

INSTITUTO UNIVERSITÁRIO DE LISBOA

Department of Marketing, Strategy and Operations

Douro cruises experiences: The mediating role of cocreation in revisit intention

MSc in Hospitality and Tourism Management

2022/2023

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Supervisor: PhD, Catarina Maria Marques, Associate Professor

Iscte-Iul

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Acknowledgments

First of all, I thank my supervisor, Prof. Catarina Maria Marques, for her availability, guidance and dedication. In fact, she was tireless in carrying out this study and made it all possible through her recommendations and guidance.

Secondly, I thank my parents for all the guidance and support they have provided me throughout this journey, who have always believed in my abilities and have always encouraged and motivated me to want to achieve more, because they know how important this milestone is for me.

With a special thanks to my friends, who accompanied me in this research. In which they were always present and who gave me precious help to carry out the study. In particular, I thank Hugo Costa and Sofia Rodrigues, without them this journey would have been more difficult.

Finally, thank you to everyone who took the time to answer and share the survey. Your collaboration was fundamental for the realization of this study.

Abstract

Consumers are increasingly demanding in their choices. In line with the competitive nature of the tourism,

companies must adopt procedures and policies that enable them to understand consumers' needs in order

to provide them with a service that meets their requirements.

This study aims to understand the impact of co-creation on revisit intention in tourism services, especially

on the Douro cruises. In this sense, we seek to understand which variables of the cruise experience

influence not only the cruisers intention to revisit but also their co-creation experience and how the last

one may influence the intention to return as well. In the scope of the study, questionnaires were carried

out, applied at the end of the excursions that tourists made, having as departure and arrival point the Gaia

pier. A sample of 264 visitors was surveyed between April and June 2023.

The study demonstrates the influence of the four components of the cruise experience on co-creation and

revisit intention as well as how co-creation assumes a mediating role. However, the study showed that

only two of the variables influence co-creation and this one adopts a mediator role in the relationship

between the experience economy model and revisit intention. The latter is only influenced by one variable

of the model.

This research contributes to the topic of co-creation and revisit intention in the cruise sector in Douro

region, in which it is a recent topic in the literature, as well as having a significant contribution to the

application in business strategies.

Key-Words: Co-creation Experience; Cruise Experience; Douro cruises; Experience Economy Model; Revisit

Intention

JEL: L83, D83, C12

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Resumo

Os consumidores estão cada vez mais exigentes nas suas escolhas. O carácter competitivo do turismo

obriga a que as empresas adotem procedimentos e políticas que lhes permitam compreender as

necessidades dos consumidores, de forma a prestar-lhes um serviço que satisfaça os seus requisitos.

Este estudo tem como objetivo compreender o impacto da co-criação na intenção de revisita em serviços

turísticos, nomeadamente nos cruzeiros no Douro. Neste sentido, procuramos compreender a influência

da cocriação na intenção de revisita e quais as variáveis da experiência do cruzeiro que influenciam a

intenção de revisitar e da experiência de co-criação dos turistas. No âmbito do estudo, foram realizados

questionários, aplicados no final das excursões que os turistas efetuaram, tendo como ponto de partida e

chegada o cais de Gaia. Foi inquirida uma amostra de 264 visitantes, entre abril e junho de 2023.

O estudo demonstra a influência das quatro componentes da experiência de cruzeiro na co-criação e na

intenção de revisita e de que forma co-criação assume um papel mediador. No entanto, o estudo

demonstrou que apenas duas das variáveis influenciam a co-criação, e esta demonstra apoio na relação

entre o modelo de economia da experiência e a intenção de revisita. Esta última é apenas influenciada

por uma variável do modelo.

Esta investigação contribui para o tema da co-criação e intenção de revisitar no sector dos cruzeiros na

região do Douro, em que é um tema recente na literatura, bem como tem um contributo significativo para

a aplicação em estratégias empresariais.

Palavras-Chave: Co-Criação; Experiência de Cruzeiro; Cruzeiros no Douro; Modelo de Economia da

Experiência; Intenção de Revisita

JEL: L83, D83, C12

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List of Abbreviations

PC- Principal Component

PCA- Principal Component Analysis

MLR- Multiple Linear Regression

SD- Standard Deviation

VIF- Variance inflation factor

TOL- Tolerance Value

IC- Interval Confidence

1. Introduction

Tourism is assumed, globally, as one of the most relevant drivers and with more significant impact on the development and growth of several economies becoming increasingly a segmented and geographically complex industry in a focused and niche logic (Brandão et. al, 2021).

The territories are increasingly subject to the pressure of a competitive world, in which consumers are demanding and the need to innovate and gain advantage over their competitors is imperative (Brandão et. al, 2021). This occurs at the level of attracting residents, investments, industries, tourists, which are the means to revitalize the companies (Brandão et. al, 2021).

In Portugal, the travel and tourism sector are expected to create nearly 193,000 jobs over the next 10 years, with an average of over 19,000 new jobs per year, resulting in more than 1.1 million people employed in the sector by 2032 (World Travel & Tourism Council, 2022).

Cruise tourism is a component of the tourism industry that has been growing visibly in recent years (Figueira et al. 2021). All over the world it is possible to board a cruise ship, by river or sea, and explore several tourist destinations without having to change accommodation or means of transport. Because it is a type of tourism that includes all the facilities that the customer seeks, it is becoming increasingly popular in the industry (Brandão et. al, 2021). Currently, the largest offer of river cruises is concentrated in Europe, where it started on the continent's rivers and canals and is now expanding to other countries with navigable rivers around the world (Brandão et. al, 2021). The tourist offer differs from that of ocean cruises because, due to the geographical limitations of the river channels, smaller ships (with an average capacity of 150 to 300 passengers) are used, the routes can be taken in one day, and the navigation is combined with activities on land (Brandão, et. al, 2021).

Value creation can occur through co-creation (Monteiro, 2020). In the tourism sector, the application of this concept can produce unique or personalized experiences through the interaction between the supplier and the customer, leading to higher satisfaction (Monteiro, 2020). To meet customer needs adequately and with unforgettable experiences and thus achieve a high level of satisfaction, companies

are adopting the process of co-creation with customers. This is precisely one of the main objectives that service providers want to achieve, since factors such as reputation and profitability are directly linked (González-Mansilla et al., 2019). This is the case in the tourism industry, where there is a high need for interaction with customers in order to provide a distinctive and valuable customer experience. Offering a superior value proposition is seen as a source for gaining a competitive advantage and achieving customer satisfaction as well as customer loyalty, and positively influencing their recommendations and revisit intention (Hosany et al., 2016).

The concept of co-creation is a process that affects other concepts. There are several authors, who mention positive relationships between co-creation and customer orientation (Campbell, 2003; Harkison, 2018; Wu & Liu, 2018), loyalty, perceived value (Meng & Cui, 2020), emotional feelings (Taheri et al. 2017), revisit intention (Prebensen et. al 2013), among other relevant ones.

The success of companies is to have the perception of consumers' needs and thus generate and promote customer satisfaction and loyalty (Kuo et al., 2016). This statement assumes an even greater relevance in the sector under study, since the tourism sector is characterized by high competitiveness and the need for a superior involvement between company and customer. This customer orientation in tourism services arises much by the difficulty of achieving customer satisfaction, so companies are looking for new forms of lasting relationships (Yang et al., 2017).

The creation and perception of value can also arise through the interaction between the company and the customer through a process of co-creation, in which, for example, the customer can design and/or adapt a tailored service, creating high levels of satisfaction (Monteiro, 2020). There are several studies that have shown that perceived value is an antecedent of customer satisfaction (González-Mansilla et al., 2019). With this, perceived value that results in satisfaction creates a higher propensity for repeat consumption of a service. The hospitality industry is one of the services that requires more involvement, being the consumer experience one of the strongest pillars of this service. Therefore, it is essential that companies take measures that allow customers to have positive experiences because allowing customers to share their needs will be important in order to provide a service that suits their needs (Grissemann & StokburgerSauer, 2012; Hsiao et al., 2015).

Like all of the aforementioned concepts, co-creation proceeds no differently and will have an impact on revisit intention, even if it may be in an indirect way (Monteiro, 2020). The intent of revisiting is one of the concepts that most interest service managers. With the services that are available, sometimes it becomes difficult to maintain a long-term relationship with the customer, hence the need to understand what strategic attitudes they should adopt so that the customer returns to consume a service. (Monteiro, 2020). A priori, it is possible to conclude that all the above-mentioned concepts have an impact on the revisit intention, just as co-creation is the focal point for the whole process of a customer orientation (Monteiro, 2020).

Previous studies show the importance of promoting the potential of the Portuguese territory in terms of river tourism (Moreira, 2018). Other authors (Figueira et al., 2021) have studied the impact on economic, social and environmental development in this region. However, no previous study has examined how cruise co-creation can generate or increase the intention to return to the Douro cruises and to understand the factors the influence the experience itself.

When there is a co-creation process with the customer, it is expected that their needs are met in order to create memorable experiences that lead customers to make positive recommendations to other tourists, which stimulate their interest in the place and increase their intention to visit the place again (Monteiro, 2020). However, in the tourism sector, it is not easy to understand what makes customers revisit a service because the tourism sector is very complex and there are too many variables that influence customers (Monteiro, 2020). In this sense, this study seeks to understand how co-creation involving customers influences the intention to revisit the same Douro cruise. It is critical to understand what variables influence the intention to revisit. The co-creation processes in the tourism sector have specific characteristics due to their multicultural dimension, so it is also necessary to understand what is valued according to individual needs in order to satisfy them (Vada et al., 2019).

In this context, Pine and Gilmore (1998) introduce the four domains of experience: education (learn something new), esthetics (indulged in environments), entertainment (be entertained), and escapism (diverging to a new self). From this perspective, individuals can participate in the experience in four different ways: passive participation, active participation, absorption, and immersion, the so-called economy experience model (4E model) (Oh et. al, 2007). The success of the experience lived by the tourist

depends on the combination of several uncontrollable factors, and it is important to involve all participants in the process (Oh et. al, 2007).

The co-creation processes that are observed in the cruise industry, due to its multicultural dimension, have specific characteristics and, as such, it is also necessary to understand what is valued according to their individual needs for these to be met (Vada et al., 2019).

Based on previous studies, it seems likely that important research questions remain to be answered. First, does the cruise experience increase the degree of consumer's co-creation? Second, does the perception of co-creation influence the intention to revisit the same cruise? Finally, does co-creation mediates the cruise experience and the intention to revisit?

In this sense, the main objective of this study is to explore the mediating role of co-creation between cruise experience and the intention on revisiting. The following research objectives are proposed to initiate the research:

- Test if the 4E model has influence in the process of co-creation
- Test if the 4E model influences the Intention to Return
- Analyze co-creation as an influencer on Intention to Return
- Analyze wether co-creation mediates the experience economy model and the intention to return

The contribution of this investigation has both theoretical and practical value. In theoretical terms, this research draws attention to the complexity of the relationship between the four dimensions of the cruise experience (entertainment, education, escapism, and aesthetics) that may influence the co-creation process in the cruise industry. These variables have already been explored in the context of wine tourism, tourism satisfaction and in the cruise sector, including Portugal. There are studies that examine this model on co-creation but these dimensions were analyzed individually. However, these four dimensions have not yet been explored simultaneously in the context of co-creation in tourism specifically in river cruising. That is, we sought to understand and examine the factors that influence tourists' propensity to repeat the same cruise. For this research, the methodology adopted was quantitative, with the use of questionnaire surveys addressed to consumers who have taken a cruise on the Douro. The study was supported by a questionnaire survey that drew on previous works of Oh et al., (2007), Hosany and Witham (2009), when

they conducted their research on evaluating the tourist experience, research that was based on the four experience domains introduced by Pine and Gilmore (1998).

This master dissertation is subdivided into chapters and sub-chapters that move from general theoretical research to specific field research. After this introduction, there is the first chapter, the literature review, that contains a contextualization of co-creation and its evolution through the sector of tourism and a brief characterization of river tourism specifically in Portugal and on Douro Region. Next, still in the literature review, the main context of this research starts to be explored with the Experience Economy Model and its components: educational experience, escapism experience, esthetic experience, and entertainment experience followed by the concept of Intention to Return.

Subsequently, after all the relevant theoretical information is presented, the most appropriate methodology used for research purpose will be explained in next chapter, to complete the gap in the literature review and to really understand how co-creation can motivate a return of the tourists to do the same cruise trip. After that the results gathered will be analyzed. Finally, in last chapter we conclude the dissertation, the main conclusions of the research will be presented as well as some suggestions of managerial implications, some limitations of the study and recommendations for future research.

Table 1- Structure of the Master Thesis. Source: Author's Elaboration

Introduction	> Relevance of the topic	
	> Identification of the gap in the literature	
	 Objectives and Research Problem 	
	> Structure of the Master Thesis	
Literature Review	 Research about Cruise Experience and their four dimensions 	
	> Exploration of the co-creation process	
	> Conceptualization of the different drivers of Intention to Return	
	> Presentation of the conceptual model featuring the hypothesis	
Methodology	> Explanation of the used methodology	
	> Development of the questionnaire	
	> Data collection and treatment process	
Results	> Sample Profile	
	 Descriptive Statistics Analysis 	
	 Principal Component Analysis 	
	> Multiple Linear Regression	
	> Mediation Effect	
Conclusions and implications	> Discussion	
	> Conclusions	
	> Limitations of the study and future research	

2. Literature Review

2.1 Co-creation in tourism

Co-creation is defined by customer participation in the creation of products/services. (Campbell, 2003; Harkison, 2018 & Wu & Liu, 2018). It is primarily an organizational process involving managers, employees, and customers; however, the final and essential role is always played by the customer (Campbell, 2003; Harkison, 2018 & Wu & Liu, 2018). Managers are responsible for designing processes that allow customers to take an active role, so that organizations always make the necessary adjustments to meet customer needs (Monteiro, 2020). Co-creation behavior is delineated as "the joint, collaborative, concurrent, peer-like process of producing value, both materially and symbolically" (Galvagno & Dalli, 2014, p. 644) and includes dimensions such as physical and/or psychological involvement (Prebensen et al., 2016). Co-creation includes processes of interconnected interactions and activities that involve the tourist and other actors before the trip (prior to consumption) (Prebensen et al., 2013), while at the destination (during consumption) (Volo, 2009), and/or after the trip (after consumption) (Binkhorst & Den Dekker, 2009).

