INSTITUTO
UNIVERSITÁRIO
DE LISBOA

Cruise Passenger Satisfaction and the role of Past Experience:

Analysis of user-generated content

Ana Rita Ribeiro Costa Medina

Masters in Hospitality and Tourism Management

Supervisor:

PhD Professor Maria Margarida Guerreiro Martins dos Santos Cardoso, Associated Professor with Habilitation, Department of Quantitative Methods for Management and Economics at ISCTE Business School

September, 2024

BUSINESS
SCHOOL

Department of Marketing, Operations & General Management

Cruise Passenger Satisfaction and the role of Past Experience:

Analysis of user-generated content

Ana Rita Ribeiro Costa Medina

Masters in Hospitality and Tourism Management

Supervisor:

PhD Professor Maria Margarida Guerreiro Martins dos Santos Cardoso, Associated Professor with Habilitation, Department of Quantitative Methods for Management and Economics at ISCTE Business School

September, 2024

À minha avó Maria,
que «só gostava de ver quando
esta menina crescer».

Resumo

Este estudo examina a satisfação dos passageiros de cruzeiros com base em conteúdo gerado pelos utilizadores. Foram recolhidas do website Cruise Critic 416 críticas narrativas e as respetivas classificações dos atributos de qualidade propostos pelo website - 'Entretenimento', 'Refeições', 'Fitness e Recreação', 'Cabines', 'Espaços Públicos', 'Custo-benefício', 'Embarque' e 'Serviço' - para a companhia de cruzeiros com maior valor de mercado e frota do mundo, a Royal Caribbean International, tendo sido recolhidas 16 avaliações para cada um dos 26 navios da companhia.

A correlação entre a Satisfação Global dos passageiros e os atributos de qualidade, fundamentados pela literatura, é positiva, pelo que estes afetam positivamente a perceção dos clientes face à esperiência, destancando-se a relação 'Custo-benefício', com o maior impacto na mesma. Concluiu-se também que a Experiência Prévia em cruzeiros afeta negativamente a Satisfação Global dos hóspedes, pelo que quanto maior o nível de experiência, menor a Satisfação Global tende a ser, refletindo os elevados padrões e expectativas dos passageiros mais experientes.

Regressões Lineares Moderadas foram usadas para investigar o papel moderador da Experiência Prévia nas relações entre cada atributo de qualidade e a Satisfação Global, que é significativo relativamente à satisfação com 'Cabines', 'Espaços Públicos', o processo de 'Embarque' e a qualidade do 'Serviço', considerada a mais sensível ao papel moderador da Experiência Prévia. De um modo geral, o efeito moderador tendeu a fortalecer a relação direta entre o preditor e a Satisfação Global, à medida que o nível de experiência diminuiu, comprovando que os passageiros menos experientes são mais sensíveis às melhorias nestes atributos de qualidade.

Palavras-Chave: Turismo, Indústria de Cruzeiros, Satisfação, Experiência Prévia

Códigos de Classificação JEL: M10, Z30

Abstract

This study examines cruise passengers' satisfaction based on user-generated content (i.e., quantitative ratings and narratives shared online). 416 text reviews and the corresponding ratings of eight quality attributes - 'Entertainment', 'Dining', 'Fitness and Recreation', 'Cabins', 'Public Rooms', 'Value for Money', 'Embarkation', and 'Service' - were collected from the Cruise Critic website for the cruise company with the highest market value and largest fleet worldwide, Royal Caribbean International, for which 16 reviews were collected for each one of the company's 26 ships.

The relationships between cruisers' Overall Satisfaction and each quality attribute, grounded in literature, were tested and proved to positively affect Overall Satisfaction, having 'Value for Money' stood out with the strongest impact. Past Cruising Experience was proved to negatively affect guests' Overall Satisfaction, meaning that the higher the level of cruising experience, the lower the Overall Satisfaction tends to be, reflecting the high standards and expectations of the most experienced cruisers.

Moderated Linear Regressions were used to analyse the moderating role of Past Experience on the relationships between each quality attribute and Overall Satisfaction. The moderating effects were found significant when regarding satisfaction with 'Cabins', 'Public Rooms', the 'Embarkation' process, and the 'Service' quality. The latter relationship was found to be the most sensitive to the moderating role of Past Experience. In general, the moderator tended to strengthen the direct relationship between the predictor and the Overall Satisfaction, as the level of experience decreased, proving that least experienced cruisers are more sensitive to improvements in these quality attributes.

Keywords: Tourism, Cruise Industry, Satisfaction, Past Experience

JEL Classification Codes: M10, Z30

Table of Contents

CHAPTER 1

Introduction

The cruise industry stands as a vibrant segment within the realm of global tourism, attracting a diverse array of travellers seeking unique and captivating experiences on the high seas, while waking up every morning with a new balcony view and always with the comfort of a five-star resort on land.

The Cambridge Dictionary defines “Cruise” as “a journey on a large ship for pleasure, in which you visit several places” (“Cambridge Dictionary”, 2024). The world is increasingly looking at cruises as floating hotels instead of means of transportation, as they used to be in ancient long travels. These days, according to the World Tourism Organization and the International Maritime Organization, the cruise industry is responsible for 1.2 million jobs around the world and generates around US$150 billion to the global economy annually (“UNWTO”, 2020). It is therefore important to study the sector in order to contribute to its wealth and sustainable growth.

Exploring the motivations that drive individuals towards cruising and understanding the elements that contribute to their satisfaction are essential endeavours within contemporary tourism research. Passengers’ perception of the cruising experience is a construct that derives from their evaluation of a wide range of quality attributes (Chua et al., 2016) and, while deciphering the importance of those attributes on guests’ satisfaction, cruise companies may personalize their marketing strategies and tailor their operations to deliver an integrated and efficient service that meets their expectations.

Cruisers’ Overall Satisfaction may be considered as a gap between perceptions and expectations through SERVQUAL, conceived by Parasuraman et. al (1985). Considering the importance of investigating cruisers’ perceptions, this study aims to determine the main quality attributes perceived by customers and weigh the effect of each one on their Overall Satisfaction, providing insightful recommendations for the cruise industry stakeholders and supporting the decision-making process for cruise companies when deciding on how to allocate their resources to maximize customers’ perceptions.

On the other hand, expectations are, within the tourism research, considered a baseline of comparison for customers when evaluating their experience. Therefore, hand in hand with the

excellence of the service delivery, cruise operators must predict their clients' standards and expectations in order to surpass them and maximize satisfaction. This research will introduce an experience-based approach while examining cruisers' expectations, as it enriches the perspective that would be obtained if only the traditional (expectation baseline) dimension was considered (Mazursky, 1989) and has never been applied to the cruise industry and cruisers' satisfaction.

Therefore, the role of Past Experience within cruisers' expectations is going to be investigated, as previous cruising experiences may affect cruisers' quality standards and, consequently, their baseline of comparison when evaluating their cruising experience. Moreover, apart from the managerial implications that the experience-based approach provides, the study will fill in a theoretical gap in the existing literature, by testing the moderating effect of Past Cruising Experience on the relationship between customers' satisfaction with each quality attribute and their Overall Satisfaction.

The contemporary landscape of cruising studies has seen a paradigm shift towards leveraging secondary data sources, particularly online reviews and online word-of-mouth, which drive decision-making processes for both researchers and industry stakeholders seeking to understand customers' evaluations of the company's performance in comparison with competitors. Narratives shared online are likely to be uncontaminated by cruise companies' marketing campaigns, as these reviews are a result of clients' experiences and allow researchers to identify the main themes in guests' descriptions of their experiences (Brochado et al., 2019).

The present study will thereby analyse online ratings to identify the main determinants of cruisers' satisfaction and whether these vary according to their Past Cruising Experience. The additional qualitative data analysis will also offer a deep understanding of the main themes and pertinent concepts shared by reviewers, providing articulate and cohesive conclusions that aim to answer the following research questions:

- What are the main service quality categories correlated with cruisers' Overall Satisfaction with cruise ships?
- How does guests' Overall Satisfaction vary according to their Past Cruising Experience and how does it affect the relationship between their perception of the quality dimensions and their Overall Satisfaction?
- What are the main narratives shared online by cruisers that can be linked with each quality attribute?

Aiming to provide a theoretical context to answer the research questions, a literature review on the cruise industry and its placement within the world tourism scenario was conducted, as well as on cruisers' motivations, expectations and satisfaction. Founded on the literature insights, the subsequently explained methodology was designed to support the necessary quantitative and qualitative data collection and analysis, detailed afterwards, which then lead to findings and conclusions, subject to research limitations, mentioned last in the paper.

CHAPTER 2

Literature Review

Relevant literature on the cruising industry was investigated, establishing a foundation for the current study, highlighting the key themes and discussion shared by researchers and providing a theoretical background for the research questions and hypotheses.

2.1. The cruise industry within world tourism

The cruise industry has emerged as a pivotal component of the global tourism sector, demonstrating substantial growth and resilience over recent decades. According to the United Nations World Tourism Organization (UNWTO), the cruise industry supports 1.2 million jobs and in 2023, with 31.7 million passengers, it contributed US$138 billion to the global economy (CLIA, 2024). The sector contributes significantly to economic development, particularly in coastal and island destinations that benefit from the influx of cruise tourists (Dowling, 2006). The diversification of cruise offerings, including themed cruises and luxury liners, has broadened the market appeal, attracting a demographic diversity of clients(Papa Thanassis, 2016).

According to CLIA (2021), the COVID-19 pandemic brought unprecedented challenges to the cruise industry, leading to a near-total shutdown in early 2020. The pandemic exposed vulnerabilities related to health and safety, significantly impacting consumer confidence and operational protocols. In response, the industry has implemented stringent health measures, including enhanced sanitation procedures, health screenings, and modifications to onboard activities to ensure passenger and crew safety (CLIA, 2021). Despite these setbacks, the

industry's resilience and adaptability have been evident in its gradual recovery, with a renewed focus on health security and crisis management.

Furthermore, the cruise industry's influence on travel patterns and consumer behaviour underscores its significance within global tourism dynamics. It plays a crucial role in shaping travel trends, with an increasing number of travellers opting for cruise vacations as a preferred mode of exploring multiple destinations efficiently (CLIA, 2020). The industry's contribution to local economies through direct spending, employment opportunities, and the stimulation of related sectors like hospitality and transportation highlights its multifaceted impact on world tourism. Overall, the cruise sector's interplay with economic, environmental, and social dimensions illustrates its complex and influential role in the global tourism landscape, particularly in a post-pandemic world.

2.2. Cruising motivations

The existing literature has shown that travellers' motivations vary according to their previous experiences (Petrick et al., 2001), which extends to the cruise industry, as first-time cruisers have different expectations and desires from repeat cruisers when planning their holidays. The referred researchers investigated this phenomenon through a marketing perspective, aiming to conclude about the most efficient strategies to enhance clients' loyalty. Many years later, Bruzzi and Benevolo (2022), who conducted a similar study, specifically within the cruise industry, still concluded that past experiences influence cruisers' motivations for their vacations. The researchers suggested that cruising is a driver for land-based tourism, as cruisers do not spend the necessary time in each destination in order to get to know the place well, and later on feel the need of going back for a longer stay. However, Brida and Coletti (2012) established a difference between first-time and repeat cruisers, arguing that, although cruising may enhance the desire for land-based holidays, the more cruising experiences tourists have had, the more willing they are to go back to cruising again instead of considering travelling as stayover tourists, as least experienced cruisers may consider after their first cruising experience.

While exploring the hypothesis of experience influencing cruising decision, Bruzzi and Benevolo (2022) also stated that first-time cruisers usually choose the ship according to its itinerary because they have no comparison standards for the other categories that repeat cruisers consider. This supports the research conducted by Rodrigue and Notteboom in 2013, who argued that the itinerary is an extremely relevant factor of differentiation, as it is exactly what

gives value to the cruise industry when compared to land tourism and even to other ships because most service quality attributes are easy to reproduce but combining the on-board elements with a specific route is unique for cruise vacations. The study, which is structured from the company's perspective, states that "the cruise industry sells itineraries, not destinations" (Rodrigue & Notteboom, 2013, p. 31), meaning that cruise companies must give due importance to the selection of the ports of call. On the other hand, from the consumer perspective, Brida and Coletti (2012) concluded that choosing the itinerary is actually the first decision in a self-organised visit. When clients plan the trip by themselves, they tend to prioritize itineraries because, contrary to holidays planned by travel agencies, there are no agreements with a certain company or an applicable discount that travel agencies may offer, influencing the clients' decision. Therefore, itinerary has proved to be one of the major drivers behind cruising decisions.

When planning cruising vacations, tourists usually also consider the itinerary according to the expenditures it represents, not only due to the ports of call (Sciortino et al., 2022). This applies especially to first-time cruisers, who frequently do not want to spend much money in an experience they may not enjoy, balancing the willingness to spend money with the itinerary that best suits their interests, due to the importance of both elements. However, when it comes to repeat cruisers, even those who have experienced only one cruise before and are willing to cruise again, higher onshore activities' prices, reflected on higher cruising prices consequently, may actually have a positive effect on customers' decisions. Sciortino et al. (2022) investigated the characteristics of cruise itineraries, namely the stops where the expenditure patterns are higher and when it comes to price, it has been proved through a hedonic price approach that the number of nights of the itinerary, the departure date and the days in advance clients book their vacations are the main attributes for the pricing structure of the industry (Maria Espinet-Rius et al., 2018). While considering all the characteristics of the cruise options, clients are willing to pay more if the experience is indeed more valuable, as they know they will not regret it.

Contrary to what Ozturk and Gogtas (2016) argued, defending the rational inclination for cheaper options, Maria Espinet-Rius et al. (2018) stated that cruisers see higher prices as an indicator of the higher quality of the cruise line. Customers trust the market enough to believe that if a certain price is being practised, the experience will be worth it and it is justified by the number of nights and the season it takes place. Accordingly, Bahja et al. (2019), while studying the elements affecting cruising decisions, concluded through a choice-based conjoint analysis

that ‘cruise vacation price’ was “the most influential factor on a cruise vacation choice” (Bahja et al., 2019, p.12).

Nevertheless, literature suggests that, as in a circular cycle, the relative weight of price itself is a driver that may be influenced by cruisers’ motivations. This is owing to the fact that expenditure is important for customers when choosing a cruise vacation, but customers’ motivations and other personal weighers may also increase or reduce the dissuasive effect of price on the decision process (Nicolau & Más, 2006).

Although the cruise market, as well as any other, survives due to the income that companies generate, through the definition of prices which allow them to keep and/or grow the business, “cruise shipping companies need to think beyond economic accomplishments” (Geerts & Dooms, 2022, p.1). To face the upcoming challenges of a globalized tourism industry whose stakeholders are more and more demanding when it comes to Corporate Social Responsibility, cruise lines cannot ignore the ethical and sustainability side of the business. There is an increasing awareness of problems related to employees’ rights and working conditions, as well as the vessels’ environmental impact, such as solid waste, air and water pollution and marine habitat destruction (Ruiz-Guerra et al., 2019). Therefore, Geerts and Dooms (2022) proved that the changing expectations from stakeholders justify that one of the most important drivers of cruising decisions is now, contrarily to the beginning of the cruise industry, the environmental friendliness of the cruise line, which Bahja et al. (2019) concluded to be the second strongest factor affecting cruising decisions, motivations and potential clients’ decision-making process.

The importance of Corporate Social Actions as a key driver for cruising motivations would be supported later on by (Ahn & Lu, 2022a), whose research shows that potential guests are influenced by the subject while planning their trip. However, the study failed the hypothesis that Corporate Social Responsibility, specifically the environmental responsibility domain, affects customers’ satisfaction, because when it comes to evaluating the experience, once taken, Corporate Social Responsibility is not often considered.

Consistent with the increasing importance of environmental friendliness of cruise companies given by customers while planning their vacations, which is justified by the new generations’ priorities, such as sustainability and even mental health, Castillo-Manzano and López-Valpuesta (2018) proved the direct influence of passengers’ own profiles, lifestyle and personal preferences on the decision-making process when booking a cruising experience. Later on, Bruzzi and Benevolo (2022) investigated cruisers’ intention to revisit European

destinations, having conducted a regression analysis which proved that personal characteristics are key in guests' perception of the experience as well, influencing their decision to cruise again.

2.3. The Importance of Online Reviews

Bahja et al. (2019) investigated the major contribution of online reviews to cruisers' motivations and even proved it to be the most influential attribute on their decision to cruise. This supports the study by Park et al. (2007), whose research, although not about cruises but general consumption of products and services, concluded that "the quantity of online consumer reviews has a positive effect on consumer purchasing intention" (Park et al., 2007, p.140), meaning that the intention of buying is directly proportional to the number of reviews available because it means that the product, tangible or intangible, is popular. Also, the paper shows that low-involvement consumers are more likely to be influenced by the number of reviews rather than their quality, contrary to high-involvement consumers. These findings may be translated to the cruise industry, as Chipkin (2011) did, by noticing that low-involvement consumers corresponded to first-time cruisers, whose standards are lower than repeat cruisers, who may be seen as high-involvement clients, with a more experienced perspective of the cruise industry. Later on, (Sotiriadis & van Zyl, 2013) reinforced the influence of online reviews on tourists' decision-making process, while studying electronic word-of-mouth as an increasingly important marketing tool to be wisely used in an integrated marketing strategy for tourism businesses.

However, although online reviews may have an important role, cruisers are more likely to evaluate a good experience rather than a disappointing one (Bahja et al., 2019), which must be taken into account because it may bias the potential clients' expectations. When clients have a disappointing experience, they usually comment with friends and family but are not likely to leave a bad review online. On the other hand, if the cruising experience surpasses their expectations, the clients may want to leave an appreciation comment on an online platform (Castillo-Manzano & López-Valpuesta, 2018a). These findings show that social network' usage by tourists has been changing over the years, as when online reviews started to be widely used, they did not work as an informative channel, as they were supposed to be, but rather as a complaining channel, because consumers would leave statements of dissatisfaction but no appreciation comments (Pantano & Pietro, 2013).

2.4. Cruisers' expectations and satisfaction

Since Parasuraman et al. (1988) drew the 'Conceptual Model of Service Quality' (SERVQUAL), consumers' satisfaction is measured through a simple difference between perceived and expected quality of the experience or product. For many years, this model has helped researchers investigate clients' expectations and consequent satisfaction, for marketing and sales strategies purposes, and many have already studied satisfaction regarding tourism services, to support management decisions, since "the only way for the organization to keep a high level of customer satisfaction and still operate efficiently is to master the art of an optimum level of performance that ensures that expectations are consistently met" (Augustyn & Ho, 1998, p.72). This means nothing but to minimize the gap between tourists' perceptions and expectations, meeting or ever surpassing them, for any expected level of service delivery, may it be a luxurious experience or a low-cost one.

"Knowing what the customer expects is the first and possibly most critical step in delivering good quality service" (Bhavani, 2013, p.483). When talking about customer expectations, Gebremichael & Singh (2019) argued that the foundations of the image that customers tend to create are the previous experiences or prior information from various sources, which implies changes because perceptions and behaviours are continuously evolving and depend on people's mindset, age, experiences and standards, as Khadka & Maharjan (2017) advocated for. These researchers came up with the idea of an evolving process that ends up generating standards if looking at the expectations as an accumulated consumption experience over time. This idea has been summed up by Nasar et al. (2012) when referring to consumers becoming more and more apprehensive about products and services than before. This happens because clients have access to more information and experiences and they will therefore be rigorous when evaluating a certain service. This is why Wicks & Roethlein (2009) concluded that "employees' level of knowledge was a key factor in satisfying the needs of the customer" (Lu, Berchoux, Marek, & Chen, 2015, p.6) because the staff must understand clients' expectations in order to know how to meet them.

Literature has proven the importance of some satisfaction dimensions within the cruise industry, about which cruisers compare their expectations and perceptions, forming an opinion about the cruise ship and the cruise company that may either lead to them repeating the cruising experience and their consequent loyalty or to the negative evaluation and online Word-of-Mouth, which will then affect potential customers' expectations and decisions, in turn.

Grounded on literature about the importance of online reviews, the eight quality dimensions further investigated are the ones contemplated on the 'Cruise Critic' website database, later on used for data collection. These were examined and sustained by existing literature, which proved their importance on cruisers' Overall Satisfaction.

2.4.1. Entertainment

The cruise industry's role in global tourism numbers is so important that Castillo-Manzano et al. (2018) compared it to Las Vegas resorts as a tourism model. The investigation led to the conclusion that there are similar categories which contribute to clients' satisfaction when it comes to massive vessels, such as entertainment (Castillo-Manzano et al., 2018). In fact, the growing dimension of the vessels is partly justified by the need to have "more rooms to do many things" (Chua et al., 2015, p.135). Entertainment is one of the major drivers of satisfaction for cruisers, according to existing research, because the amount of entertainment programs, present at all times during a cruising vacation, is an element of differentiation when compared to stayover experiences (Han & Hyun, 2018).

Guests want to be constantly entertained and have an endless number of activity options, as research has shown that cruisers are very stimulated by the feelings of novelty that unexpected onboard activities generate (Chua et al., 2015). Moreover, the investigation suggests that cruise line companies must offer a wide variety of entertainment programs, in order to attract customers with different interests and tastes. Guests were proved to assess the 'entertainment value' of the cruising experience, which even enhances the likelihood of repeating the same cruise ship holiday (Castro-Nuño et al., 2022). While having endless options of activities on board, cruisers feel engaged during their consumption experience, which must be tailored to guests' interests (Calza et al., 2020).

2.4.2. Dinning

Consistent with the importance of entertainment, Björk et al. (2023) also examined the impact of cruise ship dining environment on travellers' satisfaction and proved that restaurant atmosphere, interaction with other cruisers and the restaurant staff were key for guests' perceived value of the experience. Literature has labelled dining as a 'core attribute' for vacationers (Sun et al., 2014) and dining options on board must be aligned with the

entertainment programs, since the aim of the cruise companies should be to deliver a cohesive experience.

Consumption emotions, such as excitement, comfort and even romance, prevent guests from being annoyed and enhance their experience, mediating the effect of satisfaction on the intention to revisit (Han et al., 2009). Research has proved the either direct or indirect importance of the "onboard gastronomic experience for cruiser retention" (Castillo-Manzano et al., 2022, p.376) and some authors even stated that it is a determinant factor for cruisers who repeat a cruising experience within the same corporation, which confirms the influence of quality dining on guests' perceptions and consequent satisfaction and loyalty, previously demonstrated through the acceptance of the hypothesis that food and beverage contribute to cruisers' satisfaction and intention to recommend (Chua et al., 2015). All the mentioned authors also argue that cruise companies must provide options for international cuisines with menus created by recognised chefs, as guests find holidays a great opportunity to try new cuisine and flavours. This contradicts a study conducted in China, whose results indicate that cruisers prefer to have traditional food they know and are used to (Sun et al., 2014). The disparity of findings may be due to customers' cultures since the same research validated the importance of variety and novelty of cuisine for the American sample. Therefore, the dining experience must be tailored to the consumer and comprehend a wide variety of options, to meet the different expectations and preferences, namely the increasing interest in healthy eating and thereby the dining options must also include "nutritional balanced meals and light food options" (Chua et al., 2015, p.141).

2.4.3. Fitness and Recreation

Due to the broader interests of the new generation of cruisers, who appreciate healthier food and beverage options and whose main goal, even on vacation, is to preserve and improve their health, both physical and mental (Jotov et al. 2022), cruise companies are required to provide a package of services that meet those expectations. This can be achieved by providing services such as SPA treatments, fitness centres and even personal trainers on board, to assist guests' training sessions. Therefore, 'Fitness and Recreation' is an important driver for guests' satisfaction and Xie et al. (2012) concluded that it is even more important for potential cruisers than for cruisers themselves, so it must be wisely communicated by cruise companies, who shall adapt their marketing strategies to the expectations of potential customers instead of,

specifically for this satisfaction category, relying on the word-of-mouth and reviews by past customers.

"Cruise ships' fitness rooms have equipment that many shore-based centres wish they could afford and scheduled classes are offered on every single ship" (Dowling & Vasudavan, 2000, p.22), supporting the idea of greatness and luxury from which the cruise industry lives by. The mentioned research states that everything on the ship is usually designed to look great and modern, and fitness centres are no exception, as it is a factor of differentiation relative to the facilities people use daily in their routine to workout or relax. This luxury and image of grandness is not only translated by these facilities but by every service and product operated onboard, namely the dining conditions, as the cruise industry standards in terms of food have also been associated with quantity since its beginning. "Passengers [want] quantity as much as quality" (Escoffier, 1995, p.24), either justified by the first extremely rich clients and, later on, by the industry massification, by the giantism of modern and opulent vessels, whose luxury is held by consumerism and excess practices and standards, which differentiate them from the average ones.

2.4.4. Cabins and Public Rooms

Literature has shown that the dimension and luxury of cruise ships are not directly correlated with cruisers' satisfaction. Over the past decades, the cruise tourism sector has been growing rapidly, even more than the global tourism industry itself in percentage terms (Ruiz-Guerra et al., 2019), which also led to an inevitable considerable increase in ship size (Sun et al., 2014), as cruise companies began to orient themselves towards mass tourism in order to meet the requirements of the exponential number of tourists who have been joining the cruise fever. However, (Castillo-Manzano and López-Valpuesta, 2018) wondered if the dimension of a cruise ship would increase clients´ satisfaction, justifying that nowadays the paradigm is about size and 'gigantism' when it comes to evaluating facilities or even services in the growing luxury economy associated with 'prestige' and 'status' concepts. However, the research concluded that the mentioned 'gigantism' is less satisfactory, because even though clients expect excellent service quality in the largest famous cruise ships of the world, there is an important feeling that is lost: the uniqueness and exclusivity, which are hardly delivered in the mass family-tourism. Therefore, "fewer passengers generate higher satisfaction" (Zhang et al., 2015, p.10).

Although the dimension of the cruise ship may not be directly related to the customers' satisfaction, literature has shown that the quality of the cruise ship facilities influence cruisers' perception of their experience. Ahn & Lu (2022) proved the hypotheses that physical quality, defined as an embodiment of external factors, positively influence both customers' satisfaction and revisit intention. By physical quality, researchers mean the quality of equipment (Tucker & Pitt, 2010) and the quality of the environment that companies provide (Ahn & Lu, 2022), namely the environment of public rooms, which is, along with the quality of cabins, the focal category to which researchers have narrowed their investigations, as both are proved to be of high importance for clients, namely through an electronica Word-of-Mouth approach (Castillo-Manzano et al., 2022), that represents the purest discloser of consumer perception and intention to revisit and recommend.

Therefore, authors agree on the positive connection between onboard facilities and passengers' satisfaction, suggesting that the perception of quality regarding 'Cabins' and 'Public Rooms' directly affect cruisers' satisfaction with the cruise, supporting Castillo-Manzano and López-Valpuesta (2018), who verified that the 'intrinsic characteristics' of cruise ships are a major satisfaction driver for the cruise industry clients.

2.4.5. Value for money

The value for money is an important weigher for cruisers' decision-making process, as it is for their satisfaction. It is usually evaluated through the perception of the quality of the ports of call. (Bruzzi and Benevolo, 2022). The researchers argued that the visits to destinations are an important factor for clients' satisfaction, which contradicts Ozturk & Gogtas (2016), who studied cruisers travelling to the island of Oahu and proved that on-shore activities were not as influential as others such as transportation and safety. The disagreement between the studies may be explained because of the different samples used for the questionnaires, as Bruzzi and Benevolo (2022) worked with European destinations' tourists and Ozturk and Gogtas (2016) surveyed travellers in the Hawaiian islands, which are destinations with extremely heterogeneous characteristics, as tourists visit Europe for a cultural experience and Hawaii for a relaxing one. However, both authors agree that the value that tourists perceive from destinations, independently from what they visit or appreciate during the time on shore, affects satisfaction, revisit intentions and recommendations.

Even though the perceived value of ports of call is a weigher of cruisers' satisfaction, the itinerary itself must not be seen as so because when booking the experience, guests are already aware of it, meaning it is not a surprise so there is no room for the gap between expectation and perception (Buzova et al., 2019). Tourists have expectations about each destination, but the itinerary is known and will be fulfilled. Nevertheless, Buzova et al. (2019) tested the cruisers' evaluation of shore activities and concluded that the major contributors for a high perceived value of excursions and visits at destinations are the performance of the tour guide, sightseeing and arrangement of the tour.

The perceived value of the ports of call that are included in a certain itinerary directly affect the prices of the cruising experience and the amount of spending strongly influences the intention to revisit and repeat the cruise itinerary, meaning the prices practised by cruising companies, including the trip and activities on board and on shore are of high importance when analysing cruisers' satisfaction, which occurs "if the individual obtains more value in comparing to the value of what actually they have spent in terms of time, effort and also price" (Shahijan et al., 2018, p.7). Literature shows that there is a trade-off of give and get for tourists, who compare what they spend with what they receive from the experience, proving the conceptual heterogeneity between 'quality' and 'value' (Sánchez-Fernández and Iniesta-Bonillo, 2006). Therefore, 'quality' may be considered what tourists get whereas 'value' is a personal construct that results from the trade-off between "perceived quality and affordability, within a choice condition" (Sánchez-Fernández and Iniesta-Bonillo, 2006, p.45). Moreover, 'quality' may be considered the means to 'value', which may be seen as the ultimate end, that cruising companies must focus on when assessing their clients' satisfaction since it is the value for money guests perceive that is either going to be a positive or negative weigher on their judgement.

Bruzzi and Benevolo (2022) proved that spending more money on vacations leads to a higher intention to revisit, although it seems a contradiction, but actually the higher the economic availability and willingness to spend, the better the customer experiences what is being delivered by the cruise company and therefore, the higher the customer satisfaction. According to the service profit chain, satisfaction then leads to customer loyalty and the consequent intention to revisit, having (Ahn and Lu, 2022) tested and approved the hypothesis that this was a positive relationship.

On the condition that prices affect the value of cruisers' experience, Wang and Li (2023) suggested that, on the one hand, managers should create high-quality services to improve clients' perception of the experience, and on the other hand, they must keep services at reasonable prices to increase the perceived value of clients and consequently create more loyalty amongst cruisers, because loyal customers "are willing to spend more money even though the prices may be higher than expected" (Hwang and Han, 2014, p.248). Accordingly, Alden, Steenkamp and Batra (1999) had already argued that organizations must build brand prestige so that the clients accept high prices, proving that loyalty is key to a company's long-term sustainability.

2.4.6. Embarkation

Although cruise companies control the major characteristics of each cruise ship experience, some situations influence guests' satisfaction where the cruise company does not have much influence, namely the geographical distance between a client's home and the embarkation port, which has a direct relationship with the intention to revisit (Bruzzi and Benevolo, 2022). In fact, the embarkation day is key for the guests' perception of the cruising experience, as it marks the first impression of the cruise company. Literature shows that embarkation and disembarkation represent a negative influence on cruise reviews and are often considered poor or even terrible (Arasli et al., 2020). Cruisers say that "embarkation and disembarkation [are] the worst part of the trip" (Arasli et al., 2020, p.8). Accordingly, Lois and Wang (2005) had proved that port operations are a significant factor of guests' dissatisfaction and cruisers associate embarkation and disembarkation days with an unpleasant experience. Therefore, the first and last day of the cruising experience must be smooth and organized to make it as simple and easy for guests as possible, as "a smooth embarkation is thus necessary for a perfect cruise experience" (Zhang et al., 2015, p.10).

Alongside the embarkation and disembarkation processes, the port infrastructures' quality is also of high importance, as cruisers usually spend some time there waiting to embark on the ship or waiting for the luggage to be returned to them after disembarking, which means the port itself must provide comfortable sitting and a good environment, as well as quality services that cruisers may want to use while waiting (Arasli et al., 2020). Cruise companies are not in charge of the port infrastructures, but they must ensure that their guests are receiving the best treatment

possible, because the embarkation and disembarkation experience will be inevitably associated with the cruise company and not with the authority responsible for the port (Wang et al., 2016).

2.3.7. Service

Transversally to every characteristic of the cruising experience, the quality of Human Resources is of tremendous significance. Wang et al. (2016) proved that staff behaviour influences clients' satisfaction, as employees are the ones on the 'front-line', either 'on stage' dealing directly with the customer or 'off stage' working where the clients cannot physically see them. Therefore, it is critical to have people who are passionate about their work, as it will reflect on the early steps of the service profit chain, which are employees' satisfaction and consequent service quality (Hogreve et al., 2022). Castillo-Manzano et al. (2022) studied the final steps of the profit chain, clients' satisfaction and consequent loyalty and intention to revisit, which come as a result. The research showed that cruisers' behaviour is driven by the quality of the service crew, highlighting the importance of Human Resources. "Managers [mention] employees as a crucial part of customer satisfaction" (Lu et al, 2015, p.20). These lead to either choosing or not the same cruise line or even the exact same cruise ship and itinerary. Therefore, the service quality must be considered a driver of satisfaction itself. (Testa & Sullivan, 2002).

2.5. Past Cruising Experience

The "Experience" concept has two connotations, as it "represents an individual's psychological interpretation of a given event (…) [but also] the amount, type and diversity of information available for the individual through previous participation" (Schreyer et al., 1984, p.35). Literature has studied the latter definition within the tourism industry as the level of attraction between tourists and holiday destinations, characterized by the concept of "Experience Use History" (EUH), used as a baseline that determines the levels of satisfaction but does not necessarily coincide with the expectational one. The study of EUH is a link between external behaviour and psychological processes that interpret the information from the recreation environment and initiate those behaviours (Schreyer et al., 1984) and it may also be an indicator of motivations for participation, because it is used to assess customers' satisfaction and, consequently, their intention to repeat the experience (Yasvari et al., 2012).

Oliver (1981) suggested that satisfaction is the evaluation of the surprise with a product or service as a result of subjective comparisons between customers' expectations and perceptions

and although many studies of customer satisfaction compare these constructs, Van Raalj & Francken (1984), aligned with other researchers, suggested that intensity and nature of Past Experience is the most authentic baseline for a social comparison, rather than expectations from brand performance, as costumers focus on a set of related situations and experiences in addition to the one in question, which may be even more pronounced in the tourism context (Mazursky, 1989).

This approach is useful to avoid expectation manipulation by exposing consumers to product information, because Past Experience is a strong variable in the decision-making process and "as our decision criteria are strengthened, our need for information is weakened" (Mill and Morrison, 1984, p.11). People with higher EUH are more likely to have a detailed conception of the rewards available (Schreyer, 1982), while beginners may be responding to more generalized images promoted by commercial entrepreneurs or the media (Schreyer et al., 1984).

Experience-based approach enriches the perspective that would be obtained if only the traditional (expectation baseline) dimension was considered (Mazursky, 1989). Also, it is expected that future intentions will be influenced by prior experience, which may exert more influence on travel decisions than information acquired from external sources. (Burton & Khammash, 2010).

Gabe et al. (2006) expanded the research to the cruise industry and concluded that the number of visits to a destination has a positive effect on the likelihood of a passenger returning and exploring what was left behind due to the lack of time in each port. According to Gitelson & Crompton (1984), tourists return to familiar destinations either to reduce the risk of selecting an undesirable location, because they have an emotional connection to it or to expose others to experiences they previously enjoyed, while Sonmez & Graefe (1998) had stated that judgments already formed of destinations may change if additional destinations are added to the evaluation, if another attractive destination is recommended by a friend or if a recent crime happened at or near the destination. The study revealed significant differences between individuals who had past travel experience with various geographic regions and those who did not, in terms of their likelihood to revisit those regions. It proved that visiting a region increases the intention to travel there again. The intention to return to a determined destination after visiting it during a cruise vacation is important for cruise operators because clients may decide on doing so during another cruise holiday whose itinerary includes that specific destination.

Loureiro et al. (2019) later on found significant differences between low and high-experience groups while studying travellers' well-being, specifically in the luxury cruise industry. This study used Past Experience as a moderator which represented a stimulus related to the experience, either brands, products or places to visit during the holiday, concluding that there are differences between both groups on perceiving the reputation and credibility of the cruise, as "low-experience travellers may believe more easily in the cruise company and regard it as having quality than travellers with more experience" (Loureiro et al., 2019, p.12).

2.5. Hypotheses and Conceptual Map

Research by Castillo-Manzano et al. (2018), Han & Hyun (2018), and Castro-Nuño et al. (2022) consistently highlights the importance of 'Entertainment' as a significant driver of satisfaction. Similarly, Björk et al. (2023) and Chua et al. (2015) emphasize the crucial role of 'Dining' experiences in shaping guests' perceptions and intentions to revisit. Studies by Jotov et al. (2022) and Ahn & Lu (2022) underscore the significance of 'Fitness and Recreation' options and facilities, as well as the quality of 'Cabins' and 'Public Rooms', in influencing Overall Satisfaction among cruisers. The 'Value for Money', as investigated by Bruzzi and Benevolo (2022), Ozturk & Gogtas (2016), and Shahijan et al. (2018), emerges as a key determinant of satisfaction, with guests evaluating the affordability and perceived value of the investment on the cruising experience. Moreover, 'Embarkation' processes, as highlighted by Bruzzi and Benevolo (2022) and Arasli et al. (2020), significantly impact guests' initial impressions and Overall Satisfaction. Additionally, 'Service' quality, as examined by Wang et al. (2016) and Testa & Sullivan (2002), plays a crucial role in shaping guest experiences and fostering loyalty to cruise lines. Based on the literature review's findings, the present research model assumed that Cruise Critic's eight service quality attributes have a positive relationship with Overall Satisfaction. The following hypotheses were formulated for this study:

H1a. Cruisers' Overall Satisfaction is positively affected by the satisfaction with Entertainment.