Through this involvement, organizations can gain capabilities and knowledge about customers so that they can subsequently use this information to deliver personalized service with a superior value proposition (Campbell, 2003; Harkison, 2018; Wu & Liu, 2018). Companies that have this orientation have a "propensity to prioritize customer needs and organize their activities to meet their expectations and latent needs" (Wang et al., 2013, p. 230).

Consumer participation in the creation of new services increases the effectiveness of the value creation process, as it favors the exchange of information between the consumer and the firm and increases the investment of both parties in development work (Fang et al., 2008).

For that value to arise from collaborative interactions between service providers and consumers (Vargo & Lusch, 2004) some studies argue that frequent interactions, open communication, and ongoing dialog are the drivers of value co-creation (Prebensen et al. 2016). Yi and Gong (2013) argue that the co-creation behavior of customer includes participation behavior (including information seeking, information sharing,

responsible behavior, and personal interaction) from customer citizenship behavior (including feedback, advocacy, helping, and tolerance) so that users can develop experiences that meet their needs and engagement through personalized interaction (Prahalad & Ramaswamy, 2004).

In tourism services, the level of co-creation is higher due to the need for engagement (Sugathan & Ranjan, 2019). This process begins with the customers and the elements of the service they will enjoy, such as in an online environment (e.g., booking) and/or the physical elements such as the layout, amenities, culture, and others. In addition, the interpersonal dimensions play a fundamental role in the co-creation process (Pizam & Tasci, 2019).

During and after using the service, the customer will become a co-creator, and the perceived value of the service will be higher and contribute to customer loyalty (Meng & Cui, 2020). Mustak, Jaakkola, and Halinen (2013) mention that with customer participation, one would arrive at the design of offerings that are better aligned with the expectations and needs of customers, leads to better value creation. In other words, customer participation is expected to positively influence the perceived value and experience of a particular service (Taheri et al., 2017).

Campos et al. (2015) point out that tourists are seen as creators and actors, seeking the experience of local culture and identity through intense experiences at the destination. Co-creation of experiences can then be understood as a series of events of psychological significance to which the tourist is exposed when he or she actively contributes through physical and/or mental participation in activities and interacts with others in the context of the experience (Campos et al., 2015).

There are several methods that companies in the tourism sector can adopt to benefit from the innovative potential of consumers, from processes that benefit from passive interaction between company and consumer (e.g., questionnaires) to processes that require active interaction (e.g. user communities) (Hjalager & Nordin, 2011). Cases where co-creation has fostered learning and innovation include strategies, activities, and services that stimulate customer involvement in service creation, such as ongoing interaction between staff and customers, leading to ideas for new routes and experiences; co-creation using Twitter through hashtags placed throughout the hotel and used by staff and customers (Neuhofer, 2016); focusing on creating experiences rather than routine service at a hotel's front desk allows for customer engagement, enhancing their stay and generating ideas for innovation to provide a better

experience for all guests (Sørensen & Jensen, 2015). It provides opportunities for co-creation through a personalized and highly engaging experience that emphasizes information sharing (Neuhofer et al., 2014). Users' motivation to co-create tourism experiences is mainly due to the high level of commitment to the service and the expected benefits from its use (Hoyer et al., 2010).

2.2 River Tourism: Portugal and Douro

When cruise tourism is mentioned, even in academic papers, it is usually about sea and ocean cruising destinations (commonly the Mediterranean, northern European fjords, Caribbean, Pacific, and other areas) and the impact of mass tourism on local attractions. River (and canal) cruise tourism seems to be neglected in the literature, or at least limited to rare locations and topics (Moreira, 2018). The differences between sea and river cruises are evident. Technically, the routes vary between linear and circular, the size of the ships and the number of passengers and crew on board are different, the duration of the voyage and the number of stops is different, and the requirements for ports are also different. There are also differences in passenger preferences and experiences (Moreira, 2018). "Rivers are a major tourism resource providing spectacular settings, recreational opportunities, waterfront landscapes in many centers of tourism interest, a means of transport and an essential source of water for human consumption." (Prideaux & Cooper, 2009, p. 14)

Today, river cruise operations are heavily concentrated in Europe. The Cruise Lines International Association (2019) reports that in 2018, the European region accounted for almost 90% of global river cruise passengers, of which 64% accrued to the Danube, the Rhine, and their tributaries. The European Union also holds 41% of the river cruise vessels (Central Commission for the Navigation of the Rhine, 2019).

Each river has a unique natural and cultural, built and intangible heritage, so it can be said that each river in itself is an important heritage element with social value that should be preserved, conserved, appreciated, interpreted and experienced (Moreira, 2018). Nature tourism, rural tourism, but also short stays in cities (city breaks), cultural tourism, gastronomy and wine, golf and adventure tourism are tourism products that can enhance the river heritage (Moreira, 2018).

There are attributes in the offer that cannot be neglected: innovation, quality and safety. Quality is extremely important for river tourism. It is not only about the quality of the water, but also about the quality of the equipment, infrastructure and services offered (Moreira, 2018).

Portugal is establishing itself as an excellent tourist destination (Turismo de Portugal, 2007) and is becoming increasingly popular due to its history, geographical location, climatic conditions, and natural and cultural resources. Our country has an outstanding coastline with potential for surfing and is known worldwide. It also offers a great marine biodiversity, natural conditions and infrastructural conditions for cruise tourism (Turismo de Portugal, 2007). The combination of sun and sea makes it possible to find marinas, ports and moorings of recognized superiority in Portugal (Turismo de Portugal, 2007). Portugal and their nautical tourism have the indispensable predicates (Turismo de Portugal, 2007).

In Portugal, the cruise industry generated 840 million euros for the economy, 133 million euros in taxes and 8. 863 jobs, while in 310 port calls, each one contributed an average of 1.08 million euros to GDP, created 29 jobs and generated 0.43 million euros in tax revenues (Publituris, 2023). This assessment also shows that the cruise sector contributed to retail trade in the order of 48 million euros, followed by real estate services with about 40 million euros, accommodation with 37 million euros, restaurants with 29.3 million euros, transportation with 24.2 million euros and gross sales with 17.6 million euros (Publituris, 2023). In Lisbon, it corresponded to 0.16% of the national GDP in 2019, contributing 336 million euros (Publituris, 2023).

Cruise tourism is of enormous importance for Portugal, both in terms of connectivity and, above all, to position the country on a different level, both in terms of experience and promotion (Fernandes, 2019). In the case of the Douro, only after the opening of the river to the navigability for passenger boats has made possible the evolution of river tourism in the region (Fernandes, 2019). Since the river was opened to navigation throughout its extent, it has been increasingly used by curious tourists from all over the world (Fernandes, 2019). It is a sector with an obvious potential, strengthened mainly by the available resources (quantity and quality), cultural and natural heritage, and various policies (e.g., investments, creation of infrastructures) (Fernandes, 2019).

The Douro River region extends in northern Portugal, from Spain to the Atlantic cities of Porto and Vila Nova de Gaia. It is the main waterway where the traditional "Rabelo" boats transported fortified port wine for storage, ageing and subsequent sale.

The first river cruise took place on October 19, 1986, between the cities of Porto and Régua, and it was not until 1990 that the first trip was made between Porto and Barca D'Alva (Almeida & Pedro, 2003). The number of maritime tourism companies operating on the Douro increased slowly, from five to nine between 1997 and 2001 (Almeida & Pedro, 2003). Currently, there are 22 companies in the Douro subregion specialized in activities exclusively related to tourist entertainment on the Douro River. In the Douro, it is clear that river tourism activity comes from the presence and work of river operators in the region. Data from the Roteiro do Douro website show that there are five operators (see table 2) that stand out from the others in the region (Roteiro do Douro).

All vessels offer tourist products with different characteristics and peculiarities due to the type of clients/operators, the external architecture and the interior design of the vessels, as well as the tourist services offered (Roteiro do Douro). These vessels offer a variety of programs, from grape harvesting to train rides. Different tours accessible to discover the Alto Douro wine region, museums, farms, wine tastings, contemplating the magnificent landscapes at the different viewpoints of the region and taste the "transmontana" cuisine. (Roteiro do Douro).

As far as the tourist offer is concerned, the Douro region has a number of resources that make it a unique area, with a valuable cultural, natural and artistic heritage. In 2015, the Tourism Marketing Strategy of Porto e Norte de Portugal defined the tourism products of a given region for the period between 2015 and 2020, and at the regional level, i.e., in the Douro area, nautical tourism (cruises and tours on the Douro River) was defined as the destination's anchor product (Bernardo, 2018). In addition, the Douro has a rich cultural heritage also in the cultural field, with two places classified as World Heritage Sites by UNESCO the Alto Douro Wine Region and the Côa Valley Archaeological Park. Similarly, there are places of ecological value, such as the Alvão Natural Park, the Douro International Natural Park, the Tua Valley Natural Park and several other places that are part of the Natura 2000 network (Start&Go, 2020).

Description	Duration
Created in 1993, it has continually strived to provide its customers with quality in everything	
that comprises the service to its customers, preserving and showing the culture of the	
Douro region. It has a fleet of 12 modern luxury river cruise ships, offering its guests the	
chance to feel the Douro, highlighting the culture and scenery with magnificence and	
comfort. Douro Azul, the largest operator of river cruises in Europe, has a capacity between	
30 and 130 passengers (Douro Azul, 2023).	
It is a company that is governed by professionalism, quality, vigor and multiplicity. In 1999	
they started their activity with the acquisition of their first boat (a replica of a "Rabelo" boat	
the "Rota do Douro" with capacity for 75 people). More recently, in June 2016, a new boat	
was obtained in which it is possible to have 450 passengers. Regarding meals the company	1-2 days
that on board its ships they are cooked with regional products, of recognized quality (Sobre	
Nós: Rota do Douro, 2023).	
They own five boats and have been in business for about 25 years proceeding in	
concordance with the river, farms, and vineyards. It is worth mentioning the three UNESCO	
World Heritage Sites that are present in many of their routes: the Historic Centre of Porto,	
the Prehistoric Sites of Rock Art in the Côa Valley and the Siega Verde and Alto Douro	1-2 days
Region. Their capacity varies between 94 and 324 passengers (Barcadouro, 2021).	
They have been cruising the Douro River for about 25 years, presenting themselves as one	
of the leading organizations in the sector. They own several private boats that allow cruises	
between the six bridges of the Douro River. It has a fleet of 10 cruises with a capacity varying	
between 14 and 360 passengers. It is important to mention that the chance to develop	
activities oriented to adventure tourism, since the company has cruises on Jet Boats that	1-2 days
are guided for those who are enthusiastic about this kind of tourism (Tomaz do Douro,	
2021)	
They provide a plurality of tourist, restaurant and accommodation services. The company's	
journey began in 1982 with the management restaurant Chez Lapin, one of the first and	
most renowned restaurants in the city of Porto. In 1997, begins the Douro Acima's	
performance in the preparation and celebration of tourist attractions along the Douro	1 day
River. At this moment the company has a fleet constituted by six "Rabelo" boats that make	
trips between Porto, Vila Nova de Gaia, Régua, Pinhão, Pocinho and Barca D'Alva. Its	
capacity varies between 40 and 130 passengers (DouroAcima, 2013)	
	Created in 1993, it has continually strived to provide its customers with quality in everything that comprises the service to its customers, preserving and showing the culture of the Douro region. It has a fleet of 12 modern luxury river cruise ships, offering its guests the chance to feel the Douro, highlighting the culture and scenery with magnificence and comfort. Douro Azul, the largest operator of river cruises in Europe, has a capacity between 30 and 130 passengers (Douro Azul, 2023). It is a company that is governed by professionalism, quality, vigor and multiplicity. In 1999 they started their activity with the acquisition of their first boat (a replica of a "Rabelo" boat the "Rota do Douro" with capacity for 75 people). More recently, in June 2016, a new boat was obtained in which it is possible to have 450 passengers. Regarding meals the company that on board its ships they are cooked with regional products, of recognized quality (Sobre Nós: Rota do Douro, 2023). They own five boats and have been in business for about 25 years proceeding in concordance with the river, farms, and vineyards. It is worth mentioning the three UNESCO World Heritage Sites that are present in many of their routes: the Historic Centre of Porto, the Prehistoric Sites of Rock Art in the Côa Valley and the Siega Verde and Alto Douro Region. Their capacity varies between 94 and 324 passengers (Barcadouro, 2021). They have been cruising the Douro River for about 25 years, presenting themselves as one of the leading organizations in the sector. They own several private boats that allow cruises between 14 and 360 passengers. It is important to mention that the chance to develop activities oriented to adventure tourism, since the company has cruises on Jet Boats that are guided for those who are enthusiastic about this kind of tourism (Tomaz do Douro, 2021). They provide a plurality of tourist, restaurant and accommodation services. The company's iourney began in 1982 with the management restaurant Chez Lapin, one of the first an

Table 2- Description of the cruises operating in the Douro

Considering the number of vessels that operate in the Douro, and therefore the number of tourists that this type of tourism brings to the region, it is increasingly important to have a careful perception of the impact that this industry brings to the Douro Valley every day.