H1b. Cruisers' Overall Satisfaction is positively affected by the satisfaction with Dining.

H1c. Cruisers' Overall Satisfaction is positively affected by the satisfaction with Fitness and Recreation.

H1d. Cruisers' Overall Satisfaction is positively affected by the satisfaction with Cabins.

H1e. Cruisers' Overall Satisfaction is positively affected by the satisfaction with Public Rooms.

H1f. Cruisers' Overall Satisfaction is positively affected by the satisfaction with Value for Money.

H1g. Cruisers' Overall Satisfaction is positively affected by the satisfaction with Embarkation.

H1h. Cruisers' Overall Satisfaction is positively affected by the satisfaction with Service.

Literature has proven that Past Experience affects satisfaction by providing a baseline for comparison, often more accurate than expectations (Schreyer et al., 1984; Van Raalj & Francken,1984) and the higher the Past Experience, the higher the standards customers have, who will be more demanding and harder to please (Loureiro et al., 2019), although it has never been proven within the cruise industry. Accordingly, the effect of 'Past Cruising Experience' on Overall Satisfaction will also be evaluated.

H2.1. Cruisers' Overall Satisfaction is negatively affected by the Past Cruising Experience.

Furthermore, previous familiarity with cruises represents a stimulus related to the experience and shapes the effect of quality evaluations on clients' satisfaction (Mazursky, 1989; Burton & Khammash, 2010), as experienced travellers have different standards and perceptions of quality, while less experienced travellers are more easily influenced by a company's reputation and generalized images promoted by the media (Loureiro et al., 2019). Therefore, the moderating effect of Past Experience on the relationship between satisfaction with each quality attribute and Overall Satisfaction was added to the current research through the following hypotheses:

H2.2. Past Cruising Experience moderates the relationship between the quality attributes and Overall Satisfaction:

H2.2a. Greater Experience tends to weaken the relationship between cruisers' Overall Satisfaction and Entertainment.

H2.2b. Greater Experience tends to weaken the relationship between cruisers' Overall Satisfaction and Dining.

H2.2c. Greater Experience tends to weaken the relationship between cruisers' Overall Satisfaction and Fitness and Recreation.

H2.2d. Greater Experience tends to weaken the relationship between cruisers' Overall Satisfaction and Cabins.

H2.2e. Greater Experience tends to weaken the relationship between cruisers' Overall Satisfaction and Public Rooms.

H2.2f. Greater Experience tends to weaken the relationship between cruisers' Overall Satisfaction and Value for Money.

H2.2g. Greater Experience tends to weaken the relationship between cruisers' Overall Satisfaction and Embarkation.

H2.2h. Greater Experience tends to weaken the relationship between cruisers' Overall Satisfaction and Service.

Figure 2.1 shows the Conceptual Model formulated for this study, compiling all hypotheses.

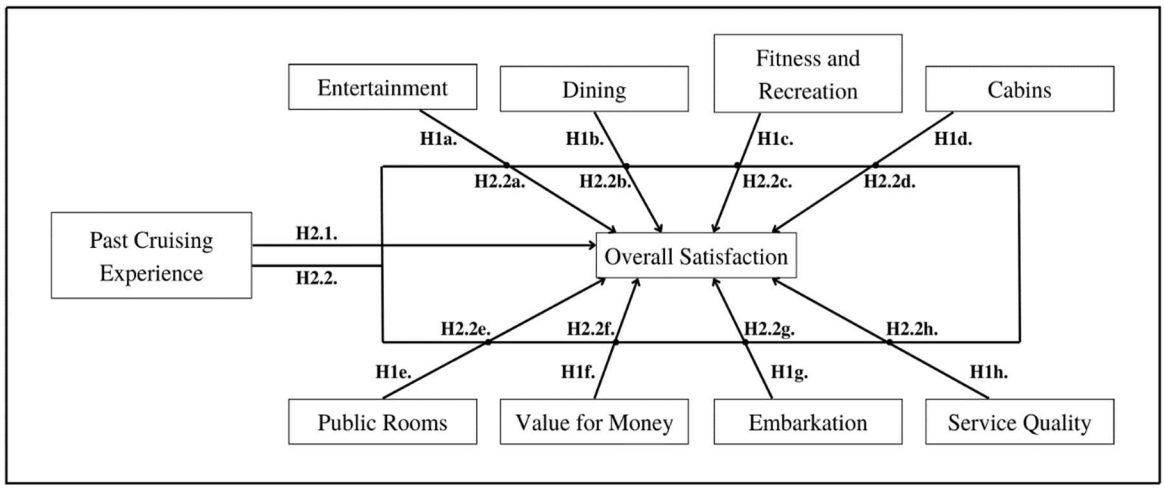


Figure 2.1: Conceptual model

CHAPTER 3

Methodology

This study investigated the relationship between cruisers' satisfaction with eight quality attributes and their Overall Satisfaction, as well as the moderating effect of Past Cruising Experience. This chapter aims to provide a detailed and systematic description of the research context to provide a comprehensive background of the environment and conditions in which the study was conducted. Afterwards, the research approach is discussed, presenting the research design and substantiating the use of secondary data for both the quantitative and

qualitative analysis. The subsequent section describes the data analysis procedures, highlighting the specific tools and techniques utilized to interpret the data collected. Furthermore, ethical considerations are addressed to ensure that the research adheres to the highest ethical standards, protecting the rights of the data source and acknowledging potential constraints and their implications for the research findings.

3.1. Research Context

This investigation was conducted in the cruise industry, specifically considering ocean ships, whose itineraries are spread all over the world. All categories of cruise vacations were considered, from family cruises to luxury or thematic ones. The ocean cruise industry is composed of five major companies, which are Carnival, Costa, MSC, NCL and Royal Caribbean (Castillo-Manzano & López-Valpuesta, 2018). Royal Caribbean International leads the statistics, with the highest market share as of 2022, with 20% ("Statista", 2024) and current revenue of US$8,587 for 2024 ("Cruise Market Watch", 2024).

However, not only the revenue is key when analysing companies that deliver hospitality and tourism services. Years of experience and companies' operational dimension are also important weighers for the analysis and, within that matter, the Royal Caribbean fleet is the largest one in the world, composed by 26 current vessels ("Royal Caribbean", 2024), including the biggest one ever built, the Wonder of The Seas ("The Times", 2022). The number of ships follows the years of experience, as the company was founded in 1968 and is one of the oldest operating in the market ("Royal Caribbean", 2024), meaning there are clients that have been cruising since the birth of the company. Therefore, this study investigated the quality of the services and products delivered by Royal Caribbean and its clients' satisfaction.

3.2. Research Design

A mixed-methods research design was employed to investigate cruisers' Overall Satisfaction, focusing on various aspects of the cruising experience. The mixed-methods approach combines both quantitative and qualitative methods to provide a comprehensive understanding of the research problem and conclude about the hypotheses. This design was chosen to not only quantify the relationships between specific satisfaction dimensions and Overall Satisfaction, concluding about hypotheses H1i. $(i = a, b, c, d, e, f, g, h)$, while also

adding the Past Experience variable, io examine its correlation with Overall Satisfaction (H2.1.) and investigate its moderating effect on the relationships between each quality attribute and Overall Satisfaction, suggested by hypotheses H2.2i. ($i = a, b, c, d, e, f, g, h$), but also to gain deeper insights into cruisers' experiences through qualitative data, whose narratives complement the quantitative data analysis.

3.3. Data Collection

The contemporary landscape of cruising studies has seen a paradigm shift towards leveraging secondary data sources, particularly online reviews and electronic word-of-mouth (WOM), which drive decision-making processes for both researchers and industry stakeholders.

The emergence of e-tourism and the generalization of internet access have provided an approach that traditional methods could not, due to the large and miscellaneous range of data options, compiled on a wider variety of formats. “The availability and easy access of travel advice sites make it easier for customers to disseminate their viewpoints” (Zhang et al., 2015, p.4). In fact, online ratings show the user-perceived quality of specific products and services that may be key for potential customers’ decision (Park et al., 2007). Burton and Khammash (2010) found that hotel guests consider reading online reviews prior to making decisions about the holiday, thereby reducing the risk of buying a product with a negative rating.

The online WOM phenomenon brings valuable insights about the market and the guests’ preferences and cruise companies use those insights to make management decisions that are meant to increase their competitiveness in the market, maximizing customer satisfaction and ultimately leading to their loyalty (Castillo-Manzano et al., 2022). Therefore, user-generated content is nowadays used as a source of information by both researchers, who are able to gather a higher amount of information, and managers, who analyse the electronic WOM as a predictor of loyalty itself (Tao & Kim, 2019) and, finally, by potential clients, resulting in the high acceptance of user-generated content by the hospitality industry.

Previous secondary research on the cruise sector has conducted linear regression analyses (Castillo-Manzano & López-Valpuesta, 2018), structural equation modelling (Hwang & Han, 2014) or choice-based conjoint analysis (Bahja, F., 2017). Moreover, regression analysis has been used to process online ratings and critical content analysis methods have been employed through text-mining (Buzova et al., 2019) and Leximancer functions (Arasli et al., 2020).

The majority of the secondary studies have collected data from 'Cruise Critic' review website (see "Cruise Critic", 2024), which has become the main source of user-generated content for the cruise industry (Sun et al., 2023). 'Cruise Critic' is "a major source of professional as well as user reviews" (Chipkin, 2014, p.2). Each online review by a cruiser consists of 5-star ratings of the eight cruising service dimensions and a free-form text review (Zhang et al., 2015). The rating system covers both Overall Satisfaction and the ratings of individual quality attributes, considered to be attitudinal variables (Chatterjee, 2019). Moreover, each cruiser has a Past Experience category associated, which indicates whether the user is a first-time cruiser ($Exp1$), has done 2-5 cruises ($Exp2$), 6-10 ($Exp3$) or more than 10 cruises ($Exp4$).

Amongst the 26 ships in Royal Caribbean's fleet, the most recent 16 reviews were collected from each, making a total of 416 quantitative and qualitative reviews. Within the 16 reviews, 4 were collected for each Past Experience category whenever possible, in order to obtain a balanced and unbiased sample. The ratings for each category were uploaded to the SPSS software, which was the statistics program used, while the text comments were collected and organized in a text document for each ship to later on be uploaded to Leximancer software.

3.4. Data Treatment

The quantitative component of the research involved analysing secondary data and interpreting it, in particular by investigating the correlation between each satisfaction dimension and Overall Satisfaction, as well as its correlation with Past Experience. Moreover, the data treatment involved examining how each quality dimension individually predicts Overall Satisfaction and how Past Experience moderates those relationships. To this end, a Moderated Linear Regression procedure was adopted.

To do so, three Linear Regression models on Overall Satisfaction were computed for each quality dimension, namely satisfaction with 'Entertainment', 'Dining', 'Fitness and Recreation', 'Cabins', 'Public Rooms', 'Value for Money', 'Embarkation' and 'Service'. The first model (1) considers the quality attribute as the only independent variable, while (2) the second one also includes the Past Experience dummy coded as a predictor and (3) the last one adds the Interaction Terms, which represent the moderating effect, as well. All predictors were considered as interval variables and were centred to improve the interpretability of the regression coefficients. For each Linear Regression model estimated, one expects to infer on:

(1) Which quality dimensions significantly affect Overall Satisfaction, inferring on H1a. to H1h.;
(2) The significance of Past Experience as an additional predictor, as an intermediate step to the decision of whether it is a moderator;
(3) Whether the Moderating Terms significantly improve the percentage of Overall Satisfaction explained by the model, which represents the significance of the moderating effect itself and tests H2.2a. to H2.h.

3.4.1. Inferring the existence of Past Experience moderating effect

Past Experience does not depend on the exogenous construct ("Overall Satisfaction"), therefore being capable of assuming a moderating role in the relationship between the predictors and the outcome (Hair et al, 2021). In order to infer the existence of that role, a Moderated Linear Regression was estimated for each one of the eight quality dimensions, visually represented as an example for "Satisfaction with Entertainment" in Figure 3.1.

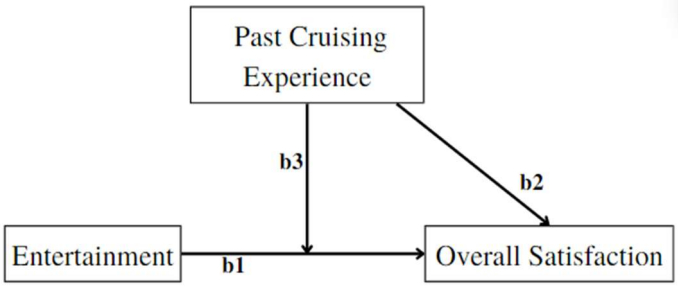


Figure 3.1: Moderation model example. Inspired by Hair et al. (2022)

The moderator is, within the research, a quantitative variable that was dummy coded, whereby when the value one ("1") represents one of the four categories, as previously enumerated - first-time cruiser ($Exp1$), 2-5 previous cruises ($Exp2$), 6-10 cruises ($Exp3$) or +10 cruises ($Exp4$) -, all other three categories assume the value zero ("0"). Grounded on literature insights on the cruise industry, $Exp4$ was chosen to be the reference category, meaning that when all three others assume the value zero, the model refers to the most experienced cruisers.

At first, the reference categories considered were first-time cruisers (Petrick, 2004) and those with +10 cruising experiences (Reichheld & Sasser, 1990), as these customers have the most fundamentally different expectations and perceptions (Baker & Crompton, 2000).

However, when considering first-time cruisers as the reference category, no significant moderating effects were found except when they referred to the Exp4 category and regarded Public Rooms, Embarkation, or Service [see Annexes A to H]. Therefore, the reference category was set as the group of the most experienced cruisers. This led to the discovery of more significant Past Experience moderator effects, including the ones that highlight the differences between the relationships regarding $Exp1$ and $Exp4$ categories.

Figure 3.1 shows that the influence of the predictor on the outcome not only depends on the strength of the simple effect b1 but also on the product of b3 and the moderator. The model may be redesigned in a way that clearly represents the effects of each dimension and the Interaction Term (or Moderating Term) on Overall Satisfaction, as shown in Figure 3.2.

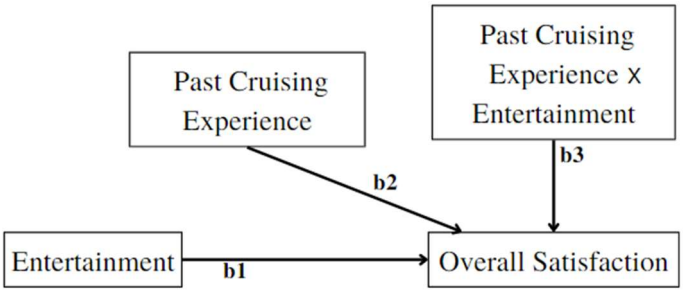


Figure 3.2: Moderation Model with distinct Interaction Term Effect. Inspired by Hair et al. (2022)

3.4.2. Calculating the R-Squared Change and conducting the F-test

In order to infer the significance of the moderating effect, the R-Squared Change between the models with and without the moderating term was first calculated. R-Squared is a measure of the proportion of variance in the dependent variable that can be uniquely attributed to the independent variables of interest. As such, in the context described, R-Squared Change quantifies the difference in R-Squared values for the models with and without the Interaction Terms. The F-test on the R-Squared Change was conducted and showed whether there was a significant difference from one model to the other, i.e., if the new variables, namely the moderating terms, in model (3), added in each model significantly improved the prediction.

The null hypothesis (H0) in the F-test, is that all Interaction Terms' coefficients are zero, meaning that the Moderating Terms should be discarded. Therefore, the research on the moderating effect aims to reject H0 and consequently conclude that there is at least one Moderating Term that is significantly different from zero.

3.4.3. Determining the practical significance of the moderating effects

After proving the existence of a moderating effect, Memon et al. (2019) suggested the study of the f^2 effect size for each dimension, as it "indicates how much the moderation contributes to the explanation of the endogenous construct" (Hair et al., 2021, p. 161). The f^2 effect size measures the relevance of the R-Squared Change and has already been applied to the cruise industry research (González-Rodríguez et al., 2020). For this study, it was calculated as developed by (Cohen, 1988) through the following formula:

$$f^2 \text{ effect size} = \frac{R^2 with\ Interaction\ Terms\ -\ R^2 without\ Interaction\ Terms}{1 - R^2 wit\quad Interaction\ Terms}, \qquad (1)$$

where $R^2 with\ Interaction\ Terms$ is the proportion of variance explained by the Moderated Linear Regression and $R^2 without\ Interaction\ Terms$ is the proportion of variance of the model without the Moderating Terms. The interpretation of the f^2 effect size was suggested by Kenny (2018), whose research categorized f^2 effect size values into small ($f^2 \approx 0.005$), medium ($f^2 \approx 0.01$), and large ($f^2 \approx 0.025$). In accordance, only the quality attributes whose R-Squared Changes were proved to be relevant through a large f^2 effect size were thoroughly further analysed.

For every Moderated Linear Regression where the Moderating Effect was found significant, a corresponding graph was generated in SPSS, for the visual assessment of the impact of the moderating effect on the relationships between relevant quality attributes and Overall Satisfaction.

3.4.4. Qualitative data treatment

Hand in hand with the quantitative data, narratives shared online by the same reviewers who left the score rating were analysed using Leximancer software, which generated a conceptual map of the main themes and concepts shared by guests, through which was possible to examine structural relationships between concepts and investigate themes' associations with either customers' expression of satisfaction or dissatisfaction.

Finally, integrated theoretical conclusions and managerial implications are presented, combining the findings of both quantitative and qualitative analyses, in order to support cruise operators' management decisions and ground stakeholders' position in the industry.

While collecting and analysing secondary data, this research prioritized ethical principles throughout the research process. First, it ensured the privacy and confidentiality of reviewers by not disclosing any personally identifiable information, thus maintaining the anonymity of reviewers. Recognizing the subjective nature of user-generated content, the study approached the analysis with caution to avoid overgeneralizations based on individual opinions. Transparency about the methodology and data sources was maintained to promote accountability and contextual understanding of the findings.

CHAPTER 4

Findings and Results

Both descriptive statistics and regression models for the research were investigated, highlighting the areas of high and low satisfaction and moreover the determinants of Overall Satisfaction, considering both the direct effects of the eight proposed quality attributes and the moderating influence of Past Cruising Experience, which provided valuable insights about cruiser satisfaction that, alongside the analysis of narrative comments, can guide improvements in both the cruise companies' service delivery and marketing strategies.

4.1. Descriptive Statistics

Table 4.1 summarizes the descriptive statistics for all the quality attributes. Amongst the 416 answers, whose scores' minimum and maximum were 1 and 5, respectively, the results show that cruisers were overall pleased with their experience, as all attributes' average rating is above the midpoint of the scale and all variables have negative Skewness values, indicating that the distributions are all skewed to the left and suggesting that the data have more values that are more concentrated above the mean, in the highest values of the scale, conveying more satisfaction.

Table 4.1: Descriptive Statistics

Descriptive Statistics

	Mean	Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic
Entertainment	3.55	1.307	-0.545	-0.774
Dining	3.38	1.417	-0.459	-1.065
Fitness and Recreation	3.60	1.244	-0.615	-0.545
Cabins	3.75	1.359	-0.762	-0.695
Public Rooms	3.68	1.260	-0.688	-0.553
Value for Money	3.31	1.464	-0.335	-1.256
Embarkation	4.03	1.313	-1.198	0.184
Service	3.92	1.394	-1.024	-0.336
Overall Satisfaction	3.37	1.312	-0.375	-0.972

The mean being above the midpoint of the scale combined with a negative skewness indicates that, while most of the data points are above the midpoint, the few lower scores are more spread out or extreme, causing the distribution to have a longer left tail, meaning that the

responses were generally favourable but there is a small group of highly dissatisfied respondents. The distribution is, for most dimensions, platykurtic, suggesting a distribution more dispersed than a normal one. Only 'Embarkation' is leptokurtic, meaning that it has a distribution with shorter tails, although it is still very close to a normal distribution.

The Embarkation process received above-average evaluation with a mean score of 4.03 and is the attribute that customers were more satisfied with, while cruisers were less pleased with the Value for Money (with a mean of 3.31). The variability in responses, as indicated by standard deviations, suggests that while some aspects had more consistent ratings (e.g., Fitness and Recreation), others had more heterogeneous opinions (e.g. Value for Money).

4.2. Determinants of Overall Satisfaction

The Overall Satisfaction was first regressed on each of the eight dimensions suggested by the Cruise Critic website. Table 4.2 presents the results of Simple Linear Regressions and the corresponding Bootstrap results when regressing Overall Satisfaction on each quality dimension [see Annexes I to P].

Table 4.2: Bootstrap Confidence Intervals for each dimension's coefficient in Simple Regression

	Unstandardized Coefficients	Sig. (2-tailed)	Standardized Coefficients	Bootstrap Results 95% Confidence Interval Lower	Upper
Entertainment	0.655	<.001	0.652	0.583	0.728
Dinning	0.715	<.001	0.772	0.655	0.767
Fitness and Recreation	0.753	<.001	0.714	0.683	0.816
Cabins	0.665	<.001	0.689	0.596	0.731
Public Rooms	0.808	<.001	0.775	0.747	0.865
Value for money	0.773	<.001	0.863	0.724	0.815
Embarkation	0.548	<.001	0.548	0.464	0.627
Service	0.673	<.001	0.715	0.613	0.726

The Bootstrap Confidence Intervals proved all eight quality attributes to individually significantly affect Overall Satisfaction, because the predictors' coefficients are, for a level of confidence of 95%, likely to be within the Bootstrap Confidence Interval limits (that are both positive) and hence not likely to be zero. Thereby, and as the coefficients are all positive, it is possible to conclude that there is a significant direct linear relationship. All Pearson

correlations, which correspond to the predictors' Standardized Coefficients shown in Table 4.2, are strong [see Annex Q].

As a result, research hypotheses H1a. to H1h. can be accepted. The quality attributes that individually have a stronger effect on the outcome are the 'Value for Money', followed by the quality of 'Public Rooms', the 'Dining' and 'Fitness and Recreation' activities, although all of the associations are strong (e.g. the strongest Pearson correlation is 0.863, corresponding to 'Value for Money').

4.3. The Impact of Past Cruising Experience on Overall Satisfaction

In order to test hypothesis H2.1. (i.e., the negative influence of Past Experience on passengers' Overall Satisfaction), the correlation between both variables was investigated.

Table 4.3: Overall Satisfaction means for each Past Experience category

Past Cruising Experience			Statistic	Std. Error
Overall Satisfaction	First-time cruiser	Mean	**4.162**	0.108
		Median	5.000	
	2-5 previous cruises	Mean	**3.670**	0.126
		Median	4.000	
	6-10 previous cruises	Mean	**2.837**	0.125
		Median	3.000	
	10+ previous cruises	Mean	**2.822**	0.106
		Median	3.000	

The means for the Overall Satisfaction were confirmed to decrease as Past Cruising Experience increased, as shown in Table 4.3, as the average score for first-time cruisers is the highest value, followed by cruisers with 2-5 and 6-10, respectively. The most experienced cruisers are the ones who have the lowest average global satisfaction. The median values are consistent with the mean values, as the median for first-time cruisers is the highest score on the scale, while the median score for the most experienced cruisers is the midpoint of the scale.

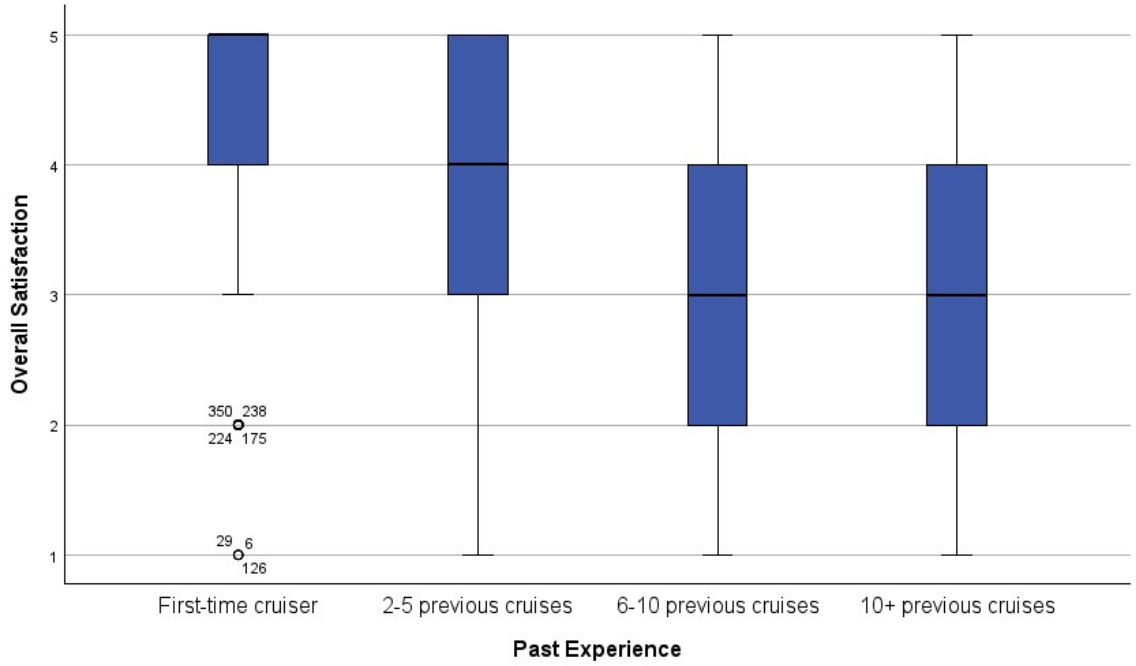


Figure 4.1: Boxplot of the correlation between Past Experience and Overall Satisfaction

Figure 4.1 visually represents the findings about the influence of Past Experience on Overall Satisfaction for each experience category and it is possible to conclude that Overall Satisfaction tends to become more consistent with higher cruising experience in terms of extreme dissatisfaction, as indicated by the fewer outliers in the more experienced groups. However, as passengers gain more cruise experience, the variability in satisfaction seems to increase slightly, with more diverse responses within the main body of responses (Interquartile Range), though the median satisfaction level stays stable amongst the higher levels of Past Experience. First-time cruisers show several outliers below the typical satisfaction range, indicating some extreme cases of dissatisfaction, although the range of middle satisfaction scores (IQR) is narrower compared to more experienced groups, suggesting varied expectations and experiences, while the most experienced cruisers have grounded expectations and more congruous evaluations and are consistently more demanding.

Moreover, the Spearman correlation between Past Experience and Overall Satisfaction was found to be -0.439 [see Annex R], with a Bootstrap Confidence Interval that does not include zero $CI = (-0.515, -0.360)$, meaning that it is possible to infer that Past Experience has a significant inverse effect on Overall Satisfaction and, consequently, H2.1. may be accepted.

4.4. Testing Moderating Effects

"Moderation describes a situation in which the relationship between two constructs is not constant but depends on the values of a third variable" (Hair et al, 2021, p.156). Hypotheses H2.2a. to H2.2h. were intended to prove whether the moderator changed the strength and eventually the direction of the relationship between each of the eight endogenous constructs and the exogenous one, accounting for heterogeneity in the data.

4.4.1. Testing the R-Squared Change

Considering the group of most experienced cruisers ($Exp4$) as the reference category, the effect of the Moderating Terms on Overall Satisfaction was investigated. The Moderating Terms result of the multiplication of Past Experience dummies by the quality attribute variables, which were previously centred by the mean to support the regression results interpretation. Examining their coefficients on the Moderated Linear Regression allowed inferring on the effect of moderation.

Table 4.4.: R Square Change and F-test

		R Square Change	Sig F Change
Entertainment	Model 2	0.081	<.001
	Model 3	0.001	0.754
Dinning	Model 2	0.038	<.001
	Model 3	0.003	0.307
Fitness and Recreation	Model 2	0.057	<.001
	Model 3	0.006	0.11
Cabins	Model 2	0.065	<.001
	Model 3	0.011	**0.016**
Public Rooms	Model 2	0.056	<.001
	Model 3	0.006	0.055
Value for Money	Model 2	0.021	<.001
	Model 3	0.002	0.243
Embarkation	Model 2	0.137	<.001
	Model 3	0.013	**0.025**
Service	Model 2	0.075	<.001
	Model 3	0.014	**0.003**

Table 4.4 presents the values of R-Squared Change and the results of the F-test for models (2), which included the dummy variables of Past Experience as predictors, and (3), with the Interaction Terms as well.

According to model (3) results, the p-values for ‘Entertainment’, ‘Dining’, ‘Fitness and Recreation’ and ‘Value for Money’ showed no evidence against the null hypothesis, which therefore failed to be rejected.

For the Moderated Linear Regression referring to ‘Cabins’, ‘Embarkation’ and ‘Service’, the F-Test rejects the null hypotheses, meaning that Past Experience has a significant moderating effect. Since the p-value for “Public Rooms” surpassed the Sig. level by only 0.005, the null hypothesis for this dimension was close to being rejected and so further analysis was conducted.

4.4.2. The practical significance of the moderating effect

The F-test results were complemented with the calculation of f^2 effect size, whose results are shown in Table 4.5. The quality attributes with moderate f^2 effect size are ‘Fitness and Recreation’, ‘Public Rooms’ and ‘Embarkation’, while ‘Cabins’ and ‘Service’ have a large f^2 effect size. As the F-test for ‘Fitness and Recreation’ had previously failed to reject H0 by a consistent difference, this variable was not further investigated, while the medium f^2 effect size for ‘Public Rooms’ confirmed the practical significance of the moderator on the predictor’s relationship with the outcome.

Table 4.5: f^2 effect size for each predictor

Predictor	f2 Effect Size
Entertainment	0.0040
Dinning	0.0083
Fitness and Recreation	0.0140
Cabins	**0.0245**
Public Rooms	**0.0208**
Value for Money	0.0086
Embarkation	**0.0218**
Service	**0.0350**

As a result, four quality attributes were thoroughly analysed in terms of the moderating effect of Past Experience on their relationship with Overall Satisfaction. These were ‘Cabins’, ‘Public Rooms’, ‘Embarkation’ and ‘Service’ and the moderating effect was proven to significantly improve the proportion of variance in the outcome predicted by the regression models.

4.4.3. The significance of the moderating effect

As can be seen for all four dimensions [see Annexes L, M, O and P], the predictors' coefficients decrease from model 1 to model 2 (in the case of $Service_C$, from 0.637 to 0.611) and then again from model 2 to model 3 (from 0.611 to 0.461). The coefficients differ because as the models become more complex, they account for a wider range of variables and therefore the effect of the predictor on the dependent variable is nuanced. Essentially, part of the variation in Overall Satisfaction that was previously attributed solely to the predictor is then also explained by the experience variable and moreover by each Interaction Term.

The moderating effect of Past Experience on the relationship between 'Service' and Overall Satisfaction is further investigated as an example for the analyses conducted for all four significant dimensions. Table 4.6 shows that the regression coefficients and Bootstrap's Confidence Intervals for all Interaction Terms on the Moderated Linear Regression of Overall Satisfaction on $Service_C$ (the predictor 'Service' centred by its mean) and Past Experience are statistically significant when considering $Exp4$ as the reference category.

Table 4.6: Moderated Linear Regression coefficients and the corresponding Bootstrap 95% Confidence Intervals

Bootstrap for Coefficients - Service

Model		B	Bootstrap[a] 95% Confidence Interval Lower	Upper
1	(Constant)	3.371	3.289	3.454
	Service_C	0.673	0.613	0.726
2	(Constant)	3.019	2.844	3.189
	Service_C	0.611	0.549	0.669
	Experience=first-time cruiser	0.832	0.591	1.055
	Experience=2-5 previous cruises	0.596	0.348	0.831
	Experience=6-10 previous cruises	-0.008	-0.266	0.238
3	(Constant)	2.971	2.787	3.147
	Service_C	0.461	0.363	0.556
	Experience=first-time cruiser	0.798	0.527	1.045
	Experience=2-5 previous cruises	0.637	0.391	0.876
	Experience=6-10 previous cruises	0.041	-0.217	0.299
	Experience=first-time cruiser * Service_C	**0.311**	0.118	0.522
	Experience=2-5 previous cruises * Service_C	**0.227**	0.079	0.376
	Experience=6-10 previous cruises * Service_C	**0.155**	0.001	0.307

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

The predicted value of Overall Satisfaction according to satisfaction with Service and Past Experience is as follows:

$$\hat{Y} = 2.971 + 0.461Service_C + 0.798Exp1 + 0.637Exp2 + 0.041Exp3$$
$$+ 0.311Exp1 \times Service_C + 0.227Exp2 \times Service_C + 0.155Exp3 \times Service_C$$

a) If the level of experience is 4 (> 10 previous cruisers), $\hat{Y} = 2.971 + 0.461Service_C$

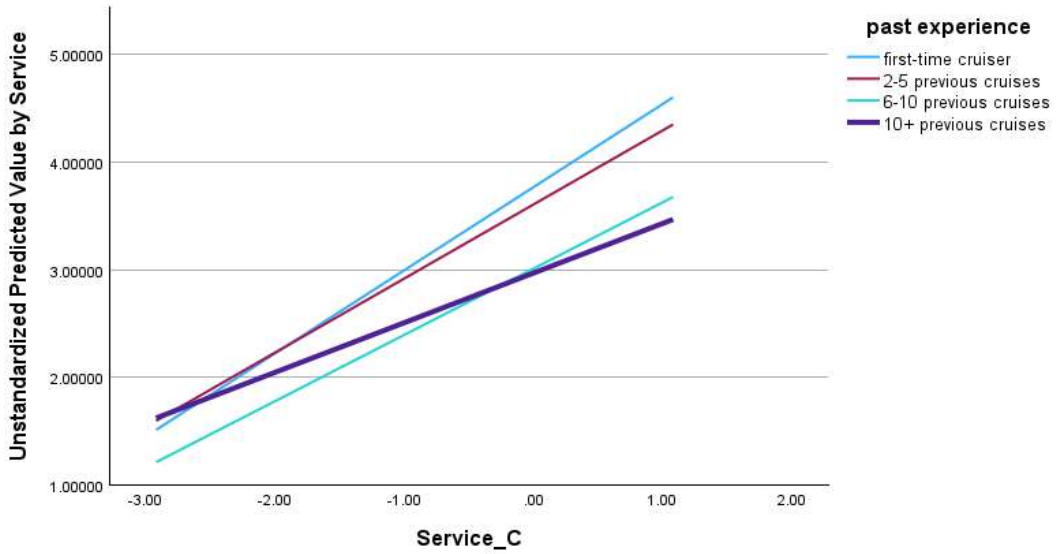
b) Considering that the coefficient of the Interaction Terms $Exp1 \times Service_C$, $Exp2 \times Service_C$ and $Exp3 \times Service_C$ and the coefficient of dummies $Exp1$, $Exp2$ and $Exp3$ are significant:

b.1) if the level of experience is 3 (6-10 previous cruises), $\hat{Y} = 3.012 + 0.616Service_C$. Hence, there is a significant increase in the strength of the relationship between Y and $Service_C$, comparing with **a)**

b.2) if the level of experience is 2 (2-5 previous cruises), we obtain $\hat{Y} = 3.608 + 0.688Service_C$ and hence the strength of the relationship between Y and $Service_C$ is again significantly stronger than the one in **a)**

b.3) if the level of experience is 1 (first-time cruiser), $\hat{Y} = 3.769 + 0.772Service_C$, which is the strongest direct linear relationship between Overall Satisfaction and $Service_C$ across all levels of Past Experience, compared to **a)**

These findings are visually represented in Graph 4.1, which shows the effect of Service quality on Overall Satisfaction, across the four categories of Past Experience.



Graph 4.1: Predicted value of Overall Satisfaction by Service_C, according to Past Experience

The positive slopes for all Past Experience categories illustrate the direct influence of the predictor on the outcome. An improvement in Service quality leads to a positive response in passengers' predicted value of Overall Satisfaction, regardless of the clients' previous cruising experience. However, although the direction of the effect is the same for all categories, its strength varies according to Past Experience.