Figure 1 shows a gradual increase in the number of maritime-tourism operators operating on the Douro waterway. As it can be seen from 2019 to 2020 there was a decrease of approximately 86%. However, due to the COVID19 pandemic, limitations and restrictions have been imposed on tourist travel and international travel, with a decrease in tourism consumption and the consequent closure of some organizations belonging to this sector of activity.

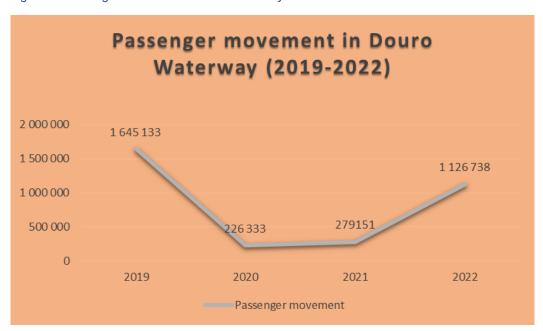


Figure 1- Passenger movement in Douro Waterway. Source: APDL

The Douro Waterway received 1126738 passengers in 2022, a recovery of 75% compared to 2021, a year with difficulties due to the covid-19, according to the Administerial of Portos do Douro, Leixões and Viana do Castelo (APDL, 2022).

In 2022, 1126738 passengers traveled on the waterway, 863544 (77%) of which on cruises in the same reservoir and at night, 164589 on one-day cruises (15%), 89281 on hotel boats (8%), and 9324 (1%) on pleasure crafts (Figure 2) (APDL, 2022).



Figure 2- Passenger distribution in Douro Waterway. Source: APDL

In 2022 there were 222 boats that were in operation, with a capacity of 11814 passengers (table 3) (APDL, 2022)

Table 3- Number of vessels and their capacity on the Douro River. Source: APDL

Year	vessels	Capacity
2020	201	11 707
2021	208	11 747
2022	222	11 814

The Douro destination has strong tourism products such as gastronomy and wine, river tourism, cultural and landscape tourism, nature tourism, health and wellness tourism, religious tourism and much more. Although tourism demand in the Douro is still mainly national (about 80%), being the second least international destination in the North, the region offers countless opportunities for the creation of different tourism products, such as slow tourism, adventure tourism, business tourism or educational and scientific tourism, which can be implemented as complementary tourism offers (Start&Go, 2020).

2.3 Value co-creation in cruise tourism

The modern cruise ship as a social environment full of situations where passengers become an active part of value creation, interacting with staff, the environment, and most importantly, other guests (Weaver, 2005; Yarnal & Kerstetter, 2005).

The cruise sector suffers from a limited number of studies when compared with other areas of tourism, despite the fact that cruise ships possess almost ideal laboratory conditions for social research. Huang and Hsu (2009) argue that few have studied social interactions between guests on cruise ships. Cruise tourists experience their vacations as a variety of encounters as they interact with different locations at sea and ashore, with staff, other guests, and their surroundings.

As a business orientation, co-creation involves considering the tourist as willing to participate in the design, production, and consumption of an experience (Eraqi, 2011) or to collaborate with the organisation in the creation of new products and services (Santos-Vijande et al., 2012). As a consequence, introduction of activities into business operations is seen as requiring changes to management and staff competencies and behaviour (Lugosi & Walls, 2013). Front line staff are critical in facilitating co-creation activities due to their interaction with customers and internal marketing is needed to help foster an innovative culture so staff actively participate in service design and improvement (Santos-Vijande et al., 2012). Interaction is paramount in co-creation, and employees may need to develop new skills as their role changes from service providers to experience providers (Bharwani & Jauhari, 2013).

Brejla and Gilbert (2012) analyze the patterns of co-creation of value on board cruise ships using holiday reviews retrieved through Web content. These authors analyzed the rating aspects of the cruise vacation from reviews in the data set. The data set is explored in terms of how different aspects of the cruise vacation are rated with regards to 'overall rating' and 'service'. The overall rating is observed with regards to aspects related to spaces where social interactions between guest to guest and guest and staff on board are likely to happen and thus opportunity for co-creation is created. Ultimately the textual analysis is incorporated and again put into relation with the rating aspects and all available rating aspects are correlated. This study has shown that the perception of service has a high impact on the overall rating of

the cruise vacation. Even more so, the guest to guest and guest to staff interactions may lead to co-creation that become manifest in the reporting of service rating.

2.4 Revisit Intention in cruise tourism

Revisit intention has been identified as a key research topic in the tourism literature. The intention to revisit a destination can be considered as a type of post-consumption behavior (Cole & Scott, 2004) and has been defined as a visitor repeating an activity or revisiting a destination (Baker & Crompton, 2000). It also refers to the visitor's judgment about the likelihood or plans to revisit the same destination (Khasawneh & Alfandi, 2019; Stylos et al., 2016).

Prevailing literature on places visited by cruise ships has shown a growing interest in repeat visitors to the destination and their future consumption intentions (Brida et al., 2010). There are several studies showing that the lived experience during the stay is a critical aspect of repeat visitors' loyalty to their destination (Choi & Chu, 2001). Repeat visitors are generally characterized by a different consumption trajectory than first-time visitors, who are generally less likely to expand and diversify their destination experiences (Assaker et al., 2011; Bigné et al., 2009).

Existing literature has shown that repeat visitors and first-time visitors exhibit significantly different behavior in terms of spending and length of stay (Petrick, 2004; Petrick et al., 2001). Therefore, these two groups are treated as distinct market segments that require specific tourism marketing strategies (Oppermann, 1997). It is necessary to focus particularly on strategies that encourage repeat visitors to mature destinations (Alegre & Cladera, 2006), as they are more economically beneficial than first-time visitors. They stay longer, participate in local activities, and spend larger sums on shopping, dining, lodging, and local transportation. In addition, lower marketing costs are required to attract repeat visitors to these destinations. Repeat visitors can also create a pull effect by generating positive word of mouth (Oppermann, 1998; Pritchard, 2003; Tsai and Bui, 2020). They may also be less sensitive to the pricing policies of (competing) destinations due to a kind of loyalty effect (Krishnamurthi & Papatla, 2003; Petrick, 2005).

Even in cruise tourism, some authors have analysed the various factors that affect a cruise passenger's intention to return to a destination or port of call. Some factors are related to the characteristics of the cruise passenger (Brida & Coletti, 2012). For example, intention to return increases if the tourist is married

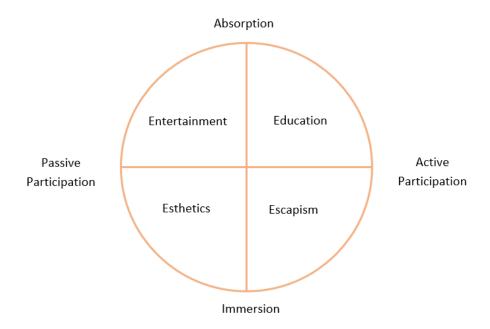
or lives near the destination (Brida & Coletti, 2012). Some studies also show that intention to return increases with age (Gitelson & Crompton, 1984), which could be a result of older people visiting more destinations. However, other studies show that older people are less likely to return and that first-time cruisers are more likely to return than experienced cruisers, who tend to change their destination choices frequently (Brida & Coletti, 2012; Petrick, 2004).

Other aspects are related to the characteristics of the port of call, the length of stay and the itinerary. The intention to return is higher when the length of stay at the port of call is longer (as tourists have more time to enjoy the place) (Gabe et al., 2006) and when it is a self-organised visit (Brida & Coletti, 2012). Other aspects studied were the quantity and quality of information received on the ship, both for returning and for recommending the visit to others and the perception of safety and security (Silvestre et al., 2008). Finally, some factors reduce the intention to return. For example, the distance between home and destination appears to negatively affect the likelihood of returning (Gabe et al., 2006).

2.5 Experience Economy Model

In the late 20th century, Pine and Gilmore (1998) identified four domains of customer experience that differ in terms of the degree of customer involvement and connection with the environment. As shown in Figure 3 below, they divide experiences into four broad categories based on where they fall on the spectrum of the two dimensions. The Entertainment and Esthetics dimensions involve passive participation where the consumer does not influence the outcome of the experience. In contrast, the Education and Escapism dimensions involve active participation where consumers play a key role in the process. According to Pine and Gilmore (1998), all four dimensions together form the optimal consumer experience, referred to as the "sweet spot".

Figure 3- The Four Experience Realms. Source: Adapted from Pine and Gilmore (1999)



2.5.1 Experience Economy Model in Co-creation

Prahalad and Ramaswamy (2004) defined a co-creation experience as one co-created by organizers and consumers that enables consumers to create service experiences that fit their environment. Jaakkola et al. (2015) added that co-creation of experiences occurs not only between consumers and service providers, but also in interactions with other consumers or participants. Mathis et al. (2016) identified co-creation experiences as consumers creating their own unique experiences through an interactive process with a service provider or environment. Prebensen et al. (2016) examined the co-creation experience in winter tourism and divided it into two dimensions: active participation in the winter tourism experience and interest in active participation in the winter tourism experience. According to the experience economy model (Pine and Gilmore, 1998), tourists can actively or passively interact with their environment to have co-creation experiences. When tourists participate in leisure activities, they have the opportunity to become participants (Mkono, 2012). For example, culinary and winery events are popular with tourists, who can gain co-creation experiences in this way (Getz & Robinson, 2014). Cruise passengers explore nature and participate in entertainment programs (Hosany & Witham, 2009; Yarnal & Kerstetter, 2005), enjoy premium services (e.g., high-quality facilities and first-class services), and actively participate in extraordinary activities and authentic experiences that provide them with emotional benefits, which in

turn make them feel unique and special (Hwang & Lyu, 2018). In this context, experiencing fantasy, playfulness, and pleasure at the tourist destination will influence tourists' attitudes and encourage them to engage with other consumers. In this study, it is argued that tourists can be more deeply immersed in co-creation experiences through the entertainment experiences. Considering the above possibilities, the following hypothesis is defined:

H1a: Entertainment experience influences positively the co-creation experience

Nowadays, tourists prefer activities that involve interaction, active learning, and application of knowledge rather than simply watching a performance (Ji et al., 2018). Tourists' co-creation experience can be through direct interaction (e.g., verbal communication) or indirect interaction (e.g., observation and body language) (Ji et al., 2018). During the educational experience, there are opportunities for interesting interactions to unfold under the guidance of a tour guide. Many cruise ships also offer educational experiences, such as cooking classes, wine tastings, and classes on the best wines to pair with certain foods, as well as regular seminars that provide educational activities for visitors (Ji et al., 2018). Meanwhile, some cruise ships have invested in technology to provide new experiences that can not only impart knowledge to tourists, but also increase the interactivity of tourists and increase their interest in participating in co-creation. Based on this, the following hypothesis is formulated:

H2a: Education experience influences positively the co-creation experience

The co-creation experience is a self-directed and self-acting narrative by tourists, and this narrative structure can be influenced by the degree of interaction between tourists and the environment (Binkhorst & Den Dekker, 2009). Co-creation is not only based on the interactions between people and activities, but also on making connections with the environment (Mehmetoglu & Engen, 2011). Lee (2018) points out that esthetic design features influence consumers' emotional arousal and ultimately affect their engagement behaviors. Recently, Roy et al. (2019) conducted a study with a group of consumers who voluntarily participated in value creation activities and concluded that esthetics are positively correlated with smart co-creation experiences. For example, warm colors (e.g., yellow and orange) promote relaxation and increase creativity, while cool colors (e.g., blue and green) create a sense of calm. In the case of cruise ships, aesthetics refers to the passive apprehension of the given environment, which includes a man-made physical environment (the ship) and a natural environment (the river) (Kwortnik Jr., 2006). The aesthetic experience immerses passengers in both the cruise ship and the natural environment,

the design and layout of cruise ships convey a sense of sophistication, excitement, and luxury (Chua et al., 2016). Recently, Roy et al. (2019) conducted a study on a group of consumers who voluntarily participated in value-creation activities, and concluded that esthetics is positively correlated with intelligent co-creation experience. Experiences such as visiting themed restaurants, gastronomic museums, space travel, and sightseeing have been explained by their linear positive relationship with the co-creation process. When visitors have a positive esthetic experience, they are more likely to engage in co-creation activities, resulting in a positive co-creation experience. In summary, the following hypothesis was made:

H3a: Esthetic experience influences positively the co-creation experience

Escapism experiences help tourists break out of their everyday lives and immerse themselves in another world (Oh et al., 2007). It is a key feature of the floating experience that results from the internalization of the initial cruise experience and results from cruisers' interactions with vacation features such as the physical characteristics of the cruise ship, services, comfort, contact with nature, and ports of call (Oh et al., 2007).

Most consumer behavior is fundamentally pleasure-seeking, as consumers seek pleasurable service experiences (Schlesinger et al., 2020). In Petrick's (2004) study, emotional components (e.g., cruise passengers' feelings) are directly related to the perceived value of a cruise experience. People look for new things to do occasionally to escape the daily routine, where they can relax both physically and mentally (Han & Hyun, 2018; Oh et al., 2007). Lau and Yip (2020) conducted a study in a Singapore cruise that onboard events, concerts, and local artistic performances can provide a desirable sense of escapism. This study supports the idea that consumers' pursuit of escapism is a deeply immersive experience, and when this pursuit is apprehended, they are more likely to engage in co-creation experiences. Therefore, another hypothesis is proposed:

H4a: Escapism experience positively influences the co-creation experience

2.5.2 Experience Economy Model in Revisit Intention

Revisit intention has been recognized as one of the essential factors for the survival and growth of businesses in the tourism industry. It is an important concept for destination marketing to predict travelers' potential behavior (Baker & Crompton, 2000).