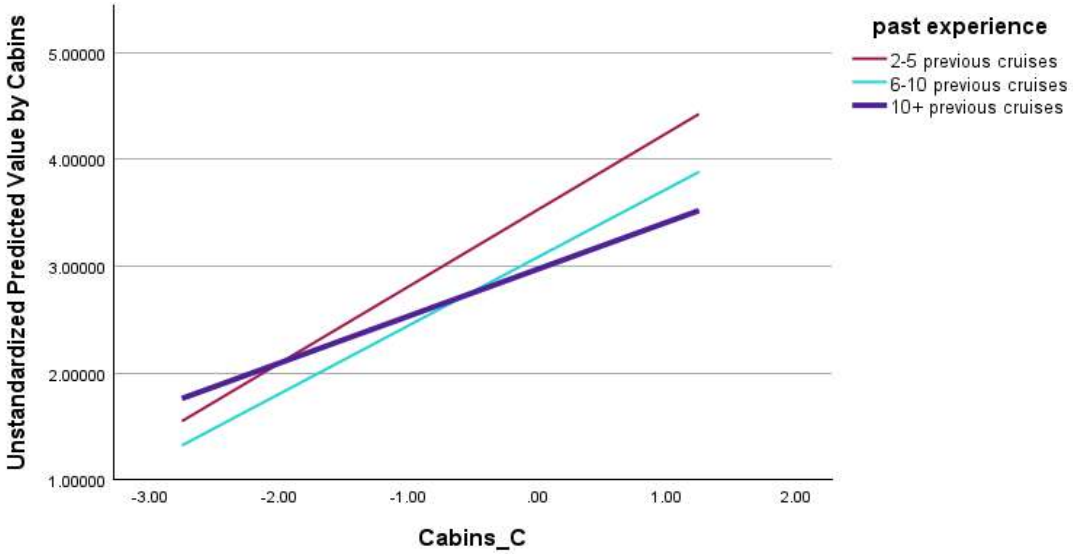
The straight line corresponding to the reference category, represented by the purple line and highlighted in bold, shows the flattest slope among all. The most experienced group is the least responsive to changes in Service quality, because they are harder to impress and no attribute improvement alone is enough to shape their satisfaction. On the other hand, for first-time cruisers (blue line), improvements in Service delivery lead to the largest increase in Overall Satisfaction. This group is highly sensitive, which may be explained by the importance of helpful staff during the vacation, to assist with any doubts and needs that first-time clients inevitably may have. The middle categories, "2-5 previous cruises" (red line) and "6-10 previous cruises" (turquoise line), are somewhere between the others, not as responsive as first-time cruisers but still showing more sensitivity than the most experienced ones.

Similar analyses were conducted for all other three dimensions, whose Moderated Linear Regression models are summarized in Table 4.7. The bold Interaction Terms' coefficients indicate which moderating effects are significant [see Annexes M, O and P].

Table 4.7: Estimated Moderated Linear Regressions with significant coefficients in bold

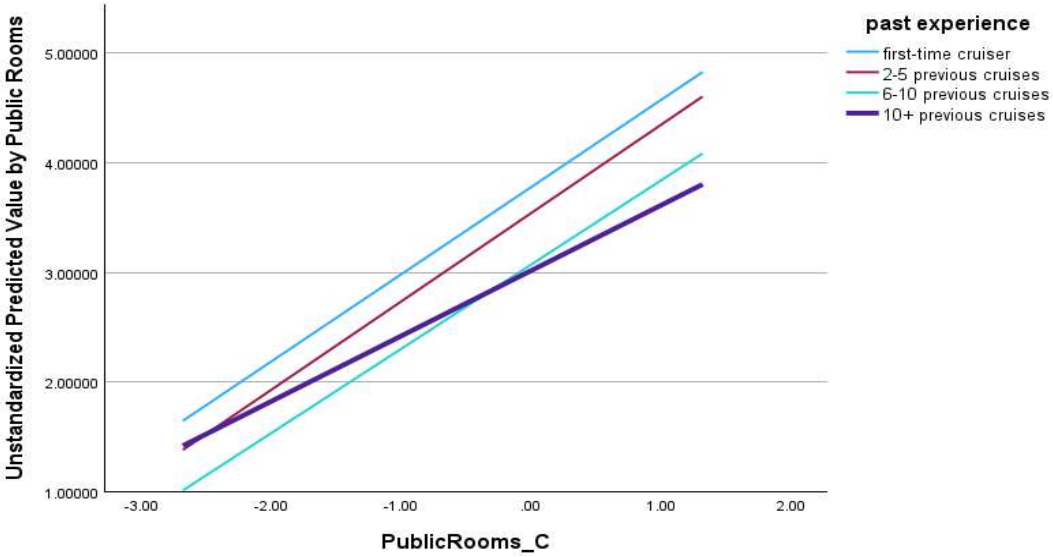
Predictor	Predicted Value of Overall Satisfaction
Cabins	$\hat{Y} = 2.971 + 0.440Cabins_C$ $+ 0.864Exp1 + 0.555Exp2 + 0.111Exp3$ $+ 0.193Exp1 \times Cabins_c + \mathbf{0.279}Exp2 \times Cabins_c$ $+ \mathbf{0.200}Exp3 \times Cabins_c$
Public Rooms	$\hat{Y} = 3.016 + 0.597PublicRooms_C$ $+ 0.762Exp1 + 0.525Exp2 + 0.055Exp3$ $+ \mathbf{0.199}Exp1 \times PublicRooms_c + \mathbf{0.210}Exp2 \times PublicRooms_c$ $+ \mathbf{0.172}Exp3 \times PublicRooms_c$
Embarkation	$\hat{Y} = 2.830 + 0.352Embarkation_C$ $+ 1.183Exp1 + 0.763Exp2 + 0.157Exp3$ $+ \mathbf{0.332}Exp1 \times Embarkation_C + 0.198Exp2 \times .Embarkation_C$ $+ 0.120Exp3 \times Embarkation_C$

In the case of the satisfaction with 'Cabins' quality, there is no significant difference between first-time cruisers and the most experienced ones, as the coefficient is likely to be zero, meaning the null hypothesis of the non-existent moderating effect cannot be rejected. However, cruisers with 2-5 and 6-10 Past Experiences express a noteworthy increase on the strength of the relationship between this quality attribute and Overall Satisfaction, when compared to the relationship referring to the most experienced group.



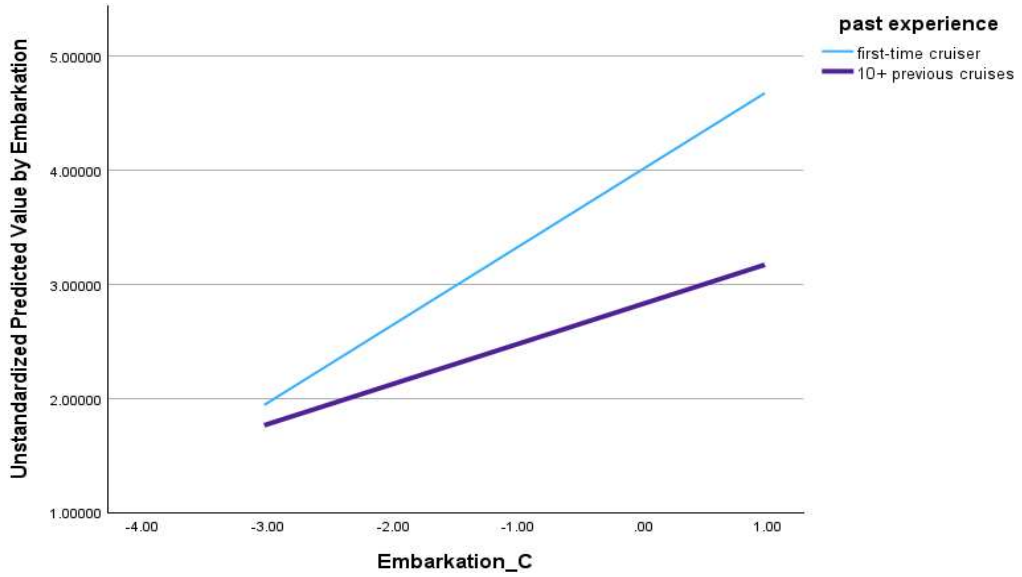
Graph 4.2:Predicted value of Overall Satisfaction by Cabins_C, according to Past Experience

Consistent with the findings for the Service quality, the most experienced cruisers are proved to be least responsive to improvements in Cabins quality, as the slope is very flat, meaning that Cabins' quality is not an extremely important dimension for the most experienced passengers when considered alone, although all slopes are positive.



Graph 4.3:Predicted value of Overall Satisfaction by Cabins_C, according to Past Experience

Graph 4.3 represents the Linear Regression of Overall Satisfaction on Public Rooms, for each Past Experience category. The regression line corresponding to $Exp4$ shows the flattest slope, indicating lower sensitivity of these cruisers, regarding Public Rooms. In general, cruisers tend to be more responsive to changes in Public Rooms conditions, when compared to improvements in Cabins, or even with the Service quality, whether it is the environment of the lounges, pool deck conditions or the quality of the public facilities, because both the Interaction Terms and, consequently, the slopes. This is a good indicator for cruise operators that investments in Public Rooms' conditions are very likely to lead to improvements in guests' perceptions.



Graph 4.4:Predicted value of Overall Satisfaction by Cabins_C, according to Past Experience

Finally, for the Embarkation process, a significant difference was found between the moderating effect of $Exp1$ and $Exp4$ on the relationship between the predictor and the outcome. Although a troubled Embarkation process negatively affects passengers' perceptions to the same extent, approximately, a smooth procedure leads to high levels of Overall Satisfaction for first-time cruisers, while the experienced ones are not as sensitive, thus their predicted value of Overall Satisfaction does not improve as much, for the same level of good Embarkation process quality.

4.4.4. Moderating effects in a nutshell

The analysis of the Moderated Linear Regression for each quality dimension and the respective Interaction Terms' coefficients provided an understanding of the role of Past Experience on the relationship between the quality attributes and clients' Overall Satisfaction.

When moderating effects were found significant, similar results could be derived for ‘Service’, ‘Cabins’, ‘Public Rooms’ and ‘Embarkation’, as the predictor’s coefficient is the lowest for the most experienced cruisers, which means that cruising veterans are less sensitive to changes in the quality of each attribute alone. These clients demand an excellent integrated service delivery, and all dimensions must be perfectioned so that their perceptions may affect their Overall Satisfaction to a point where the investments are worthy.

These findings are reflected in the graphs of the Predicted Value of Overall Satisfaction defined by each predictor, through the different slopes of the lines according to the sensibility of the experience group to improvements in the quality attribute. The less sensitivity of the more experienced cruisers, represented by the flatter straight lines is transversal to all four quality attributes, as the demanding experienced cruisers are harder to please and are not easily satisfied with the improvement of one dimension alone, but with the upgrading of the whole cruising experience as a whole, with integrated strategies to deliver the best cohesive service. This corroborates the hypotheses that Past Experience tends to weaken the relationship between these predictors and Overall Satisfaction.

4.5. Content Analysis of Cruisers’ Reviews

The content analysis of the selected reviews uncovered 10 main themes, many of which coincide with quality attributes investigated in the quantitative analysis, namely “Dining” (relevance=58%), “Room” (52%) and “Service” (34%), referred to as “People”, as well as “Cabins” (28%). These themes follow the top three most relevant concepts across the reviews, which are “Ship” (relevance=100%), “Cruise” (94%) and “Experience” (64%).

Figure 4.2 presents the map of concepts and themes generated by Leximancer, which highlights the central aspects of what passengers value or discuss most frequently about their experiences. The size and proximity of the clusters suggest their relative importance and how interrelated these themes are.

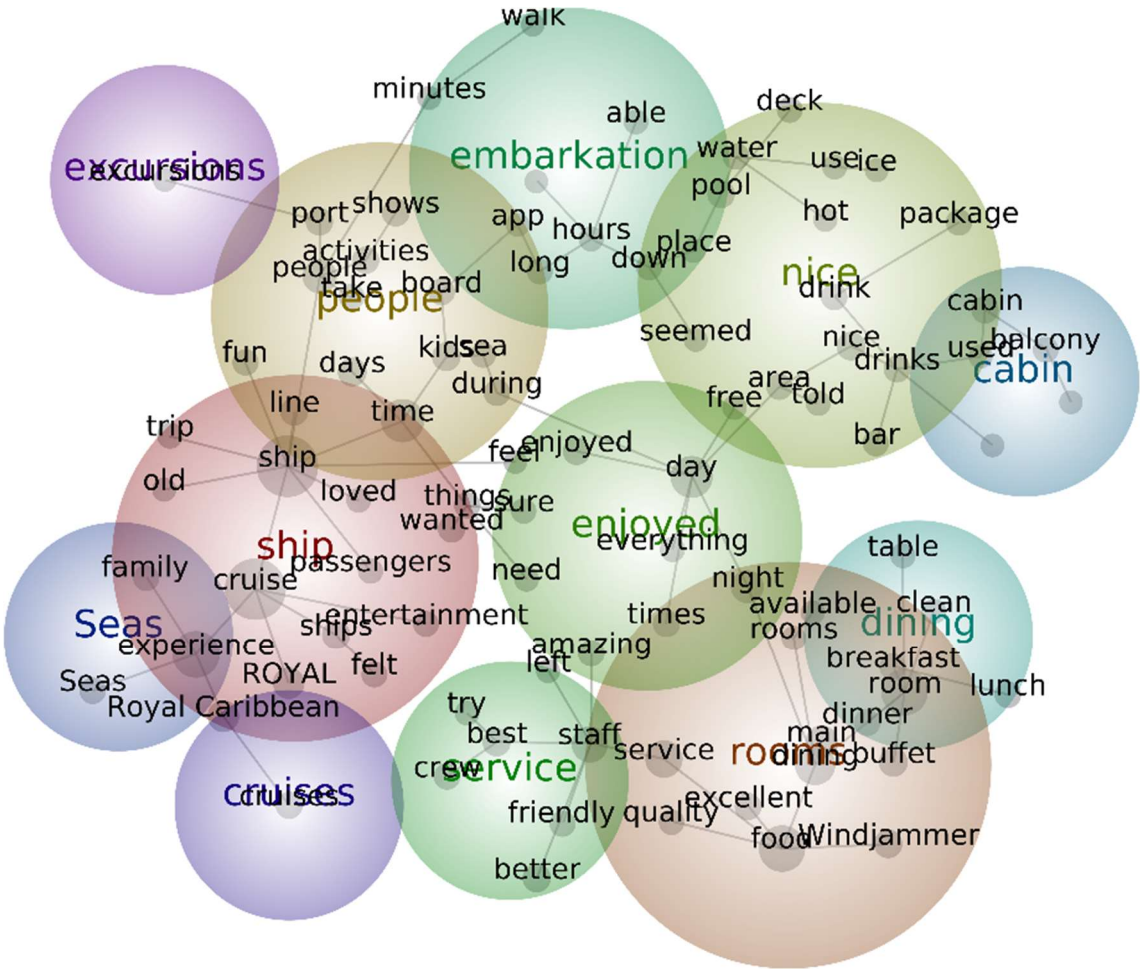


Figure 4.2: Leximancer map of themes and concepts

The main concepts within the theme “Ship”, which is the central one and is associated with all others, are “old” (count = 32, relevance = 37%) and “clean” (count = 36, relevance = 36%), which leads to the conclusion that, although some of the ships may not be as modern, efforts are already being made to assure the necessary hygienic conditions and maximum comfort for passengers. Royal Caribbean should, however, consider modernizing the facilities of older ships, as it is a matter of importance for passengers.

Within the “Embarkation” theme, terms like "minutes" (18, 12%) and "long" (14, 9%) suggest that the efficiency and smoothness of boarding procedures are noteworthy to cruisers. Long waiting times or efficient service at the port can greatly impact initial impressions. One passenger stated that “not sure what the issue was but [debarkation] was not easy or fast [and there was] a very long line on the ship and we were carrying our bags off ourselves” (Past Experience= first-time, Overall Satisfaction=2).

Dining experiences are also a major highlight. The concept “food” is the fourth most mentioned concept across the reviews, with a count of 542 and a relevance of 58%. The variety

and quality of food, specific meal times, and venues like the "Windjammer" are frequently mentioned. This indicates that culinary options and dining satisfaction are critical components of the cruise experience. The importance of dining is even more pronounced when analysing its relationship with the theme “Room”, representing the importance of the dining facilities onboard. The concept “rooms” is primarily correlated with the concept “main” (120, 55%), referring to the main public lounge or the pool deck in some ships, but is right away followed by the “dinner” (96, 53%), which is also a major term within the “Dining” theme (28, 26%), and later on by “buffet” (35, 25%).

The conceptual map also provides a deeper understanding of the importance of private spaces where passengers spend their time. The relationship between the themes “Room” and “Cabin” is represented by a bridge that includes the terms “night” and “nice”, amongst others, and crosses the theme “Enjoyed”, meaning that cruisers also enjoy the comfort of the cabins while spending the night, to complement the quality of public rooms that they appreciate during the “day”, that is also a concept correlated with the theme “Room” (count=63, relevance=18%). Moreover, within the “Cabin” theme, the most notable concepts are “balcony” (33, 26%) and “bed” (13, 18%), as well as “clean” (13, 13%), mainly to register a good impression. One reviewer reads “The balcony rooms were very clean and comfortable” (Past Experience: 6-10, Overall Satisfaction: 5) and another states that “[Although] the balcony was a bit dated, the cabin was clean and nice” (Past Experience: 10+, Overall Satisfaction: 3).

Cruisers also place a considerable emphasis on “Excursions” (count=83, relevance=9%), which are mostly correlated with the term “walk” (likelihood=7%) and although the term “amazing” is referred to 5 times, the negative term “long” is used 11 times. However, this does not necessarily mean that excursions must be shortened, but that the excursion programs are perhaps not being clearly disclosed and clients sign for those without really knowing the structure of the excursion and, specifically, how much physical effort it requires.

The conceptual map offers a detailed snapshot of what passengers prioritize and discuss regarding their cruise experience and highlights the importance of smooth operations, such as efficient embarkation process and operations onboard, as well as excursions, family and social dynamics, the quality of service and the culinary experience and the comfort of living quarters.

CHAPTER 5

Conclusion and Recommendations

The above study sought to answer three research questions regarding cruisers' satisfaction with the main ocean cruise company in the world, Royal Caribbean International. It also explored passengers' perceptions according to previous cruising experiences using both quantitative ratings and online reviews' narratives shared on the most important cruising website worldwide, the 'Cruise Critic'.

The quality attribute with the highest rating is 'Embarkation' (mean = 4.03), perhaps explained by the low expectations passengers have of the embarkation process, famous for being a slow and tedious moment, which makes it easier for clients to be surprised, while the one with which customers are least satisfied with is 'Value for Money' (mean = 3.31), proving that many customers may enjoy the experience but feel like it does not makeup to the investment. Nevertheless, all attributes' means are above the mid-point of the scale, proving that cruisers in general pleased with the cruising experience.

In accordance, all quality attributes - 'Entertainment', 'Dining', 'Fitness and Recreation', 'Cabins', 'Public Rooms', 'Value for Money', 'Embarkation', and 'Service' - were proved to individually have a strong positive Pearson correlation with Overall Satisfaction. Therefore, hypotheses H1a. to H1h. were accepted, which comes as an answer for the first research question, aiming to understand the major service quality categories associated with cruisers' satisfaction.

The second research question led to the investigation of the effect of Past Experience on Overall Satisfaction and it was proved that the higher the previous cruising experience, the lower the satisfaction, corroborated by the significant negative Spearman correlation between both variables and leading to the acceptance of research hypothesis H2.1., which suggested the inverse relationship between the variables.

Finally, the moderation analysis concluded that the moderating terms referring to Past Cruising Experience improve the percentage of Overall Satisfaction explained by satisfaction when referring to four quality attributes – 'Cabins', 'Public Rooms', 'Embarkation' and 'Service'. For these four predictors, the moderate or strong f^2 effect size showed the practical significance of the Moderation Terms. Hypotheses H2.2d., H2.2e., H2.2g. and H2.2h., which

suggested the moderating effect of Past Experience in the relationship between Overall Satisfaction and 'Cabins', 'Public Rooms', 'Embarkation' and 'Service', respectively, were accepted, while H2.2a., H2.2b., H2.2c. and H2.2f. were rejected, as no significant moderating effect was found. Results indicate that when Past Experience is high, the positive effect of the four referred quality dimensions on Overall Satisfaction becomes notably weaker. This suggests that in practical terms, cruise operators may benefit disproportionately from improvements in these quality attributes.

The investigation aggregated customers according to their level of previous experience: first-time cruisers, those with 2-5 previous experiences, 6-10 and the most experienced cruisers, who have sailed on more than 10 cruises. This segmentation was important to handle the non-linearity of the effects of Past Experience, allowing the moderated models to capture differences in how each experience levels influence the relationship between the predictors and the outcome and to improve interpretability and practical relevance, admitting the models to reflect the real-world context, where customers are segmented by cruise companies while designing marketing strategies and while delivering the service itself.

The analysis shows that cruisers with lower Past Experience take more benefit from a greater improvement in the above-referred quality dimensions, compared to those with higher experience, as the predictors' coefficients are higher for lower levels of Past Experience, due to cruisers' higher sensitivity and responsiveness. This implies that cruise companies could enhance guests' satisfaction and consequent loyalty more effectively by not only increasing the performance of each dimension, whose return will be noticeable for least experienced cruisers, but also by simultaneously developing an integrated tailored service delivery, which meets the most experienced clients' lifestyle and preferences. In this scenario, experienced guests might see a higher improvement in their Overall Satisfaction for every additional investment unit, compared to a smaller or even negligible increase if the investments were to be made only to improve each quality attribute alone. These findings could influence how resources are allocated within the company, potentially leading to targeted training programs that prioritize the least experienced employees to maximize satisfaction outcomes.

5.1. Theoretical implications

This research's findings provide important theoretical contributions. Besides offering a deeper understanding of cruisers' perceptions, the results extended previous studies' findings by

proving that the quality of 'Service', 'Cabins', 'Public Rooms' and 'Embarkation' lead to cruise passengers' satisfaction and that those individual relationships are moderated by the cruisers' Past Cruising Experience. The latter should prove to be an effective moderation variable and must be included in econometric models intended to investigate the cruise industry. Moreover, the results add to Zhang et al.'s (2015) work by providing a conceptual map that aggregates the main themes and concepts shared by reviewers online.

5.2. Managerial Implications

These findings also have managerial implications, not only for the cruise company under study, Royal Caribbean, but also for all cruise companies worldwide who seek to understand their clients' motivations and satisfaction. The results proved the dimensions 'Value for Money', 'Public Rooms', 'Dining' and 'Fitness and Recreation' to be the ones that most significantly impact passengers' perceptions of the cruising experience. Guests' satisfaction with these categories may influence their perceptions so much that it would shape their ratings and could be the main focus of their reviews' narratives. This will inevitably affect online word-of-mouth and have a huge impact on the company's ability to attract new customers and moreover retain them, leading to their long-term loyalty.

Considering satisfaction as the gap between customers' perceptions and expectations, cruise operators must influence both variables. On the one hand, expectations must be managed through a balanced blend of creating the thrill and promoting the truth, in order to captivate customers, while adjusting expectations to prevent the disappointment of expecting something and being provided with less. There must be a clear communication of what passengers should expect and marketing campaigns must be as faithful to the service as possible.

As this study proved, expectations also derive from past cruising experiences that customers may have had, which cruise companies cannot influence. Thereby, hand in hand with the demographic segmentation of the marketing campaigns, such as targeting both solo travellers and families or young people and old couples, for example, cruise operators may consider designing an integrated marketing system that delivers tailored messages for cruisers with heterogeneous Past Experience. The marketing strategy to attract new cruisers should prioritize the passengers' safety and ensure permanent assistance before, during and after embarkation. Potential cruisers must feel safe and should be able to clear any doubt they may have, while feeling the excitement of a whole new experience. On the other hand, experienced

customers should be attracted by cruise companies with the promise of tailored service delivery, that is differentiated from other experiences they may have had. Typical problems with cruising vacations that cruisers may already have identified shall be rectified and the marketing campaigns must mention it and make sure that the guests will have a smooth experience, customized to their tastes and lifestyle.

On the other hand, cruise operators must influence the other variable in the calculation of satisfaction. Perceptions can be shaped by improving the quality of the services delivered. Improvements in the quality of 'Value for Money', 'Public Rooms', 'Dining' and 'Fitness and Recreation' are the ones that will generate a higher increase in guests' perceptions, as they show the strongest correlations with Overall Satisfaction. Aligned with the improvements in these quality attributes, cruise companies must take into account the ones whose effect on their clients' satisfaction is more affected by Past Experience. Investing in the quality of 'Cabins', 'Public Rooms', the 'Embarkation' process and 'Service' will affect the least experienced cruisers, who are more sensitive to improvements in these areas while for those with higher Past Cruising Experience, an integrated tailored service delivery system must be applied.

In practice, tailored services can mean, for example, personalizing guests' Cabins, perhaps by incorporating elements of the clients' personal life as decoration or carefully choosing the food and beverages on the mini-bar according to food restrictions and lifestyle.

As for Room Services, in order to please all guests within a limited physical space, cruise companies must provide a wide variety of options when it comes to lounges and public spaces onboard, meeting the tastes of guests who prefer to listen to live music, for example, or those who enjoy a calmer space. There should be, for instance, non-smoking areas and also deliberate spaces for smokers, perhaps with bar service available, as well as rooms for families with children and, on the other hand, lounges for adults only. Every guest must have at least one room that meets their personality and lifestyle, so that the experience feels tailored and premium to every cruiser. Transversally, the ships should be as modern as possible, attending to technological demands and proving to have relaxing but efficient common areas.

In the case of Embarkation and Disembarkation days, there could be beverage stands for guests embarking on the ship to enjoy, or live music while waiting to embark. Tailored service for revisiting guests could include welcoming them before embarking with a framed picture of previous embarkations, which would require a database with the cruise company's premium members and pictures taken on the first day. This would be a unique service that cruisers would

be surprised with at the first time and would expect to receive in future vacations. It could also be an incentive for cruisers to join the premium membership of cruise operators. As for first-time cruisers, there should always be enough staff members to guide them and provide any information they could possibly need.

In contrast to the Embarkation, the Service variable is the quality attribute with which clients have the most means of comparison because it is very similar to how tourism facilities operate on land. Royal Caribbean's "Royal Genies" ("Royal Caribbean", 2023) is already a step towards delivering personalized service, as these are staff members who assist premium members during their vacations. All staff members must be available to answer any doubts that first-time cruisers may have.

The excellence of all quality attributes suggested by literature and confirmed by the research is essential for cruisers, namely the quality of the activities onboard, such as entertainment and fitness/ recreation options, the dining conditions and the value that clients feel they take from the money invested in the experience. All these findings are to be considered by cruise companies and by the sector's stakeholders, who must know their customers so well that they feel at home, warmly welcomed onboard and carefully assisted throughout their vacations.

5.3. Research Limitations

Despite the theoretical and managerial implications, this study also suffered from some limitations that shall be taken into account when applying the findings. First, the data was collected from the Cruise Critic website, so the participants were limited to cruisers who posted online reviews. This may not provide a complete picture of the clients' perceptions, as previous studies have suggested that young customers usually contribute more to electronic word-of-mouth (Bronner & de Hoog, 2011). Also, online reviews may be biased because clients are more willing to rate a good experience rather than a bad one and the percentage of above-average ratings may be a consequence of it (Castillo-Manzano & López-Valpuesta, 2018a).

Moreover, although the quality attributes determined by the website are supported by literature, it restricted the selection of attributes to study to some extent. Future research on the topic may investigate the linear regression model including other variables or examine the moderation role of Past Experience on passengers' satisfaction with a certain quality attribute

according to passenger type, thus eventually considering a segmentation analysis. Primary data may also be collected so that the researcher can identify specific problems lifted by literature.

Finally, the cruise industry itself is always evolving, namely the cruise companies, whose number of ships and onboard services change and are updated constantly to meet the demands of an increasingly modern industry. Therefore, the new and renewed ships, namely Royal Caribbean's, which entered service after this research, could also be included in the data collection. Therefore, there is room for growing research on the cruise industry and cruisers' satisfaction, namely when it comes to deciding the data collection methods and analysis approaches.

Bibliographical References

Abbas Najafipour, A., Marzi, V., & hosein Foroozanfar, M. (2014a). The Future of Cruise Ship Tourism Industry; the Challenges of Cruising Market and Operations Management. *Journal of Social Issues & Humanities*, *2*(7).

Ahn, J., & Lu, S. (2022). Examining the relative role of CSR activity and service experience on cruise customers' behavior. *Social Responsibility Journal*, *18*(3), 453–468. https://doi.org/10.1108/SRJ-07-2020-0298

Alden, D. L., Steenkamp, J.-B. E. M., & Batra, R. (1999). Brand Positioning Through Advertising in Asia, North America, and Europe: The Role of Global Consumer Culture. *Journal of Marketing*, *63*(1), 75–87.

Amalnerkar, E., Lee, T. H., & Lim, W. (2020). Reliability analysis using bootstrap information criterion for small sample size response functions. *Structural and Multidisciplinary Optimization*, *62*(6), 2901–2913. https://doi.org/10.1007/s00158-020-02724-y

Arasli, H., Saydam, M. B., & Kilic, H. (2020). Cruise travelers' service perceptions: A critical content analysis. *Sustainability (Switzerland)*, *12*(17). https://doi.org/10.3390/SU12176702

Augustyn, M., & ho, S. K. (1998). Service Quality and Tourism. *Journal of Travel Research*, *37*(1), 71–75. https://doi.org/10.1177/004728759803700110

Bahja, F. (2017). Evaluating the Relative Importance of Influencing Factors on Cruise Vacations: A Conjoint Analysis Cruise Vacations. https://digitalcommons.usf.edu/etd

Bahja, F., Cobanoglu, C., Berezina, K., & Lusby, C. (2019). Factors influencing cruise vacations: the impact of online reviews and environmental friendliness. *Tourism Review*, *74*(3), 400–415. https://doi.org/10.1108/TR-12-2017-0207

Baker, D. A., & Crompton, J. L. (2000). Quality, Satisfaction and Behavioral Intentions. *Annals of Tourism Research*, *27*. www.elsevier.com/locate/atoures

Björk, P., Kauppinen-Räisänen, H., & Sthapit, E. (2023). The impact of cruise ship dinescape on travellers' behaviour. *Consumer Behavior in Tourism and Hospitality*, *18*(2), 174–190. https://doi.org/10.1108/CBTH-02-2022-0048

Bollen, K. A., Stine, R., & Stinet, R. (1990a). Direct and Indirect Effects: Classical and Bootstrap Estimates of Variability. In *Source: Sociological Methodology* (Vol. 20).

Brida, J. G., & Coletti, P. (2012). Tourists' intention of returning to a visited destination: Cruise ship passengers in cartagena de indias, Colombia. *Tourism in Marine Environments*, *8*(3), 127–143. https://doi.org/10.3727/154427312X13491835451412

Brochado, A., Rita, P., Oliveira, C., & Oliveira, F. (2019). Airline passengers' perceptions of service quality: themes in online reviews. *International Journal of Contemporary Hospitality Management*, *31*(2), 855–873. https://doi.org/10.1108/IJCHM-09-2017-0572

Bronner, F., & de Hoog, R. (2011). Vacationers and eWOM: Who posts, and why, where, and what? *Journal of Travel Research*, *50*(1), 15–26. https://doi.org/10.1177/0047287509355324

Bruzzi, S., & Benevolo, C. (2022). Cruisers' intention of returning to European destinations: A regression analysis. *International Journal of Tourism Research*, *24*, 311–322. https://doi.org/10.1002/jtr.2503

Burton, J., & Khammash, M. (2010). Why do people read reviews posted on consumer-opinion portals? In *Journal of Marketing Management* (Vol. 26, Issues 3–4, pp. 230–255). https://doi.org/10.1080/02672570903566268

Buzova, D., Sanz-Blas, S., & Cervera-Taulet, A. (2019). 'Tour me onshore': understanding cruise tourists' evaluation of shore excursions through text mining. *Journal of Tourism and Cultural Change*, *17*(3), 356–373. https://doi.org/10.1080/14766825.2018.1552277

Calza, F., Pagliuca, M., Risitano, M., & Sorrentino, A. (2020). Testing moderating effects on the relationships among on-board cruise environment, satisfaction, perceived value and behavioral intentions. *International Journal of Contemporary Hospitality Management*, *32*(2), 934–952. https://doi.org/10.1108/IJCHM-09-2019-0773

Caber, M., González-Rodríguez, M. R., Albayrak, T., & Simonetti, B. (2020). Does perceived risk really matter in travel behaviour? *Journal of Vacation Marketing*, *26*(3), 334–353. https://doi.org/10.1177/1356766720927762

Carter, N., Bryant-Lukosius, D., Dicenso, A., Blythe, J., & Neville, A. J. (2014). The use of triangulation in qualitative research. In *Oncology Nursing Forum* (Vol. 41, Issue 5, pp. 545–547). Oncology Nursing Society. https://doi.org/10.1188/14.ONF.545-547

Castillo-Manzano, J. I., Castro-Nuño, M., & López-Valpuesta, L. (2018). "When Las Vegas takes to the sea: New trends in cruising." *Tourism Economics*, *24*(1), 135–140. https://doi.org/10.1177/1354816617706867

Castillo-Manzano, J. I., Castro-Nuño, M., & Pozo-Barajas, R. (2022). Addicted to cruises? Key drivers of cruise ship loyalty behavior through an e-WOM approach. *International Journal of Contemporary Hospitality Management*, *34*(1), 361–381. https://doi.org/10.1108/IJCHM-05-2021-0642

Castillo-Manzano, J. I., & López-Valpuesta, L. (2018). What does cruise passengers' satisfaction depend on? Does size really matter? *International Journal of Hospitality Management*, *75*, 116–118. https://doi.org/10.1016/j.ijhm.2018.03.013

Chatterjee, S. (2019). Explaining customer ratings and recommendations by combining qualitative and quantitative user generated contents. *Decision Support Systems*, *119*, 14–22. https://doi.org/10.1016/j.dss.2019.02.008

Chipkin, H. (2014, August 11). Consumer Trends: As popularity rises, agents seek out their share. *Travel Weekly*. www.travelweekly.com

Chua, B. L., Goh, B., Huffman, L., Jai, C., & Karim, S. (2016). Cruise Passengers' Perception of Key Quality Attributes of Cruise Lines in North America. Journal of Hospitality Marketing and Management, 25(3), 346–371. https://doi.org/10.1080/19368623.2015.1019171

Chua, B. L., Lee, S., Goh, B., & Han, H. (2015). Impacts of cruise service quality and price on vacationers' cruise experience: Moderating role of price sensitivity. *International Journal of Hospitality Management*, *44*, 131–145. https://doi.org/10.1016/j.ijhm.2014.10.012

Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Cox, R., Long, J. C., & Jenson, G. &. (2004). *Embarkation / Disembarkation Of Cruise Ship Passengers Between the Terminal and the Ship*. https://doi.org/https://doi.org/10.1061/40727(2004)1

Cruise Definition (2024). Cambridge Dictionary. https://dictionary.cambridge.org/dictionary/english-portuguese/cruise#google_vignette

Royal Caribbean Cruise Reviews (2024). Cruise Critic. https://www.cruisecritic.co.uk/cruise/royal-caribbean/reviews?upstashUserProfile=load&disableSOV=true

State of the Cruise Industry (2020). Cruise Lines International Association. https://cruising.org/en-gb/news-and-research/research/2019/december/state-of-the-cruise-industry-outlook-2020

State of the Cruise Industry (2021). Cruise Lines International Association. https://cruising.org/en/news-and-research/research/2020/december/state-of-the-cruise-industry-outlook-2021

State of the Cruise Industry (2024). Cruise Lines International Association. https://cruising.org/en/News-and-Research/Research/2024/April/2024-State-of-the-Cruise-Industry-Report

di Vaio, A., López-Ojeda, A., Manrique-de-Lara-Peñate, C., & Trujillo, L. (2022). The measurement of sustainable behaviour and satisfaction with services in cruise tourism experiences. An empirical analysis. *Research in Transportation Business and Management*, *45*. https://doi.org/10.1016/j.rtbm.2021.100619

Dowling,R. K., 9781845930486.0003, CABI, (3–17), CABI, The cruising industry., (2006), . https://doi.org/10.1079/9781845930486.0003

Dowling, R. K., & Vasudavan, T. (2000). Cruising in the New Millennium. *Tourism Recreation Research*, *25*(3), 17–27. https://doi.org/10.1080/02508281.2000.11014921

Efron, B., & Tibshirani, R. (1994). *An introduction to the bootstrap*. Chapman & Hall.

Escoffier, M. R. (1995). Food Service Operations in the Cruise Industry. *Hospitality Review*, *13*(3).

Fred Van Raalj,, W., & Francken, D. A. (1984). Vacation Decisions, Activities and Satisfactions. *Lourlsm Research*.

Frederick F. Reichhekd, & W. earl Sasser, Jr. (1990). Zero Defections: Quality Comes to Services. *Harvard Business Review*, *68*(5), 105111.

Gabe, T. M., Lynch, C. P., & McConnon, J. C. (2006). Likelihood of cruise ship passenger return to a visited port: The case of bar harbor, Maine. *Journal of Travel Research*, *44*(3), 281–287. https://doi.org/10.1177/0047287505279107

Berhe Gebremichael, G., & Inder Singh, A. (2019). Customers' expectations and perceptions of service quality dimensions: A study of the hotel industry in selected cities of Tigray Region, Ethiopia. *African Journal of Hospitality, Tourism and Leisure* 5(5), 1-15.