Revisit intentions are derived from tourists' perceptions of their travel experiences and intentions to revisit the tourist attraction they experienced (Baker & Crompton, 2000). Chang et al. (2014) reported that the quality of the tourist experience is the most important precondition for revisit intention. Moreover, customers who have an excellent and memorable experience show positive behavioral intention and become loyal customers, which ultimately leads to revisit intention (Boulding et al., 1993). Radder and Han (2015) found that edutainment (the experience between education and entertainment) was the most important experiential dimension in determining tourists' revisit intention. Quadri (2012) showed that esthetic and escapist experiences are essential to the formation of revisit intention in a wine trail. In addition, Baker (2016) found that the critical customer experience elements for increasing revisit intention are esthetic and educational experiences.

The cruises need to develop multiple entertainment options for each type of cruise traveler. This includes a variety of entertainment options such as spas, hot tubs, shows, music shows, pools, comedy, theater, and nightly parties (Clootrack, 2020). Entertainment programs are carefully designed to appeal to different age groups, from young children to older travelers (Clootrack, 2020). When a cruise line provides a good customer experience, customers are more likely to return and become repeat customers. Based on this, the following hypothesis is formulated:

H1b: Entertainment experience influences positively the tourist's intention on returning

Educational experiences capture what tourists learn while travelling and how this changes their perspective (Petrick et al., 2006; Qu & Ping, 1999). In educational experiences, a tourist absorbs the events taking place in front of them at a destination and actively participates through interactive use of the mind and/or body. Generally, tourists enhance their skills and knowledge, either generally or specifically, through educational experiences at the destinations they visit (Oh et al., 2007).

Cartwright and Baird (1999) identify three sources for the educational value of a cruise. First, cultural "immersion" allows tourists to immerse themselves in and learn about new cultures both on board and in the various ports of call. Onboard, passengers have the opportunity to socialize and learn from their new acquaintances (e.g., Yarnal & Kerstetter 2005). Second, visiting multiple destinations on a cruise allows guests to discover and learn from a variety of sights. For example, on a week-long cruise in the Eastern Mediterranean, a tourist has the opportunity to explore all the sights and facilities and learn about their

customs (Hosany & Witham, 2009). Finally, the activity programs aboard a cruise offer a range of learning opportunities, from dance classes, cooking and dessert demonstrations, wine tastings and computer classes to educational lectures about life at sea (Hosany & Witham, 2009). If the cruise line offers a good experience/travel program, the tourist is more likely to return. On this basis, the following hypothesis is made:

H2b: Education experience influences positively the tourist's intention on returning

In the esthetic experience, the visitor is immersed in the environment and passively perceives it without changing anything (Adrianty & Chairy, 2021). It is more of a mental presence. Many sights provide visitors with esthetic experiences. Oh et al. (2007) found that the physical environment of a business has a great impact on customer loyalty. In addition, esthetics have a great influence on consumer behavior, decision making, and evaluation of services (Oh et al., 2007)

The need to use aesthetic components such as atmosphere, colour, decor, service, and design that can add an aesthetic dimension to the destination, the importance of design components in tourist areas such as colours, lighting, music, and smell is shown (Wang et al., 2008). Poor design of these facilities harms the attractiveness of a destination and has further negative impacts on the natural and cultural environment as well as most other anthropogenic activities (Yan et al., 2013). If a tourist place has good facilities, it will lead to aesthetic experiences, so that customers feel satisfied and intend to visit it again. Based on this argument, the following hypothesis is proposed:

H3b: Esthetic experience influences positively the tourist's intention of returning

The escapism experience requires greater immersion and involvement than entertainment and educational experiences. Tourists participating in escapism experiences not only break away, but also travel to a specific location and participate in activities worthy of their time (Pine & Gilmore 1999). Escapist experiences require the tourist to act on actual performances or events in the real or virtual environment. In general, tourism offers people the opportunity to escape their everyday lives and return to routine after experiencing something out of the ordinary (i.e., a life outside of routine). Tourism provides numerous opportunities for escapist experiences. Vacation is "an escape, a problem solver, a provider of strength, energy, new courage to live, and happiness" (Krippendorf 1987, p. 17). Therefore, tourists are willing to

travel around the world in search of satisfying and authentic experiences. Moreover, a cruise offers tourists the opportunity to live a privileged life for a short period of time, to escape the daily routine (Qu & Ping, 1999), and to be in a different world (Yarnal & Kerstetter 2005). This study supports the idea that consumers' pursuit of escapism is a profound experience, and that when this pursuit is perceived, they are more likely to return. Therefore, another hypothesis is proposed:

H4b: Escapism experience positively influences the tourist's intention of returning

2.6 Co-creation and revisit intention

Creating a co-creation experience to respond to customers' increasing experiential consumption and increase their revisit intentions is considered a highly competitive and effective strategy that managers should consider, especially in the tourism sector where co-creation processes are more frequently observed (Meng & Choi, 2018).

The co-creation experience and its main components (the experience the service provided, the interaction, the perceived value, and the degree to which the experience was remembered) are critical factors in influencing customers' intention to use the service again (Prebensen et al., 2013). However, it is important to understand what customer experience is in the tourism context. Thus, the concept is referred to as the subjective personal reactions and feelings associated with tourism activities (Prebensen et al., 2013).

Since co-creation is a complex process, it is important to understand the level of co-creation and its implications for revisit intent. Positive experiences have pleasurable effects, and consumers who have had them think about returning one day to repeat the service consumed (Wigfield & Eccles, 2000). This interaction involves active participation, pleasant memories, and affective responses (Buonincontri et al., 2017). However, if the environment where the level of co-creation is lower, the intention to revisit will have a lower perceived value because the consumer has already had an experience with that service (Sugathan & Ranjan, 2019).

It is important to emphasize that the consumer's expectations will be higher on a future visit because of the contact that has already occurred. Therefore, the impact of the experience will create a lower intention to revisit in the customer (Sugathan & Ranjan, 2019). When the co-creation environment is higher, the

expectation is assumed to be even higher because co-creation has already occurred and customers have already used their knowledge and efforts to improve the service and consequently have a memorable experience (Prahalad & Ramaswamy, 2004; Vargo & Lusch, 2004). It is expected that by using co-creation resources, the customer will better perceive the value of the experience and that this will result in a reinforcement effect in their intention to revisit the service. Authors Sugathan and Ranjan (2019) concluded that revisit intention is higher in environments with high co-creation. In short, the level of co-creation affects revisit intention. However, if there is no co-creation, the novelty and memorable experiences may not be enough for the customer to have the intention to use the same service again (Monteiro, 2020).

Moreover, from the customers' perspective, a co-creation experience can be enhanced by the co-creation behavior of the customers themselves (Campos et al., 2015). As customers participate and interact more, they naturally have more opportunities to connect with the elements of the experiential landscape. Thus, as the benefits of the experiential landscape accumulate, customers are likely to have higher perceived value and a more memorable experience, which in turn leads to positive attitudes (Buonincontri et al., 2017; Campos et al., 2017). As a result, the experiential landscape and co-creation behaviors create a memorable experience, form a positive attitude, and develop a revisit intention (Priporas et al., 2017). Revisit intention is related to the co-creation process because when customers interact and participate more, there is a greater connection to the experience elements of the service. Therefore, the perceived value is higher and the experience becomes more memorable, leading to a positive attitude toward the intention to revisit the service (Buonincontri et al., 2017; Campos et al., 2017). Based on this, the following hypothesis is formulated:

H5: The level of co-creation a customer has in the tourist service influences revisit intention.

3. Conceptual Model

Concluding, the proposed model with all the hypothesis that are going to be studied based on the Literature Review and Hypothesis Development, is presented below in figure 4.

Figure 4- Conceptual Model

Cruise Experience Experience **Economy Model** Entertainment H1a Co-Creation Experience H2a Н3а_ H4a Education **H5** H₁b H2b Esthetic Revisit H3b Intention H4b Escapism

4. Methodology

The main objective of this Master Dissertation is to study the mediating role of co-creation between cruise experience and the intention on revisiting. In particular, (i) test if the 4E model has influence in the process of co-creation (ii) test if the 4E model influences the intention to return (iii) analyze co-creation as an influencer of intention to return. To increase the legitimacy of this study, an organized and structured investigation should had been done. This Master Thesis followed a sequential approach, moving from secondary data (previous studies and research), to primary data (field investigation). This Master thesis follows assumptions of a quantitative approach, because it is our intention to test a model with eight constructs and their associations. Therefore, a questionnaire was used to test and validate the hypotheses defined in the literature review.

4.1 Sample Definition

In this analysis, the target population consists of people who have already taken a cruise on the Douro River, reaching a sample of 264 people.

A convenience sampling method was developed, taking into account the areas of the Douro most frequented by cruisers. Questionnaires were made between April and June 2023 to individuals who have participated in a cruise in the region. All surveys were conducted in person at the "Gaia" pier and the "Estivia" pier during the above-mentioned period, as these are the places where cruise ships embark and disembark in the Douro, we considered that these would be the ideal places to obtain the greatest number of responses. The surveys were applied more frequently at the Gaia dock due to the simple fact that it is easier to go there.

In order for the respondents to answer the questionnaire, the purpose of the survey was explained to them one by one if any doubts emerge, taking into account that not too many people should answer at the same time, since it would not be easy to explain the best arguments in detail to numerous groups, despite the collaboration of three colleagues. After the explanation the majority of the cruisers took the questionnaire.

4.2 Questionnaire

The questionnaire itself included 18 questions which were organized in the following sections: (1) tourism experience (Q1-Q4); (2) co-creation experience (Q5); (3) intention to revisit (Q6); (4) characterization of the trip (Q7 – Q13) and (7) socio-demographics of respondents (Q14 – Q18). The last part of the questionnaire asked respondents to answer questions about their age, country of origin, education, marital status, and gender, as well as about some details about their trip, such as companion, length of stay, and purpose of visit. It was quite long and on average took around 10-15 minutes to answer. Questionnaires face-to-face were made to cruisers of all ages, genders, and nationalities who were willing to participate in the study. The only necessary condition was to have the experience of a Douro cruise. Since the objective of the study is to evaluate the tourist experience during the cruise, the questionnaires needed to be complete at the end of the cruise. Since the cruisers return in the morning and stay in Gaia for two days until it begins its route again, it was possible to complete the questionnaires during the times when the cruisers departed to explore the city of Porto. The questionnaire complete version can be found in Annex 1.12.

4.3 Pre-test

The application of the questionnaire was preceded by a pre-test with six randomly selected visitors at Gaia wharf. When filling out the questionnaire, it was asked to forward any doubts or comments to the researcher. During this process, it was indicated that the description of the co-creation would be extensive and exhaustive. Since the intention was to replicate the original instrument, no changes were made to the questions.

4.4 Measures of the model constructs

Adapted scales from previous studies were used to measure each model construct. The research instrument consists of several rating scales to capture the study's main variables, namely, cruisers' experience, co-creation and intention to revisit. The measures for cruisers' experiences were operationalized using Hung, Hwang and Lyu (2020), Seker & Unur (2022) and Kang (2020) tourist experience scale setting. The four dimensions of experience—education, entertainment, esthetics, and escapism—were each represented between four to six statements. Each statement was rated using a 7-point Likert scale ranging from (1) strongly disagree to (7) strongly agree. Co-creation was measured using eighteen items tapping into respondents' evaluations of how engaged they were into interacting with other customers and staff, these items were also measured using a 7-point scale ranging from (1) strongly disagree to (7) strongly agree, some items were reworded to fit the study setting. Table 4 presents the measures and studies where they were adapted from.