Geerts, M., & Dooms, M. (2022). An analysis of the CSR portfolio of cruise shipping lines. *Research in Transportation Business and Management*, *45*. https://doi.org/10.1016/j.rtbm.2020.100615

Gitelson, R. J., & Crompton, J. L. (1984a). Insights into the Repeat Vacation Phenomenon. *Annals of Tourism Research*, *11*, 199–217.

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Moderation Analysis. In *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R. Cham* (pp. 155–172). Springer. https://doi.org/http://dx.doi.org/10.1007/978-3-030-80519-7_8

Han, H., Back, K. J., & Barrett, B. (2009). Influencing factors on restaurant customers' revisit intention: The roles of emotions and switching barriers. *International Journal of Hospitality Management*, *28*(4), 563–572. https://doi.org/10.1016/j.ijhm.2009.03.005

Han, H., & Hyun, S. S. (2018). Role of motivations for luxury cruise traveling, satisfaction, and involvement in building traveler loyalty. *International Journal of Hospitality Management*, *70*, 75–84. https://doi.org/10.1016/j.ijhm.2017.10.024

Hogreve, J., Iseke, A., & Derfuss, K. (2022). The Service-Profit Chain: Reflections, Revisions, and Reimaginations. Journal of Service Research, 25(3), 460-477. https://doi.org/10.1177/10946705211052410

Huang, S. (Sam), Afsharifar, A., & Veen, R. van der. (2016). Examining the moderating role of prior knowledge in the relationship between destination experiences and tourist satisfaction. *Journal of Vacation Marketing*, *22*(4), 320–334. https://doi.org/10.1177/1356766715618996

Hult, G. T. M. (2023). Partial Least Squares Structural Equation Modeling (PLS-SEM). In *Psy 523/623*. http://www.-springer.-com/series/16374

Hwang, J., & Han, H. (2014). Examining strategies for maximizing and utilizing brand prestige in the luxury cruise industry. *Tourism Management*, *40*, 244–259. https://doi.org/10.1016/j.tourman.2013.06.007

Jotov, N., Miletić, V., Rajković, Ž., Vidaković, M., & Mitrović, D. (2022). Wellness programs as an integral part of the tourist offer on cruise ships. *Sportlogia*, *18*(1), 14–24. https://doi.org/10.5550/sgia.221801.en.jrm

Khadka, K., & Maharjan, S. (2017). Customer satisfaction and customer loyalty. *Centria University of Applied Sciences Pietarsaari*, *1*(10), 58-64.

Lachowicz, M. J., Preacher, K. J., & Kelley, K. (2018). A novel measure of effect size for mediation analysis. *Psychological Methods*, *23*(2), 244–261. https://doi.org/10.1037/met0000165

Lin, L. Y., Tsai, C. C., & Lee, J. Y. (2022). A Study on the Trends of the Global Cruise Tourism Industry, Sustainable Development, and the Impacts of the COVID-19 Pandemic. *Sustainability (Switzerland)*, *14*(11). https://doi.org/10.3390/su14116890

Lois, P., & Wang, J. (2005). Choosing a Cruise Destination, and the Level of Passengers' Satisfaction, their Needs and Expectations: the Cyprus Case. *Tourism Today - The College of Tourism and Hotel Management*, *5*, 142–152.

Loureiro, S. M. C., Japutra, A., & Kwun, D. (2019). Signalling effects on symbolic status and travellers' well-being in the luxury cruise industry. *International Journal of Tourism Research*, *21*(5), 639–654. https://doi.org/10.1002/jtr.2287

Lu, C., Berchoux, C., Marek, M.W. and Chen, B. (2015), Service quality and customer satisfaction: qualitative research implications for luxury hotels, *International Journal of Culture, Tourism and Hospitality Research*, Vol. 9 No. 2, pp. 168-182. https://doi.org/10.1108/IJCTHR-10-2014-0087

Maria Espinet-Rius, J., Fluvià-Font, M., Rigall-Torrent, R., & Oliveras-Corominas, A. (2018). Cruise tourism: a hedonic pricing approach. *European Journal of Management and Business Economics*, *27*(1), 101–122. https://doi.org/10.1108/EJMBE-11-2017-0053

Mazursky, D. (1989). Past Experience and Future Tourism Decision. *Eunsm Research*, *16*, 333–344.

Mehta, D., Agarwal, A., Aggarwal, D., Nangia, D., Raghuwanshi, D., & Surendra Modi, A. (2021). Operations Research in the Cruise Industry. In *International Research Journal of Modernization in Engineering Technology and Science www.irjmets.com @International Research Journal of Modernization in Engineering*. www.irjmets.com

Memon, M. A., Cheah, J. H., Ramayah, T., Ting, H., Chuah, F., & Cham, T. H. (2019). Moderation analysis: Issues and guidelines. *Journal of Applied Structural Equation Modeling*, *3*(1), i–xi. https://doi.org/10.47263/jasem.3(1)01

Mill, R. Christie., & Morrison, A. M. . (1985). The tourism system : an introductory text. *Publications in Review*, 457. https://doi.org/10.1016/0160-7383(86)90070-8

Mulkunee, S., & Monpanthong, P. (2023). Exploring the factors of destination image, destination satisfaction affecting destination loyalty for cruise passengers in Thailand. *Kasetsart Journal of Social Sciences*, *44*(2), 605–614. https://doi.org/10.34044/j.kjss.2023.44.2.31

Nasar, A., Hussani, S. K., Karim, E., & Siddiqui, M. Q. (2012). Analysis of influential factors on consumer buying behavior of youngster towards branded products: evidence from Karachi. *KASBIT Business Journal*, *5*(1), 56-61.

Nicolau, J. L., & Más, F. J. (2006). The influence of distance and prices on the choice of tourist destinations: The moderating role of motivations. *Tourism Management*, *27*(5), 982–996. https://doi.org/10.1016/j.tourman.2005.09.009

Oliver, R. L. (1981). Measurement and evaluation of satisfaction processes in retail settings. *Journal of Retailing, 57*(3), 25–48.

Ozturk, U. A., & Gogtas, H. (2016). Destination attributes, satisfaction, and the cruise visitor's intent to revisit and recommend. *Tourism Geographies*, *18*(2), 194–212. https://doi.org/10.1080/14616688.2015.1124446

Pantano, E., & Pietro, L. di. (2013). From e-tourism to f-tourism: Emerging issues from negative tourists' online reviews. *Journal of Hospitality and Tourism Technology*, *4*(3), 211–227. https://doi.org/10.1108/JHTT-02-2013-0005

Papachristou, A. A., Pallis, A. A., & Vaggelas, G. K. (2022). Cruise home-port selection criteria. *Research in Transportation Business and Management*, *45*. https://doi.org/10.1016/j.rtbm.2020.100584

Papathanassis, A. (2016). Cruise business development. *Bremerhaven University of Applied Sciences, Bremerhaven, Germany*. https://doi.org/10.1007/978-3-319-27353-2

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual: A multiple-item scale for measuring consumer perc. *Journal of retailing*, *64*(1), 12.

Park, D. H., Lee, J., & Han, I. (2007). The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. In *International Journal of Electronic Commerce* (Vol. 11, Issue 4, pp. 125–148). M.E. Sharpe Inc. https://doi.org/10.2753/JEC1086-4415110405

Petrick, J. F. (2004). First timers' and repeaters' perceived value. *Journal of Travel Research*, *43*(1), 29–38. https://doi.org/10.1177/0047287504265509

Petrick, J. F., Morais, D. D., & Norman, W. C. (2001a). An Examination of the Determinants of Entertainment Vacationers' Intentions to Revisit. In *JOURNAL OF TRAVEL RESEARCH*.

Rice, K. (2014, August 11). Delight, served to perfection: Seabourn's recipe for luxury. *Travel Weekly*. www.exclusivegrouptravel.com

Road, L. (2005). Tourism Today Tourism Today The College of Tourism and Hotel Management. *Journal of the College of Tourism and Hotel Management*.

Rodrigue, J. P., & Notteboom, T. (2013). The geography of cruises: Itineraries, not destinations. *Applied Geography*, *38*(1), 31–42. https://doi.org/10.1016/j.apgeog.2012.11.011

Ruiz-Guerra, I., Molina-Moreno, V., & Cort es-García, F. J. (2019). Prediction of the impact on air quality of the cities receiving cruise tourism: the case of the Port of Barcelona. *Heliyon*, *5*, 1280. https://doi.org/10.1016/j.heliyon.2019

Sánchez-Fernández, R., & Iniesta-Bonillo, M. Á. (2006b). Consumer perception of value. Literature Review and a new Conceptual Framework. *The Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, *19*, 40–58.

Schreyer, R., Lime, D. W., & Williams, D. R. (1984). Characterizing the influence of past experience on recreation behavior. *Journal of Leisure Research*, *16*(1), 34–50. https://doi.org/10.1080/00222216.1984.11969571

Sciortino, C., Ferrante, M., de Cantis, S., & Gyimóthy, S. (2022). Tracking cruise passengers' consumption: An analysis of the relationships between onshore mobility and expenditure. *Annals of Tourism Research Empirical Insights*, *3*(2). https://doi.org/10.1016/j.annale.2022.100059

Shahijan, M. K., Rezaei, S., & Amin, M. (2018). Qualities of effective cruise marketing strategy: Cruisers' experience, service convenience, values, satisfaction and revisit intention. *International Journal of Quality and Reliability Management*, *35*(10), 2304–2327. https://doi.org/10.1108/IJQRM-07-2017-0135

Sonmez, S. F., & Graefe, A. R. (1998). Determining future travel behavior from past travel experience and perceptions of risk and safety. *Journal of Travel Research*, *37*(2), 171–177. https://doi.org/10.1177/004728759803700209

Sotiriadis, M. D., & van Zyl, C. (2013). Electronic word-of-mouth and online reviews in tourism services: The use of twitter by tourists. *Electronic Commerce Research*, *13*(1), 103–124. https://doi.org/10.1007/s10660-013-9108-1

Sun, L., Luo, M., & Yang, Y. (2023). Compensation mechanism for port time extension in cruise line designs. *Transport Policy*, *139*, 144–154. https://doi.org/10.1016/j.tranpol.2023.06.009

Sun, X., Cao, X., & Lau, Y. yip. (2023). Exploring cruise tourists' sentiment expression pattern from online reviews: An insight into market positioning. *Tourism Management Perspectives*, *49*. https://doi.org/10.1016/j.tmp.2023.101195

Sun, X., Feng, X., & Gauri, D. K. (2014). The cruise industry in China: Efforts, progress and challenges. In *International Journal of Hospitality Management* (Vol. 42, pp. 71–84). Elsevier Ltd. https://doi.org/10.1016/j.ijhm.2014.05.009

Tao, S., & Kim, H. S. (2019). Cruising in Asia: what can we dig from online cruiser reviews to understand their experience and satisfaction. *Asia Pacific Journal of Tourism Research*, *24*(6), 514–528. https://doi.org/10.1080/10941665.2019.1591473

Testa, M. R., & Sullivan, K. (2002a). Customer Satisfaction, Quality in Cruise Industry. In *Hospitality Review* (Vol. 20, Issue 2).

Tucker, M., & Pitt, M. (2010). Improving service provision through better management and measurement of customer satisfaction in facilities management. *Journal of Corporate Real Estate*, *12*(4), 220–233. https://doi.org/10.1108/14630011011094667

Wang, K., Wang, S., Zhen, L., & Qu, X. (2016). Cruise shipping review: operations planning and research opportunities. In *Maritime Business Review* (Vol. 1, Issue 2, pp. 133–148). Emerald Group Holdings Ltd. https://doi.org/10.1108/MABR-04-2016-0007

Wang, L., & Li, X. (2023). The five influencing factors of tourist loyalty: A meta-analysis. *PLoS ONE*, *18*(4 April). https://doi.org/10.1371/journal.pone.0283963

What is a Royal Genie and what do I need to know to get the best experience? (2023). Royal Caribbean International. https://www.royalcaribbean.com/faq/questions/what-is-the-royal-genie

Wicks, A. M., & Roethlein, C. J. (2009). A satisfaction-based definition of quality. *The Journal of Business and Economic Studies, 15*(1), 82-97,110-111. Retrieved from https://www.proquest.com/scholarly-journals/satisfaction-based-definition-quality/docview/235806523/se-2

Worldwide market share of leading cruise companies in 2022. (2024, September 6). Statista. https://www.statista.com/forecasts/1258067/market-share-cruises-worldwide . Accessed in May, 2024

Worldwide Cruise Line Market Share in 2024. (2024). Cruise Market Watch. https://cruisemarketwatch.com/market-share/. Accessed in May, 2024

Xie, H. J., Kerstetter, D. L., & Mattila, A. S. (2012). The attributes of a cruise ship that influence the decision making of cruisers and potential cruisers. *International Journal of Hospitality Management*, *31*(1), 152–159. https://doi.org/10.1016/j.ijhm.2011.03.007

Yasvari, T. H., Ghassemi, R. A., & Rahrovy, E. (2012). Influential Factors on Word of Mouth in Service Industries (The case of Iran Airline Company). *International Journal of Learning and Development*, *2*(5), 227. https://doi.org/10.5296/ijld.v2i5.2366

Zeithaml, V. A., Zeithaml, S., Berry, L. L., & Parasuraman, A. (1993). The Nature and Determinants of Customer Expectations of Service. *Journal of the Academy of Marketing Science*.

Zhang, Z., Ye, Q., Song, H., & Liu, T. (2015). The structure of customer satisfaction with cruise-line services: an empirical investigation based on online word of mouth. *Current Issues in Tourism*, *18*(5), 450–464. https://doi.org/10.1080/13683500.2013.776020

Annexes

Annex A: 3.4.1. Moderated Linear Regression regarding 'Entertainment' (Exp1 as reference category)

Bootstrap for Coefficients

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.369	.001	.047	<.001	3.282	3.465
	Entertainment_C	.655	-.001	.036	<.001	.583	.728
2	(Constant)	3.883	.004	.090	<.001	3.713	4.064
	Entertainment_C	.582	-.001	.038	<.001	.506	.657
	Experience=2-5 previous cruises	-.283	-.006	.134	.035	-.547	-.027
	Experience=6-10 previous cruises	-.844	-.002	.142	<.001	-1.126	-.579
	Experience=10+ previous cruises	-.915	-.005	.126	<.001	-1.155	-.671
3	(Constant)	3.879	.004	.113	<.001	3.660	4.108
	Entertainment_C	.591	-.001	.090	<.001	.408	.763
	Experience=2-5 previous cruises	-.282	-.004	.153	.066	-.573	.022
	Experience=6-10 previous cruises	-.828	-.002	.159	<.001	-1.142	-.517
	Experience=10+ previous cruises	-.926	-.003	.142	<.001	-1.206	-.654
	Experience=2-5 previous cruises * Entertainment_C	.016	-.002	.126	.894	-.251	.258
	Experience=6-10 previous cruises * Entertainment_C	.025	-.002	.117	.851	-.216	.242
	Experience=10+ previous cruises * Entertainment_C	-.072	.004	.111	.515	-.293	.154

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex B: 3.4.1. Moderated Linear Regression regarding 'Dining' (Exp1 as reference category)

Bootstrap for Coefficients

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.370	.002	.040	<.001	3.293	3.452
	Dining_C	.715	.001	.029	<.001	.659	.772
2	(Constant)	3.713	.002	.074	<.001	3.567	3.856
	Dining_C	.653	.001	.032	<.001	.592	.719
	Experience=2-5 previous cruises	-.154	.000	.110	.173	-.371	.062
	Experience=6-10 previous cruises	-.603	.002	.118	<.001	-.847	-.378
	Experience=10+ previous cruises	-.606	-.001	.114	<.001	-.824	-.373
3	(Constant)	3.671	.007	.089	<.001	3.507	3.850
	Dining_C	.715	-.005	.068	<.001	.562	.838
	Experience=2-5 previous cruises	-.118	-.003	.125	.345	-.373	.120
	Experience=6-10 previous cruises	-.558	-.003	.129	<.001	-.822	-.324
	Experience=10+ previous cruises	-.603	-.004	.123	<.001	-.841	-.349
	Experience=2-5 previous cruises * Dining_C	-.026	.004	.093	.778	-.199	.170
	Experience=6-10 previous cruises * Dining_C	-.053	.005	.087	.547	-.217	.131
	Experience=10+ previous cruises * Dining_C	-.151	.010	.093	.102	-.316	.055

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex C: 3.4.1. Moderated Linear Regression regarding 'Fitness and Recreation' (Exp1 as reference category)

Bootstrap for Coefficients

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.369	.000	.044	<.001	3.278	3.457
	FitnessRecreation_C	.753	.001	.035	<.001	.685	.821
2	(Constant)	3.846	.003	.085	<.001	3.680	4.024
	FitnessRecreation_C	.677	8.666E-6	.036	<.001	.604	.742
	Experience=2-5 previous cruises	-.345	-.003	.123	.005	-.597	-.102
	Experience=6-10 previous cruises	-.753	.000	.126	<.001	-1.000	-.493
	Experience=10+ previous cruises	-.801	-.006	.127	<.001	-1.057	-.542
3	(Constant)	3.872	.005	.101	<.001	3.678	4.067
	FitnessRecreation_C	.622	-.003	.084	<.001	.451	.775
	Experience=2-5 previous cruises	-.387	-.003	.134	.005	-.652	-.117
	Experience=6-10 previous cruises	-.740	-.001	.136	<.001	-1.007	-.474
	Experience=10+ previous cruises	-.865	-.006	.139	<.001	-1.136	-.577
	Experience=2-5 previous cruises * FitnessRecreation_C	.118	-.002	.108	.270	-.112	.315
	Experience=6-10 previous cruises * FitnessRecreation_C	.156	.003	.104	.117	-.039	.373
	Experience=10+ previous cruises * FitnessRecreation_C	-.062	.006	.116	.577	-.295	.170

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex D: 3.4.1. Moderated Linear Regression regarding 'Cabins' (Exp1 as reference category)

Bootstrap for Coefficients

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.371	-.001	.045	<.001	3.281	3.466
	Cabins_C	.665	.000	.034	<.001	.595	.733
2	(Constant)	3.855	-.001	.087	<.001	3.681	4.026
	Cabins_C	.594	.000	.037	<.001	.518	.665
	Experience=2-5 previous cruises	-.304	-.004	.127	.021	-.557	-.065
	Experience=6-10 previous cruises	-.790	-.001	.132	<.001	-1.049	-.542
	Experience=10+ previous cruises	-.832	.001	.136	<.001	-1.097	-.562
3	(Constant)	3.835	-.003	.117	<.001	3.597	4.063
	Cabins_C	.633	.004	.104	<.001	.423	.832
	Experience=2-5 previous cruises	-.309	-.001	.154	.041	-.604	-.007
	Experience=6-10 previous cruises	-.752	.000	.151	<.001	-1.050	-.450
	Experience=10+ previous cruises	-.864	.006	.154	<.001	-1.156	-.556
	Experience=2-5 previous cruises * Cabins_C	.086	-.006	.131	.530	-.172	.339
	Experience=6-10 previous cruises * Cabins_C	.007	-.006	.118	.949	-.224	.226
	Experience=10+ previous cruises * Cabins_C	-.193	-.002	.122	.113	-.430	.056