Table 4- Sources of measures of Experience Economy Model; Co-creation and Revisit Intention

Dimension	Item	Author	
Entertainment	The onboard activities were amusing.		
	The entertainment was captivating	Hung, Hwang & Lyu (2020)	
	Onboard activities were entertaining	nulig, riwalig & Lyu (2020)	
	Activities onboard were fun.		
	I observed that participants were enjoying events in this		
	cruise.	Seker & Unur (2022)	
	Activities in this cruise were fun to watch		
Education	I learned a lot during this cruise.		
	The experience made me more knowledgeable.	Hung, Hwang & Lyu (2020)	
	It was a real learning experience		
	It stimulated my curiosity to learn new things		

	I.	
Esthetic	The cruise was an attractive setting for my vacation	
	The environment of the cruise showed close attention	
	to design details.	Kang (2020)
	It was pleasant just being in the attractive cruise	
	facilities.	
	Just being at this cruise was very pleasant	Seker & Unur (2022)
	I felt a real sense of harmony	Hung, Hwang & Lyu (2020)
	<u> </u>	l
Escapism	I felt I played a different character in this cruise	
	I felt like I was living in a different place in this cruise	Caker 9 Haur (2022)
	I felt like I was living in a different time in this cruise	Seker & Unur (2022)
	The experience let me imagine being someone else.	
	I completely escaped from my daily routine.	Hung, Hwang & Lyu (2020)
	<u> </u>	
Co-creation	I alaways provide suggestions to the staff for improving	
	the service outcome	Yang, Chen & Huang (2017)
	I have a high level of participation in the service process	
	The cruise company offered me comprehensive	
	information that allowed me to evaluate the advantages	
	and disadvantages of its services	
	I enjoy dialoguing with the cruise staff sharing	Mansilla, Contri & Cantallops
	knowledge when they take the initiative.	(2019)
	I help other customers if they need help	
	I teach other customers how to use the service correctly	
	I give advice to other customers	
	I am very involved in deciding how the services should	
	be provided	Dunningantui Mari III
	I like to interact with the hotel staff to get information	Buonincontri, Morvillo,
	I like to interact with other customers to get information	Okumus & Niekerk (2017)
	about the services	
		1

	I like to interact with the hotel staff to share information	
	I take the initiative to seek my recommendations in	
	order to innovate the services	
	I was actively involved in the organization of my stay	
	When I have a problem, I inform the hotel employee	
	about it	
	If I have to wait longer than usual to receive service, I am	
	willing to adapt	
	I would rather spend money on a more engaging tourist	
	experience	
	The cruise allowed me to customize the range of	
	services I wanted to receive	
	I had numerous service options to adapt to my needs	
Satisfaction	Overall, I am satisfied with my cruise experience	
	I am happy with my decision to this cruise experience	Seker & Unur (2022)
	This cruise satisfied my expectations	Seker & Offar (2022)
	I am satisfied with the services offered by the cruise	
Return Intention	I want to return to Douro in the future	
	I intend to visit Douro in the next two years	
	Douro could be my next vacations city	Meng & Cui (2020)
	I find that revisiting this cruise is enjoyable	
	I find that revisiting this cruise is beneficial	

4.5 Statistical Analysis

Data was analyzed mainly using the software IBM SPSS 26. Quantitative techniques used include descriptive statistics, principal component analysis, and multiple linear regression models. Explanations of the statistical analyses developed are presented in more detail in this subsection.

4.5.1 Descriptive Statistics

The first step was to obtain descriptive statistics about the respondents' demographics in order to get acquainted with the data and get an insight into who the surveyed tourists are. Furthermore, descriptive statistics were used to characterize the trip in terms of length, companion, purpose of visit, as well as to determine the most important decision-making factors to make a river cruise trip on Douro. Additionally, we analyzed the cruiser's satisfaction. The methods used include frequency tables and descriptive measures.

4.5.2 Principal Component Analysis (PCA)

The next step was to conduct principal component analyses (PCA) in order to reduce the data and identify the underlying dimensions of entertainment, education, esthetics, escapism, co-creation and revisit intention towards a Douro cruise. The components were then labeled according to the more important items in each one. One of the requirements to perform PCA is that the initial variables are correlated. There are some measures which have to be assessed prior to performing PCA in order to see if the sample under analysis is suitable: (1) Kaiser-Meyer-Olkin measure of sampling adequacy value higher than 0.6; (2) the significance of Bartlett's test of sphericity lower than 0.05, indicating that there are pairs of variables which are significantly correlated. Several criteria were used in order to make a decision about the number of PC to extract, namely: (1) eigenvalues higher than 1.0; (2) percentage of variance explained at least 60% of the total variance; (3) and the scree plot analysis. Items with low factor loadings (below 0.5), and low communalities (below 0.4) were excluded from the analysis.

4.5.3 Multiple Linear Regression (MLR)

Multiple linear regression (MLR) is used to explain the relationship between one dependent variable and two or more independent variables. Therefore, these analyses were applied in this thesis in order to test the relationships between the constructs in the conceptual model.

There are several assumptions that have to be met in order to perform MLR. They are as it follows: 1) linearity of the relationship between each X and Y; 2) the mean of the residual component of the model is zero; 3) the independent variables are not correlated with the residual terms; 4) there is no correlation between the residual terms; 5) the variance of the random term is constant; 6) the normality of the residuals; 7) there is no correlation among the explanatory variables.

In order to test the conceptual model and hypotheses, two models were estimated, one for each dependent variable, as described by the model equations presented in Table 5. The aforementioned assumptions were checked and verified for all estimated models. It is important to mention that the Enter method was applied to all models. Enter method is a procedure for variable selection in which all variables in a block are entered in a single step.

Table 5- Model equations for each dependent variable

Model 1- Co-Creation Model	Co-Creation= B0 + B1*Entertainment + B2*Education + B3*Esthetic +	
	B4*Escapism + ε1	
Model 2- Revisit Intention	Revisit Intention= B0 + B1*Entertainment + B2*Education +	
Model	B3*Esthetic + B4*Escapism + B5* Co-Creation + ε2	

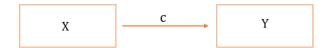
4.5.4 Mediation Effect

The direct and mediating effects of a path analysis are determined by the SPSS Process Macro SPSS v4.3. This output shows the degree of strength and effect of one variable on another. To better understand how this analysis works, Figure 5 was made. As the figure shows, there are two different effects that are examined for each model: direct effect and indirect effect. In Figure 5, X represents the independent

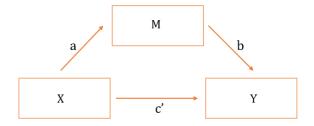
variable, Y represents the dependent variable, and M represents the mediator of the model. In a simple mediation like this, the first part of the figure (A) shows the unstandardized weight of X on Y, and is represented by c. The second part (B) shows the indirect effect of X on Y through a*b, while path a represents the effect of the independent variable on the mediator variable and path b shows the effect of the mediator on Y (Preacher & Hays, 2008). c' is the direct effect of X on Y. The total effect of the independent variable on the dependent variable (X on Y) is expressed as c = c' + ab.

Figure 5- Mediation Effect

(A)



(B)



To calculate the mediation effect, casual steps need to be done as it follows: 1) demonstrate that variable X affects Y; 2) demonstrate that variable X affects M; 3) demonstrate that variable M affects Y; 4) to demonstrate that variable M mediates the X-Y relationship, the effect of X on Y controlled by M must be 0. In order to analyze the significance of the indirect effects through Bootstrap, we used the PROCESS macro for SPSS, developed by Andrew Hayes (n.d.). 95% bias-corrected confidence intervals are used, and 5000 Bootstrap samples are created.

Therefore, four linear regression analyses were conducted in order to understand if the co-creation experience variable is a mediator of the cruise experience-revisit intention relationship. The four linear regression models can be described as follows.

First Step $Y = K1 + cX + \varepsilon 1$

Second Step $M = K2 + aX + \epsilon 2$

Thrid Step $Y = K3 + bM + \epsilon 3$

Fourth Step $Y = K4 + bM + c'X + \epsilon 4$

5. Results

5.1 Quantitative Results

5.1.1 Sample Characterization

The sample is composed of 264 respondents, from which 66.3% female. The age of the respondents was distributed mostly between 45 years old and 79 years old, with the mode being 49 years old and the mean 60 years old. In terms of education, the respondents have Master (41.67%) or Bachelor Degree (40.9%). In terms of separate countries, the most tourists came from Germany (26.5%), Spain (19.3%), United Kingdom (17.4%), United States (14.4%). The distribution of the visitors' socio-demographic characteristics is presented in table 6.

Table 6- Distribution of socio-demographic characteristics

Sample Characteristic	N	%
Gender		
Male	89	33.9%
Female	175	66.3%
Age		
18-24	2	0.8%
25-34	1	0.4%
35-44	20	7.6%
45-54	50	18.9%
55-64	91	34.5%
65 or older	100	37.9%
Level of Education		
High school	12	4.5%
Associate Degree	18	6.8%
Bachelor Degree	108	40.9%
Master Degree	110	41.7%
Doctoral Degree	16	6.1%
Country Residence		

Germany	70	26.5%
Spain	51	19.3%
United Kingdom	46	17.4%
United States	38	14.4%
Portugal	24	9.1%
Other	35	13.3%

5.1.2 Characterization of the river cruise trip

The purpose of the river cruise trip was 100% leisure. The duration of the trip in Douro was mostly seven days (58.3%), two days (18.2%) or eight days (17%). Furthermore, five days and six days were scarcely represented (5.7% and 0.8%, respectively). In terms of travel companion, most of the respondents stated they travelled with their family (49%), partner (28.1%), or with friends (22.8%). The majority of the respondents never visited the Douro region (77.65%) nor taken a river cruise (57.2%). Additionally, the cruisers respondents took mainly the Viking (28%) and the Douro Queen cruise (16.7%) The distribution of the river cruise trip is presented in table 7.

Table 8 shows a descriptive summary of the cruisers' satisfaction. These values allow us to conclude that these tourists are very satisfied with this service.

Table 7- Distribution of river cruise trip characteristics in Douro

Purpose of the visit	N	%
Business	0	0.0%
Leisure	264	100.0%
Other	0	0.0%
Duration		
2 days	48	18.2%
5 days	15	5.7%

6 days	2	0.8%
7 days	154	58.3%
8 days	45	17%
Travel Companion		
Family	130	49.1%
Friends	60	22.8%
Partner	74	28.1%
Other	0	0.0%
Previous visited Douro		
Yes	59	22.4%
No	205	77.7%
Previous taken a river cruise		
Never	151	57.2%
1-2 times	86	32.6%
3-4 times	27	10.2%
More than 4 times	0	0%
Type of cruise		
Viking	71	28.0%
Tomaz do Douro	17	6.4%
Splendour	2	0.8%
Serenity	31	11.7%
Rosa Alva	31	11.7%
Queen Isabel	13	4.9%
Douro Total	12	4.5%
Douro Splendour	3	1.1%
Douro Ruby	16	6.1%
Douro Queen	44	16.7%
Douro Encantado	1	0.4%
Douro Elegance	4	1.5%
Barcadouro	1	0.4%
Amadouro	15	5.7%

Table 8- Descriptives of Satisfaction

Satisfaction	Mean	Standard Deviation
Overall I am satisfied with my visit here	5.58	0.903
I am happy with my decision to visit here	5.36	0.908
This destination satisfied my expectation	5.5	0.931
I am satisfied with the services offered by the cruise	5.62	0.851

5.2 Model Variables

5.2.1 Entertainment

The first question of the survey aimed to identify how entertained the cruisers were during their trip. Respondents were asked to select from 1 to 7 (1-strongly disagree/7-strongly agree) their opinion on each statement. According to the results, they feel that mainly "onboard activities were amusing" (mean=6.21; sd=0.832) and "fun to watch" (mean=6.07; sd=0.821). All statements are on average above 5.8 which shows that tourists consider the cruise activities entertained.

Table 9- Descriptives of Entertainment

Entertainment	Mean	Standard Deviation
The onboard activities were amusing	6.21	0.832
The entertainment was captivating	5.84	0.809
Onboard activities were entertaining	6.04	0.836
Activities onboard were fun	6.02	0.804
I observed that participants were enjoying events	6.0	0.839
Activities in this cruise were fun to watch	6.07	0.821

5.2.2 Education

Regarding education the respondents felt that they learned a lot (mean= 6.03; sd=0.722) and it stimulated to learn new things (mean=5.95; sd=0.827). The mean of all statements is above 4 indicating that the tourists agree with the educational character of the cruise.

Table 10- Descriptives of Education

Education	Mean	Standard Deviation
I learned a lot during this cruise.	6.03	0.722
The experience made me more knowledgeable.	5.81	0.811
It was a real learning experience	5.92	0.,759
It stimulated my curiosity to learn new things	5.95	0.827

5.2.3 Esthetics

Regarding the results from the esthetic perspective, the respondents felt "a real sense of harmony (mean=6.04; sd=0.82) and "very pleasant" (mean=6; sd=0.832). All statements of esthetics present an average value close to 6 which means that tourists consider this trip as an esthetic experience.

Table 11- Descriptives of Esthetics

Esthetics	Mean	Standard Deviation
The ship was an attractive setting for my vacation	5.99	0.804
The environment of the ship showed close attention to design details.	5.94	0.872
It was pleasant just being in the attractive cruise facilities.	5.92	0.819
Just being at this destination was very pleasant	6.0	0.832
I felt a real sense of harmony	6.04	0.82

5.2.4 Escapism

For the variable escapism the cruisers feel that they "completely escaped" from their daily routines (mean= 4.63; sd= 1.314) and they lived in "a different time in this cruise" (mean=4.14; sd= 1.343). Some statements of this variable present the lowest mean values, some of them lower than 4, meaning that tourists do not agree these statements.

Table 12- Descriptives of Escapism

Escapism	Mean	Standard Deviation
I felt I played a different character in this cruise	3.83	1.436
I felt like I was living in a different time in this cruise	4.14	1.343
The experiences I had in this destination let me imagine being someone else	3.93	1.356
The experience let me imagine being someone else	3.92	1.357
I completely escaped from my daily routine.	4.63	1.314

5.2.5 Co-Creation

The tourists feel that the company offered them information that allowed them to evaluate the perks of taking the cruise (mean=4.54; sd=1.214) and they "had numerous service options to adapt" to their needs (mean=4.52; sd=0.876). Besides the cruise companies allowed them to customize the service (mean=4.38; sd=1.051). In this variable, the mean in most of items is lower than 4 which means that there is a lack of co-creation in these cruises. sd=1.051). In this variable, the mean in most of items is lower than 4 which means that there is a lack of co-creation in these cruises.

Table 13- Descriptives of Co-creation

Co-Creation	Mean	Standard Deviation
I always provide suggestions to the staff for improving the service outcome	3.63	1.347
I have a high level of participation in the service process	3.64	1.105
The cruise company offered me comprehensive information that allowed me to evaluate the		
advantages and disadvantages of its services.	4.54	1.214
I enjoy dialoguing with the cruise staff sharing knowledge when they take the initiative.	3.85	1.245
I help other customers if they need help	3.97	1.200
I teach other customers how to use the service correctly	3.80	1.214
I give advice to other customers	3.82	1.164
I am very involved in deciding how the services should be provided	3.75	1.134
I like to interact with the hotel staff to get information.	3.82	1.237
I like to interact with other customers to get information about the services	3.92	1.177
I like to interact with the hotel staff to share information	3.83	1.193
take the initiative to seek my recommendations in order to innovate the services	3.81	1.210
I was actively involved in the organization of my stay	3.77	1.145
When I have a problem, I inform the hotel employee about it	4.06	1.300
If I have to wait longer than usual to receive service, I am willing to adapt	4.06	1.017
I would rather spend money on a more engaging tourist experience	3.09	0.999
The hotel allowed me to customize the range of services I wanted to receive	4.38	1.051
I had numerous service options to adapt to my needs	4.52	0.876

5.2.6 Revisit Intention

Although satisfaction has great average, the revisit intention has not the same result. Overall, tourists are keen to visit again, as they consider that taking this cruise enjoyable (mean=4.66; sd=1.2) and beneficial experience (mean=4.63; sd=1.2) and want to return to the Douro in the future (mean=4.35; sd=1.4).

Table 14- Descriptives of Revisit Intention

Revisit Intention	Mean	Standard Deviation
I want to return to Douro in the future	4.35	1.409
I intend to visit Douro in the next two years	3.96	1.342
Douro could be my next vacations city	3.97	1.497
I find that revisiting this cruise is enjoyable	4.66	1.188
I find that revisiting this cruise is beneficial	4.63	1.169

5.3 Principal Components

In order to be able to test the conceptual model and hypotheses, a set of linear regression models should be estimated. Previously, it was necessary to reduce the number of variables per construct by several principal component analyses (PCA). In this sense, a principal component analysis was performed to all of the constructs in the model: entertainment, education, esthetics, escapism, co-creation and revisit intention towards Douro cruises.

5.3.1 PCA of Entertainment

A set of six variables were used to measure the entertainment of the tourists on the Douro cruises. The PCA identified one principal component which explains 68.9% of the total variance. This solution is good because all variables have loadings higher than 0.4 and the lowest loading value is 0.787 for the item "Activities in the cruise were fun to watch". The PC was named Entertainment (Table 15).

Table 15- Main variables of each PC of Entertainment

Entertainment	Loadings	Varience %	Cronbach's Alpha
The onboard activities were amusing	0.859	68.9	0.91
The entertainment was captivating	0.845		
Onboard activities were entertaining	0.841		
Activities onboard were fun	0.832		
I observed that participants were enjoying events	0.814		
Activities in this cruise were fun to watch	0.787		
(KMO=0.865; Bartlett's test significance=0.000)			

5.3.2 PCA of Education

A set of five variables were used to measure the education of the tourists on the Douro cruises. The PCA identified one principal component which explains 73.46% of the total variance. This solution is good because all variables have loadings higher than 0.4 and the lowest loading is presented for "The experience made me more knowledgeable" with a value of 0.618. The PC was named Education.

Table 16- Main variables of each PC of Education

Education	Loadings	Varience %	Cronbach's Alpha
I learned a lot during this cruise.	0.744	73.46	0.877
The experience made me more knowledgeable.	0.618		
It was a real learning experience	0.791		
It stimulated my curiosity to learn new things	0.786		
(KMO=0.815; Bartlett's test significance=0.000)			

5.3.3 PCA of Esthetics

A set of five variables were used to measure the esthetics of the tourists on the Douro cruises. The PCA identified one solution which explains 73.29% of the total variance. This solution is good because all variables have loadings higher than 0.4 and the lowest loading value (0.681) is presented for the item "Just being at this destination was very pleasant". The PC was named Esthetics.

Table 17- Main variables of each PC of Esthetics

Esthetics	Loadings	Variance %	Cronbach's Alpha
The ship was an attractive setting for my vacation	0.739	73.29	0.908
The environment of the ship showed close attention to design details	0.732		
It was pleasant just being in the attractive cruise facilities.	0.751		
Just being at this destination was very pleasant	0.681		
I felt a real sense of harmony	0.762		
(KMO=0.854; Bartlett's test significance=0.000)			

5.3.4 PCA of Escapism

A set of five variables were used to measure the escapism of the tourists on the Douro cruises. The PCA identified one principal component which explains 78.09% of the total variance. This solution is good because all variables have loadings higher than 0.4 and lowest loading value (0.636) is presented for the item "I completely escaped from my daily routine". The PC was named Escapism.

Table 18- Main variables of each PC of Escapism

Escapism	Loadings	Varience %	Cronbach's Alpha
I felt I played a different character in this cruise	0.838	78.09	0.929
I felt like I was living in a different time in this destination	0.793		
The experiences I had in this destination let me imagine being someone else	0.78		
The experience let me imagine being someone else	0.857		
I completely escaped from my daily routine.	0.636		
(KMO=0.876; Bartlett's test significance=0.000)			

5.3.5 PCA of Co-Creation

Initially, Co-Creation was accessed by 18 variables. Several PCA were performed in order to find the best solution. Two variables, "I would rather spend my money on a more engaging tourist experience" and "If I have to wait longer than usual to receive service, I am willing to adapt" were removed from the PCA because it had the lowest number of significant correlations with the other variables. As a result, one dimension was identified that explain 63.28% of the total variance. This solution present three items which loads lower than 0.5 on the principal component. Not being a good solution, it is acceptable given that the

objective of this PC analyses was to find only one dimension (Hair et al., 2018). The Cronbach's alpha confirms this solution as its value is very high (0.952). Detailed results are presented in Table 19.

Table 19- Main variables of each PC of Co-creation

Co-Creation Co-Creation	Loadings	Varience %	Cronbach's Alpha
I always provide suggestions to the staff for improving the service outcome	0.561	63.28	0.952
I have a high level of participation in the service process	0.569		
The cruise company offered me comprehensive information that allowed me to evaluate the	0.435		
I enjoy dialoguing with the cruise staff sharing knowledge when they take the initiative.	0.73		
I help other customers if they need help	0.656		
I teach other customers how to use the service correctly	0.767		
I give advice to other customers	0.755		
I am very involved in deciding how the services should be provided	0.627		
I like to interact with the hotel staff to get information.	0.754		
I like to interact with other customers to get information about the services	0.759		
I like to interact with the hotel staff to share information	0.76		
take the initiative to seek my recommendations in order to innovate the services	0.68		
I was actively involved in the organization of my stay	0.64		
When I have a problem, I inform the hotel employee about it	0.543		
The hotel allowed me to customize the range of services I wanted to receive	0.466		
I had numerous service options to adapt to my needs	0.421		
(KMO=0.965; Bartlett's test significance=0.000)			

5.3.6 PCA of Revisit Intention

A set of five variables were used to measure the revisit intention of the tourists to the Douro cruises. The PCA identified one solution which explains 77.54% of the total variance. This solution is good because all variables have loadings higher than 0.4 and the lowest loading for "I find that revisiting this cruise is enjoyable" with a value of 0.721.

Table 20- Main variables of each PC of Revisit Intention

Revisit Intention	Loadings	Varience %	Cronbach's Alpha
I want to return to Douro in the future	0.806	77.54	0.925
I intend to visit Douro in the next two years	0.845		
Douro could be my next vacations city	0.731		
I find that revisiting this cruise is enjoyable	0.721		
I find that revisiting this cruise is beneficial	0.773		
(KMO=0.823; Bartlett's test significance=0.000)			

5.4 Multiple Linear Regression Models

A total of two multiple linear regression models were tested. Statistics as R2, R2 adjusted, Durbin-Watson, VIF, TOL and regression coefficients for significant independent variables (at 5%) are presented in Table 21. Stepwise method of enter variables were selected. Annex 1.8- Multiple Linear Regression Models presents more detailed information about the estimated model results. It should be noted that the dimensions extracted from PCA were used for each independent and dependent construct. Consequently, all variables in the model are standardized.

Table 21- Significant coefficients for the 2 multiple linear regression models

Model	R2	R2 Adjusted	Significant Independent Variables	Unstandardized Coefficients	Standardized Coefficients	Durbin- Watson	VIF	TOL	
Model 1 Co-Creation	0.374	0.363	Esthetic Experience	0.324	0.296	1,503	1.670	0.599	
- Widdel 1 Co-Cleation	0.374		Escapism Experience	0.417	0.418		1.263	0.792	
Model 2 Revisit Intention	0.200	0.183	Entertainment Experience	0.319	0.303	1 712	2.179	0.459	
Widdel 2 Revisit Intention	sit Intention 0.200	ei z kevisit interition 0.200	del 2 Revisit Intention 0.200 0.183 Co-Creation	Co-Creation	0.359	0.352	1,712	1.547	0.646

5.4.1 Co-Creation Model

In the co-creation model, the independent variables which have significant statistical influence on co-creation are two: Esthetic (B = 0.324) and Escapism (B = 0.417). As the coefficients of both variables are positive, their influence on the favorability of co-creation is positive. However, the escapism has the greatest impact on the co-creation.

5.4.2 Revisit Intention Model

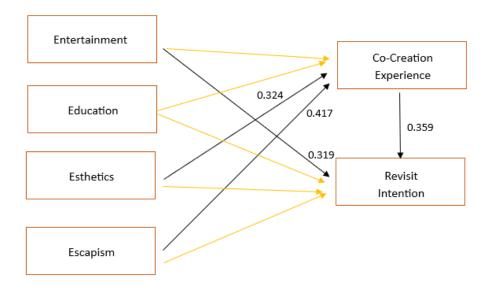


Figure 6- Multiple Linear Regression Model

The results showed that the respondents' intention to revisit the Douro cruises were significantly affected by two variables: Entertainment Experience (B=0.319) and Co-Creation (B=0.359). In figure 6 is presented the most significant direct effects.

5.5 Mediation Effect

5.5.1 Entertainment

From the Table 22 we can conclude that the variable co-creation mediates partially the revisit intention when it comes to entertainment because part of the total effect is the direct effect.

Table 22- Results of Co-creation mediating Entertainment and Revisit Intention

		Revisit Intention	95% IC
	Indirect Effect	0.115	(0.063; 0.175) *
Entertainment	Direct Effect	0.239	(0.108; 0.371)
	Total Effect	0.354	(0.227; 0.483)
	Direct Relationship	0.339	

^{*}Bias-corrected bootstrap confidence intervals based on 5000 bootstrap samples

5.5.2 Education

Concerning education, co-creation fully mediates the relationship education- revisit intention since the direct effect (c') is zero (non-significant).

Table 23- Results of Co-creation mediating Education and Revisit Intention

		Revisit Intention	95% CI
	Indirect Effect	0.142	(0.085; 0.202) *
Education	Direct Effect	0.078	(-0.056; 0.212)
	Total Effect	0.220	(0.092; 0.347)
	Direct Relationship	0.228	

^{*}Bias-corrected bootstrap confidence intervals based on 5000 bootstrap samples

5.5.3 Esthetics

We can also see that co-creation fully mediates the relationship esthetics- revisit intention once the direct effect (c') is non-significant and therefore the total effect is almost entirely indirect through the co-creation experience.

Table 24- Results of Co-creation mediating Esthetics and Revisit Intention

		Revisit Intention	95% IC
Esthetics	Indirect Effect	0.162	(0.096; 0.238) *
	Direct Effect	0.026	(-0.110; 0.162)
	Total Effect	0.188	(0.059; 0.316)
	Direct Relationship	0.180	

^{*}Bias-corrected bootstrap confidence intervals based on 5000 bootstrap samples

5.5.4 Escapism

Finally, through the table below we can conclude that co-creation also fully mediates the relationship escapism-revisit intention because the direct effect (c') is zero.

Table 25- Results of Co-creation mediating Escapism and Revisit Intention

		Revisit Intention	95% IC
Escapism	Indirect Effect	0.173	(0.094; 0.269) *
	Direct Effect	0.028	(-0.108; 1.163)
	Total Effect	0.201	(0.077; 0.324)
	Direct Relationship	0.196	

^{*}Bias-corrected bootstrap confidence intervals based on 5000 bootstrap sample

6. Discussion and Conclusions

6.1 Discussion

The main objective of this study was to examine whether the relationship between cruise experience and intention to revisit is mediated by co-creation.

To this end, factors such as entertainment, education, aesthetics and escapism were analyzed in order to understand their impact and interaction with co-creation and the consumer's intention to revisit, thus allowing companies to adopt a strategy that allows them to increase the desire of the consumer to return.

The results of the questionnaire, conducted on a sample of 264 cruisers on the Douro River, confirmed almost all hypotheses. Four hypotheses were confirmed: H3a, H4a, H1b, and H5. These results are consistent with previous research (e.g., Sugathan and Ranjan (2019); Lau and Yip (2020)). Two components, aesthetics and escapism, have a significant influence on co-creation, and two other components: entertainment and the co-creation experience, have an influence on revisit intention. In addition, co-creation has a mediating effect on the cruise experience and revisit intention.

As already proven through the literature review co-creation encourages the active participation and involvement of the individuals involved in the creative process. When people actively contribute and collaborate, they become more interested in the outcome, which leads to a more intense aesthetic experience (Lau & Yip, 2020). By involving multiple perspectives and ideas, co-creation can result in more diverse and enriching aesthetic experiences. The results of this study (H3a) point to a positive influence of aesthetic experience on co-creation and are in agreement with the results obtained by Roy et al. (2019).

The relationship between co-creation and the escapism experience can be seen when co-creation is applied in the context of developing immersive experiences or entertainment services. By involving customers in the creative process, companies or creators can tap into the desires and preferences of their target audience, ultimately providing them with more satisfying and engaging escapism experiences (Schlesinger et al., 2020). The research of this study concluded, that a positive relationship exists. Hosany

and Witham (2009) found escapism to be the least influential of the four experience realms, it being only significant in predicting overall perceived quality. However Lau and Yip (2020) supported the idea that consumers' pursuit of escapism is an immersive experience, and when this pursuit is seized, they are more likely to engage in co-creation experiences.

Furthermore, the hypothesized relationships between entertainment, co-creation with revisit intention (H1b, H5) were also all verified. The results showed that the component with the strongest impact on the intention to revisit is the co-creation one which goes according to Sugathan and Ranjan (2019) that conclude that revisit intention is higher in environments with high co-creation. In cruises, co-creation involves passengers actively engaging in various aspects of their cruise experience, such as itinerary planning, onboard activities, entertainment options and dining choices (Sugathan & Ranjan, 2019). When customers actively participate in co-creation activities during their cruise experience, they develop a sense of ownership and emotional attachment to the service. This sense of ownership enhances their overall satisfaction and increases the likelihood of revisiting in the future (Sugathan & Ranjan, 2019). Co-creation activities enable customers to co-design and co-produce value with the service provider. By actively engaging in the creation process, customers can enhance the value they derive from the cruise experience. This increased value leads to higher levels of satisfaction and a greater likelihood of revisiting (Gabe et al., 2006).

Overall, co-creation in cruises fosters a sense of ownership, personalization, enhanced value, and positive word-of-mouth, all of which positively influence customers' revisit intentions (Gabe et al., 2006). By involving customers in the co-creation process, cruise lines can create memorable experiences, build loyalty, and increase the likelihood of repeat business.

Apart from this, revisiting intention is also influenced by entertainment. The overall entertainment offerings and experiences provided by a cruise line can greatly impact passengers' desire to return for future trips. If passengers have a positive and memorable experience with the entertainment offerings, they are more likely to consider revisiting the cruise line. The availability of a diverse range of entertainment options catering to different preferences and age groups enhances the overall cruise experience. High-quality entertainment, including talented performers, state-of-the-art production values, and innovative shows, creates a positive impression and increases the likelihood of passengers wanting to come back for more.

Finally, the entertainment experience contributes to the overall brand perception of the cruise line. Positive entertainment experiences can enhance the perception of the cruise line as fun, exciting, and customer-oriented. This, in turn, builds loyalty among passengers, increasing their intention to revisit and choose the same cruise line for future trips. It is important for cruise lines to continually innovate and improve their entertainment offerings to meet the evolving preferences and expectations of passengers. By providing exceptional and memorable entertainment experiences, cruise lines can significantly influence passengers' intention to revisit. This goes all according to Radder and Han (2015) that revealed entertainment is one of the most important experience dimensions in determining visitors' revisit intention.

Lastly, in the mediation analysis, the indirect and total effects are all significant, i.e., different from zero, which means that the co-creation experience is always a mediator. For the entertainment - revisit intention relationship, co-creation experience is a partial mediator because part of the total effect is from the direct effect. In the other relationships, this variable is a full mediator because the direct effect is zero (not significant), and therefore the total effect is almost all indirect through the co-creation experience. Consequently, this research found a direct positive relation between the experience economy model and the intention to revisit. The more engaged the cruisers are in the experience the more probability they tend to revisit. A positive relation between the four components and co-creation was also revealed, so that the more the cruisers are emerged in the cruise experience the co-creation process is more developed. Finally, there is a positive relation between co-creation and revisit intention resulted from this analysis leading to the conclusion that the more engaged the cruisers are in the co-creation process, they more intent to visit. Therefore, H5 is supported. Hosany and Witham (2009) found a significant relationship between cruise tourists' experiences and their intention to recommend through satisfaction as a mediating variable. Manthiou et al. (2014) chose loyalty as a behavioral variable, measured by intention to revisit the community festival in question. In the context of rural tourism, Loureiro (2014) found significant positive associations between travel experiences and revisit intentions through the mediation of arousal and memory. From a theoretical perspective, previous studies have not examined the co-creation experience as a mediator in the cruise industry. This provides a deeper understanding of the functions of co-creation experience in forming revisit intentions and sheds light on the direction of strategy development.

6.2 Conclusions

One of the objectives of this thesis was to understand if co-creation mediates the role of the intention to revisit in the context of Douro cruises. The Douro River flows through the picturesque Douro Valley in Portugal, renowned for its stunning landscapes of terraced vineyards it is also one of the world's oldest and most esteemed wine regions, famous for producing port wine. Overall, a Douro River cruise offers a unique blend of natural beauty, cultural exploration, wine tasting and relaxation, making it an attractive choice for those seeking an engaging and enriching travel experience, proving that it is an emerging tourism destination in need of better marketing and branding efforts. Examining what international tourists think about Douro cruises after visiting it could help for getting a better understanding of what can be improved.

After conducting an extensive literature review, experience was studied as a multi-dimensional construct composed of entertainment, education, esthetic and escapism, and its influence on co-creation and revisit intention.

The data collection included face-to-face questionary and the final sample was composed of 264 cruisers. The results showed that the two most important factors for cruisers to have a co-creation experience are: the escapism experience and the esthetics of the vessel. The two factors with the lowest importance for the respondents are entertainment and education. Plus, the results showed that entertainment and co-creation are the main reasons for travelers to revisit the same cruise. Furthermore, in terms of the purpose of visit, all cruisers were there for leisure. The duration of the trip was mainly seven days and the majority of the tourists travelled with their partner or with friends/family. Almost half of the respondents came from Germany, Spain and United Kingdom. Besides, more than half of the cruisers never visited the Douro region.

From research point of view, this master thesis contributed to the literature of tourism in at least four directions. Firstly, it is one of the few studies which study revisit intention not only with its economy model components but also added co-creation experience. This research not only provides further insights about the influence of co-creation in intention to revisit but it is also the first one to test the significant influence of co-creation on revisiting intention in cruise sector.

Secondly, it is examined the entertainment, education, esthetics and escapism experiences in co-creation and revisit intention context on the Douro River. Principal component and regression analyses were performed to each of the components of economy model in order to find the most important dimensions and their effects on co-creation.

As this thesis shows, in the context of Douro cruises, co-creation has a significant influence on tourism behavior after visit. Co-creation in the river cruise sector allows cruise companies to align their offerings with customer preferences, enhance customer satisfaction, and drive innovation. By involving passengers in the design and development process, cruise companies can create more meaningful and memorable experiences that cater to the evolving needs and desires of their target market. For instance, one of the influencing variables of co-creation was the esthetic experience – the fact that this cruise companies could focus on creating an aesthetic experience by carefully selecting routes that offer captivating views and incorporate elements of design, such as elegant interiors, stylish furnishings, and panoramic windows, to maximize passengers' visual pleasure. The aim is to immerse passengers in the beauty of the surroundings and create a visually pleasing environment throughout the journey (Chua et al., 2016).

The third contribution of this thesis is that it proposed and tested a conceptual model aiming to investigate if co-creation has a mediating role in the intention to revisit. The results verified that every component from the economy model is mediated by co-creation (H5). By actively involving customers in the value creation process, businesses can enhance customer satisfaction and loyalty, ultimately increasing the likelihood of customers revisiting in the future. Other interesting findings of the conceptual model show that esthetic and escapism (H3a; H4a) have the most influence on co-creation by focusing on creating visually appealing environments and offering an immersive escapism experience. Cruise companies aim to provide a memorable and personalized journey for their passengers. However, entertainment and education did not seem to have a significant impact on the co-creation experience simply because some participants may be more focused on enjoying the entertainment rather than actively contributing to the co-creation effort. Co-creation often requires creative thinking and problem-solving skills. However, traditional education systems may prioritize conformity and standardized approaches, which can stifle individual creativity and discourage divergent thinking.

Moreover, one specific component has an impact on the revisit intention besides the co-creation experience: it is the entertainment service (H1b) for the simple fact that it contributes to the overall brand perception of the cruise line. Positive entertainment experiences can enhance the perception of the cruise line as fun, exciting, and customer-oriented. This, in turn, builds loyalty among passengers, increasing their intention to revisit and choose the same cruise line for future trips (Sugathan & Ranjan, 2019).

Finally, in terms of management, this study contributes in a way that provides knowledge and guidance to companies, especially in the tourism sector. However, the conclusions can also be applied to sectors that are not as specific and involved as the tourism sector. Thus, in their strategies, companies will have the opportunity to work on all the variables studied, as they contribute to the management of the relationship with the customer, offer a long-term relationship, motivate customers to communicate their needs and suggestions for a higher quality service, as well as the likelihood of behavior of return to use the service. With this, co-creation is an absolutely essential process for all the other concepts addressed in the study.

7. Limitations and directions for future research

During the process of developing this master thesis, several limitations were identified. The first limitation is related to the sample of the questionnaire. It was identified that some of the age groups, namely 18-24 or 25-34, are not very well represented in the study. One of the future research suggestions would be to repeat the study but with a sample, including a more equally represented respondents from these age groups. In addition to the aforementioned more representative and equitable sampling across age and gender, it should be noted that this study had a significant percentage of females as well as older age group. A multiculturality of the sample is quite small, and it would be meaningful to take a more multicultural approach in order to understand the tourists' differences between various regions.

Another limitation was the fact that the questionnaire was created and distributed only in English. During the data collection, there were several occasions when the cruisers could not fill out the survey due to the fact that they were unable to understand it in English. This constraint can be eliminated by translating the questionnaire into some of the most popular languages. The choice of which languages could be based on statistical data about the country-of-origin of the passengers who are taking a Douro cruise (if this information is available).

Furthermore, as this was a study focused only on the context on cruises specifically on Douro, the validity of the conceptual model is verified only about this cruise. Future research should test the proposed conceptual model in different tourism sectors. Additionally, another type of analysis could be used to test the hypotheses, such as structural equation modelling.

Next, the present study only focused on one mediator (co-creation). There may be other variables that could mediate the relationship between cruise experience and intention to revisit. Thus, future research may consider looking into other variables for example loyalty.

8. References

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9. Annexes

Annex 1- SPSS Outputs

Annex 1.1 Principal Component Analysis: Entertainment

KMO and Bartlett's Test				
Kaiser-Meyer-Olkin Measure of Samplir	0,865			
	Approx. Chi-Square	963,522		
Bartlett's Test of Sphericity	df	15		
	Sig.	0,000		

Total Variance Explained								
				Extraction				
				Sums of				
				Squared				
	Initial	Eigenvalue	S	Loadings				
		% of	Cumulative		% of	Cumulative		
Component	Total	Variance	%	Total	Variance	%		
1	4,134	68,905	68,905	4,134	68,905	68,905		
2	0,629	10,484	79,389					
3	0,392	6,525	85,914					
4	0,383	6,384	92,298					
5	0,255	4,249	96,547					
6	0,207	3,453	100,000					

Annex 1.2 Principal Component Analysis: Education

KMO and Bartlett's Test				
Kaiser-Meyer-Olkin Measure of Sa	0,815			
	Approx. Chi-Square	561,795		
Bartlett's Test of Sphericity	df	6		
	Sig.	0,000		

Total Variance Explained							
				Extraction			
				Sums of			
				Squared			
	Initial	Initial Eigenvalues					
		% of	Cumulative		% of	Cumulative	
Component	Total	Variance	%	Total	Variance	%	
1	2,938	73,457	73,457	2,938	73,457	73,457	
2	0,507	12,680	86,138				
3	0,294	7,358	93,496				
4	0,260	6,504	100,000				

Annex 1.3 Principal Component Analysis: Esthetics

KMO and Bartlett's Test				
Kaiser-Meyer-Olkin Measure	0,854			
	Approx. Chi-Square	851,527		
Bartlett's Test of Sphericity	df	10		
	Sig.	0,000		

Total Variance Explained								
				Extraction				
				Sums of				
				Squared				
	Initial Eigenvalues			Loadings				
		% of	Cumulative		% of	Cumulative		
Component	Total	Variance	%	Total	Variance	%		
1	3,664	73,288	73,288	3,664	73,288	73,288		
2	0,469	9,376	82,663					
3	0,397	7,948	90,612					
4	0,262	5,238	95,850					
5	0,207	4,150	100,000					

Annex 1.4 Principal Component Analysis: Escapism

KMO and Bartlett's Test				
Kaiser-Meyer-Olkin Measure of Sa	0,876			
	Approx. Chi-Square	1105,679		
Bartlett's Test of Sphericity	df	10		
	Sig.	0,000		

Total Variance Explained								
	Initial E		Extraction Sums of Squared Loadings					
		% of	Cumulative		% of	Cumulative		
Component	Total	Variance	%	Total	Variance	%		
1	3,904	78,085	78,085	3,904	78,085	78,085		
2	0,488	9,756	87,841					
3	0,279	5,575	93,416					
4	0,173	3,467	96,882					
5	0,156	3,118	100,000	_				

Annex 1.5 Principal Component Analysis: Satisfaction

KMO and Bartlett's Test				
Kaiser-Meyer-Olkin Measure of	0,838			
	Approx. Chi-Square	1097,948		
Partlett's Test of Sphericity	df	6		
Bartlett's Test of Sphericity	Sig.	0,000		

Total Variance Explained								
				Extraction				
				Sums of				
				Squared				
	Initial E	Initial Eigenvalues						
		% of	Cumulative		% of	Cumulative		
Component	Total	Variance	%	Total	Variance	%		
1	3,456	86,409	86,409	3,456	86,409	86,409		
2	0,287	7,171	93,580					
3	0,167	4,180	97,759					
4	0,090	2,241	100,000					

Annex 1.6 Principal Component Analysis: Co-Creation

KMO and Bartlett's Test				
Kaiser-Meyer-Olkin Measure of Samp	0,965			
	Approx. Chi-Square	3296,179		
Bartlett's Test of Sphericity	df	120		
	Sig.	0,000		

Total Variance Explained								
				Extraction				
				Sums of				
				Squared				
	Initial	Eigenvalues	5	Loadings				
		% of	Cumulative		% of	Cumulative		
Component	Total	Variance	%	Total	Variance	%		
1	10,124	63,276	63,276	10,124	63,276	63,276		
2	0,983	6,142	69,418					
3	0,638	3,988	73,406					
4	0,587	3,667	77,073					
5	0,547	3,420	80,493					
6	0,438	2,735	83,228					
7	0,397	2,478	85,706					
8	0,350	2,189	87,895					
9	0,332	2,073	89,968					
10	0,310	1,937	91,905					
11	0,287	1,792	93,697					
12	0,260	1,626	95,323					
13	0,214	1,337	96,660					
14	0,193	1,208	97,868					
15	0,181	1,134	99,002			·		
16	0,160	0,998	100,000					

Annex 1.7 Principal Component Analysis: Revisit Intention

KMO and Bartlett's Test								
Kaiser-Meyer-Olkin Measure of Sam	0,823							
	Approx. Chi-Square	1188,886						
Bartlett's Test of Sphericity	df	10						
	Sig.	0,000						

	Total Variance Explained										
				Extraction							
				Sums of							
			Squared								
	Initia	Loadings									
				% of	Cumulative						
Component	Total	% of Variance	%	Total	Variance	%					
1	3,877	77,541	77,541	3,877	77,541	77,541					
2	0,621	12,418	89,959								
3	0,234	4,674	94,633								
4	0,145	2,904	97,536								
5	0,123	2,464	100,000								

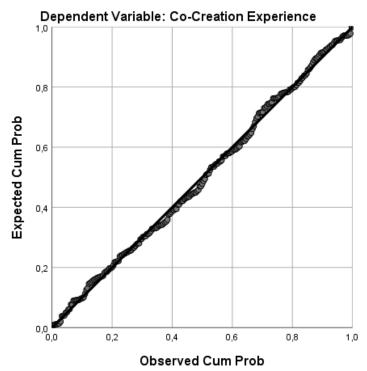
Annex 1.8 Multiple Linear Regression Models

a) Model 1

		Coeffic	cients ^a				
		dardized icients	Standardized Coefficients	t	Sig.	Collinearity	/ Statistics
Model	В	Std. Error	Beta			Tolerance	VIF
1 (Constant)	0,004	0,053		0,070	0,944		
PCEntertainment Entertainment Experience	0,025	0,079	0,024	0,311	0,756	0,459	2,181
PCEducation Education Experience	0,031	0,082	0,029	0,377	0,707	0,454	2,202
PCEsthetic Esthetic Experience	0,324	0,074	0,296	4,378	0,000	0,599	1,670
PCEscapism Escapism Experience	0,417	0,059	0,418	7,093	0,000	0,792	1,263

a. Dependent Variable: PCCoCreation Co-Creation Experience

Normal P-P Plot of Regression Standardized Residual

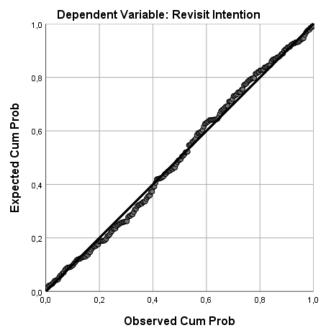


B) Model 2

	Coefficients ^a										
		Unstandardized Coefficients		Standardized Coefficients	t	t Sig. Collinearity S					
	Model	В	Std. Error	Beta			Tolerance	VIF			
1	(Constant)	0,006	0,061		0,093	0,926					
	PCEntertainment Entertainment Experience	0,319	0,092	0,303	3,458	0,001	0,459	2,179			
	PCEducation Education Experience	-0,041	0,095	-0,038	-0,430	0,667	0,449	2,228			
	PCEsthetic Esthetic Experience	-0,094	0,089	-0,083	-1,051	0,294	0,560	1,785			
	PCEscapism Escapism Experience	-0,053	0,074	-0,052	-0,711	0,478	0,665	1,503			
	PCCoCreation Co- Creation Experience	0,359	0,075	0,352	4,762	0,000	0,646	1,547			

a. Dependent Variable: PCRevisitIntention Revisit Intention

Normal P-P Plot of Regression Standardized Residual



Annex 1.9 Mediation Effects: Entertainment

*****	TOTAL, DIRECT	r, AND INDI	RECT EFFECTS	S OF X ON	Y *******
Total effect o	f X on Y				
Effect	se	t	р	LLCI	ULCI
,3548	,0649	5,4653	,0000	, 2269	, 4827
Direct effect	of X on Y				
Effect	se	t	р	LLCI	ULCI
,2394	,0666	3,5927	,0004	,1081	, 3708
Indirect effec	t(s) of X on	Y:			
Effect	BootSE	BootLLCI	BootULCI		
CCR .1153	.0290	.0626	.1746		

Annex 1.10 Mediation Effects: Education

*****	*****	TOTAL, DIRE	CT, AND I	NDIRECT EFFE	CTS OF X O	1 X *******	***						
Total e	effect of	X on Y											
E	ffect	se	t	р	LLCI	ULCI							
	,2195	,0648	3,3857	,0008	,0918	,3472							
Direct	Direct effect of X on Y												
E	ffect	se	t	р	LLCI	ULCI							
	,0780	, 0678	1,1496	,2514	-, 0556	,2115							
Indire	ct effect	(s) of X on	Υ:										
	Effect	BootSE	BootLLC	I BootULCI									
CCR	,1415	,0297	,085	4 ,2018									

Annex 1.11 Mediation Effects: Esthetics

*****	*****	TOTAL, DIRE	ECT, AND	INDIRECT	EFFECTS	OF X	ON Y ***	*****					
Total e	effect of	f X on Y											
Εf	fect	se	t		р	LLCI	UL	CI					
,	1880	, 0652	2,8848	,004	3	,0596	,31	63					
Direct	Direct effect of X on Y												
Εf	fect	se	t		р	LLCI	UL	CI					
,	0262	,0692	, 3783	,705	5 -	,1101	,16	24					
<pre>Indirect effect(s) of X on Y:</pre>													
	Effect	BootSE	BootLL	CI Boot	ULCI								
CCR	, 1618	,0360	,09	57 ,	2384								

Annex 1.11 Mediation Effects: Escapism

*****	*****	TOTAL, DIRE	CT, AND IND	IRECT EFFEC	TS OF X ON	1 A *******	****					
Total e	effect of	X on Y										
Εi	ffect	se	t	р	LLCI	ULCI						
,	,2009	, 0627	3,2044	,0015	,0774	,3243						
Direct	effect c	of X on Y										
Εi	ffect	se	t	р	LLCI	ULCI						
,	,0277	,0689	,4018	,6882	-, 1080	, 1633						
Indire	<pre>Indirect effect(s) of X on Y:</pre>											
CCR	Effect ,1732	BootSE ,0444	BootLLCI ,0939	BootULCI ,2688								
CCR	, 1132	,0444	,0939	, 2000								

Annex 1.12 Questionnaire



This questionnaire is part of the final dissertation of the Master's in Hospitality Management and Tourism of the Instituto Universitário de Lisboa (ISCTE-IUL), under the scientific supervision of Professor Catarina Marques.

The data collection focuses on the co-creation experience and the revisit intention of cruisers and it is aimed only at people who have taken a cruise on the Douro. The following variables will be analyzed: entertainment, education, esthetic, escapsim, co-creation and revisit intention.

The duration of the questionnaire is between 5-10 minutes and your cooperation is essential for the completion of this research. All data collected will be treated confidentially and only within the scope of this study, so I am appealing for complete sincerity in your answers, since the success of this study depends on your collaboration.

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The questions in this section are intended to assess the entertainement, education, esthetic and escapism dimension in your cruise experience.

How much do you agree or disagree with the following statements?

1. Entertainment

	Strongly disagree	Disagree	Disagree Somewhat	Neither agree nor disagree	Agree Somewhat	Agree	Strongly Agree
The on board activities were amusing.	0	0	0	0	0	0	0
The entertainment was captivating	0	0	0	0	0	0	0
On board activities were entertaining	0	0	0	0	0	0	0
Activities onboard were fun	0	0	0	0	0	0	0
I observed that participants were enjoying events in this cruise.	0	0	0	0	0	0	0
Activities in this cruise were fun to watch	0	0	0	0	0	0	0

	Strongly disagree	Disagree	Disagree Somewhat	Neither agree nor disagree	Agree Somewhat	Agree	Strongly Agree
I learned a lot during this cruise	0	0	0	0	0	0	0
The experience made me more knowledgeable	0	0	0	0	0	0	0
It was a real learning experience	0	0	0	0	0	0	0
It stimulated my curiosity to learn new things	0	0	0	0	0	0	0

3. Esthetic

	Strongly disagree	Disagree	Disagree Somewhat	Neither agree nor disagree	Agree Somewhat	Agree	Strongly Agree
The cruise was an attractive setting for my vacation	0	0	0	0	0	0	0
The environment of the cruise showed close attention to design details	0	0	0	0	0	0	0
It was pleasant just being in the attractive cruise facilities	0	0	0	0	0	0	0
Just being at this cruise was very pleasant	0	0	0	0	0	0	0
I felt a real sense of harmony	0	0	0	0	0	0	0

4. Escapism

	Strongly disagree	Disagree	Disagree Somewhat	Neither agree nor disagree	Agree Somewhat	Agree	Strongly Agree
I felt I played a different character in this cruise	0	0	0	0	0	0	0
I felt like I was living in a different place in this cruise	0	0	0	0	0	0	0
I felt like I was living in a different time in this cruise	0	0	0	0	0	0	0
The experience let me imagine being someone else	0	0	0	0	0	0	0
I completely escaped from my daily routine	0	0	0	0	0	0	0

The questions in this section are intended to assess the co-creation dimension in your cruise experience.

How much do you agree or disagree with the following statements?

	Strongly disagree	Disagree	Disagree Somewhat	Neither agree nor disagree	Agree Somewhat	Agree	Strongly Agree
I always provide suggestions to the staff for improving the service outcome	0	0	0	0	0	0	0
I have a high level of participation in the service process	0	0	0	0	0	0	0
The cruise company offered me comprehensive information that allowed me to evaluate the advantages and disadvantages of its services	0	0	0	0	0	0	0
I enjoy dialoguing with the cruise staff sharing knowledge when they take the initiative	0	0	0	0	0	0	0
I help other customers if they need help	0	0	0	0	0	0	0
I teach other customers how to use the service correctly	0	0	0	0	0	0	0
I give advice to other customers	0	0	0	0	0	0	0
I am very involved in deciding how the services should be provided	0	0	0	0	0	0	0
I like to interact with the cruise staff to get information	0	0	0	0	0	0	0
I like to interact with other customers to get information about the services	0	0	0	0	0	0	0
I like to interact with the cruise staff to share information	0	0	0	0	0	0	0
I take the initiative to seek my recommendations in order to innovate the services	0	0	0	0	0	0	0
I was actively involved in the organization of my stay	0	0	0	0	0	0	0
When I have a problem, I inform the cruise employee about it	0	0	0	0	0	0	0
If I have to wait longer than usual to receive service, I am willing to adapt	0	0	0	0	0	0	0
I would rather spend money on a more engaging tourist experience	0	0	0	0	0	0	0
The cruise allowed me to customize the range of services I wanted to receive	0	0	0	0	0	0	0
I had numerous service options to adapt to my needs	0	0	0	0	0	0	0

The questions in this section are intended to assess satisfcation dimension in your cruise experience.

How much do you agree or disagree with the following statements?

	Strongly disagree	Disagree	Disagree Somewhat	Neither agree nor disagree	Agree Somewhat	Agree	Strongly Agree
Overall I am satisfied with my cruise experience	0	0	0	0	0	0	0
This cruise satisfied my expectations	0	0	0	0	0	0	0
I am happy with my decision to this cruise experience	0	0	0	0	0	0	0
I am satisfied with the services offered by the cruise	0	0	0	0	0	0	0

The questions in this section are intended to assess your intention on returning.

How much do you agree or disagree with the following statements?

	Strongly disagree	Disagree	Disagree Somewhat	Neither agree nor disagree	Agree Somewhat	Agree	Strongly Agree
I want to return to Douro in the future	0	0	0	0	0	0	0
I intend to visit Douro in the next two years	0	0	0	0	0	0	0
Douro could be my next vacations city	0	0	0	0	0	0	0
I find that revisiting this cruise is enjoyable	0	0	0	0	0	0	0
I find that revisiting this cruise is beneficial	0	0	0	0	0	0	0

Number of past river cruises taken?
No previous cruise
1-2 times
3-4 times
More than 4 times
Travel Companion
Family
Friends
Partner
Other
Context of the cruise trip
Work/Business
Leisure
Other
Previous visited Douro Region
Yes
No
Duration of the cruise trip (days)

What's the name of the company	
DouroAzul	
Rota do Douro	
Barca Douro	
Tomaz do Douro	
DouroAcima	
Other	
What was the name/type of the cruise?	

Gender		
Male		
Female		
Other		
Nationality		
Germany		
Spain		
USA		
Portuguese		
UK		
Other		
Age		

Mariatal Status Single Married Divorced Widowed Other Highest Level of Education Less than High School High School Associate Degree Bachelor's Degree Master's Degree Doctoral Degree