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex E: 3.4.1. Moderated Linear Regression regarding 'Public Rooms' (Exp1 as reference category)

Bootstrap for Coefficients

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.368	.000	.040	<.001	3.287	3.444
	PublicRooms_C	.808	.000	.030	<.001	.750	.868
2	(Constant)	3.806	-.002	.066	<.001	3.669	3.934
	PublicRooms_C	.739	.001	.031	<.001	.681	.798
	Experience=2-5 previous cruises	-.254	.001	.101	.009	-.448	-.062
	Experience=6-10 previous cruises	-.744	.002	.109	<.001	-.941	-.533
	Experience=10+ previous cruises	-.743	.006	.111	<.001	-.955	-.516
3	(Constant)	3.778	-.003	.081	<.001	3.621	3.933
	PublicRooms_C	.796	.004	.066	<.001	.672	.934
	Experience=2-5 previous cruises	-.237	.003	.114	.027	-.445	-.017
	Experience=6-10 previous cruises	-.707	.001	.118	<.001	-.932	-.483
	Experience=10+ previous cruises	-.762	.007	.121	<.001	-.986	-.512
	Experience=2-5 previous cruises * PublicRooms_C	.010	-.004	.089	.917	-.170	.176
	Experience=6-10 previous cruises * PublicRooms_C	-.027	-.005	.086	.763	-.192	.130
	Experience=10+ previous cruises * PublicRooms_C	-.199	-.003	.094	.037	-.405	-.023

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex F: 3.4.1. Moderated Linear Regression regarding 'Value for Money' (Exp1 as reference category)

Bootstrap for Coefficients

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.364	.000	.032	<.001	3.298	3.426
	ValueMoney_C	.773	-.001	.023	<.001	.727	.817
2	(Constant)	3.606	-.001	.065	<.001	3.472	3.732
	ValueMoney_C	.726	.000	.025	<.001	.677	.776
	Experience=2-5 previous cruises	-.081	-.001	.085	.342	-.246	.077
	Experience=6-10 previous cruises	-.432	.004	.096	<.001	-.623	-.240
	Experience=10+ previous cruises	-.443	.001	.099	<.001	-.634	-.240
3	(Constant)	3.603	-.001	.088	<.001	3.431	3.778
	ValueMoney_C	.729	.001	.061	<.001	.602	.843
	Experience=2-5 previous cruises	-.088	.000	.107	.411	-.311	.111
	Experience=6-10 previous cruises	-.420	.004	.112	<.001	-.640	-.200
	Experience=10+ previous cruises	-.476	.002	.114	<.001	-.711	-.255
	Experience=2-5 previous cruises * ValueMoney_C	.046	-.002	.073	.521	-.093	.198
	Experience=6-10 previous cruises * ValueMoney_C	.017	-.002	.079	.816	-.138	.170
	Experience=10+ previous cruises * ValueMoney_C	-.079	2.887E-5	.078	.305	-.234	.076

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex G: 3.4.1. Moderated Linear Regression regarding 'Embarkation' (Exp1 as reference category)

Bootstrap for Coefficients

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.366	-3.759E-5	.054	<.001	3.263	3.471
	Embarkation_C	.548	.000	.043	<.001	.467	.633
2	(Constant)	4.053	.001	.078	<.001	3.899	4.196
	Embarkation_C	.502	.000	.041	<.001	.423	.584
	Experience=2-5 previous cruises	-.453	-.006	.134	<.001	-.712	-.199
	Experience=6-10 previous cruises	-1.056	-.002	.133	<.001	-1.328	-.822
	Experience=10+ previous cruises	-1.220	.002	.126	<.001	-1.464	-.971
3	(Constant)	4.013	.000	.083	<.001	3.854	4.168
	Embarkation_C	.684	.001	.090	<.001	.502	.860
	Experience=2-5 previous cruises	-.420	-.004	.137	.002	-.703	-.153
	Experience=6-10 previous cruises	-1.026	.000	.135	<.001	-1.303	-.779
	Experience=10+ previous cruises	-1.183	.006	.128	<.001	-1.413	-.925
	Experience=2-5 previous cruises * Embarkation_C	-.134	-.004	.124	.273	-.380	.101
	Experience=6-10 previous cruises * Embarkation_C	-.212	.002	.115	.056	-.428	.018
	Experience=10+ previous cruises * Embarkation_C	-.332	-.005	.119	.006	-.571	-.101

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex H: 3.4.1. Moderated Linear Regression regarding 'Service' (Exp1 as reference category)

Bootstrap for Coefficients

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.371	-7.231E-5	.045	<.001	3.283	3.464
	Service_C	.673	.000	.028	<.001	.614	.726
2	(Constant)	3.851	.004	.073	<.001	3.711	3.998
	Service_C	.611	-.001	.029	<.001	.549	.664
	Experience=2-5 previous cruises	-.236	-.005	.109	.040	-.481	-.019
	Experience=6-10 previous cruises	-.841	-.005	.124	<.001	-1.084	-.600
	Experience=10+ previous cruises	-.832	-.007	.114	<.001	-1.065	-.596
3	(Constant)	3.769	.000	.092	<.001	3.581	3.948
	Service_C	.772	.002	.082	<.001	.608	.935
	Experience=2-5 previous cruises	-.161	-.002	.124	.184	-.412	.093
	Experience=6-10 previous cruises	-.757	-.001	.137	<.001	-1.035	-.496
	Experience=10+ previous cruises	-.798	-.001	.124	<.001	-1.032	-.540
	Experience=2-5 previous cruises * Service_C	-.084	.000	.104	.399	-.283	.133
	Experience=6-10 previous cruises * Service_C	-.156	-.005	.103	.118	-.357	.037
	Experience=10+ previous cruises * Service_C	-.311	-.003	.096	<.001	-.492	-.118

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex I: 4.2. Moderated Linear Regression regarding 'Entertainment' (Exp4 as reference category)

Bootstrap for Coefficients - Entertainment

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.369	.001	.047	<.001	3.282	3.465
	Entertainment_C	.655	-.001	.036	<.001	.583	.728
2	(Constant)	2.969	.000	.083	<.001	2.807	3.136
	Entertainment_C	.582	-.001	.038	<.001	.506	.657
	Experience=first-time cruiser	.915	.005	.126	<.001	.671	1.155
	Experience=2-5 previous cruises	.632	-.002	.134	<.001	.370	.894
	Experience=6-10 previous cruises	.071	.003	.134	.602	-.181	.325
3	(Constant)	2.953	.001	.086	<.001	2.787	3.126
	Entertainment_C	.519	.004	.063	<.001	.393	.647
	Experience=first-time cruiser	.926	.003	.142	<.001	.654	1.206
	Experience=2-5 previous cruises	.644	-.001	.137	<.001	.371	.907
	Experience=6-10 previous cruises	.098	.001	.144	.503	-.179	.366
	Experience=first-time cruiser * Entertainment_C	.072	-.004	.111	.515	-.154	.293
	Experience=2-5 previous cruises * Entertainment_C	.088	-.006	.107	.428	-.121	.291
	Experience=6-10 previous cruises * Entertainment_C	.097	-.007	.100	.321	-.116	.288

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex J: 4.2. Moderated Linear Regression regarding 'Dining (Exp4 as reference category)

Bootstrap for Coefficients - Dining

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.370	.002	.041	<.001	3.289	3.451
	Dining_C	.715	-.001	.029	<.001	.655	.767
2	(Constant)	3.107	.002	.079	<.001	2.951	3.265
	Dining_C	.653	-.001	.031	<.001	.590	.711
	Experience=first-time cruiser	.606	-.003	.114	<.001	.386	.817
	Experience=2-5 previous cruises	.452	.004	.114	<.001	.216	.663
	Experience=6-10 previous cruises	.003	.000	.112	.984	-.221	.219
3	(Constant)	3.068	.001	.086	<.001	2.904	3.235
	Dining_C	.564	-.006	.064	<.001	.430	.682
	Experience=first-time cruiser	.603	-.001	.126	<.001	.365	.866
	Experience=2-5 previous cruises	.485	.007	.119	<.001	.248	.711
	Experience=6-10 previous cruises	.045	.004	.122	.719	-.187	.287
	Experience=first-time cruiser * Dining_C	.151	.005	.089	.088	-.013	.328
	Experience=2-5 previous cruises * Dining_C	.124	.003	.088	.164	-.047	.294
	Experience=6-10 previous cruises * Dining_C	.097	.008	.085	.254	-.061	.269

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex K: 4.2. Moderated Linear Regression regarding 'Fitness and Recreation (Exp4 as reference category)

Bootstrap for Coefficients - Fitness and Recreation

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.369	.001	.045	<.001	3.281	3.462
	FitnessRecreation_C	.753	-5.280E-5	.035	<.001	.683	.816
2	(Constant)	3.045	.003	.088	<.001	2.875	3.221
	FitnessRecreation_C	.677	.001	.036	<.001	.602	.745
	Experience=first-time cruiser	.801	-.005	.127	<.001	.562	1.041
	Experience=2-5 previous cruises	.456	-.005	.128	<.001	.205	.710
	Experience=6-10 previous cruises	.048	-.002	.120	.681	-.200	.270
3	(Constant)	3.007	.004	.096	<.001	2.828	3.204
	FitnessRecreation_C	.560	.003	.077	<.001	.410	.706
	Experience=first-time cruiser	.865	-.005	.141	<.001	.589	1.139
	Experience=2-5 previous cruises	.478	-.004	.131	<.001	.215	.729
	Experience=6-10 previous cruises	.125	-.002	.131	.328	-.129	.376
	Experience=first-time cruiser * FitnessRecreation_C	.062	-.005	.113	.596	-.166	.279
	Experience=2-5 previous cruises * FitnessRecreation_C	.180	-.005	.101	.069	-.021	.366
	Experience=6-10 previous cruises * FitnessRecreation_C	.218	-.001	.098	.023	.021	.400

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex L: 4.2. Moderated Linear Regression regarding 'Cabins' (Exp4 as reference category)

Bootstrap for Coefficients - Cabins

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.371	-.002	.046	<.001	3.276	3.460
	Cabins_C	.665	.001	.035	<.001	.596	.731
2	(Constant)	3.024	.002	.092	<.001	2.845	3.216
	Cabins_C	.594	.002	.037	<.001	.525	.664
	Experience=first-time cruiser	.832	-.008	.133	<.001	.573	1.082
	Experience=2-5 previous cruises	.528	-.009	.128	<.001	.271	.769
	Experience=6-10 previous cruises	.041	.003	.130	.761	-.223	.289
3	(Constant)	2.971	.003	.095	<.001	2.783	3.170
	Cabins_C	.440	.001	.062	<.001	.311	.555
	Experience=first-time cruiser	.864	-.013	.152	<.001	.549	1.137
	Experience=2-5 previous cruises	.555	-.010	.129	<.001	.290	.799
	Experience=6-10 previous cruises	.111	.001	.138	.433	-.174	.377
	Experience=first-time cruiser * Cabins_C	.193	.007	.120	.114	-.045	.440
	Experience=2-5 previous cruises * Cabins_C	.279	.000	.101	.008	.070	.480
	Experience=6-10 previous cruises * Cabins_C	.200	-.002	.085	.019	.034	.371

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex M: 4.2. Moderated Linear Regression regarding 'Public Rooms' (Exp4 as reference category)

Bootstrap for Coefficients - Public Rooms

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.368	.000	.041	<.001	3.287	3.449
	PublicRooms_C	.808	2.887E-5	.029	<.001	.747	.865
2	(Constant)	3.062	-.003	.083	<.001	2.900	3.227
	PublicRooms_C	.739	-.001	.030	<.001	.675	.796
	Experience=first-time cruiser	.743	.005	.111	<.001	.532	.970
	Experience=2-5 previous cruises	.489	.003	.114	<.001	.253	.710
	Experience=6-10 previous cruises	-.001	.007	.119	.996	-.229	.222
3	(Constant)	3.016	-.002	.088	<.001	2.842	3.189
	PublicRooms_C	.597	.001	.064	<.001	.472	.722
	Experience=first-time cruiser	.762	.003	.120	<.001	.523	.995
	Experience=2-5 previous cruises	.525	.003	.116	<.001	.299	.746
	Experience=6-10 previous cruises	.055	.006	.127	.694	-.194	.308
	Experience=first-time cruiser * PublicRooms_C	.199	-.001	.094	.033	.015	.384
	Experience=2-5 previous cruises * PublicRooms_C	.210	-.004	.092	.023	.016	.385
	Experience=6-10 previous cruises * PublicRooms_C	.172	.000	.083	.034	.015	.344

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex N: 4.2. Moderated Linear Regression regarding 'Value for Money' (Exp4 as reference category)

Bootstrap for Coefficients - Value for Money

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.364	.001	.033	<.001	3.299	3.427
	ValueMoney_C	.773	-.002	.023	<.001	.724	.815
2	(Constant)	3.163	.003	.065	<.001	3.033	3.293
	ValueMoney_C	.726	-.002	.025	<.001	.675	.772
	Experience=first-time cruiser	.443	-.003	.098	<.001	.231	.636
	Experience=2-5 previous cruises	.362	.001	.092	<.001	.179	.540
	Experience=6-10 previous cruises	.010	-.002	.094	.902	-.173	.191
3	(Constant)	3.127	.002	.068	<.001	2.992	3.263
	ValueMoney_C	.650	-.004	.050	<.001	.548	.743
	Experience=first-time cruiser	.476	-.004	.112	<.001	.255	.691
	Experience=2-5 previous cruises	.388	.002	.093	<.001	.202	.571
	Experience=6-10 previous cruises	.055	.000	.100	.579	-.137	.258
	Experience=first-time cruiser * ValueMoney_C	.079	.004	.078	.314	-.074	.234
	Experience=2-5 previous cruises * ValueMoney_C	.124	.000	.067	.055	-.010	.252
	Experience=6-10 previous cruises * ValueMoney_C	.096	.003	.071	.168	-.043	.232

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex O: 4.2. Moderated Linear Regression regarding 'Embarkation' (Exp4 as reference category)

Bootstrap for Coefficients - Embarkation

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.366	.000	.053	<.001	3.259	3.470
	Embarkation_C	.548	.000	.041	<.001	.464	.627
2	(Constant)	2.833	.002	.100	<.001	2.629	3.030
	Embarkation_C	.502	.000	.041	<.001	.417	.580
	Experience=first-time cruiser	1.220	-.002	.131	<.001	.964	1.491
	Experience=2-5 previous cruises	.767	-.007	.147	<.001	.462	1.036
	Experience=6-10 previous cruises	.164	-.001	.142	.243	-.110	.441
3	(Constant)	2.830	.003	.098	<.001	2.635	3.030
	Embarkation_C	.352	-.001	.076	<.001	.196	.498
	Experience=first-time cruiser	1.183	-.003	.134	<.001	.919	1.460
	Experience=2-5 previous cruises	.763	-.009	.145	<.001	.464	1.031
	Experience=6-10 previous cruises	.157	-.002	.141	.253	-.123	.441
	Experience=first-time cruiser * Embarkation_C	.332	.000	.116	.003	.111	.540
	Experience=2-5 previous cruises * Embarkation_C	.198	-.0001	.118	.089	-.035	.430
	Experience=6-10 previous cruises * Embarkation_C	.120	.003	.105	.252	-.088	.330

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex P: 4.2. Moderated Linear Regression regarding 'Service (Exp4 as reference category)

Bootstrap for Coefficients - Service

Model		B	Bootstrap[a] Bias	Std. Error	Sig. (2-tailed)	95% Confidence Interval Lower	Upper
1	(Constant)	3.371	.000	.043	<.001	3.289	3.454
	Service_C	.673	-.001	.029	<.001	.613	.726
2	(Constant)	3.019	.002	.089	<.001	2.844	3.189
	Service_C	.611	.000	.030	<.001	.549	.669
	Experience=first-time cruiser	.832	-.004	.123	<.001	.591	1.055
	Experience=2-5 previous cruises	.596	-.006	.124	<.001	.348	.831
	Experience=6-10 previous cruises	-.008	.003	.127	.954	-.266	.238
3	(Constant)	2.971	.003	.091	<.001	2.787	3.147
	Service_C	.461	.000	.047	<.001	.363	.556
	Experience=first-time cruiser	.798	-.008	.135	<.001	.527	1.045
	Experience=2-5 previous cruises	.637	-.007	.125	<.001	.391	.876
	Experience=6-10 previous cruises	.041	.001	.133	.738	-.217	.299
	Experience=first-time cruiser * Service_C	.311	.005	.100	.003	.118	.522
	Experience=2-5 previous cruises * Service_C	.227	.001	.078	.007	.079	.376
	Experience=6-10 previous cruises * Service_C	.155	.000	.077	.049	.001	.307

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex Q: 4.2. Pearson correlations between each quality attribute and Overall Satisfaction

				overall impression
entertainment	Pearson Correlation			**.652**
	Bootstrap[b]	95% Confidence Interval	Lower	.585
			Upper	.712
dining	Pearson Correlation			**.772**
	Bootstrap[b]	95% Confidence Interval	Lower	.720
			Upper	.822
fitness and recreation	Pearson Correlation			**.714**
	Bootstrap[b]	95% Confidence Interval	Lower	.653
			Upper	.766
cabins	Pearson Correlation			**.689**
	Bootstrap[b]	95% Confidence Interval	Lower	.617
			Upper	.749
public rooms	Pearson Correlation			**.775**
	Bootstrap[b]	95% Confidence Interval	Lower	.729
			Upper	.814
value for money	Pearson Correlation			**.863**
	Bootstrap[b]	95% Confidence Interval	Lower	.831
			Upper	.890
embarkation	Pearson Correlation			**.548**
	Bootstrap[b]	95% Confidence Interval	Lower	.462
			Upper	.627
service	Pearson Correlation			**.715**
	Bootstrap[b]	95% Confidence Interval	Lower	.658
			Upper	.765

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Annex R: 4.3. Bootstrap Confidence Interval for the Spearman Correlation between Past Experience and Overall Satisfaction

Correlations

					overall impression
Spearman's rho	past experience	Correlation Coefficient			**-.439**
		Sig. (2-tailed)			<.001
		N			416
		Bootstrap[b]	Bias		.000
			Std. Error		.040
			95% Confidence Interval	Lower	-.515
				Upper	-.360

b. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples