UNIVERSIDADE DO ALGARVE

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CO-CREATION OF TOURIST EXPERIENCE:

ATTENTION, INVOLVEMENT AND MEMORABILITY

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Statement of authorship of the thesis

I declare to be the author of this work, which is unique and unprecedented. Authors and works consulted are properly cited in the text and are included in the listings of references.

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Ana Cláudia Campos

I dedicate this work to

My parents, Mizé and José António

My children, Francisco, Teresa and Sofia

Wisely and slow; they stumble that run fast.
(W. Shakespeare, *Romeo and Juliet*, Act II, Scene III).

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CONTENTS

LIST OF FIGURES

LIST OF TABLES

ABSTRACT

In recent years, facilitation of memorable tourism experiences has been claimed strategic in the context of the competitive development of tourism businesses and destinations. At the same time, trends in consumer behaviour are consistently showing the tourists' willingness to become more involved in the design, production and consumption of their experiences by getting closer to producers and other consumers, and also their growing desire of enhancing opportunities to extract from hedonic consumption positive enduring memories. As extant literature on tourism experience continues to stress the role of the tourist as co-creator of the experience, research on co-creation from the tourist perspective is still scarce. Accordingly, this thesis examines co-creation adopting the tourist point of view and explores psychological processes emerging from it. In this work, co-creation is described as the tourist's experience of actively participating and interacting on-site, and its direct and indirect influence on attention, involvement and memorability is empirically examined in the context of animal-based experiences at *Zoomarine* Park, Algarve, Portugal.

This thesis is composed of three independent though interrelated studies. The first study is conceptual and reviews literature on co-creation in tourism, aiming at highlighting prior contributions to conceptualization, and how these help building up a definition of co-creation of use in empirical research. The second study explores this definition and applies it in a qualitative research which relates on-site co-creation with attention and memorability, through analysis of 22 interviews conducted to tourists following an experience. The last study of this thesis is based on a quantitative approach and design and examines the relationship between tourist on-site co-creation, attention, involvement and memorability using a model which is tested through Structural Equation Modelling (SEM). With data obtained from 385 tourists participating in two experiences characterized by different levels of co-creation, a connection was found between co-creation and experience memorability through the mediating effects of attention and involvement.

The thesis main findings include the following: (i) the *growing interest* observed in the study of co-creation in the field of tourism, which is consequently leading to more investigation being done, diversifying approaches, contexts and methods employed; (ii) the *fairly extended agreement* among researchers on characterizing co-creation, from

the tourist point of view, through the concepts of active participation and interaction; and (iii) the tourists' perception of a relation between co-creation, attention and experience memorability; also quantitatively substantiated findings comprise: (iv) the *direct effect* of co-creation on tourist attention and involvement; (v) the *indirect effect* of co-creation on the memorability of the experience; (vi) the effect of the *level of co-creation* on the level of attention, involvement and memorability, leading to the conclusion that the more co-creative is the tourist experience, the more attentive and involved the tourist will be with events, and therefore the more memorable the tourist experience is expected to be. Based on the preceding findings, contributions to theory on co-creation in tourism are identified and clarified, and implications to experience management and design are discussed.

Keywords: tourist experience, co-creation, attention, involvement, memorability

RESUMO

O valor estratégico das experiências turísticas memoráveis para o desenvolvimento competitivo das organizações e destinos turísticos tem sido recentemente muito reconhecido. Simultaneamente, a observação das tendências de comportamento do consumidor tem revelado, no caso do turismo, que os turistas procuram cada vez mais ter papel ativo na concepção, produção e consumo das suas experiências, aproximando-se dos produtores e outros consumidores, assim como manifestam crescente desejo de maximizar as suas oportunidades de criar memórias duradouras através do consumo hedónico.

Embora recente investigação sobre a experiência turística venha a salientar o papel do turista como co-criador da experiência, a investigação sobre a co-criação na perspetiva do turista é ainda limitada. Nesse sentido, esta tese examina o significado da co-criação do ponto de vista do turista, explorando processos psicológicos nela envolvidos. Neste trabalho, co-criação é definida como a experiência do turista enquanto participa ativamente e interage *in loco*, e assim definida, a sua influência direta e indireta sobre a atenção e o envolvimento do turista e a memorabilidade da experiência é analisada empiricamente no contexto de duas experiências com animais que apresentam níveis diferenciados de co-criação por parte do turista e são proporcionadas pelo *Zoomarine*, um parque temático situado na região do Algarve, Portugal.

Esta tese é composta por três estudos independentes, embora interrelacionados. O primeiro estudo é, na sua natureza, conceptual, e consiste numa revisão da literatura em turismo focada no tema da co-criação, evidenciando os principais contributos da investigação recente no tema e como estes ajudam à construção de uma definição de co-criação que possa revestir-se de utilidade empírica. O segundo estudo vem na sequência do primeiro, explorando esta definição no âmbito de uma investigação qualitativa assente em 22 entrevistas em profundidade realizadas a turistas após uma experiência, e no âmbito da qual se explora a relação entre a co-criação, a atenção e a memorabilidade da experiência. O terceiro e último estudo incluído nesta tese adota uma abordagem e desenho quantitativos e examina a relação entre co-criação *in loco*, atenção, envolvimento e memorabilidade através de um modelo testado usando o método Structural Equation Modelling (SEM). A partir dos dados obtidos de 385 questionários

aplicados a turistas que participaram em duas experiências caracterizadas por diferentes níveis de co-criação, foi identificada uma relação entre co-criação e memorabilidade da experiência mediada pela atenção e envolvimento do turista.

Entre os principais resultados apurados na sequência deste trabalho, contam-se os seguintes: (i) o *crescente interesse* pelo estudo deste tema na área do turismo, conducente à realização de mais investigação, e diversificação de abordagens, contextos e métodos de investigação adotados; (ii) o *relativo consenso* alcançado entre os investigadores quanto a uma caracterização da co-criação, sob o ponto de vista do turista, como a experiência de participação ativa e interativa; e (iii) a *perceção dos turistas* acerca da existência de uma relação entre co-criação, atenção e memorabilidade da experiência; adicionalmente, a análise quantitativa permitiu apurar: (iv) o *efeito direto* da co-criação na atenção e envolvimento do turista; (v) o *efeito indireto* da co-criação na memorabilidade da experiência, também quantitativamente avaliado; (vi) o efeito do nível de co-criação no nível de atenção, envolvimento e memorabilidade da experiência, levando à conclusão de que quanto mais co-criativa é a experiência do turista, maiores serão também a sua atenção aos eventos e o seu envolvimento e, por consequência, presumivelmente mais memorável será a sua experiência. Com base nestes resultados, alguns contributos para o estudo da co-criação no turismo são apontados e clarificados; complementarmente, são elaboradas recomendações e sugestões úteis no âmbito da gestão e conceção da experiência turística.

Palavras-chave: experiência turística, co-criação, atenção, envolvimento, memorabilidade

CHAPTER 1
GENERAL INTRODUCTION

1.1 Thesis' frame of reference

In the globalised market, experiences have gained the highest value and businesses now compete through experiential value propositions (Boswijk, Thijssen & Peelen, 2007; Pine & Gilmore, 1999; Richards, 2001; Rose & Johnson, 2014). Trend reports extensively indicate consumers are less and less sensitive to goods and services *per se* and instead aspire to relate with companies committed to offer them opportunities to live exciting, compelling and unforgettable experiences (Global Trends, 2012; World Travel Market, 2014). Young consumers alone account for 36% of the world population (Euromonitor International, 2015) and recent findings show they are placing higher value in the consumption of experiences and spending more on experiences than on physical goods, such as cars or houses (Eventbrite, 2014). These and similar sources also tell about how consumers generally view consumption as a more integrated and involved relation with companies and brands, and expect to play a central part in the whole process of production and consumption (Schawbel, 2015). As consumption becomes for affluent societies a mode of personal expression, entertainment, learning and pleasure (Dahlström & Edelman, 2013; Hirschman & Holbrook, 1982; Holbrook & Hirschman, 1982; Morgan, Elbe & Curiel, 2009), experiences that elicit positive feelings and emotions and generate exciting and lasting memories are highly regarded and sought for (Arnould & Price, 1993; Poulsson & Kale, 2004). For individuals, tourism is a great generator of experiences (Binkhorst & Den Dekker, 2009), and as such businesses and destinations increasingly face the challenge of meeting tourists' high expectations of living memorable experiences by intervening more actively in their production and consumption.

1.1.1 Awareness of the strategic value of consumers' attention

Attentional processes are intrinsically involved in the consumers' purchase decisions (Guerreiro, Rita & Trigueiros, 2015). Consequently, in order to remain competitive, businesses need, on the one hand, to focus consumers' attention on experiential propositions, and, on the other, to get them engaged in stimulating and meaningful consumption-related activities. The now expanded competition thrives on availability and dissemination of vast amounts of information enabled by digital

communication technologies (Chen, Shang & Kao, 2009; Edmunds & Morris, 2000; Neuhofer, Buhalis, & Ladkin, 2012). Quite paradoxically though, this process developed at the expenses of consumers' attention, as purchase decisions are increasingly made against the continuous fight between overload and similarity of competing commercial stimuli (Lewis & Bridger, 2001; Waiguny, Matzler, Faullant, Bidmon, Fladnitzer, 2005) and the brain has limited capacity to process them all (Guerreiro et al., 2015). Recognition of this has led scholars to elaborate on the value of attention in today's business arena, which is getting higher as it is less found on the consumers' side (Davenport & Beck, 2000; Teixeira, 2014). Attention is now considered a scarce resource and whose ownership and control is seen as source of businesses' competitive advantage (Gray, 2015; Lewis & Bridger, 2001).

1.1.2 Involvement increasingly matters to consumers

At the same time, consumers' desire to get involved with companies by developing and maintaining close and diverse relationships with them is growing and becoming more conspicuous (Bodin & Isberg, 2011; Business Innovation Observatory, 2014; Dautel, 2013; Delloite, 2015; Global Trends, 2012; Richards, 2010). However managers still face reluctance to allow them doing so (Le Nagard, 2011). An extensive body of research provides evidence that consumers' involvement with the consumption of goods and services, and participation in experiential activities is related with personal relevance or interest, pleasure, and perception of own identity (Celsi & Olson, 1988; Clements & Josiam, 1995; Dimanche, Havitz & Howard, 1991; 1993; Elliott & Wattanasuwan, 1998; Gahwiler & Havitz, 1998; Jamrozy, Backman & Backman, 1996; Kim, Scott & Crompton, 1997; Laurent & Kapferer, 1985; Zaichkowsky, 1985). Moreover as consumers become more skilled and informed they are expected to derive higher pleasure and become more interested in participating in the process of creation of experiences (Ihamäki, 2012; Richards, 2013). Over the years, academics have been demonstrating the importance of involvement in the context of consumer behaviour (Michaelidou & Dibb, 2008) and asserting that a vision on business competitiveness should be based on the effort to enhance consumers' involvement with companies and brands through pleasurable, interesting and meaningful experiences from ideation to consumption (Dong, Evans & Zou, 2008; Kristensson, Matthing & Johansson, 2008; Magonette, 2014).

1.1.3 Orientation towards co-creation

As reports highlight consumers' readiness to become active participants in production and consumption activities, companies and brands progressively perceive the urge of complying with it (Cherif & Miled, 2013). Accordingly, co-creation has been noted as this emerging trend in business that is leading companies to develop and adopt innovative organizational practices meant to integrate the consumer in the process of constructing a rewarding consumption experience (Payne, Storbacka & Frow 2008). Customization, ideation, design or direct participation in production supported by intense dialogue and interaction between providers and consumers are more and more becoming part of the daily activities of firms guided by the overarching premise that the consumer is always a co-creator of value (Vargo & Lusch 2008). In this regard, co-creation defines a new perspective of business management which views consumer participation as a source of competitive advantage and is spreading among companies in a growing diversity of industries and services, such as education, health, or banking (Promise, 2009; PwC, 2013; Urbick, 2012). Reflection on business practice has been feeding academic discussion of advantages, conditions, direction and meanings of this trend, as at the same time management and marketing theorists emphasize the contextualized consumer experience in interaction with companies as the *locus* of value creation (Prahalad & Ramaswamy, 2004; Grönroos, 2006, 2008; Gummesson 2007).

1.1.4 The importance of tourist attention and involvement

Today's world is full of affordable destinations and competition is fierce. The successful promotion of businesses and destinations increasingly depends on capturing tourists' attention and this is being done through tangibilizing the experiential offering (Agapito & Lacerda, 2014; Roberts, 2010). However awareness of the role of attention in tourist behaviour has not so far been fully achieved in tourism scholarship. Little reference to attention is found in tourism literature, and though Larsen (2007) has argued for the study of the tourism experience adopting general concepts of psychology, attention was not included in his discussion. To the present date, Ooi (2010) remains the exception in tourism studies stressing the need to integrate attention in the study of the tourism experience as a way to businesses and destinations more effectively manage it. As research efforts should be placed on inquiring about what experiences and activities are currently capturing tourist's attention and the means that adequately do so, in the

present thesis, Ooi's (2010) recommendation to understand the tourism experience through attention is accepted and elaborated from a theoretical and an empirical perspective.

In contrast with attention, the importance of involvement in tourist behaviour has already been recognised some decades ago (Dimanche, Havitz & Howard, 1991; Dimanche & Havitz, 1994, 1995; Havitz & Dimanche, 1990, 1997) and much research, both theoretical and empirical, has been done since then. However as the profile of current travel consumers continues to evolve towards higher levels of cultural capital (Richards, 2011; Richards & Wilson, 2007), in order to remain competitive, businesses and destinations need to adapt to the changing conditions (Prebensen, Vittersø, & Dahl, 2013) and thus to develop strategies to have tourists more engaged in the consumption process by recognizing their competence to do so. Greater tourist involvement is claimed strategic in the context of the competitive development of destinations and necessary to experiencing memorable events on-site (Andrades & Dimanche, 2014).

1.1.5 Tourism is about living memorable experiences

As tourism is acknowledged a fertile land for hedonic consumption (Poulsson & Kale, 2004), the industry is selling the message that destinations are places of memorable experiences (Mazanec, Wöber & Zins, 2007; Ryan, 1997) by affording tourists rich psychological benefits (Kreziak & Frochot, 2011; Ma, Gao, Scott, & Ding, 2013; Morgan et al., 2009). Despite the fact that holidays last only a fortnight, memories may linger for an entire life span (Marschall, 2012) and become a subject matter repeatedly recalled and shared among relatives and friends. Memorability is the most appealing characteristic of experiences (Pikkemaat & Schuckert, 2007) and recent research is stressing the importance of memorable experiences to both tourists and destinations (Kim, 2010; Kim, Ritchie, Ritchie, & McCormick, 2012; Neuhofer et al., 2012; Tung & Ritchie, 2011). The fact that prediction of tourist behaviour has been found to depend on recollected events rather than on lived ones (Larsen, 2007; Wirtz et al., 2003) is stimulating scholars to studying the tourist experience in relation to memorability, preferring it to that of overall quality (Hung, Lee & Huang, 2014; Lee, 2015). Memorability has been approached in two different ways: (i) as the essential quality of an experience (Tung & Ritchie, 2011; Kim, Ritchie & McCormick, 2012) and (ii) as the degree to which an experience possesses that quality (Dong & Siu, 2013).

4

1.1.6 Co-creation is also happening in tourism

As with other industries, the tourism industry is today permeated by state-of-the-art thinking on co-creation and implementing practices in key sub-sectors, covering the pre-, during and post-travel phases of the overall holiday experience (Binkhorst & Den Dekker, 2009; Stangl, 2014). Tourism and tourism-related companies are embracing concepts of collaborative idea generation, open and social innovation, crowd enlisting, user-based scenarios, and putting them into practice aiming at improving tourists' travel experiences. Simultaneously, tourism consumers worldwide are also becoming important contributors to other tourists' experiences by connecting with them and providing first-hand evaluations of firms' services, attractions, events, and generally destination experiences. Recommendations, solutions, and ideas from tourist communities that may best serve others' particular needs and wants are also spreading in digital *fora* (www.tripadvisor.com; www.flyertalk.com; www.mycreativetours.com; www.lonelyplanet.com/thorntree; www.virtualtourist.com). These trends in the tourism marketplace are gradually impelling researchers to apply co-creation oriented principles in the study of tourism and the tourist behaviour, thereby accepting it as a strategy for business and destination competitiveness, together with recognition of the tourists' central role in the creation of its own experience (Bertella, 2014; Kreziak & Frochot, 2011; Mathisen, 2013; Minkiewicz, Evans & Bridson, 2013; Mkono, 2012; Prebensen & Foss, 2011; Prebensen, Vittersø, & Dahl, 2013; Rihova, Buhalis, Moital, & Gouthro, 2014).

1.2 Thesis' objectives

This thesis discusses co-creation research and literature singling out the concepts of active participation and interaction in experience. These are discussed in connection with attention, involvement and memorability, refining analyses by means of incorporating multidisciplinary thinking and findings from psychology, learning theories, neuroscience, marketing, and consumer behaviour. This research project was conducted with the expectation of contributing to the building of both theoretical and empirical bodies of knowledge in tourism assuming that future research focused on tourist psychological processes is a path leading to a more penetrating understanding of the tourist experience. Two theoretical approaches to experience inform our analysis of co-creation: one, the management and marketing perspective, which focuses on the

consumption phase of the experience by highlighting the activities and interactions that contextually involve consumers and organizations (Mossberg, 2007); the other, the psychological-based view which defines the experience as the subjectively lived events by the individual (Larsen, 2007).

Hence, *the overall objective* of this thesis is to study on-site co-creation from the tourist perspective and analyse how and to what extent it influences tourist's attention, involvement and memorability of the experience. These processes have been selected to analyse in this thesis as tourism literature has been highlighting their importance in the context of the study of the tourism experience and little research has been conducted to date that explores them and their relationships (Andrades & Dimanche, 2014; Hung, et al., 2014; Ooi, 2010).

This thesis is composed of three studies offering an integrated analysis of co-creation in tourism (**Table 1.1**), by adopting a research path progressing from conceptual thinking and discussion to empirical investigation, as described below in more detail. The studies are organized according to the standards of publishable papers in scientific, peer-referee journals. This means that each study contains selected contents arranged by title, abstract, introduction, specific research objectives, methods, results, conclusions and literature references. In other words, though each one can be understood as a single unit of research and therefore read autonomously, they are nonetheless interrelated through the theme and the research process, contributing in this way to a more general comprehension of co-creation and the tourist experience.

Study 1, "Co-creation of tourist experiences: A literature review" is a conceptual work, with the objective of performing an examination of literature in the areas of management, marketing, and tourism, attempting at summarizing most salient aspects of the construct of co-creation and perspectives found in prior research so that subsequent opportunities for empirical investigation could emerge. A table synthetizing the review's more relevant findings is presented in this context. As the word "co-creation" is now widely used by scholars and practitioners alike and in a great variety of contexts and across industries, there is room for conceptual uncertainty and divergence. Thus being so, this study aimed at: i) presenting a state of the art review on the co-creation construct, with focus on tourism literature; ii) proposing a framework encompassing salient findings from prior research; iii) and presenting a definition of co-

creation tourism experience based on those findings. The major contribution of this investigation to tourism studies lies in the proposition of a definition of co-creation with the potential to be empirically explored and applied.

Study 2, "Co-creation experiences: Attention and memorability", describes the qualitative research conducted in the context of *one* experience with dolphins, the *Dolphin Emotions Experience*. This research was designed to uncover the impact of co-creation in the memorability of the experience exploring attention as a psychological process influencing the experience outcome. In order to achieve this goal, the definition of co-creation proposed in **Study 1** was adopted in **Study 2** and the method of in-depth interviews was employed to allow participants in the experience to describe their own views and perceptions on the subjects under analysis. Thus the specific objectives set for **Study 2** were: i) to clarify the concept of co-creation tourism experience through analysis of activities and interactions occurred during the on-site experience; and ii) to highlight attentional focuses and levels and meanings of memorability attached by participants to the experience.

Study 3, "Co-creating tourism experiences: Attention, involvement and memorability", was conceived to complement the exploratory research conducted in **Study 2** by adopting a quantitative research methodology. The principal aim was to propose a conceptual model allowing the measurement of the impacts of on-site co-creation on experience memorability using tourist attention and involvement as mediator variables. Hypotheses relating the research constructs were then formulated based on this model. The data collection method employed was the survey, and the questionnaire was developed mainly from data obtained from interviews performed in **Study 2**, with the exception of the involvement construct, as later clarified in Chapter 4. The theoretical grounds for the inclusion of involvement in the model are also explained and provided. The questionnaire was applied to participants in *two* different experiences with dolphins, the *Dolphin Emotions Experience* and the *Dolphin Show*. The Structural Equation Modelling (SEM) method was selected to analyse the relationships between the constructs. The objectives for **Study 3** were specified in the following way: i) to measure the research's constructs; ii) to analyse the adequacy of application of an adapted scale for measuring the involvement construct in the context of co-creation, iii) to find out if the constructs show differences in magnitude depending on the level of co-creation, assuming attention and involvement as mediators of memorability and iv) to

critically examine the inherent potential of the analysis to better understand tourist psychological processes involved in co-creation.

Table 1.1
Summary of the studies comprising the thesis

Studies	Main Objective	Nature	Constructs	Analyses
Study 1 **(Chapter 2)**	To contribute to co-creation research in tourism by proposing a definition of co-creation	Conceptual	Co-creation tourism experience (active participation, interaction)	Literature review on co-creation in tourism research
Study 2 **(Chapter 3)**	To explore on-site co-creation in connection with attention and memorability of experience	Empirical (qualitative: in-depth interviews)	Co-creation tourism experience; Attention; Memorability	Descriptive statistics; Content analysis
Study 3 **(Chapter 4)**	To examine the effect of co-creation on tourist attention, involvement and memorability of experience	Empirical (quantitative: survey/questionnaire)	Co-creation tourism experience; Attention; Involvement; Memorability	Descriptive statistics; Exploratory factor analysis (EFA) Structural Equation Modelling (SEM)

1.3 Methodology overview

The thesis is informed by a postpositivist paradigm, adopting both qualitative and quantitative data collection and analysis methods (Jennings, 2005, 2009). The qualitative study (**Study 2**) in Chapter 3 involved the use of in-depth interviews conducted to national and international tourists that were participants in the *Dolphin Emotions Experience* at *Zoomarine*, a theme park located in Albufeira, Portugal. Interviews were conducted during May 2014 and took place immediately after the experience, with an average length of 40 minutes. They were performed in Portuguese and English, recorded and transcribed verbatim afterwards. The study includes a detailed report of the ethical and functional procedures that were followed in the research and related documents are included in this report (see **Appendices 1, 2** and **3**).

The main purpose of interviews was the exploration of the definition of on-site co-creation tourist experience proposed in **Study 1** in a very specific setting by means of uncovering participants' perceptions of own behaviours and psychological processes during the experience. Attention and memories perceived as vivid, i.e. easy to recall and with greater probability of lingering in life, were selected for analysis and discussion.

The interviews developed from an outline (**Appendix 3**) which covers the research' themes and contains guiding questions to maintain focus on the desired contents but also allowing, according to standard features of qualitative interviews (Jennings, 2005), a significant degree of freedom to the interviewees. The interview outline comprised three main sections: a set of introductory questions related to the overall visit to *Zoomarine*, a second set of questions focusing on the *Dolphin Emotions Experience*, and a last section composed of questions to inquire about participants' socio-demographics. Topics covered included: reasons for visiting the park; reasons for engaging in the *Dolphin Emotions Experience*; experience activities and interactions, perceived attention focuses, levels, and behaviours, memorable aspects of the experience and perceived level of memorability, and also perceived influence of active participation and interaction on attention and memorability.

The second stage of the empirical investigation (**Study 3**) however was informed by a quantitative perspective on phenomena under study. Based on literature review and results found in the qualitative stage, several research hypotheses have been postulated and a conceptual model was conceived to represent relationships between constructs. In line with these hypotheses, a survey instrument was designed to test them. Scales to measure the constructs were used and with the exception of the scale employed to measure involvement, all were developed from the qualitative research, having thus an exploratory value. Once the design of the questionnaire was completed, a pilot test was performed to assess question formulation and clarity of language so that misunderstandings could be avoided and content adequacy improved if necessary (Banalves & Caputi, 2001). The utilization of this pilot was additionally intended to test the internal reliability of the scales used in the questionnaire (Finn, Elliott-White, & Walton, 2000). Based on the results of the pilot test, the questionnaire was then prepared for the research's main survey and directly applied on-site. Portuguese and English were the languages used in the questionnaire (see **Appendices 4** and **5**). The survey took place during August and September 2014 and was performed to tourists that participated in either the *Dolphin Show* or the *Dolphin Emotions Experience*. These two experiences were studied in this research as both are related with the same animal species, the dolphins, and were expected to require different levels of tourist co-creation. The data were posteriorly analysed using the Structural Equation Modelling method (SEM). **Figure 1.1** depicts the research design and process.

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STAGE 1: QUALITATIVE RESEARCH
22 in-depth on-site interviews
Site selection
Outline
Interview conducting
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STAGE 2: QUANTITATIVE RESEARCH
Pilot Test
Questionnaire design and translation
On-site self-completion questionnaire
Convenient sampling
n = 73
Survey
On-site self-completion questionnaire
Cluster sampling
n = 385
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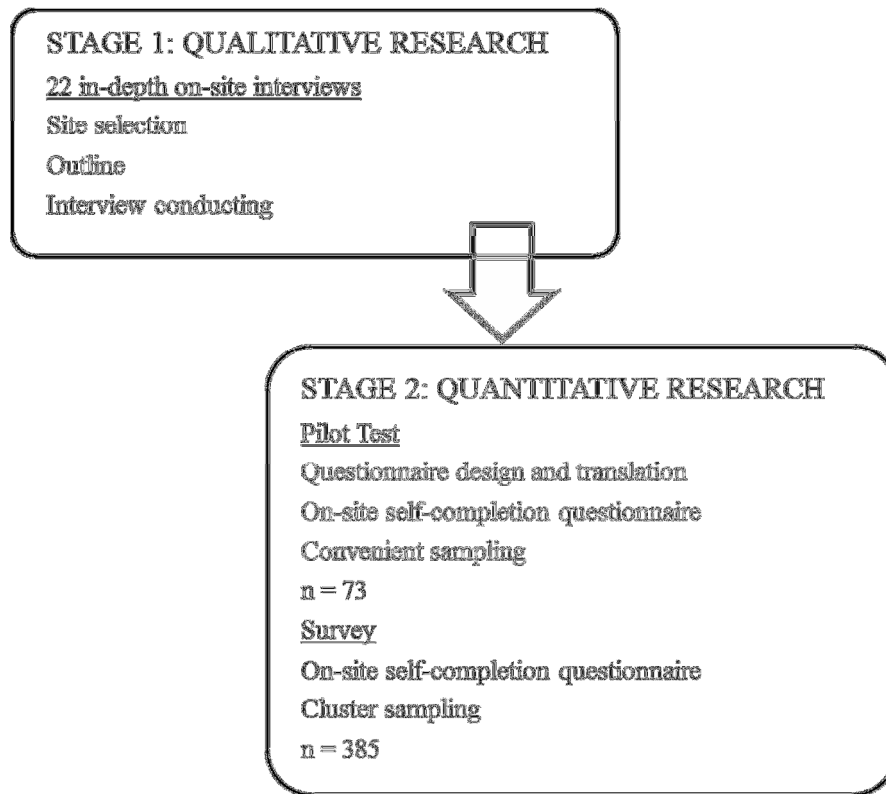
Figure 1.1: Stages and processes of the empirical research

1.4 Research setting

Algarve is a well-known tourism destination in Portugal, more specifically in the extreme south-west of the country (**Figure 1.2**). A holiday haven for approximately 3.6 million of Portuguese and foreign tourists (INE, 2015), this lively region is characterised by a coastline of white beaches, adorned with cliffs, reefs and dunes and by a radiant sun that shines for over 300 days a year (www.visitalgarve.pt). Algarve became a very popular tourism destination during the 60s, following the opening of Faro International Airport. Since then tourism evolved as the main economic activity of the region, with UK, Germany, Netherlands, and Ireland as most relevant outbound markets. Early developments in tourism were related to the demand of tourists for sun, sea and sand (Martins & Centeno, 1999). From the supply side, tourism growth meant the building of accommodation units and infrastructures in order to respond to visitors' needs. By then, seasonality patterns matched visitor flows during the summer peak. In time, as a response to both new paradigms of tourism development and visitor behaviour trends and needs, the region reacted by diversifying its offerings to tourists, placing new emphasis on tradition, culture, and off-peak sports.
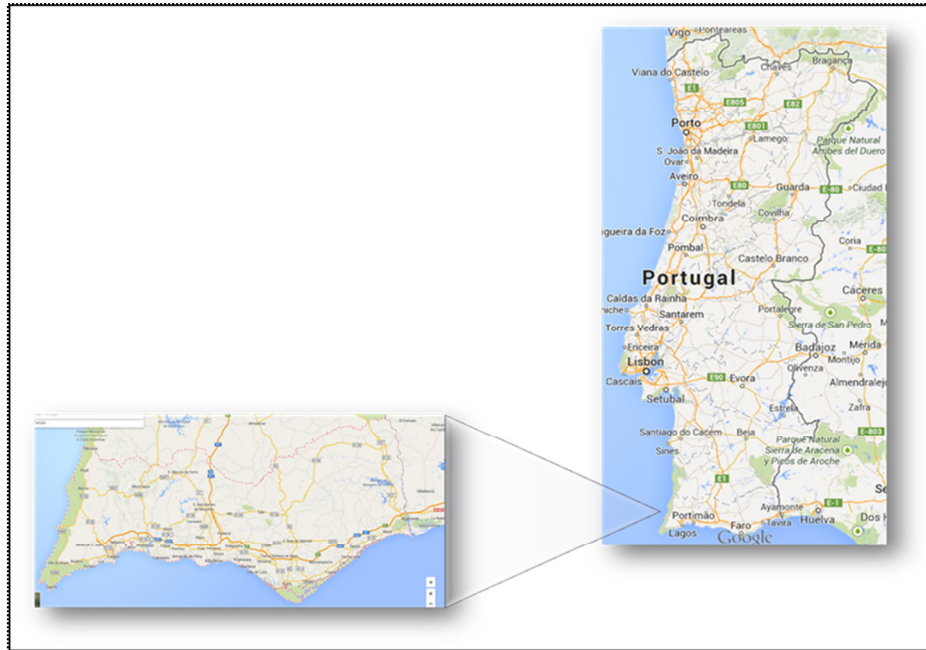
Figure 1.2: Portugal and the Algarve region (Source: Google Maps)

Theme parks have long been recognized both as places of mass recreation and leisure and as tourist attraction (Pikkemaat & Schuckert, 2007). The success and growth of theme parks is closely related to the fact that they offer visitors the opportunity of enjoying a wide variety of hedonic consumption (Bigné, Andreu, & Gnoth, 2005) based on fantasy, fun, learning, and entertainment experiences (Milman, 2001) loaded with emotional content (Ma, Gao, Scott, & Ding, 2013). In this sense, as high emotional outcomes affect experience memorability (Ma et al., 2013; Pikkemaat & Schuckert, 2007), *Zoomarine*, a marine wildlife park located in Albufeira, Algarve, was chosen as an adequate setting of this research. In fact, *Zoomarine* provides a wide range of opportunities for leisure and service experiences, combined with attractions for both adults and children, and apart from key attractions related to marine animal life, it comprises relaxation areas, entertainment and learning spaces and activities, in addition to varied amenities accommodating all sorts of visitor needs.

1.5 Elucidation of the thesis' key constructs

This thesis articulates around the concepts that inform the overall research objective. Core concepts approached are thus *co-creation*, *attention*, *involvement* and *experience memorability*. In the three studies that comprise the thesis (conceptual, qualitative and quantitative) they are understood and used according to the following considerations.

Co-creation

The term *co-creation* has been variedly used in the management, marketing and tourism literature, reflecting divergence in approach and conceptualization. Some reviews on the construct have been highlighting this fact (Minkiewicz et al., 2013), as can be read in **Study 1**. Approaches to co-creation usually encompass a business orientation and strategy that considers the participation of the consumer in product and service creation and development (Etgar, 2008; Hoyer, Chandy, Dorotic, Krafft & Singh, 2010; Zhang & Chen, 2008) or in the design, production and consumption of experiences (Volo, 2009). As such, research has led to discussion of the organizational processes, dimensions and activities required to succeed in customer participation. Lack of agreement is also found on what is co-creation about, with debate focusing mostly on value and marketing notions about value creation (Ballantyne, Williams, & Aitken, 2011; Chen & Chen, 2010; Grönroos, 2008; Prahalad & Ramaswamy, 2004; Vargo & Lusch, 2004). Value is a much debated concept in the marketing literature, and in what concerns co-creation it has led to alternative views that shift between more objectivist and subjectivist meanings. Minkiewicz et al. (2013) suggested that the concepts of value-in-experience and value-in-context similarly capture the idea that value pertains to the domain of the consumer and can be found in a given context and consumption experience, thus stressing a subjective, phenomenological view on co-creation. In this thesis, the perspective of Minkiewicz et al. (2013) is followed, thus agreeing with the interpretation of co-creation as the tourist experience in a particular consumption setting (on-site), with value as a derived outcome.

Attention

Many areas of research contribute to the study of *attention*, however most common definitions come, or are adaptations, from cognitive psychology. Consensus centres on the notion that attention is a process of stimuli selection (Driver, 2001) so that the individual (or the brain) can more effectively process information and consequently better perform an activity (Ratneshwar, Mick, & Reitinger, 1990). In the literature, this process is concurrent with that of focusing, i.e. the orienting and narrowing of attentive efforts (physical and cognitive) to items presented in the environment. In this thesis it is accepted the definition of attention as the focusing and

concentration on a specific item of the experience (adapted from Davenport & Beck, 2001, and Bitgood, 2010).

Involvement

The *involvement* construct has been extensively used in consumer behaviour and marketing literature, and applied to explain consumption behaviour and profile consumers (Kyle, Kerstetter & Guadagnolo 2002; McGehee, Yoon & Cárdenas 2003; Michaelidou & Dibb, 2008). Since the 1990s, it has been applied to tourism (Havitz & Dimanche, 1990, 1997, 1999; Dimanche et al., 1991, 1993) and products, activities, settings, experiences and destinations have been identified with objects of involvement (Havitz & Dimanche, 1997; Gursoy & Gavcar, 2003). A variety of definitions has been proposed over the years, denoting conceptual disagreement. Definitional approaches have considered involvement from a psychological or behavioural perspective (McIntyre & Pigram, 1992). Yet others discussed it on the basis of duration, by distinguishing enduring and transient (situational) involvement (Houston & Rothschild, 1978). In this thesis, involvement will be considered from a psychological point of view and regardless distinction between enduring and situational involvement, as clarified in Study 3. Based on the previous considerations, in this thesis, involvement is defined by combining the views of Rothschild (1984) and Havitz and Dimanche's (1990), according to which it is an unobservable state of motivation, arousal or interest between an individual and recreational activities, tourist destinations or associated products, evoked by a particular stimulus or situation.

Experience memorability

The concept of *memorability* has been gaining recognition in the tourism literature, as researchers and practitioners are placing a greater emphasis on the importance of memorable experiences to enhance businesses' and destinations' competitiveness (Neuhofer et al., 2012). In this thesis, the construct of experience memorability is taken from psychology, and following prior attempts at applying it to the context of tourism experiences (Hung et al, 2014). In psychology, memorability is the characteristic of something to last vividly in long-term memory and be recalled in detail and, as such, it applies to objects, individuals, events or experiences. However as the tourist experience is understood as the subjectively lived events by the tourist during on-site consumption activities (Larsen, 2007; Mossberg, 2007), memorability is

accepted as the tourist's memory vividness and perception of long term effects of the lived experience (adapted from Anderson & Shimizu, 2007; Reisberg, Heuer, McLeann & O'Shaughnessy, 1988).

1.6 Thesis' structure

The thesis report consists of five chapters, as shown below in **Figure 1.3**. It starts with Chapter 1, *General Introduction*, which clarifies the context and the general objective of the thesis, but also the specific objectives of each study. Chapter 1 is followed by Chapters 2, 3 and 4, comprehending studies one, two and three. It then concludes with Chapter five, *General Conclusion*, which summarises previous chapters and major findings of each piece of research, clarifying the way they all contribute to a more detailed but at the same time deeper understanding of co-creation in tourism. Most relevant conclusions are reviewed; how they relate to prior research and add to knowledge are topics of discussion that facilitate identification of future research paths. The report ends with reflection on major theoretical and managerial contributions of the thesis. The limitations of the whole research process are identified and opportunities for future research are accordingly mentioned. Supplementary documents used in this research may be read at the end of this report (**Appendices 1** to **5** and **Annex A**) as well as papers published or submitted by the doctoral candidate which are related to the themes and constructs examined in this thesis (**Appendices 6** to **8**).
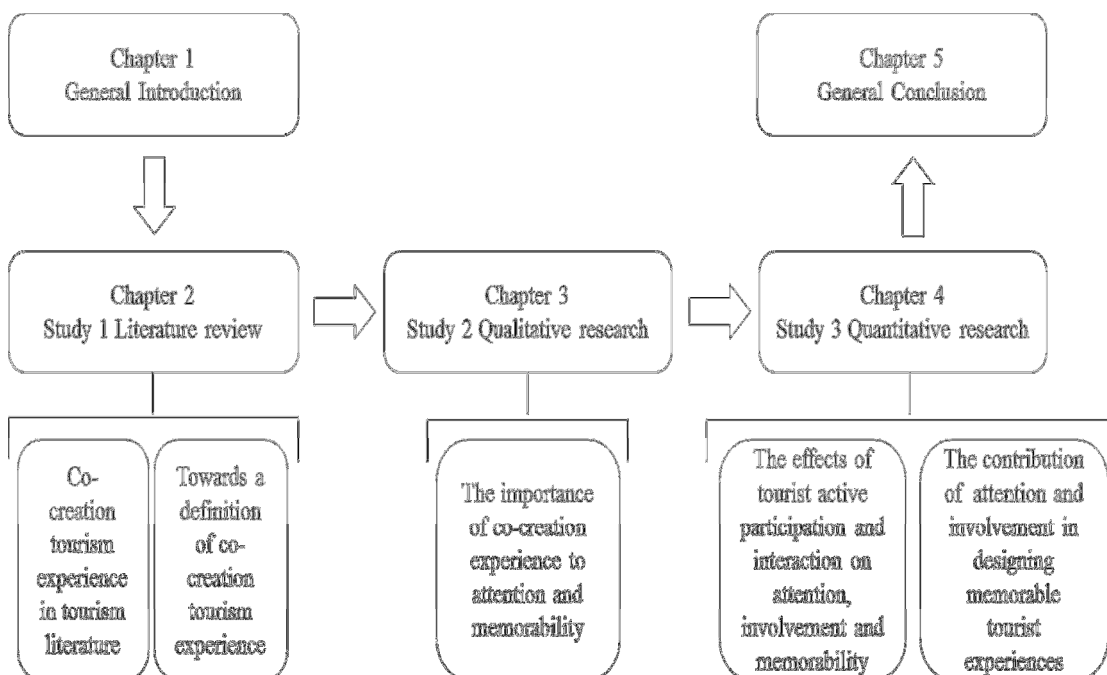
Figure 1.3: Thesis' structure

1.7 Summary

This chapter introduced and described this thesis report, highlighting key stages and processes of the overall research project. First of all, the importance of the research topic and themes has been put forward as a way to justify research objectives, approaches and methodology. Gaps in literature were here identified as opportunities for this investigation to be conceived and undertaken. This is followed by description of the thesis' overall research objective and overview of methodology adopted in each study, and the setting of the research. Then clarification of key constructs was presented to provide instrumental guidance through the reading of the report. The chapter ends with presentation of the structure of the thesis report.

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CHAPTER 2
STUDY 1. CO-CREATION OF TOURIST EXPERIENCES: A LITERATURE REVIEW[1]

Abstract

This paper reviews the literature concerning co-creation of tourism experiences. It analyses the theoretical underpinnings of co-creation and discusses key dimensions of the concept from the tourist's perspective, highlighting the importance of active participation and interaction. The aim is to propose a psychological-focused definition of on-site co-creation tourism experience on which to base a conceptual framework relating important constructs. Opportunities for future empirical research in this area are suggested.

Keywords: co-creation tourism experience, active participation, interaction, tourist psychology

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2.1 Introduction

Many authors report an increasing demand for more participative and interactive experiences (Buhalis, 2001; Mathisen, 2013; Morgan, Elbe, & Curiel, 2009; Scott, Laws, & Boksberger, 2009). This is of special importance to tourism because it is an industry that sells experiences (Buhalis & O'Connor, 2006; Ihamäki, 2012; Kim, 2010; Ooi, 2010; Quan & Wang, 2004; Volo, 2009). As competition among destinations around the world continues to grow (Mariani, Buhalis, Longhi, & Vitouladiti, 2014), recognition of their importance to visitors is leading businesses and destinations to market themselves as providing opportunities to live compelling and memorable experiences (Andrades & Dimanche, 2014; Lugosi & Walls, 2013; Ritchie & Hudson, 2009; Tung & Ritchie, 2011).

Memorable tourism experiences provide opportunities for individuals to build their identity, increase personal competencies, and fulfil cherished desires and dreams (Mehmetoglu & Engen, 2011; Morgan et al., 2009). Participative experiences contribute to meaningful personal narratives (Gretzel, Fesenmaier, & O'Leary, 2006) and long lasting memories (Larsen, 2007). They are also ways through which tourists can materialize their creative potential (Arnould & Price, 1993; Holbrook & Hirschman, 1982; Richards, 2010, 2011; Tan, Kung, & Luh, 2013) and achieve life goals (Gretzel et al., 2006; Kreziak & Frochot, 2011), using personal resources such as skills, technology competence, culture or knowledge (Kozinets, Sherry, Storm, Duhachek, Nuttavuthisit, & Deberry-Spence, 2004; Kreziak & Frochot, 2011; Prebensen, Vittersø, & Dahl, 2013). Experiences allow tourists to *do* things rather than just *look at them* (Azevedo, 2009; Eraqi, 2011) and engage in activities for self-development, explore multisensory environments, and connect to other people (Binkhorst & Den Dekker, 2009; Buhalis, 2001; Ihamäki, 2012; O'Dell, 2010; Rihova, Buhalis, Moital, & Gouthro, 2014; Ryan, 2002). In such experiences, tourists are directly involved in creating and choreographing their activities from moment to moment (Bertella, 2014; Binkhorst & Den Dekker, 2009; Kreziak & Frochot, 2011; Prebensen & Foss, 2011).

The present study is motivated by extant literature on tourism experiences which stresses the role of the tourist as co-creator of the experience (Prebensen et al, 2013; Tan et al., 2013). It aims then at contributing to conceptualization of co-creation in the tourism field by uncovering and discussing key dimensions and proposing a

psychology-based definition (Larsen, 2007; Mannell & Iso-Ahola, 1987) of on-site co-creation experience. A bibliographic search covering the research areas (1) *tourist experience design, management and marketing*, (2) *tourist attractions and events,* (3) *hospitality*, and (4) *tourism management and marketing* (**Table 2.2**) allowed the identification of two overall perspectives on co-creation: on one hand, an *organisation/destination perspective* (Neuhofer, Buhalis, & Ladkin, 2012) and, on the other, a *tourist perspective* (Prebensen et al., 2013a; Tan et al. 2013). In this study, the organisation/destination perspective is briefly discussed and subsequently the analysis focuses on the tourist perspective. Four dimensions of co-creation experience emerged after intensive and repeated reading of the papers identified by the researchers. They are here presented, clarified, and afterwards used as basis of a conceptual framework which describes the linkages between the concepts underpinning the definition proposed in this paper. Based on this research, directions for future research on the topic are suggested.

2.2 Method

The research method adopted in this study developed from a bibliographic search based on *Scopus* and *Sciencedirect databases*, starting with the term "co-creation" and similar words ("co-creative", "co-creator"; "co-create"; "co-created") in conjunction with tourism-related terms such as "tourism", "tourism experience", "experience design", "tourism services", "destination experience", "hospitality", "leisure travel". However as the search progressed, additional terms and semantically-related expressions (i.e. "active involvement", "active participation", "active role", "co-producer") were found, considered and integrated in the analysis. The review of literature was limited to published work in the past seven years and has been conducted in order to capture how co-creation is conceptualised, discussed and applied to tourism. Publications analysed included 32 journals covering the fields of management, marketing and consumer behaviour, hospitality and tourism (**Table 2.1**), as well as tourism books, conference proceedings and project reports. One major finding is that the concept of co-creation is widely and variously adopted by tourism scholars.

Table 2.1
Recent published research on co-creation*

Journals	No. of papers analysed
Advances in Hospitality and Leisure	1
African Journal of Business Management	1
Annals of Tourism Research	4
Culture Unbound	1
Current Issues in Tourism	1
Décisions Marketing	1
European Journal of Tourism, Hospitality and Recreation	1
International Journal of Contemporary Hospitality Management	1
International Journal of Hospitality Management	1
International Journal of Nonprofit and Voluntary Sector Marketing	1
International Journal of Services and Operations Management	1
International Journal of Tourism Research	5
Journal of Destination Marketing & Management	3
Journal of Hospitality Marketing and Management	3
Journal of Hospitality and Marketing Research	1
Journal of Hospitality and Tourism Research	1
Journal of Hospitality and Tourism Technology	1
Journal of Marketing Management	1
Journal of Quality Assurance in Hospitality & Tourism	2
Journal of Retail and Leisure Property	1
Journal of Service Management	1
Journal of Strategic Marketing	1
Journal of Tourism Consumption and Practice	1
Journal of Travel Research	1
Management Science Letters	1
Museum Management and Curatorship	1
Scandinavian Journal of Hospitality and Tourism	3
Space and Culture	1
Tourism and Hospitality Research	1
Tourism & Management Studies	1
Tourism Management	5
Tourism Recreation Research	1
Total	50

*Note: books, conference proceedings and reports not included.

2.3 Literature review

A growing number of theoretical and empirical studies have examined co-creation in the context of tourism. Table 2 highlights the scope and contexts of these investigations. Previous studies in the tourism literature have discussed co-creation from both a theoretical (Binkorst & Den Dekker, 2009; Jager, 2009; Li & Petrick, 2008; Scott et al., 2009) and an applied perspective (Bertella, 2014; Mathisen, 2013; Mkono, 2012). The scope of analysis in prior studies varies from specific tourism experience contexts (Bertella, 2014; Kreziak & Frochot, 2011) to broad industry or destination analyses (Eraqi, 2011). Co-creation has been used to clarify current changes in the tourism supply chain (Räikkönen & Honkanen, 2013), analyse the overall destination experience (Zouni & Kouremenos, 2008) and study new approaches to marketing (Lichrou, O'Malley, & Patterson, 2008).

27

Co-creative interaction has also been studied in a number of specific tourism contexts, such as vacation packages (Räikkönen & Honkanen, 2013) and natural areas (Mathisen, 2013). For example, it has been argued that tour operators should increase interactions with customers in order to stimulate their contribution to design, production, and consumption of holidays (Zouni & Kouremenos, 2008). Involving tourists in activities that meet their interests and capture their attention is found very important for co-creation (Andrades & Dimanche, 2014) and the natural environment is described a space where staging of exploration, play and knowledge may activate tourists' involvement with on-site experiences (Mathisen, 2013).

2.3.1 The organisation/destination perspective

Co-creation has been approached from a supply perspective, both at the organisation and the destination level. Despite differences in scope and complexity, organisations and destinations share the premise of the strategic role of co-creation for competitive performance, stressing a management and marketing approach (Binkhorst, 2007; Ciasullo & Carrubbo, 2011; Eraqi, 2011; Hsieh & Yuan, 2011; Jager, 2009; Li & Petrick, 2008; Lichrou et al., 2008; Lugosi, 2009, 2014; Mossberg, 2007; Neuhofer et al., 2012; Samuelsen, 2010; Santos-vijande & Rodriguez, 2012; Sfandla & Björk, 2012; Shaw, Bailey, & Williams, 2011; Thompson, 2008; Zouni & Kouremenos, 2008).

Thus the organisation and the destination points of view are identical insofar as they share the vision of co-creation as a business orientation and strategy towards competitiveness to be dealt with management and marketing principles and thinking. In both, there is commonality of concern over management and marketing issues which include mechanisms, processes and systems of *engaging tourists* in co-creation (Bharwani & Jauhari, 2013; Chathoth, Altinay, Harrington, Okumus, & Chan, 2012; Ciasullo & Carrubbo, 2011; Shaw et al., 2011) so that they can live *a memorable consumption* experience (Bharwani & Jauhari, 2013; Mossberg, 2007; Poulsson & Kale, 2004). In this sense, co-creation can be thought of as occurring before, during and after the travel (Jager, 2009; Neuhofer et al., 2012) and is effected by the mobilization of all the organisation's or destination's networks and processes to *encourage the participation* of consumers in the *generation of value* (Ciasullo & Carrubbo, 2011; Eraqi, 2011) by means of using their personal resources (i.e. knowledge, time, and

creativity) in contextual, personalized, and interactive experiences (Binkhorst & Den Dekker, 2009; Jager, 2009; Tajzadeh-Namin, 2012; Volo, 2009).

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; Zouni & Kouremenos, 2008) or to collaborate with the organisation in the creation of new products and services (Samuelsen, 2010; Santos-vijande & Rodriguez, 2012). As a consequence, introduction of activities into business operations is seen as requiring changes to management and staff competencies and behaviour (Haahti, 2006; Holst-Kjaer, 2011; 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, Álvarez & Rodríguez, 2012). Interaction is of primary importance in co-creation and staff may need to develop new competencies as their roles change from service providers to experience providers (Bharwani & Jauhari, 2013). Managers are urged to focus attention on the analysis of the process rather than the outcome of co-creation (Grissemann & Stokburger-Sauer, 2012; Richards & Marques, 2012). Similarly, at the destination level, co-creation is claimed as a condition for competitiveness in the face of profound changes in tourist behaviour (Ciasullo & Carrubbo, 2011; Eraqi, 2011; Jager, 2009) and destination management organisations and tourism industry organisations are challenged to develop new thinking and practice.

2.3.2 The tourist perspective

The co-creation literature generally acknowledges that implementation calls for a new relationship between producers and consumers (Azevedo, 2009). In this relationship consumers are described as co-creators of value (Li & Petrick, 2008) or even *the sole* creators of value (Rihova et al., 2013a) through the meaning they derive from the consumption experiences (Bertella, 2014; Kreziak & Frochot, 2011) that they design, produce, and consume (Andrades & Dimanche, 2014; Zouni & Kouremenos, 2008). The tourist perspective analyses co-creation as it happens in the tourist sphere, encompassing the behaviour and psychology involved in experiences, before, during and after the travel. The following sections identify and discuss the key dimensions found in literature.

1. The tourist contributes to some aspect, phase or the overall tourism experience (Binkhorst & Den Dekker, 2009). Co-creation involves processes of interrelated interactions and activities that connect the tourist and other actors *before travel (before consumption)* (Andrades & Dimanche, 2014; Binkhorst, 2007; Eraqi, 2011; Haahti, 2006; Hjalager & Nordin, 2011; Prebensen et al., 2013a)*, during stay at the destination (during consumption)* (Jager, 2009; Volo, 2009)*, and/or after the travel (after consumption)* (Binkhorst & Den Dekker, 2009; Neuhofer et al., 2012). From the tourist viewpoint, idea generation, for example, would count as a co-creative participation in experience design before travel and consumption, carving a musical instrument in a workshop would represent co-creation during the visit, and sharing experiences and memories in a virtual community is an example of co-creation of an experience in the post-travel phase. This emphasises the tourist's *new roles* in the tourism experience and how and to what extent he has become a producer and actor instead of a passive *sightseer* given that he owns valuable personal (cultural, intellectual, physical) resources (Prebensen et al., 2013a) that add value to the consumption experience (Neuhofer et al. 2013a). Binkhorst and Den Dekker (2009) adopt this view of co-creation. Co-creation prior to on-site consumption is sometimes termed *co-design* or *co-invention* (Binkhorst & Den Dekker, 2009; Ek, Larsen, & Hornskov, 2012).

2. The tourist actively participates in on-site experience activities. Travel to visit attractions and destinations involves participation in some kind of entertainment-focused or learning-based activities (Edensor, 2000) that are perceived as stimulating, different from everyday routines (Wikstrom, 2008) and potentially meaningful (Tan et al., 2013). This participation generates the tourist's interest and purpose while *in-situ* (Bertella, 2014) and consequently confers meaning to the travel holiday (Ryan, 2000). Researchers in this area draw on a dramaturgical metaphor and interpret tourism as a form of *performance* imbedded in social praxis (Edensor, 2000, 2001; Perkins & Thorns, 2001), in contrast to a traditional view of tourism informed by the paradigm of *the gaze*. Within a *gaze* paradigm, tourism is described as a particular way of looking at the world which simultaneously "forms what is seen and the way of seeing" (Perkins & Thorns, 2001, p. 187) and the usual touristic activities sought by tourists are dominated by the eye, visual perception and seeing. Urry (1990) proposed the *gaze* as characteristic of mass consumption tourism in which activities were mainly directed at *sights* that

could be found at *sites* (Pagenstecher, 2003). Examples of such activities are visiting heritage sites, museums, churches and other historical landmarks, attending entertainment parks, local festivals and festivities, contemplating landscapes, going to famous, must-see attractions. Underlying this view is the interpretation of the tourist as passive spectator.

Though Urry's (1990) sociological synthesis fitted well-known patterns of consumption from the early days of mass tourism and included a dynamic aspect of tourism as social construction of meaning anchored in the visual experience, criticism has focused on the changing patterns of tourists' behaviour and the need for re-examining the conception of the tourist acting as "a passive sightseer consuming sites in prescribed fashions" (Ek et al., 2012, p. 126). *The performance turn* in tourism (Mansfeldt, Vestager & Iversen, 2008) counters this by arguing tourists today want to "roll up their sleeves" (Eraqi, 2011, p. 79), active participation and multi-sensory exploration, and adhere to "ideas of active bodily involvement; physical, intellectual and cognitive activity *and* gazing" (Perkins & Thorns, 2001, p. 186). This evolution is seen as a sign of a maturing process of tourism towards sophistication (Richards, 2011), and encompasses a change in tourist motivations, arguably supported in higher needs, such as personal identity and growth (Arnould & Price, 1993; MacLeod, Hayes, & Slater, 2009).

The performance turn also implies tourists have a thirst of *doing* rather than just *seeing* (Eraqi, 2011), where one's own performances are seen as authentic, becoming in consequence more appealing propositions than merely watching others' performances (Mkono, 2012). Mathisen (2013) asserts that emotions and cognition are influenced by active participation in the experience, but specifically that this kind of participation links to existential authenticity and perception of personal value. Wikstrom (2008, p. 36) found that one's *"own activity" "resulting from your doing, your interest and your engagement"* bestowed experiential value on an activity. The *creative turn* orientation emphasises this too by declaring that active involvement leads to viewing the tourist not as someone who wants to watch others but instead to interact, actively learn and apply knowledge (Tan, Luh, & Kung, 2014; Tan et al., 2013). Tourists are now seen as experiencers, creators and actors, rather than receivers, interpreters, and observers (O'Dell, 2007) and thus touristic activities are displaced from the spectator perspective to the actor (or performer) position, blurring the traditional distinction between producer

and consumer. Staging of experiences involves tourists' own paths, detours from designed scripts, spontaneity, and therefore unpredictability (Ek et al., 2012).

Activities are part of tourism experiences (Morgan, 2007b) or more truly, experiences *arise* from activities (Ooi, 2003), and involve active participation of the tourist (Aho, 2001; Mkono, 2012). This active participation may be physical, emotional or mental engagement (Bertella, 2014) and can strengthen personal and/or collective identity (Kreziak & Frochot, 2011; Lugosi & Walls, 2013) as well as intensify the experience through the use of personal skills and resources (Aho, 2001). Special interest tourism reflects this change from standardized tourism consumption involving the gaze to alternative tourism based on active participation (Buhalis, 2001). New activities are becoming visible that illuminate tourists' search for physical or intellectual challenge or the want of experience sharing with a community of like-minded people (Rihova et al., 2014). These new demands may account for "the growing interest in participative and extreme sports, and in new types of cultural, adventure, sports and creative tourism" (Azevedo, 2009, p. 4), but also participation in science, arts or crafts workshops (Richards, 2010; Richards & Wilson, 2007), and interactive experiences in natural (Mathisen, 2013), cultural (Minkiewicz et al., 2013) or animal-based environments (Bertella, 2014). Distinctive experience is to be found in contexts where tourists have opportunities to be actively involved and apply their creativity (Morgan, 2007a; Richards & Wilson, 2006). Geocaching has been analysed through the lenses of creative tourism experience theory (Ihamäki, 2012). Here, "active participation" is described in terms of "the involvement of tourists in self-development", "the tourists' reflexive interaction", and "the tourists' application of knowledge to improve skills" (p. 160). This research also highlights the importance of a geocaching community and how it supports co-creation of geocaches.

3. *The tourist interacts with others during on-site experience.* On-site co-creation experiences engage the individual physically, emotionally and intellectually (Verhoef, Lemon, Parasuraman, Roggeveen, Tsiros, & Schlesinger, 2009), while connecting tourists, their relatives and friends, other tourists, locals, staff, and different types of suppliers in the experience space (Mossberg, 2007, Mansfeldt, Vestager, & Iversen, 2008; Morgan, 2007b) or environment (Binkhorst & Den Dekker, 2009; Prebensen & Foss, 2011). Interactions are expected, bringing together all these influencers of the tourist experience (Prebensen, Woo, & Uysal, 2013b). Some

interactions are planned, such as an encounter between a craft instructor and a tourist at a workshop, while others just happen due to the nature of a particular context or setting, e.g. tourists communicating to each other during the workshop. Again, some interactions are formal, entailing a written agreement between parties (e.g. a hotel owner and a guest), but others are informal, (a chance encounter between a tourist and a fellow countryman in a restaurant). Regardless of the type, these social interactions are part of the co-created experience (Cutler & Carmichael, 2010). Co-creation experiences are a matter of interpersonal (Binkhorst & Den Dekker, 2009), "outer interactions" with the experience environment, the experience people, and the experience activities (Tan et al., 2014, 2013).

Interpersonal interactions take place between individuals in different contexts, from informal environments to formal settings, encompassing processes of verbal and non-verbal communication (Tan et al., 2013). Such interactions have always been important phenomena within tourism, both from an individual perspective and a collective point of view. They are critical for human development, and in particular, child cognitive and emotional growth and maturation is highly dependent on family and social interaction (Bandura, 1989). A child's imitative behaviour begins through interaction with others in the social sphere.

Such interactions put subjectivity face to face with other subjectivities, generating a common space where emotions, values, choices, ideas and ideals emerge, converge or collide (Bochner, Cissna, & Garko, 1991). Communication during interactions involves sharing of information, meanings, emotions and feelings. Interactions can occur in familiar environments, such as the household, the neighbourhood school, the company, or, in new settings such as a tourism destination, and can be described in terms of the degree of an individual's relationship or closeness (Surra & Ridley, 1991). The degree of closeness influences the behavioural, affective and cognitive dimensions of interactions. Interconnection with congeners (e.g. peers, adults) are seen as influencing personal growth through role modelling (Bandura, 1989) and have been considered an important factor contributing to exploring individuals' creativity (Ihamäki, 2012).

There is agreement on the importance of such interactions in service theory, as services depend upon encounters that come about during delivery, when providers and

consumers meet and jointly produce the service. In fact, a service encounter has been defined as a specific period of time when interactions occur within the overall *servicescape*, people interactions included (Shostack, 1984). People interaction is believed to affect the perception of the quality of service (Gronroos, 1990; Mohr & Bitner, 1995). Human interaction is also perceived of major significance in the context of hospitality and tourism (Andrades & Dimanche, 2014; Bharwani & Jauhari, 2013; Brunner-Sperdin, Peters, & Strobl, 2012; Dong & Siu, 2013; Hjalager & Nordin, 2011; Jackson, Morgan, & Hemmington, 2009; Kreziak & Frochot, 2011; Lugosi, 2009; Mehmetoglu & Engen, 2011; Morgan & Xu, 2009; Nuttavuthisit, 2010; Obenour, Patterson, Pedersen, & Pearson, 2006; Räikkönen & Honkanen, 2013; Ryan, 2000, 2002; Tan et al., 2013; Walls, Okumus, Wang, & Kwun, 2011).

The hospitality and tourism literature usually adopts an *industry perspective*, according to which tourism is a system composed of its people and the tourist, determined by a high level of interaction (Neuhofer et al., 2013a). O'Dell (2010) characterizes the *experiencescape* as the environment in which the tourist's experience takes place, including the particular contexts, the physical objects, the subjects and their sets of relationships. Some interactions are sporadic, one-time encounters, while others happen as an extension of long term bonds (e.g. spouses, children, or friends). This industry perspective considers interactions as elements of the tourist experience that need to be "carefully designed, integrated and managed to ensure an emotional connection, loyalty and satisfaction" with brands and destinations (Lugosi & Walls, 2013, p. 52).

In no lesser degree, interactions are at the core of the tourist experience *from the tourist perspective*. Tourist experiences have a social dimension (Morgan, 2007b) based on the set of relationships and interactions tourists develop on-site (Bertella, 2014; Mehmetoglu & Engen, 2011). These interactions carry social meaning (Mehmetoglu & Engen, 2011) because they are closely connected to tourists' motivations towards pursuing pleasure in socializing with others (de Rojas & Camarero, 2008; Kreziak & Frochot, 2011) and sharing emotional moments with them (Correia & Crouch, 2004). This is despite the transient nature of relationships (Cutler & Carmichael, 2010) and that they involve strangers (Ballantyne, Packer, & Falk, 2011). Ballantyne et al. (2011) stress the importance of social interaction in stimulating thoughts, feelings and people's creativity. Contacts with others are also a source of feelings of companionship and

security and contribute to positive appraisals, such as satisfaction towards opportunities of sharing with relevant ones emotionally significant moments.

Interactions during travel are sources of experiences (Minkiewicz, Evans, & Bridson, 2013) and interplay between individuals (Walls et al., 2011) impacts on the tourist's level of engagement in the experience (Minkiewicz et al., 2013) and how memorable it is (Bharwani & Jauhari, 2013; Morgan & Xu, 2009). In the sense that interaction involves some kind of proximity to other people in the *experiencescape,* it is also the foundation of *communitas*, desire and feelings of belonging (Arnould & Price, 1993; Cary, 2004; Morgan, 2007a, 2007b; Schmitt, 2010). Experiential meaning is found not only in the achievement of individual projects and goals but also created through interaction with those participating in the experience (Arnould & Price, 1993; Kreziak & Frochot, 2011). Interacting with others in activities that involve personal challenge and goal achievement creates a sense of togetherness or flow (Csikszentmihalyi & LeFevre, 1989; Rihova et al, 2013) where activity and performance involve collaboration with others (Mansfelt et al., 2008). Kyle and Chick (2004) suggest that such collaborative involvement is linked to social relevance and meaningfulness of others which in turn creates bonding, attachment and memorability. Interactions with others enable the individual's social development and experiences become memorable because of them (Tung & Ritchie, 2011). Additionally, interactions are key dimensions in the formation of social communities (Rihova et al., 2013, 2014) which grow into dense relational *loci* where co-creation behaviours and processes eventually evolve beyond the company's scope. Rihova et al. (2013, 2014) consider that Vargo and Lusch's (2004) S-D Logic must be expanded to include these socially dense, and intensely interactive, consumption contexts and social theory is claimed to assist in the clarification of these phenomena.

4. The tourist engages in on-site subjective experience. Tourism co-creation experiences can be conceptualized as a set of psychological events and processes that are intrinsic to the tourist (Scott et al., 2009), since "the same tourist activity can create different experiences in people" (Volo, 2009, p. 115). Tourism co-creation experiences originate from the individual when engaging in activities and interacting with subjects during the trip in a specific experience environment (Larsen, 2007). As they pertain to an individual, experiences are subjective (Morgan, 2007b), intangible, and highly personal phenomena (O'Dell, 2007, Cutler & Carmichael, 2010).

Mannell and Iso-Ahola (1987) discussed the phenomenology of experiences as immediate conscious events, lived in the present and which can be analysed in terms of intensity, duration, memorability, and meaning. Conscious events include things such as perceptions, thoughts, images, recollections, bodily sensations, emotions, plans, wishes and impossible fantasies, awareness of needs, objectives and behaviours (Kim, 2010; Kreziak & Frochot, 2011). Heightened happiness, self-awareness and extreme concentration for instance have been found to be associated with subjectively meaningful experiences both at work and during leisure (Csikszentmihalyi, 1990; Mannell & Iso-Ahola, 1987). Flow has been used to describe individuals' experiences in terms of feelings and emotions (e.g. alertness, perceptiveness, concentration, happiness, satisfaction, and creativity) but also to assess the quality of an experience (Nakamura & Csikszentmihalyi, 2002). The individual's perception of a flow experience was found to be based on a balanced encounter between the challenge involved in the particular situation and the individual's ability to meet it (Csikszentmihalyi & LeFevre, 1989), and thus that particular meaningful moments may be influenced by the individual's personality and motivations as well as by the experience situation and performed activities.

Moscardo (1996) approached tourism experiences in heritage sites through a psychological lens, using the mindfulness concept to describe a particular state of mind that occurs when individuals are "active, interested, questioning, and capable of reassessing the way they view the world" (p. 382). Mindfulness has been found essential in contexts where interpretation plays an important role in experiences because effective interpretation requires the individual's awareness of the situation, active information processing and attentive behaviour, as well as perception of being interested, involved, and in control during performance of activities. Such psychological engagement in the experience is seen as beneficial to visitors and tourists due to the increase of self-esteem, satisfaction, and learning outcomes that a mindful state generates.

Table 2.2
Co-creation definitions, theoretical underpinnings, perspectives, and dimensions in tourism literature

Areas/contexts	Authors	Definition	Theoretical underpinnings	Perspective adopted (tourist/visitor/guest; organization/industry, destination)	Dimensions of co-creation
(1) Tourism experience design, management and marketing	(Azevedo, 2009)	A relationship between producer and consumer (p.6)	Experiential Marketing, Co-creation theory	The organization	Active participation/involvement; interaction (destinations and tourists, the local community and other actors)
	(Bertella, 2014)	The active role played by tourists in creating and giving meaning to an experience that touches them deeply (pp.115-116)	SD Logic, Experiential Consumption, Co-creation theory (Prahalad & Ramaswamy, 2004)	The tourist, organization	The tourist active role; physical participation, mental and emotional connectedness; interaction with subjects and the experience environment
	(Binkhorst & Den Dekker, 2009)	The interaction of an individual at a specific place and time and within the context of a specific act. Inclusion of the tourist in the process of designing the tourist experience (p.315)	The Experience Economy; co-creation theory (Prahalad & Ramaswamy, 2004), tourism network approach	The tourist, organization, destination	The tourist active participation, active activities, interpersonal interaction; contribution to experience design
	(Ek et al., 2012)	The tourists as producers, co-designers of the experience but also of the places they visit (p.124)	The Experience Economy, the performance turn, and experience design theory	The tourist	The tourist active performance in designing and experiencing, interaction with the network, impacts on tourist psychology
	(Haahti, 2006)	Contribution of consumers in the design of the experience in order to create value for themselves (p.11)	Identity Economy framework; Relationship Cultivation theory; The Experience Economy; Value Creation theory	The organization	The tourists' active role/ involvement in the experience
	(Ihamäki, 2012)	The tourist's active participation in the development process of creative tourism experience (p.2)	Creative tourism	The tourist	The tourist active participation, social, group, subject and object interaction (reflexive, with locals and tourist communities),

				improvement of psychological moods
(Kreziak & Frochot, 2011)	The active and creative role of tourists in the process of value co-creation (p.24); tourists are co-producers (p.25)	Consumer Agency; S-D Logic	The tourist	Participation; social interaction ("socialisation") and with the organization; the experience of flow
(MacLeod, Hayes, & Slater, 2009)	The tourist as an active participant in the experience with personal enrichment, enlightenment, engagement and stimulation as the key motivators (p.156)	The Experience Economy; Experiential Marketing; Co-creation theory (Prahalad & Ramaswamy, 2004)	The tourist, organization	The active participation/ engagement of the tourist in the experience; interaction with organisations, destinations, places, and activities
(Mansfelt et al., 2008)	Producers and tourists engage in a co-creating relationship (p. 11)	The Experience Economy; the performance turn	The tourist, destination	The tourist active participation in the design of the experience/active involvement, interaction or the interplay between the place, the products or services offered, the customer for production of the experience; the subjectivity of the tourism experience
(Mathisen, 2013)	The creation of value and views tourists as active, with a desire to use their own knowledge and skills in order to interact with other tourists, objects, and environments (p.164)	S-D Logic; Experiential Marketing, the performance turn	The organization	Active participation and engagement (emotional, physical and mental), social interaction and with the environment, reflexivity
(Mkono, 2012)	The active involvement of tourists in the creation of tourism experiences (p.185)	The performance turn	The tourist	Active involvement /participation (physical, intellectual, cognitive), interactivity
(Morgan & Xu, 2009)	The experience is co-created by the consumer and the organisation (p.222)	Co-creation theory (Prahalad & Ramaswamy, 2004)	The Tourist	Personal and social interaction, physical activity and achievement
(Mossberg, 2008)	The tourist as a creative agent and participant of the value creation process (p.202)	The Experience Economy; Experiential Consumption and Marketing	The organization, destination	Active involvement of the tourist in the experience (designing, producing, and consuming); interaction between the tourist and the organisation
(Prebensen & Foss, 2011)	The consumer as taking an active part in consuming and producing values and deals	Coping theory in tourism; service and	The tourist	Active part, participation, involvement (design, production,

	with customer involvement in defining and designing the experience (p.55)	experience-based theories		consumption), interaction with people (interpersonal connectedness)
(Prebensen et al., 2013a)	The tourist as a participant in the value creation process by bringing various types of customer resources and efforts into the experience value scene (pp.240-241)	S-D Logic, Experiential Marketing	The tourist	Active participation (involvement) in production and consumption, interaction
(Richards, 2010)	Using the consumer's knowledge of the product in order to improve it and to provide a closer fits with consumer needs (p.12)	Creative tourism; The Experience Economy	The tourist	Active part (production of the experience), interaction between the tourist and locals
(Richards, 2011)	The creative collaboration in developing tourism practices by both consumers and producers (p.1236)	Creative tourism; The Experience Economy	The tourist, organization and destination	Collaboration in developing tourism practices, active participation in learning and production of the experience
(Richards & Marques, 2012)	Process where meaningful experiences are created and participation, involvement and engagement are specific features (p.8)	Creative tourism; The Experience Economy	The tourist, organization and destination	Active role/ participation and interaction with locals, social/ relational, emotional and spiritual spheres
(Richards & Wilson, 2006)	The tourist as 'co-producer' of own experiences involving reflexive interaction (p. 1213, p.1218)	Creative tourism; The Experience Economy	The tourist, organization and destination	Active participation in experience activities and narratives, skill development and learning, interactivity, reflexivity
(Rihova et al., 2013)	The customer is the sole creator of value, while the firm joins in as a supporter/facilitator of customers' value creation (p.555)	S-D Logic; C-D Logic (Consumer-oriented perspective)	The tourist	The social interaction between tourist during activities, practices and experiences
(Rihova et al., 2014)	The tourist's practices and experiences that develop in his or her own social context (p.3)	S-D Logic; C-D Logic (Consumer-oriented perspective)	The tourist	Social interaction (inter-subjectivity); the tourist as subject of psychological states, meanings and symbols, skills and bodily action
(Scott et al., 2009)	Co-invention of tourism experiences. The consumer is an active participant rather than a passive observer and staff/customer interaction become important (p.105)	Co-creation theory (Binkhorst & Den Dekker, 2009); S-D Logic	The organization	The active participation of the tourist in the design and consumption of the experience; interaction between the tourist and

					the organisation
	(Tan et al., 2013)	The consumer is the 'product', and there is a process of co-creation between the transformer and the transformed (p.159)	Creative tourism; The Experience Economy	The tourist	Active participation in activities and experience design, selection and reflection, interaction (people, organisation, environment); the cognitive psychology of creativity
	(Tan et al., 2014)	The tourist is the active co-creator or co-producer of own experience (p. 248)	Creative tourism; The Experience Economy	The tourist	Active participation in the production of the experience; interaction (people, organisation, environment); reflexivity and consciousness; the cognitive psychology of creativity
	(Volo, 2009)	Tourists co-create the context in which they develop the essence of the experience (p.122)	The Experience Economy Experiential Marketing; Co-creation theory (Prahalad & Ramaswamy, 2000)	The tourist	Active participation in the experience context, sorting and interpretation; social interaction and with the tourism system; the psychology of the tourism experience: experience as a sequence of mental events (sensation, perception and cognition (memory, learning)
(2) Tourist Attractions & Events	(Holst-Kjaer, 2011)	A collaborative way of two and more businesses and/or entrepreneurs to fuse their (in this case, intangible) experience products (p.262)	Cultural Consumption, Marketing of Experiences	The organization	The visitors' participation in staging, producing and consuming the event experience
	(McIntyre, 2010)	The visitor's self-design, or co-creation of their own experiential mix and flow (p.193)	The Experience Economy, Experiential Marketing	The visitor	Active interaction with the experience; immersion/absorption; personal transformation; subjective and creative process; cognitive activity (learning and self-development)
	(Mehmetoglu & Engen, 2011)	Individual customers actively co-construct their own experiences through personalised interaction (with the company), and thereby co-create unique values for themselves (p.244)	The Experience Economy, Experiential Marketing	The organization	The tourist active participation in the production and consumption of the experience (performance); interaction between the tourist, the organisation and other tourists (the

					experience environment/ *experiencescape*)
	(Minkiewicz et al., 2013)	Creation of the experience by visitors through co-production, personalization and engagement (p.17)	The Experience Economy; Experiential Marketing, Co-creation and Value theory (Prahalad & Ramaswamy, 2004; Vargo & Lusch, 2004)	The organization	Active participation of the visitor in the performance of one or more activities performed throughout the consumption experience (physical, cognitive, emotional, and behavioural levels); social interaction (other visitors, organisation; the psychological state of engagement during the experience; reflexivity
	(Morgan, 2006)	The consumer as an active participant rather than a passive recipient (p.306)	The Experience Economy; Co-creation theory (Prahalad & Ramaswamy, 2004)	The visitor	The active participation of the visitor in the experience; interaction between visitor and organisation, and other visitors
	(Morgan, 2007a)	The visitor as co-creator of the experience in a creative space (p.3)	The Experience Economy; Co-creation theory (Prahalad & Ramaswamy, 2004)	The visitor	Interaction between visitors organisers, performers, and local businesses
	(Morgan, 2007b)	Firms create 'experience spaces' where dialogue, transparency and access to information allow customers to develop experiences that suit their own needs and level of involvement (p.366)	The Experience Economy; Co-creation theory (Prahalad & Ramaswamy, 2004)	The organization	interaction between the firm's supply network and communities of participants; the social dimension of the experience (communitas)
	(Olsson, 2012)	The tourist voluntary involvement in production of an organisation's products, services, and/or marketing (p.235)	S-D Logic; Experiential Marketing	The tourist	The tourist active involvement and participation in production and marketing
	(Prebensen et al., 2013b)	Co-creation of value in consumption (p.2)	S-D Logic; Experiential Marketing	The tourist	The tourist involvement and participation in the creation of the experience; interactions between a customer and product, and company before, during and after travel
	(Bharwani &Jauhari, 2013)	Co-creation of value with customers through interaction while addressing	Hospitality and service theories; Co-creation	The organization	Human, interpersonal interaction with the guests during the

41

		customer-specific idiosyncratic needs (p.828)	theory (Prahalad & Ramaswamy, 2004)		consumption experience; the guest involvement on a sensory, emotional, cognitive, behavioural and relational levels
(3) Hospitality	(Chathoth et al., 2012)	The process through which customers interact with the company and the experience environment and generate their own experience (p.3)	S-D Logic; Co-creation theory (Prahalad & Ramaswamy, 2004)	The organization	The highly participated and active role of the guest in the creation of personalised unique experience; the guest interaction with the experience environment; the guest contribution to the co-creation process
	(Neuhofer et al., 2013b)	The tourists play an active part in both the production and the consumption of their own experiences (pp.291-292)	Co-creation theory (Prahalad & Ramaswamy, 2004)	The tourist, organization	The guest active part in both the production and the consumption experience; interaction between companies and consumers
	(Lugosi, 2009)	Consumer participation in service/venue operations (p.405)	Hospitality experience theory	The guest	Convivial interaction between people (providers, guest, and the locations); the subjectivity of the consumer experience; guests play an active part in the creation of the service culture and the experience of hospitality
	(Lugosi, 2014)	The active engagement of multiple, interdependent stakeholders on ongoing exchanges of information at multiple points in the organisation-consumer relationship concerning how stakeholders can develop and improve the experience through active collaboration (pp.166-167)	Actor-network theory; S-D Logic; Experiential consumption theory; Co-creation theory (Prahalad & Ramaswamy, 2004)	The guest, organization	Active participation/involvement of the guest in the construction of the experience before, during and after; social interaction and interaction between the guests and the organisation; the subjectivity of the hospitality experience
	(Shaw et al., 2011)	A constructive customer participation in the service creation and delivery process' requiring meaningful and co-operative contributions (p.208)	The Experience Economy; S-D Logic; Co-creation theory (Prahalad & Ramaswamy, 2004)	The organization	The guest contribution/active participation in the service creation and delivery process; interaction (conversation) among consumers and with the organisation
	Andrades &, Dimanche,	The co-design and co-creation of the tourism experience with the customer	Customer Experience Theory; Involvement	The organization and destination	The tourist's active participation in the tourism service delivery/

		2014)	(p.105)	theory		consumption; interpersonal/social interaction, bonding and attachment; the subjectivity of the tourist experience (reactions, feelings, thoughts), reflexivity
(4) Tourism management and marketing		(Binkhorst, 2007)	The involvement of the individual in designing, undergoing and evaluating their own experiences (p.128)	Creative Tourism, Experience Economy, Co-creation theory (Prahalad & Ramaswamy, 2004)	Destination/industry	The tourist's participative role in undergoing, creating, designing, selecting and reflecting upon experiences; reflexivity; interaction with the local people at the destination
		(Cabiddu et al., 2013)	Joint creation of value by the company and the customer (p.88)	S-D Logic; Co-creation theory (Prahalad & Ramaswamy (2004); IT economic value theories	The organization/industry	The tourist's active participation in design and production of the experience; interaction with the tourism industry/network; the subjectivity of the experience
		(Ciasullo & Carrubbo, 2011)	Creation of value through collaboration, cooperation and sharing among destination /network stakeholders (p.6)	S-D Logic; Service and Systems Theories	Destination/industry	The participation of the tourist in the destination's network of resources
		(Eraqi, 2011)	Involves tourists' active involvement and interaction with their supplier in every aspect, from product design to product consumption (p.79)	Experiential Marketing and Co-creation theory (Prahalad & Ramaswamy (2004)	The destination/industry	The tourist's active construction and innovation of services and experiences; the tourist's interaction with their supplier
		(Grissemann & Stokburger-Sauer, 2012)	The customer's provision of input in the development of their travel arrangement (p.1484)	S-D Logic	The organization	The tourist's direct and active participation in the firms operations; interaction between tourists and company
		(Hjalager & Nordin, 2011)	The tourist's co-production (contribution to idea generation, problem solving or design) (p.306)	Innovation theory	The organization	The active interaction among consumers
		(Hsieh & Yuan, 2011)	Value creation among enablers, service providers, and customers and sharing value and resource (p.268)	S-D Logic; tourism destination marketing theory	The destination	The interaction among tourists, tourism SMEs, and destinations
		(Jager, 2009)	Active customer involvement in the production of a good or service through interaction experiences (p.2)	S-D Logic; co-creation theories (Prahalad & Ramaswamy, 2004)	The destination	The tourist active participation in the production process (participant vs. spectator); interaction between

				tourists and tourism businesses, social interaction with others (visitors, F&R, locals)
(Li & Petrick, 2008)	The customer as co-creator of value and co-producer of experience (p.240)	The relationship orientation, the network approach, the S-D Logic	The destination	The interaction between tourists and tourism producers
(Lichrou et al., 2008)	Tourist are co-creators of places through narratives (p.31)	Social construction of places; destination marketing theory	The destination	The social interaction between host and visitor and with fellow tourists; the psychological nature of the tourism experience
(Lugosi & Walls, 2013)	Tourists are co-producers and actively build their own consumption experiences through the interaction between the environment, organisations, employees, locals and other consumers (p.53)	S-D Logic; co-creation theories (Prahalad & Ramaswamy, 2004)	The tourist, the organization/ destination	The tourist active building of the consumption experience; interaction between the tourist and the environment, organisations, employees, locals and other visitors; the psychological dimension of the tourist co-creation experience
(Morgan et al, 2009)	The customer as an active participant and creator of experiences through interaction rather than a passive consumer (p.205)	The Experience Economy, Experiential Marketing	The destination	The tourist active participation in the experience (through motivation and interpretation); the interaction between the tourist and the company
(Mossberg, 2007)	The tourist as co-creator of the experience environment (p.63)	Experiential Marketing	The destination	The tourist's contribution to the construction of the tourism experience; the interaction between the tourist and the producer; the subjective dimension of the tourist experience
(Neuhofer et al., 2012)	Tourists play an active part in co-creating their own experiences (p.2)	The Experience Economy; Experiential Marketing; Co-creation theory (Prahalad & Ramaswamy, 2004)	The tourist, organization/ industry	The tourist's contribution, active part in the creation and production of the experience; the (social) interaction between tourists, companies and tourist communities
(Räikkönen &	Co-creation experiences are the base of	Co-creation theory	The organization	The tourists as active producers of

	Honkanen, 2013)	value derived from interactions between customers and companies (p.109)	(Prahalad & Ramaswamy (2004); Experiential Consumption and Marketing		their own experiences; the tourist social interaction with other tourists; and the interactions with the company
	(Salvado, 2011)	The tourism co-creation experience results from the interaction of an individual at a specific place and time and within the context of a specific act (p.101)	Virtual Organisations, Digital Customer Ecosystems, Collaborative Value Chain and Co - Creation Open Innovation	The organization	The interaction between tourist and provider
	(Samuelsen, 2010)	The consumers involvement in the creation of the experience products (as co-producers or co-creators) (p.3)	The Experience Economy, the cultural turn	The organization/industry	The tourist's involvement in experience activities and the construction of the experience product; the tourist's social interaction and the continuous corporeal and mental interaction with things and physical places
	(Santos-vijande, Álvarez, & Rodríguez, 2012)	Companies are co-creators of value either through their interaction with their customers or by collaborating in the co-creation of new products and services (p.4707)	S-D Logic; Service Theory	The organization	The tourist contribution to the creation of tourism products and services; the tourist interaction with the company
	(Sfandla & Björk, 2012)	Firms and tourists are interconnected, inter- dependent and interact to co-create experiences over time (p.3)	S-D Logic; Co-creation theory (Prahalad and Ramaswamy, 2004); Tourism Experience Network (TEN)	The organization/destination	The involvement and participation of tourists in the production and consumption experience; interactions between firms and tourists
	(Tajzadeh-Namin, 2012)	The personalized experience that is unique to each individual customer/tourist (p.203)	Co-creation theory (Prahalad and Ramaswamy, 2004)	The organization/industry	The interaction between a customer and a product or service
	(Thompson, 2008)	Joint creation of the tourism product, and extended relationships between tourism supplier and consumer (p.2)	S-D Logic	The organization	The tourist participation in the production of the tourism product
	(Wang et al.,	Activities in which both the service	S-D Logic	The organization	The tourist contribution

	2011)	provider and customer collaborate in the customer's consuming and experiencing particular services (p.135)			(collaboration/cooperation) to the consumption experience and services; he interaction between the tourist and the supplier
	(Zouni & Kouremenos, 2008)	It involves both the marketer and the customer interacting in all aspects of the design, production, and consumption of a service (p.292)	Co-creation theory (Prahalad and Ramaswamy, 2004); Experiential Marketing	The organization	The tourist contribution to the design, production, and consumption of a service; the tourist interaction (direct contact, communication) with the company

Tourism experiences are here conceptualized as psychological events and processes, such as expectation, perception, and memory, and connected to different stages of the overall tourism experience (Larsen, 2007). Marketing theory treats the tourist experience in terms of consumption behaviour (Poulsson & Kale, 2004; Quan & Wang, 2004), although recognizing that, as psychological events and processes are involved, the subjective dimension imposes upon suppliers the restriction of *delivering* experiences to consumers and the limitation of only being able to develop the circumstances under which they can actually emerge (Mossberg, 2007). Co-creation can be found in a wide range of types of tourism that comprise active participation (physical and/or mental) and interaction with others during consumption, e.g. nature-based or sport tourism (Ihamäki, 2012; Morgan, 2007b), cultural and heritage tourism (Minkiewicz et al., 2013; Minkiewicz, 2009), resort tourism (Prebensen & Foss, 2011), adventure tourism, events and festivals (Morgan, 2007a), religion and pilgrimage tourism. As discussed above, it is closely related to current ideas of the performance turn (Perkins & Thorns, 2001), the tourist's skilled consumption and creative tourism (Richards, 2010; Richards & Marques, 2012) because it is focused on the tourist and how he chooses to practice tourism. In this sense, the tourism experience may be "co-creative" or non-co-creative depending on the role (active vs. passive) of the tourist in the type of the chosen tourism experience.

2.4 The tourist on-site co-creation experience: a conceptual framework

Based on the literature review above, a psychological-based definition of on-site co-creation tourism experience is proposed:

a co-creation tourism experience is the sum of the psychological events a tourist goes through when contributing actively through physical and/or mental participation in activities and interacting with other subjects in the experience environment.

The relationships between active participation, interaction, and co-creation during the on-site stage of the overall tourism experience are shown in Figure 1. The framework depicts key elements of the experience environment and how they are related to each other, therefore upholds the concept of *experiencescape* as its background (O'Dell, 2010). The underlying assumption of the framework is that

dimensions in the *experiencescape* lead to specific psychological phenomena, that is, events and processes propelled and/or enhanced by active participation and interaction and consequently that understanding of on-site co-creation should include analysis of the link there is between tourist psychology and active participation and interaction during experience. The *experiencescape* integrates dimensions, such as physical aspects of the environment, social actors and participants, and organisational dynamics and features of service delivery, which influence the way the tourist lives the experience and that have been found to impact on on-site and post-experience appraisals (Cutler & Carmichael, 2010). Service theory has long identified their importance in the service context and relation to judgements on service quality (Bitner, 1992). They have been here called "experience influencers" because they are external to the tourist, and in part they are within the power of the organisation to plan and manage. Such is the case of physical elements of the environment (e.g. the architecture and landscape, venue layout and usable spaces, furnishing, cleanliness), organisational aspects (staff availability, technical and functional quality), and, to some extent, the social component of the experience environment, which includes staff, other visitors and customers, friends and relatives.

The on-site co-creation experience has the tourist at its centre, i.e. the subject of behaviours and psychological phenomena that develop through participation in experience activities and interactions with other subjects (Larsen, 2007). As highlighted by many authors, co-creation experiences require the tourist's active participation (Bertella, 2014; Binkorst, 2007; Mathisen, 2013; Mkono, 2012; Morgan et al., 2009; Neuhofer et al., 2012; Prebensen et al. 2013a). "Active" here means the engagement of the tourist in the experience, involving the use of personal resources, capabilities and strategies (Morgan et al., 2009; Prebensen & Foss, 2011, Prebensen et al., 2013a) in either or both physical or cognitive activity.

Interactions are the relations between people that take place during the experience (Lugosi & Walls, 2013; Mathisen, 2013; Salvado, 2011) and can be emotional in nature, e.g. tourists interacting with family members or animals (Bertella, 2014; Prebensen & Foss, 2011; Rihova et al., 2013), social, e.g. casual conversations with other visitors (Rihova et al., 2013) or knowledge-based, e.g. knowledge acquisition and exchange with technical staff in a learning situation (Richards, 2010).

Both active participation and interaction affect the tourist's "immediate conscious experience" (Mannell & Iso-Ahola, 1987, p. 325), which is made up of perceptions, sensations, emotions and other psychological events and processes. As such, these dimensions are interpreted as experiential antecedents, factors that shape tourist psychology during on-site experiences. In turn, psychological phenomena are internal factors that compose the subjectively lived co-creation experience, which is afterwards evaluated and remembered. The experience outcome is here named memorability, as it refers to the vividness and the long lasting character of the tourist's recollections of the experience (Kim, 2010; Larsen, 2007; Marschall, 2012).
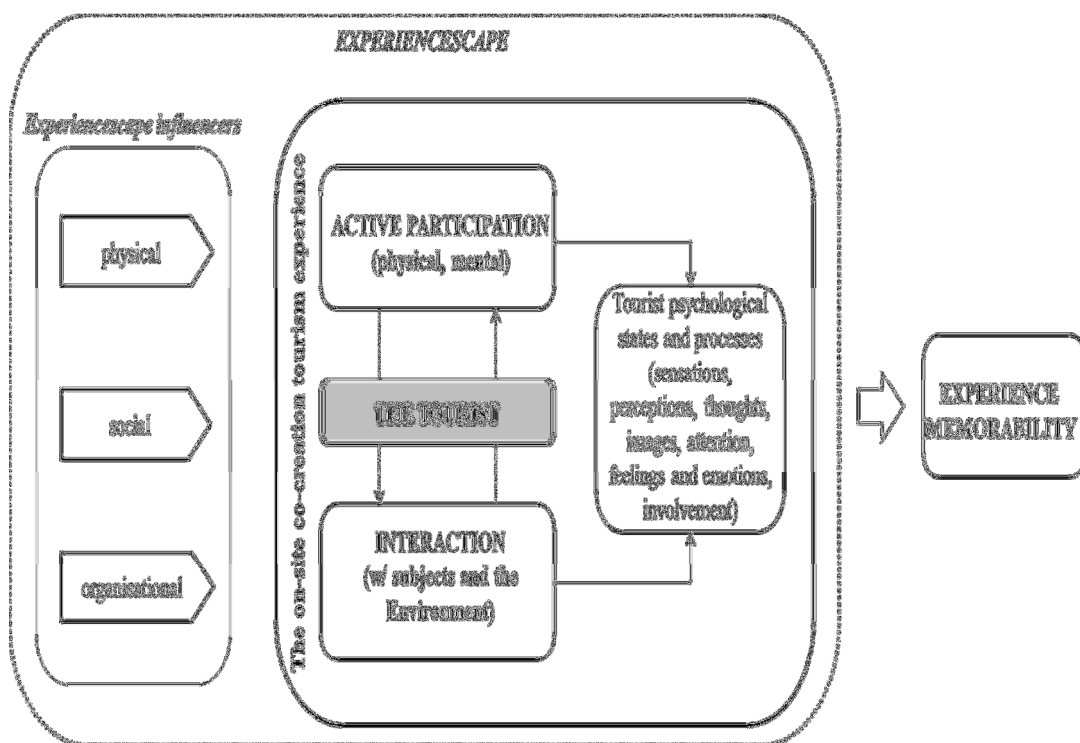
Figure 2.1: The tourist on-site co-creation experience: a conceptual framework

2.5 Discussion and conclusion

This study indicates that it is important to recognize active participation and interaction in co-creation experiences, considering that on-site tourism experiences involve parties connected in different ways (emotional, cognitive, physical, social) in close proximity and intensively. Additionally, the literature review has shown that both participation and interaction are relevant because tourism preferences for destination activities have been evolving towards more participative behaviour.

Co-creation is strategic in face of society and market trends (Grissemann & Stokburger-Sauer, 2012; Jager, 2009; Mehmetoglu & Engen, 2011; Morgan et al., 2009; Neuhofer et al., 2012; Neuhofer & Buhalis, 2012; Prahalad & Ramaswamy, 2003, 2004; Zhang & Chen, 2008) and that is why it requires attention from management and marketing thinking, both at the organisation and the destination levels. Co-creation is a consumer experience of a particular kind, i.e. the actively participated in and interactive experience (Cabiddu, Lui, & Piccoli, 2013; Füller, Hutter & Faullant, 2011; Hsieh & Yuan, 2011; Obenour et al., 2006; Poulsson & Kale, 2004; Prahalad & Ramaswamy, 2004; Vargo & Lusch, 2004, 2008; Vargo, Maglio & Akaka, 2008; Walls et al., 2011).

The psychological perspective on the tourism experience adopted here examines internal, subjective phenomena which need to be understood and connected to active participation and interaction if experience management and marketing are to be effective and competitive. Co-creation experiences are psychologically complex phenomena, and prior literature has already pinpointed psychological processes that deserve specific analysis in light of the different stages of the overall tourism experience (Larsen, 2007). This research followed Larsen's (2007) suggestion that active participation and interaction need to be explored and further analysed as co-creation dimensions influencing the tourist's psychological phenomena.

Adopting a psychological approach suggests that it is important to link studies of co-creation to other concepts such as involvement (Andrades & Dimanche, 2014), mindfulness (Moscardo, 1996), and attention (Ooi, 2010). Involvement has been found to contribute to co-creation, the perceived quality of an experience and satisfaction, and therefore as an essential dimension to consider in the management of experiences. On the same grounds, attention, which has been largely ignored in tourism studies (Ooi, 2010), is a psychological phenomenon deserving investigation in this context of co-creation experiences. As Ooi (2010: 52) writes, "experiences emerge dynamically through the flow of tourists' attention" and accordingly attention shapes experiences. In this sense, attention is a psychological phenomenon occurring in on-site co-creation, and also a strategic dimension to enhance the tourist's state of mindfulness and involvement.

This paper has concentrated on reviewing the tourism literature of co-creation experiences, identifying theoretical ideas and summarizing definitions and themes to

understand ongoing research and suggest future investigation. The purpose in examining the tourism literature was to find out the characteristics of co-created tourism experience that could support a general definition though restricted to the on-site stage of the overall experience. Table 2 highlighted definitions, meanings and approaches to co-creation in tourism studies. Analysis indicated several points, specifically (i) the theoretical backgrounds most frequently cited in support of the adoption of the co-creation approach, namely the experience economy paradigm (Pine & Gilmore, 1999), the experiential consumption and marketing paradigm (Arnould & Price, 1993; Holbrook & Hirschman's, 1982; Schmitt, 1999), the Service Dominant Logic (Vargo & Lusch, 2004, 2008), the performance turn (Perkins & Thorns, 2001), creative tourism (Richards, 2011), and the co-creation premises proposed by Prahalad and Ramaswamy (2004), (ii) the diversity of research contexts (tourism experiences, experience design, events and attractions, resorts, services, destinations, and so on), (iii) the diversity of approaches and methodologies (theoretical, empirical, qualitative and quantitative), and (iv) most frequent associations or dimensions considered (co-creation of experience value or meaning, co-creation as co-design of the experience, co-creation as the tourist's active participation and interactions).

Co-creation experiences can occur before the stay at the destination or afterwards upon returning home but in this analysis the on-site focus was selected on the grounds that the core of tourism lies in experiences that tourists participate in at the destination. Moreover the most meaningful memories originate in the destination environment, when tourists find themselves in a new environment, undertaking activities and interacting with people, all of which increase the strength of emotions and feelings and acquisition of new knowledge. The conceptual framework presented in Figure 1 represents these relationships and a working definition of co-creation is given which will assist in future research. The literature review suggests that research is needed to examine to what extent co-creation experiences involve active participation and interaction, how co-creation affects psychological processes (perceptual, cognitive or affective), and how these might in turn impact on the memorability of experiences.

Research gaps and directions for future empirical research include: (a) the dimensions of active participation and interaction and their relation with cognitive and emotional processes in co-creation experiences, including *expectations, perceptions, attention, involvement, emotions, and memory*; (b) comparison between types of tourism

experiences based on the dimensions of active participation and interaction; (c) analysis of the mutual influence of active participation and interaction as dimensions of co-creation experiences; (d) segmentation profiles based on active participation and interaction as indicators of tourists' willingness to adhere to co-creation experiences.

This review has found much of interest in exploring the concept of co-creation analysing the complementary approaches of the organisation and destination, on one side, and the tourist, on the other. However it highlights the need to concentrate reflection and empirical investigation on the on-site experience, where strong emotions, learning, and meaningful memories emerge. In this regard, research and marketing efforts must be directed to those peak moments that occur when the tourist is visiting and enjoying his time at the destination. As experience memorability is the ultimate goal of tourism for tourists, suppliers and destinations, relevant dimensions that strongly link to it, such as those here identified, demand further empirical study.

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CHAPTER 3
STUDY 2. CO-CREATION EXPERIENCES: ATTENTION AND MEMORABILITY[2]

Abstract

This study examines on-site co-creation experiences from a tourist perspective. A review of the relevant literature and in-depth interviews with 22 tourists who participated in a 'swimming with dolphins' experience are used to explore the importance of active participation and interaction in enhancing tourist attention and the memorability of the experience. Findings show that high levels of attention and memorability have been associated with particular cognitive and physical activities and interactions during the overall experience, and suggesting that on-site co-creation influences memorability by focusing a visitor's attention. This study contributes both to the understanding and conceptualization of co-creation experiences in the field of tourism by substantiating the usefulness of a psychologically-based approach to experience design.

Keywords: co-creation tourism experience, active participation, interaction, attention, memorability

3.1 Introduction

Recent research on tourism experiences stresses the role of tourists as co-creators of their own experience (Prebensen, Vittersø, & Dahl, 2013a; Tan, Kung, & Luh, 2013) and that tourism organizations and destinations need to deliver memorable experiences (Neuhofer, Buhalis, & Ladkin, 2012). These trends are leading businesses (Ramaswamy & Gouillart, 2010) and destinations (Jager, 2009; Kreziak & Frochot, 2011; Prebensen & Foss, 2011) to involve customers in the design, production, and consumption of experiences. Experiences are considered desirable due to their contribution to the meaning of individuals' lives (Pine & Gilmore, 1999) as they connect the affective, cognitive, and behavioural dimensions on a moment-to-moment basis (Schmitt, 1999; Scott, Laws, & Boksberger, 2009).

Delivery of memorable experiences is central to an experience economy (Pine & Gilmore, 1999; Voss, 2004; Dalton, Lynch, & Lally, 2009; Gibbs & Ritchie, 2010) and to tourism where "the end goal of a tourist experience is to create lasting memories that a visitor will reminisce about and will share in respective social networks" (Andrades & Dimanche, 2014, p. 108). In tourism, a memorable experience has been operationalized as "the tourism experience positively remembered and recalled after the event has occurred" (Kim, Ritchie, & McCormick, 2012, p. 13).

Experiences emerge from activities and interactions during consumption (Poulsson & Kale, 2004) and rich and vivid memories are part of their essence (Cutler & Carmichael, 2010; Pikkemaat & Schuckert, 2007; Tung & Ritchie, 2011a). Holidays may only last a fortnight but can linger in one's memory for a life-time (Marschall, 2012), are associated with *memorabilia* (Ferdinand & Williams, 2010) and narration of stories (Cary, 2004), and contribute to ongoing meaning, identity formation (Tung & Ritchie, 2011b) and ego sustainment (Oana, 2008). Experience memorability is connected to novelty, extraordinariness, spontaneity, unexpectedness (Andrades & Dimanche, 2014; Cary, 2004; Kim et al., 2012), as experiences involve a temporary rupture of everyday reality (Andrades & Dimanche, 2014), and are "in sharp contrast or opposition to the daily experience" (Quan & Wang, 2004, p. 300). As memories are the outcome of experiences, they are influential factors in future consumption habits (Cutler & Carmichael, 2010; Wright, 2010) and decisions about where to travel or to repeat

visit (Lehto, O'Leary, & Morrison, 2004; Braun-LaTour, Grinley, & Loftus, 2006; Kim, 2010; Marschall, 2012).

Tourism experiences can be both mentally and physically engaging and lead to focused attention, encoding and memorability (Hunter, 1994; Kuhl & Chun, 2014; Mulongo, 2013). Active participation, interaction and attention are considered paths to improve experience memorability (Brunner-Sperdin, Peters, & Strobl, 2012; Moscardo, 1996). Notwithstanding the strategic role of attention (Davenport & Beck, 2000; Hoffman & Ocasio, 2001; Ocasio, 1997, 2011) in co-creating experiences (Andrades & Dimanche, 2014), the theme has received little consideration by tourism scholars (Ooi, 2003). Attention attractors and distractors are inherent to the tourist experience and need to be identified and effectively managed (Ooi, 2010), so that experiential propositions are perceived as different and enticing (Falkinger, 2003).

Attention is a collection of neural and cognitive processes which have behavioural effects and are part of daily activity (Dayan, Kakade, & Montague, 2000). Attention is related to perception and memory (Mather, 2013; Kuhl & Chun, 2014; Shaffer & Kipp, 2014), and its importance in human behaviour and everyday life has stimulated research in social psychology (Mundy & Newell, 2007), neuroscience (Sarter, Givens, & Bruno, 2001), education (Sylwester & Cho, 1993; Mulongo, 2013), economics (Brooks, 1996), management (Cho & Hambrick, 2006; Yadav, Prabhu, & Chandy, 2007), visitor management (Bitgood, 2010), and recently in tourism (Niculescu, 2010; Ooi, 2010). Memory is limited in capacity (Chun & Turk-Browne, 2007) and attention is an important influencer of what will be encoded and recalled (Kuhl & Chun, 2014). Learning outcomes and memory are dependent on the degree of attention an individual pays to a subject (Scerif & Wu, 2014). Further, attention to exhibition and museum displays leads to visitors' satisfaction (Bitgood, 2010).

To date there are few psychological studies which have examined the tourist's engagement in on-site co-creation experiences (Campos, Mendes, Valle & Scott, 2015; Andrades & Dimanche, 2014). This study aims at filling this gap by exploring and integrating a psychological perspective (Larsen, 2007) through examination of attentional processes and their influence on memorability. Co-creation is here understood as requiring *the tourist's active participation* and *interaction* during the on-site experience, thus highlighting two perspectives: one, emphasising active

participation in events which have the tourist in the centre of a network of players in the experience environment; and the other considering particular experiences that mobilize the tourist to engage in relations with others. Thus, active participation and interaction with people are considered two key dimensions of co-creation (Campos et al., 2015).

This research addresses the following questions: how do tourists perceive active participation and interaction during experience, how do they describe their attentional processes and their relation to active participation and interaction, and is the memorability of the experience related to active participation, interaction and attention? These questions are explored through in-depth interviews during a highly engaging and interactive experience: swimming with dolphins. The paper firstly discusses co-creation in the tourism literature and current issues on attention addressed by diverse fields of science. It then outlines the research methodology, describes the case analysed, reports and discusses relevant findings. Theoretical and practical implications for tourism are derived from this research.

3.2 Tourism co-creation

We may distinguish two main approaches to co-creation in the literature. Firstly, co-creation may be discussed as a *process of interrelated interactions and activities* that connects the tourist and other actors, and experiences are the context in which those interactions and activities occur (Bertella, 2014; Bharwani & Jauhari, 2013; Binkhorst & Den Dekker, 2009; Mathisen, 2013; Mehmetoglu & Engen, 2011; Mossberg, 2007; O'Dell & Billing, 2005; Volo, 2009). These interactions and activities generate value for the customer (Potts, Hartley, Banks, Burgess, Cobcroft, Cunningham, & Montgomery, 2008; Ramaswamy, 2011). From this point of view, co-creation can occur before travel, during a stay at the destination, and after the travel (Binkhorst & Den Dekker, 2009; Rihova, Buhalis, Moital, & Gouthro, 2014; Rihova, Buhalis, Moital, & Gouthro, 2013). For example, an online program to help in designing a holiday itinerary may be of value to a customer and in providing such an interactive online system, the supplier is co-creating value. This perspective on co-creation is found in current management, consumer behaviour and marketing research and underpins the concepts of the experience economy, the performance turn, and S-D Logic (Arnould & Price, 1993; Holbrook & Hirschman, 1982; Perkins & Thorns, 2001; Pine & Gilmore, 1999;

Prahalad & Ramaswamy, 2004; Vargo & Lusch, 2004, 2008). This understanding of co-creation dominates the tourism literature (Neuhofer, Buhalis, & Ladkin, 2013).

A second perspective focuses on the *particular tourism experience as enacted in-situ* (Prebensen & Foss, 2011). Here co-creation is discussed as occurring during the tourist's active participation and interaction with others during the consumption experience. This interpretation is closely related to current ideas of the *performance turn* (Perkins & Thorns, 2001), the tourist's agency (Kreziak & Frochot, 2011), skilled consumption, and more recently to creative tourism (Richards, 2010; Richards & Marques, 2012). This perspective is more closely related to tourists, how they choose to practice tourism and express themselves through their own tourism experiences.

This study adopts the second perspective, a *co-creation in consumption approach*, concentrating on the *tourist's subjective experience* as a set of psychological processes and events that take place during performance-based activities and interaction with people at the experience environment. This psychological perspective conceptualizes experience as involving cognitive processes, which are connected to different stages of the overall tourism experience (Larsen, 2007). Thus the definition of co-creation tourism experience adopted in this paper is:

a co-creation tourism experience is the sum of the psychological events a tourist goes through when contributing actively through physical and/or mental participation in activities and interacting with other subjects in the experience environment.

3.2.1 Co-creation experience involves active participation

Travel to destinations involves participation in activities (Edensor, 2000) that are perceived as exciting and different from routines (Wikstrom, 2008). This participation generates interest and contributes to creation of meaning derived from the travel holiday (Ryan, 2000). Traditional practices of tourism have been informed by the *gaze* paradigm (Urry, 1990). Under this paradigm, tourism encompasses a particular way of perceiving the world influencing simultaneously what is seen and the way of seeing (Perkins & Thorns, 2001). Urry's (1990) characterized mass consumption tourism through the gaze because prevailing tourist activities involved the eye and visual

perception. Visiting historical landmarks, contemplating landscapes, going to famous attractions are activities requiring sightseeing at particular sites (Pagenstecher, 2003).

Though Urry's sociological point of view was expedient for describing patterns of mass tourism consumption and understood tourism dynamically as social construction of meaning, it was criticized on account of the conception of the tourist as "a passive sightseer consuming sites in prescribed fashions" (Ek, Larsen, & Hornskov, 2012, p. 126). *The performance turn* (Mansfeldt, Vestager & Iversen, 2008) introduced a new perspective which claims the need to overthrow a representation "too passive" to accurately describe contemporary tourist behaviour and consumption.

According to this *turn*, tourists have evolved towards active participation and multi-sensory exploration, "ideas of active bodily involvement; physical, intellectual and cognitive activity *and* gazing" (Perkins & Thorns, 2001, p. 193). A visitor thereby becomes an involved experience authenticator, a more appealing proposition than merely watching others' performances (Mkono, 2012). One's "own activity" "results from doing, interest and engagement" and a decisive contributor to experiences, bestowing experiential content on the activity itself (Wikstrom, 2008). Here the tourist is someone who wants to interact, actively learn and apply knowledge, more than watch other people (Tan et al., 2013; Tan, Luh, & Kung, 2014). There is a growing interest in understanding people as experiencers rather than as receivers of messages, as creators of meaning rather than interpreters, and as actors rather than observers (O'Dell, 2007).

Experiences therefore arise from activities (Ooi, 2003) and increasingly involve active participation of the tourist (Aho, 2001; Mkono, 2012). This active participation asks for the use of personal skills and resources (Aho, 2001), and stimulates personal and/or collective identity (Kreziak & Frochot, 2011; Lugosi & Walls, 2013). Engaged participation in stimulating activities, either in physical terms or mental, leads to memorable experiences (Wikström, 2008). This helps to explain "the growing interest in participative and extreme sports, and in new types of cultural, adventure, and creative tourism" (Azevedo, 2009, p. 4), participation in science, arts or crafts workshops (Bertella, 2014; Richards, 2010), interactive cultural experiences (Minkiewicz, Evans, & Bridson, 2013), and animal-based interaction (Bertella, 2014).

3.2.2 Co-creation experience involves social interaction

Social interactions are a central part of tourism experiences (Cutler & Carmichael, 2010) and consequently, that they have a social dimension and meaning (de Rojas & Camarero, 2008; Kreziak & Frochot, 2011; Morgan, 2007). In the context of the increasing demand for more creative forms of tourism (Richards, 2010; Richards & Wilson, 2006), co-creation experiences include "outer interactions" with the experience environment, people, and activities (Bertella, 2014; Mehmetoglu & Engen, 2011; Tan et al., 2013, 2014). On-site experiences engage the individual at different levels, namely physically, emotionally and intellectually (Verhoef, Lemon, Parasuraman, Rogeveen, Tsiros, & Schlesinger, 2009) but also socially, as they foster interpersonal interaction *in-situ* (Arnould & Price, 1993; Prebensen & Foss, 2011). These interactions bring together all influencers of the tourist experience (Prebensen et al, 2013a). Some interactions are planned, such as an encounter between a craft instructor and a tourist at a workshop, while others just happen as a result of a particular context or setting, e.g. tourists talking to each other during the workshop. They may be formal involving a written agreement between parties, e.g. a hotel owner and a guest, or informal encounters, like a casual conversation with a fellow countryman in a restaurant.

Interactions are constituents of human social behaviour (Stangor, Jhangiani & Tarry, 2014) and can be described in terms of the degree of the individual's closeness to others (Surra & Ridley, 1991). How people feel connected to others, how they perceive the relationship with family members, spouses or friends is seen as influencing the behavioural, affective and cognitive dimensions of encounters and relationships (Stangor et al., 2014). For instance, partners who perceive themselves as very close to one another, feel as they were a single entity, expressed by "we", and tend to communicate more empathetically. On the other hand, the sense of closeness develops as people experience proximity and share intimacy, namely through expression of emotionally-charged thoughts (Aron, Melinat, Aron, & Vallone, 1997).

As interactions are sources of experiences (Minkiewicz et al., 2013), the interplay between individuals becomes an important influencer of the experience (Walls, Okumus, Wang, & Kwun, 2011). People expect to derive pleasure from socializing (De Rojas & Camarero, 2008; Kreziak & Frochot, 2011) and to live emotional moments with others (Correia & Crouch, 2004), even though realizing the

transient nature of relationships (Culter & Carmichael, 2010; Rihova et al., 2013) or the fact that they may involve strangers (Ballantyne, Packer, & Falk, 2011). They desire to sense flow, belonging or *communitas* (Arnould & Price, 1993; Cary, 2004b; Morgan, 2007a, 2007b; Schmitt, 2010). Contacts with others during experience have been considered an important factor contributing to exploring individual creativity (Ballantyne et al., 2011; Ihamäki, 2012) or to succeed in achieving individual goals and projects (Arnould & Price, 1993; Kreziak & Frochot, 2011; Rihova et al., 2013).

3.3 Attention

Attention is an important research topic as it influences both people and organisations, affecting the way individuals perceive and interact with the environment, and thus how personal biography evolves and group and social dynamics unfold. Attention encompasses cognitive activities (such as information processing), physical responses resulting from human physiology (e.g. movements of the eye), and neural activity (neuron activation in brain systems) and by this reason it is viewed as a complex phenomenon built on interconnected processes (Dayan et al., 2000, Ocasio, 2011). Beyond greatly impacting learning and educational performance (Scerif & Wu, 2014), professional realization and biographical memory, it also generates effects on social behaviour, academic achievement, and business management.

Research on attention emphasises its dynamic nature. Attention is commonly defined as the selection of particular stimuli out of the many pervading and environment, for that reason facilitating mental processing of some while inhibiting others (Chun & Turk-Browne, 2007; Clark, 1997; Ocasio, 2011; Robinson, 2001). Selective attention sometimes is called *focus* (Bitgood, 2010). Attention is a scarce resource (Davenport & Beck, 2001, Dijksterhuis & Aarts, 2010; Huberman & Wu, 2008) in face of limited information processing capacity and an overload of environmental stimuli (attention scarcity). Both factors cause people to select and concentrate on stimuli which are either salient or perceived as particularly relevant in a situation (Ocasio, 2011). As individuals find difficulty in concentrating effectively on two things at the same time, and instead they are processed one at a time (attention selection) according to their perceived importance. Attention shifting requires temporary mental engagement in choosing amongst foci of attention; these changes

guide active behaviour and decision making, and are important adaptive strategies to external changes.

Attentive behaviour is triggered in two ways: through bottom-up, exogenous or push stimuli in the environment that reach the perceptual apparatus; and an individual's top-down or endogenous mental activities (Dijksterhuis & Aarts, 2010; Ocasio, 2011). The first category includes involuntary attentional responses as consequence of stimulus saliency (Bitgood, 2010) and the second refers to personal goals, "the mental representation of behaviours or behavioural outcomes that are associated with positive affect" (Dijksterhuis & Aarts, 2010: 468). Highly salient stimuli in the environment influence the orientation of attention (Kuhl & Chun, 2014). When *goals direct attention*, the amount and duration an individual devotes to stimuli depends on which goals are active in a particular situation (Clark, 1997). The amount and duration of attention are a consequence of a continuous process of balance between focus (of attention) and diversion (of attention).

3.3.1 Attention and memory

The relationship between attention and memory is discussed in cognitive psychology and neuroscience. Evidence from these fields indicates that attention influences memory, and memory, in turn, influences attention (Chun & Turk-Browne, 2007; Kuhl & Chun, 2014). Indeed, researchers consider that attention and memory are interdependent systems since recollection is itself a form of attention, in as much as memory involves internally oriented attention. Moreover, active mental engagement which incorporates strategic allocation of attention yields greater probability of successful recollection (Kuhl & Chun, 2014).

Memory is limited in capacity (Kuhl & Chun, 2014), imposing constraints on attentional processes (Robinson, 2001). Attention is an important influencer of what will be encoded and recalled; division of attention compromises encoding. Memory depends on externally oriented attention even if attentive behaviour is not related to explicit motivation to form long-term memories (Kuhl & Chun, 2014). Test results consistently show that learning depends on attentive behaviour (Scerif & Wu, 2014). The interplay between attention, memory and learning develops by virtue of the role played by attention in the selection of learning materials to be processed and included in

long-term memory (Scerif & Wu, 2014). In short, attention is a step towards memory (Mancas & Le Meur, 2013), and it is "uncontroversial that attending to or focusing on a fact or event will enhance the likelihood of later memory" (Chun & Turk-Browne, 2007, p. 177). Social cognition theory also accepts the influence of attention on memorability by explaining through observational learning that children's imitative behaviour relative to their parents' is a function of paying attention to their activities (Bandura, 1989).

3.4 Methodology

3.4.1 Research setting

This research was conducted at Zoomarine in Albufeira, Portugal, a marine life and water theme park that offers visitors fun, entertainment and environmental education in a wide variety of activities and spaces. This park was chosen as setting of this study because it offers the *Dolphin Emotions Experience*, a one and a half hour activity conceived to stimulate visitors' active participation and interaction with marine animals (the dolphins), trainers, instructors, and other participants in a secluded area and atmosphere. Zoomarine is one the two theme parks in Europe providing this kind of interactive encounter with the dolphins.

3.4.2 Data collection method

Qualitative interviews are a data collection tool adequate to a qualitative research design (Finn, Elliott-White, & Walton, 2000; Jennings, 2005; Jordan & Gibson, 2004) and their administration is based on the assumption that human subjects are able to account for their own experiences and meanings, shape situations and events and are not mere passive responders to external stimuli (Walle, 1997; Surra & Ridley, 1991, Finn, Elliot-White & Walton, 2000). They are also considered suitable for developing knowledge, understanding, and learning, because their adoption allows an exploratory stance at phenomena (Jennings, 2005). The rich information gained from interviews is of great value for the development of a subsequent quantitative data collection instrument (Dong & Siu, 2013; Leech & Onwuegbuzie, 2007).

In this study, primary data were obtained from semi-structured in-depth interviews conducted to examine how tourists expressed and reflected on their

behaviour, perceptions and thoughts during the on-site co-creation experience. The sampling procedure adopted the purposive sampling method, which is adequate to the study of a population with a characteristic (demographic, attitudinal, experiential, or other) relevant to the research's objectives or who is knowledgeable on the research topic (Jennings, 2005; Morse, Olson, & Spiers, 2002; Ritchie & Lewis, 2003). In the present case, tourists participating in the *Dolphin Emotions Experience* were considered in the best position to provide rich information on the research topics. Respondents were chosen to have a mix of gender and country of origin. As seen in Table 3.2, tourists from Portugal contributed approximately 30% of the respondents, while the remaining 70% were international tourists from Spain, UK, Germany, and Netherlands. There were approximately equal numbers of male and female respondents. In sum, respondents were national or international tourists over 18 years old who participated in the *Dolphin Emotions Experience.*

Interviews were conducted between May 5th and 17th (Easter season) and immediately after an individual finished the experience. There is a significant increase in visitors' arrivals to the Algarve region at Easter allowing efficient respondent recruitment. Conducting the interviews immediately after the conclusion of the experience allowed rich and vivid information to be collected from participants, and in a context where they were allowed free time to relax, talk freely, in a friendly atmosphere and without time constraints.

3.4.3 Interviewing process

The interviewing process followed Lincoln and Guba's (1985) five-step process, however researchers also took into consideration Jennings' (2005) guidelines to qualitative interviewing. Standard procedures were followed to ensure all formal and necessary approvals were obtained from the park managers. Meetings with the Human Resources Director and the Marketing Manager ensured the organization was informed about the research project, the objectives, and the planned schedule for fieldwork.

Preparation for the interviews involved several procedures and decisions. First, the researchers met with the experience general manager, the instructors and the trainers, in order to get acquainted with procedures, sequence of events, activities and the experience environments. Informal conversations took place before the interviewing

process with these inside informants, to clarify the purpose of the experience from the park's perspective. These gatekeepers were very important for researchers to gain access to potential interviewees (Jennings, 2005). They also facilitated the collection of information about participants' general characteristics, behaviours and expectations. The researchers were informed about the participants' high expectations towards the *Dolphin Emotions Experience*, which were explained as a consequence of a desire to accomplish a lifetime dream related to enjoying a close encounter with these animals.

Secondly, one of the researchers participated in the experience to facilitate a rapport with the interviewees, and thus stimulate the reciprocity process during interviews. Furthermore, interpretive listening, probing and elicitation of relevant information (Jennings, 2005) were considered more effectively achieved if researchers were acquainted with the experience under study. During interviews, researchers applied active, interpretive, and process listening, as recommended by Jennings (2005). As interviews were recorded, communication materials were composed of transcriptions of oral communication, and some notes were taken regarding paralinguistic communication captured during recording (voice pitch, volume, pauses, laughter). Additional considerations were duly attended to, namely those involving research ethics. The interviewees have been asked to participate in the study, after being informed of its nature and purpose. They all gave their written consent to participate and to tape record the interviews. The duration of the conversations, ranging from 30 to 60 minutes, depending on the responses from the participants, was found sufficient to allow all relevant information to emerge and achieve data saturation. Interviews were conducted in Portuguese with Portuguese nationals and in English with international tourists.

The researchers aimed at exploring active participation and interaction during and on-site experience, concentrating on attention and memorability and themes chosen for analysis were identified as experience *activities* and *interactions*, *attention*, and *memorability*. Interviews proceeded in three moments, corresponding to a three-section script. The opening moment included a set of introductory questions about the overall visit to Zoomarine and motivations to participate in the *Dolphin Emotions Experience.* In the second phase, the interviews were conducted based on open-ended questions focusing on the research themes. Table 3.1 below shows themes, examples of questions asked in this phase and literature sources. Questions on active participation were

influenced by Wikström's (2008) notion of "own activity" and Mathisen's (2013) "tourist performance" and participants were asked to describe their activities and performances; questions about interaction were induced by Mathisen's (2013) conception of "social bonding" as "group interaction" and "like-minded individuals" and in this case they were requested to identify subjects they interacted with and describe the nature and purpose of such interactions.

Table 3.1

Themes, questions, focuses and literature sources used in the interviews

Themes	Questions (examples)	Focus	Literature sources
Active participation	Could you describe what did you do/were asked to do? Could you tell which did you find your most important tasks/behaviours/ performances? Could you tell what did it mean to you to participate in this experience?	⇒ own performance, type of activity, contribution to accomplishment of the overall experience ⇒ perception of importance of own performance	Wikström (2008): own activity Mathisen (2013): tourist performance
Interaction	Did you find this experience important as an opportunity to socialize with people? Could you tell who did you most relate to during the experience? How would you describe those interactions and most influential aspects?	⇒ subjects involved in interactions ⇒ importance of social interactions ⇒ nature of interactions	Mathisen (2013): social bonding, group interaction, like-minded individuals
Attention	Could you tell what captured and kept your attention in a higher degree during this experience? Which aspects or parts of it did you attend to most? Could you tell why you were particularly attentive in those moments? Do you find being a participant in the experience and socializing with others influenced in any degree the attention you paid to events? Could you tell me more about it?	⇒ focuses of attention ⇒ perception of attentional behaviour ⇒ reasons of attentional behaviour ⇒ influence of active participation and interaction on attention	Bitgood (2010): focused and engaged attention Patterson & Bitgood (1988): active participation and attention
Memorability	What did this experience mean to you, do you find it memorable? Could you explain why? Could you detail most impressive moments or aspects of this experience? Do you find being a participant in the experience and socializing with others	⇒ perception of vividness and likelihood of long term recollection ⇒ memorable dimensions of the experience ⇒ influence of active participation and interaction on the memorability of the experience	Tung & Ritchie (2011a) and Kim, Ritchie & McCormick (2012): memorable experiences Reisberg, Heuer, McLean & O'Shaughnessy (1998): memory

influenced in any degree how memorable the experience is? Could you tell me more about it?	vividness

Attention was approached using questions evoked by Bitgood's (2010) concept of focused and engaged attention, and the relationship between active participation and attention (Patterson & Bitgood, 1988). Participants were asked about their *foci* and moments of attention, how they identify their attentive behaviour and reasons for paying attention. Questions on experience memorability were informed by Tung and Ritchie's (2011a) study and Kim et al.'s (2012) work on memorable tourism experiences. Subjects were asked to report in detail most memorable events and experiential aspects assuming Reisberg, Heuer, McLean and O'Shaughnessy's (1988) claim that vivid memories are rich in recalled minutiae; afterwards they were stimulated to discuss active participation and interactions as factors contributing to memorability. In order to gain a broader understanding of perceptions about the constructs and themes under study, participants were also asked to assess them using bipolar scales with the attributes "very low" (represented in the scale by the number 1) and "very high" (represented by the number 10). Results are presented in Table 3.1. The interview process was completed with a third group of questions focusing on informants' demographics and a confirmatory review of issues discussed.

3.5 Data analysis

Data analysis followed three steps. Interviews were first assigned a number, transcribed and inspected one by one. Information was afterwards grouped according to the research's themes. And finally, the analysis of interviews was performed taking into consideration the need to: (i) characterise active participation and interaction, (ii) identify focuses and levels of attentional behaviour, and (iii) identify meanings and levels of memorability. As the research themes had been identified prior to conducting the interviews, the analysis followed a deductive method.

Reliability and validity were considered during the research process and analysis of data. Both the interview script and interviewees' reports were clarified and discussed between the researchers as a reflection exercise and to critically judge the data obtained. Subsequently they performed the integration of respondents' reports with the themes

and analysed them. The *verbatim* quotes here presented all derive from the interviews conducted and selection is based on the relevance of content to explore the themes.

3.6 Results

3.6.1 Participants profile

Similar numbers of female (12) and male respondents (10) were interviewed with the majority between 31 and 50 years old and having higher status job, higher educational levels and qualifications (Table 3.2). Most were international tourists, visiting the park for the first time and word-of-mouth from friends and relatives was the most frequent source of information about Zoomarine. Interacting with the animals was the reason indicated by 18 informants for selecting this experience among other propositions offered by the park; living a unique or a one lifetime experience was the motive named by 14 participants and doing things and feeling strong sensations and emotions was the selection criterion for 10 respondents.

Table 3.2
Participants' profile

Gender	F	M				
N= 22	12	10				
Age n= 22	**18-20**	**21-30**	**31-40**	**41-50**	**51-60**	**61-70**
	1	5	7	7	1	1
Occupation n= 22	**Senior officials & managers**	**Professionals**	**Technicians**	**Clerks**	**Armed forces**	**Students/ retired**
	5	3	8	4	1	1
Education n= 22	**Basic education**	**Secondary education**	**Higher education**			
	1	6	15			
Nationality n= 22	**National**	**International**				
	6	16				

3.6.2 Structure of the *Dolphin Emotions Experience*

The *Dolphin Emotions Experience* is designed to afford the participant close contact with dolphins. As such, it is planned to develop in several stages and for participants to achieve the peak of physical and emotional engagement during contact in the water. Information about the architecture of this experience was obtained from the team, though participants themselves were able to perceive its three-stage structure,

which includes: the pre-experience phase, the core experience phase, and the post-experience phase.

The *pre-experience* phase is sub-divided in three parts: the reception of participants, the preparation for the dolphin interaction, and an educational session. The first stage starts with the instructor joining the group at the meeting point and leading participants to the park's private area. They are made comfortable and the environment provides the context for an informal and relaxing first contact to occur with the instructor and other members of the travel party. Usually travel parties are composed of relatives (parents and children, spouses) and/or groups of friends.

The second part consists of preparation for the dolphin interaction. The instructor informs participants about details of the venue and facilities, supplies them with the required equipment and tells them what to do. Although most communication is one-direction (from instructor to the group), interactions are informal and instructions conveyed in a friendly and enthusiastic tone. Stage three involves a 30 minute educational session, during which participants learn about dolphins (basic facts on species characteristics and anatomy, behaviours, curiosities), environmental issues (pollution and fishery practices, home recycling and benefits), and the specific behaviours to perform in the water. The session aims at conveying information and generating awareness of environmental problems, but also stimulates participants' engagement through lively and dynamic dialogue.

The second phase is the *core experience*, i.e. the interaction with the dolphins. After the lecture, participants are asked to go to the pool and join the trainer and the dolphins. In the water, they have physical contact with animals, execute planned behaviours under the instructor's and trainer's supervision, and are allowed the freedom to engage in friendly and close relationship with dolphins. The instructor stimulates participants to caress, touch, kiss and embrace them, so that emotions and positive feelings may emerge in harmony with sensations. The third phase is the *post-experience*. In the course of this phase, participants are allowed a pause for drink and a light meal during which they can get together in moments of socializing and relaxation. Interactions develop freely among the travel party, the instructor and other participants. As interaction with animals is completed, participants and observers engage in exchanges of stories, observations, and judgements.
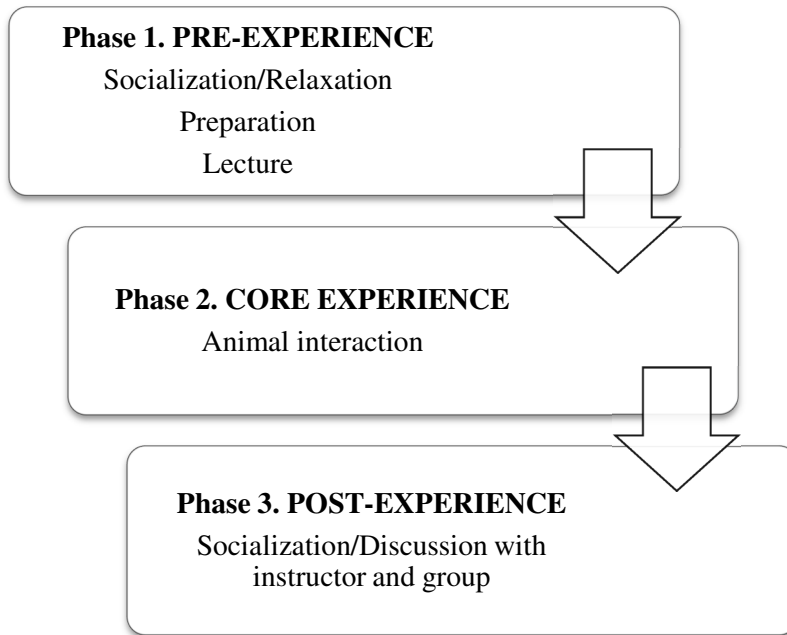
Figure 3.1: Experience Stages

3.6.3 Active participation

Participants were asked to identify and describe in their own words the activities they were involved in, how they felt about them and to evaluate their level of active participation. They discussed four different types of activities, each related to a particular mental state. These were *socializing* related to *relaxation/expectation/recall*; *preparation* related to *enthusiasm*; *lecture attendance* related to *concentration*, and *dolphin interaction* related to *flow/absorption/immersion*. As to the level of active participation perceived in the experience, the respondents considered it very high.

Socializing describes the set of activities and related behaviours involving some kind of interplay between individuals during stage one of the pre-experience phase and the post-experience phase. Socializing includes having drinks and nibbles and engaging in informal talks with others and involved moments of casual, spontaneous conversation associated with feelings of relaxation.

Preparation activities were related to acquiring information about the venue facilities and use, instructions on swimming equipment, particular actions required to prevent harm to the dolphins during the interaction, or attendance to participants' special needs. Participants reported that they were feeling excited.

Table 3.3
Prevalent experience mental states during the experience phases

Mental states (feelings, emotions, thoughts)	Activities and behaviours
Relaxation/Expectation	Phase 1: Socializing welcoming reception, coffee break, conversations and group meetings
Enthusiasm/Arousal	Phase 1: Preparation changing clothes, instructions for equipment use, particular needs
Concentration/Focus	Phase 1: Lecture attendance observing, listening, asking questions, acquiring information and knowledge
Flow/Absorption/Immersion	Phase 2: Dolphin interaction swimming, playing, training, kissing, caressing, cuddling
Relaxation/Recall	Phase 3: Socializing coffee break, conversations and group meetings, souvenirs

The *Dolphin Emotions Experience* involves the visitor in ***active physical and mental participation***. Visitors distinguished between watching a performance, on one side, and participating and interacting with the dolphin, on the other.

"This experience was not a show, you are not part of a show, you're actually doing something, participating, interacting." [male, aged 48]

Active mental participation was described as interest, concentration and absorption/immersion in a learning experience. Such participation occurred when visitors were given a lecture on dolphins and marine life, but also when asking questions of the instructors. Animal interaction involved active physical participation when visitors entered the water, swam with the dolphins, and created a ***more aroused*** state of mind.

"This experience is very interesting and absorbing, I was very talkative in the water." [female, aged 42]

The interviews revealed that those stages involving mental and physical participation were the core of the experience and provided feelings of satisfied curiosity, learning, relaxation, fun, freedom and flow.

3.6.4 Interaction

Questions related to interactions during the experience focused on the subjects the participants interacted with, the type/nature of the interactions and their level of intensity in terms of frequency. In the *Dolphin Emotions Experience*, respondents

identified the following groups: relatives and friends (travel party), other visitors, instructors, trainers and the dolphins. For most participants, interactions were perceived as high or very high.

Travel party: Interactions with the travel party were mentioned by many respondents and described as highly emotional and associated with strong positive feelings and emotions. In some cases, e.g. when children were part of the travel party, interactions between participants were seen as more important than interactions between participants and animals. This is especially the case of parents who consider sharing the experience with their children moments of exceptional closeness and intimacy:

> *"It was a very intimate moment with my family and I learned new things about my son I hadn't realized."* [male, aged 47]
> *"This was the first time I and my daughter had this experience and observing her relating with the dolphin was awesome!"* [female, aged 30]

The reverse could also be found, when sons and/or daughters were participating in the experience accompanying their elderly parents. Emotionality is also prominent in respondents' own words:

> *"This experience was very intimate and personal. The motivation had to do with indulging my mother a long wished-for experience we were about to share."* [male, aged 35]

Instructor: Interactions with the instructors were also important in this experience, and though positive feelings are reported, most frequent descriptions relate to education and learning, on one hand, and sociability, on the other.

> *"This experience was not only about fun but also about education and learning, and he* [the instructor] *was very humorous but also informative."* [female, aged 28]
> *"I felt free to ask as many questions as I wanted and that made feel good."* [male, aged 20]

In fact, respondents seem to make a clear distinction between these two dimensions in the instructor's role, and this fact appeared to add meaningfulness and a sense of completeness to the experience.

"There was a lot of information and all processes were easy and well done. The monitor talked to all of us, she knew our names, she had fun with us, she made it all easy for us. From a service point of view, everything was perfect; the lecture we attended to was very important because I learned a lot of new facts." [female, aged 35]

The instructor is the only staff member present throughout the experience, and the need to connect all participants, moments and stages demands from him or her the ability to set a positive tone, as well as providing information.

Trainer: Trainers are animal experts and most of their time is spent in close contact with the dolphins. During the *Dolphin Emotions Experience*, their role is performed exclusively in the pool and regularly lasts for about 30 minutes. Interactions with participants are only in the water, after the lecture. According to the informants, encounters with the trainers, unlike with the instructors, focused on educational content and appropriate behaviour towards the dolphins, and repeated accounts have been given on the trainer as a role model:

"He was always teaching us how to behave with the animals, how to make the most of the experience of being in the water with the dolphins." [male, aged 20]

Their presence in the water, during interaction with animals, conveyed feelings of safety and comfort to participants because they were seen as being there to guide and align behaviours according to safety principles and requirements.

Other visitors: Interactions between participants, observers and other visitors are characterized by spontaneity. They may occur, or not, they can involve shallow conversations or, on the contrary, develop into more profound personal exchanges. Such encounters, conversations, and narratives, though allowed by the experience design, are not planned to happen in a certain way or indeed at all. Connections between visitors depend on contextual, circumstantial factors, such as the travel party including children or sharing the same condition, e.g. being pregnant.

In general terms, these interactions were reported as social, positive, *experience improvers*, some involving sharing of personal stories and life experiences. One respondent indicated that experiencing the same emotions and feelings as others was

quite normal and expected. Such perception appears to develop from awareness of group belonging and goal commonality, no matter how brief. Encounters with other visitors, though understood as of short duration, are not viewed as compromising experience meaningfulness or memorability; the opposite, in fact, seems to be true. One respondent claimed that:

> *"Though I may forget other people's faces, I won't forget the fact that they have been here with me having this same fantastic experience."* [female, aged 35]

While another said:
"Being alone in this experience wouldn't have made any sense to me."
[female, aged 36]

Reports on interactions with other visitors (participants and observers) varied in terms of intensity and frequency. Some said they didn't interact with anyone else except the instructor, while others reported they interacted with many other participants. They also revealed that there was awareness of the importance of *being part of a group* for positive experience outcome.

Lack of contacts between visitors was as a result of external, circumstantial rather than a lack of desire to socialize. People wanted to socialize but there were barriers. For instance, three respondents mentioned language barriers and how those barriers affected relations, and eventually prevented interactions from happening. Other accounts however highlighted intensity of interactions with other participants. In general, there were positive feelings group interaction in experiences involving challenge and novelty. The *Dolphin Emotions Experience* involved the unknown respondents commonly felt fear of failure; being part of a group was understood as a way to overcome those feelings. One interviewee stated that:

> *"Being part of a group of people made me confident in my capacity to achieve our goals"* [male, aged 20],

Notions of *communitas*, connection, unitedness and experience intensification emerged as characteristic of interactions among participants, with human companionship leading to funny and meaningful moments. Respondents described interaction with the group of participants:

"This communion and sharing with others this unique, single moment…"
[female, aged 35]

Another respondent stressed the fact that no matter how brief the encounter, they can generate feelings of connection*:*

"Even if you don't get to know people that well, you know what they're feeling, you sense the connection between them." [female, aged 51]

Dolphins: The *Dolphin Emotions Experience* provides an encounter with animals which are seen as friendly and attractive, almost like a house pet. Dolphins were compared to dogs, but also to humans, not only because of their marked anthropomorphic facial features (smiling mouth and expressive eyes), but also because of their behaviour. In this experience environment, dolphins are domesticated animals and respond to humans as any other domesticated species, i.e. through conditioning learning processes. This was ignored by respondents, who attributed their behaviours to a friendly nature. Despite this, the interaction between human and animal engaged the senses and emotions in the highest degree, forming the basis of strong positive emotions and the substance of future memories:

"I was surprised with the taste of the salty water, the odour of fish, the noise made by the dolphins as they breathe, the freshness of the water they throw at you each time they inhaled, the kisses they give you, the sensation of touching their skin, so similar to smooth rubber. I felt tenderness towards those animals, all I wanted was to hug them, hold them tight."
[female, aged 20]

"The sensorial exploration of the dolphin, the touch of the skin, the sounds were great, caressing the dolphin was very emotional, it resembled a dog we meet in the street and feels like cuddling; these animals' intelligence is touching and captivating."
[male, aged 24]

Both the sensorial and the emotional dimensions contributed to a very positive appraisal of the experience, sometimes based on the perception of ultimate closeness with nature. Interactions with the dolphins are often referred to as *"the reason why"*, the

core, in other words, the peak experience. These moments of heightened sensitivity and emotionality have been described by respondents alternatively as immersion, absorption and *flow:*

> *"I was very relaxed and immersed in the experience."* [female, aged 42]
> *"In the water, there was just me and the dolphin, I was completely absorbed and forgot about all the rest."* [female, aged 36]
>
> *"When the dolphin approached me I forgot about everything, I felt my head was empty…"* [male, aged 47]

3.6.5 Attention

Attention has been described by respondents as *focus* or concentration. Participants have been asked to identify their focus, evaluate their level of attention during the experience and assess the influence of active participation and interaction on attention. Peak attention (very high levels) characterized, for the majority of respondents, the lecture time and the moment of interaction with the dolphins but there appear different meanings types of behaviour. Informants paid attention to different elements of the experience: animals, information, own behaviours and states of consciousness (thoughts, feelings, emotions), and other people (travel party, visitors, staff). The influence of active participation on attention was evaluated high to very high. As to the influence of interaction on attention, respondents evaluated it as high.

Animals: Dolphins are the core attraction of the experience and interaction with them is the expected benefit and focus of attention. Visitors were motivated by *"a long wished-for thing"*, *"a one-time life experience";* spending invaluable time with very friendly, human-like animals. For others, the main motive was to afford this experience to relatives (children and/or elderly parents). But even for these participants

> *"being in the water interacting with these animals was a very intense thing…"* [male, aged 61]

Reports on level of attention to dolphins varied from high to very high for most participants. Vivid and detailed descriptions were associated with feelings of surprise caused by the array of sensations:

"I was caught by surprise when I actually went into the water and touched; the salty water, the smell of fish, the noise of their breathing, their kisses and skin, so spongy and rubber-like." [female, aged 25]

Information: refers to content disseminated in both formal (lecture) and informal (instructor/trainer conversations) contexts. In the *Dolphin Emotions Experience*, topics related to marine and mammal (dolphin) life and biology, and global environmental issues but a difference between those contexts emerged. The lecture was a moment of heightened attention related to the interest in the educational themes and anticipation of the upcoming performances in the water. Participants expressed concerns as to how would they respond to this challenge:

"It is a new experience, so it is important to learn something before it happens." [female, aged 20]

"If you're attending a lecture before going into the water and do things, you'll pay more attention to it because you're always thinking what will happen and how…" [male, aged 40]

Information was also received informally during time spent in the water with the trainers. Respondents revealed high level of attention to this content.

Participants*:* showed high awareness of the interactive character of this experience and expressed their engagement either in behavioural terms or in mental, psychological ones. Attention to subjective events, i.e. states of mind, and to own behaviours was perceived as high or very high. Several respondents mentioned feelings of happiness and joy and associated bodily responses, but also negative emotions linked to self-consciousness, such as anxiety and vulnerability.

Happiness and joy were explicitly noted:

"What I most attended to was just being there in the water feeling happy and smiling all the time." [female, aged 36]

Attention to negative emotions and feelings was equally expressed in straightforward terms. One respondent declared feeling vulnerable as a result of being

left alone with the dolphin, isolated in the centre of the pool, away from others. These descriptions suggest there is a connection between participation in the experience and attention:

> *"I was very attentive to my own behaviour because I was the first of the group being asked to go to the centre of the pool with the dolphin."* [male, aged 20]
>
> *"Being an actor increased my attentive behaviour because the instructor taught us how to perform our part in the water."* [female, aged 30]

Instructors and trainers: Attention was paid to instructors and trainers due to their role of information disseminators and as role models for interaction, setting the rules of behaviour, assisting and monitoring participants and correcting them if necessary. Some respondents reported that instructors and trainers as capturing and maintaining attention. Their special knowledge and well trained skills were recalled in detail. One participant referred to the trainer's body movements and gestures as:

> *"…loaded with different and complex instructions, almost imperceptible signs… We could see those gestures only if we paid full attention to their hands."*
> [male, aged 18]

The **travel party** was also a focus of high or very high attention. The behaviours and feelings (joy and enthusiasm) of others also captured and concentrated attention:

> *"I was observing my daughter all the time, her behaviour and experience with the dolphin…"* [female, aged 34]

Another stated:

> *"I was very attentive to the lecture but more to my son's behaviour, as he was addressing questions to the instructor."* [male, aged 48]

Other participants and observers were a moderately important focus of attention, varying according to group dynamics, language barriers, and socializing motivations. Attention to other participants was often used to determine appropriate standards of behaviour:

> *"I observed the others, I learned from them and tried to replicate the same behaviours…"* [female, aged 36]

3.6.6 Memorability

In general terms, the *Dolphin Emotions Experience* was considered highly memorable and both active participation and people interaction were considered strong influencers of memorability. However, the most memorable aspect of the experience was for all respondents' interaction with the dolphins. Interaction with animals was memorable for most participants and described as *"unforgettable"*, *"enduring"*, an *"everlasting memory"*, and *"I'll never forget"*. On closer analysis, most vivid memories refer to tactile sensations and the particular emotional moments when participants were in the water. Indications of flow experience were found in relation with animal interaction, and this condition, as described by one respondent, was presented as explanation of enduring memory:

"During this interaction, I felt there was nothing else out there besides me and the dolphin, and this feeling I will always remember." [female, aged 46]

Active participation with dolphins was unanimously highly memorable. Some respondents referred to being actors and playing a role when imitating the trainers, and others referred the difference between *seeing* and *doing,* or, *seeing* the show and *being part* of it. A respondent declared that active participation:

"makes everything different, watching isn't enough, you just have to live it [the experience]*…"* [male, aged 48]

This viewpoint was shared by most participants interviewed. Others stressed that memorability was associated with the emotional intensity involved in active participation, which was invoked as a result of *"doing things":*

"what contributes most to memorability of my experience is really the fact of being with the animals doing things with them" [male, aged 28]

As noted above, the presence of others is also perceived as meaningful and contributes to experience memorability. However, interactions with other participants showed more variation and its contribution to experience memorability reflects such variation. Some informants said that interacting was not particularly relevant while

others considered that without the presence of others the experience wouldn't be so memorable. All participants found the overall experience highly memorable and common expressions of such appraisal were *"unforgettable experience", "I'll always remember this", "this experience will last in my memory", "you know it will be memorable after living it"*. Reasons were *"a one-time [or unique] experience", "a new experience", "an extraordinary experience", "a challenging experience", or "an intimate and personal experience"*.

Unplanned events

Interview findings suggest that strong emotions, attention, and extreme memorability can also be associated with contacts in the experience environment outside the planned moment of interaction with the dolphins. Two examples may account for this claim. First, a respondent told about how having met another young woman has been a very intense part of the experience. This intensity, which she explained in terms of conversation (duration and issues covered) and pleasant feelings (informality, friendliness), was due to sharing the same language and common life contexts (both of them being recent mothers). As they spoke they talked about their life backgrounds, how it feels to be a mother, and all the changes that the condition brings to personal and professional life:

> *"It felt very good to talk like that, I was happy; I found her* [the woman interlocutor] *very pleasant to talk to, we got excited talking about our children and professions... how hard it is to cope with every kind of demands."*
> [female, aged 34]

Another respondent was sensitive to what was felt as a special situation involving another participant with a terminal illness. This individual was perceived as partaking in the experience as a last opportunity to satisfy a wish and experience happiness. The respondent reported that observing that person was:

> *"very touching, emotional, her presence* elevated *everyone's experience in the group"*. [male, aged 20]

Table 3.4
Participants' evaluations of experience themes

	Respondents' evaluations									
	1	2	3	4	5	6	7	8	9	10
Themes	**Very low**								**Very high**	
Active participation	0	0	0	0	0	0	3	5	6	8
Interaction	0	0	1	0	4	0	3	5	3	6
Attention	0	0	0	0	0	0	1	2	10	9
Memorability	0	0	0	0	0	0	4	5	2	11
Importance of active participation to attention	0	0	0	0	0	0	1	7	8	6
Importance of active participation to memorability	0	0	0	0	0	0	2	5	4	11
Importance of interaction to attention	0	0	0	0	5	0	5	6	2	4
Importance of interaction to memorability	0	0	2	0	2	1	3	4	3	7

3.6.7 Experience summary

The *Dolphin Emotions Experience* comprises three phases – pre-experience, core experience, and post-experience, and each phase has been analysed in terms of active participation, interactions occurred, attentional focuses, and memorability. Table 3.5 summarizes it based on the researcher's conversations with staff, researchers' observations and information collected from interviews and it shows the variety of activities which participants have been engaged in, and significant people in participants' interactions in the different phases of the experience. For example, during the delivery of the lecture, core interaction developed between the participant and the instructor. As can be observed in Table 3.5, phase two is characterized by high intensity interaction bringing people closer together.

Participants' reports also show variation in attention, and attentional focus during the stages of the experience. The travel party and the instructor received attention throughout the experience. In the pool, the dolphin is the main focus of attention. Participants' attention returns to the travel party in the post-experience phase, although the dolphin remains the subject of vivid narratives exchanged between family members and/or friends. The table also shows changes in memorability through the different stages. Memorability is primarily related to sociability in the first stage of the pre-experience phase and the post-experience phase; and in the stages of preparation and

lecture attendance (also during the pre-experience phase), it is concerned concurrently with sociability and learning contents. Feelings, emotions, and sensations comprise the main substance of the core experience.

Table 3.5
Summary of stages of the *Dolphin Emotions Experience*

	EXPERIENCE STAGES				
	Pre-experience			**Core experience**	**Post-experience**
	Socializing and relaxation	**Preparation**	**Lecture attendance**	**Performance of tasks and behaviours in the water**	**Socializing and relaxation**
Activities	Light meals, beverages, conversations and group meetings	Changing clothes, instructions for equipment use, particular needs	Group meeting with the instructor, audio-visual materials	Swimming, playing, training, kissing caressing/cuddling	Light meals, beverages, conversations and group meetings
Interactions	Travel party	Instructor and Travel party	Instructor	The dolphins, the trainer, the instructor, the travel party	Travel party
Attention	Travel party	The instructor	The instructor	The dolphin, myself, trainer, travel party	Travel party
Memorability	Sociable (experience antecipation)	Educational and sociable (informative and friendly)	Educational and sociable (informative and friendly)	Emotional (strong, very positive feelings and emotions) and physical (sensations)	Sociable (positive, friendly and pleasant sharing of past and present life experiences)

3.7 Discussion and conclusion

This research supports the argument that co-creation involves tourists' active participation and interaction in experiences (Rihova et al., 2014; Tan et al., 2013; Volo, 2009), and is a particular way of living and performing the experience. Co-creation centres on the tourist and understanding it requires exploring the psychological effects of the tourism experience (Larsen, 2007). Active participation, either in physical or mental terms (Bertella, 2014; Minkiewicz et al., 2013; Prebensen & Foss, 2011), has been found highly relevant for tourists because it focuses attention on their experience, leading to higher levels of memorability. This study supports findings that link active participation and interactivity to attention (Hunter, 1994; Kuhl & Chun, 2014) and also results from educational theory, cognitive psychology and neuroscience connecting

attention and memorability (Almarode & Miller, 2013; Chun & Turk-Browne, 2007; Fahy, 2004; Hunter, 1994; Snell, 1999). Peaks of attention were found in two types of activity: *cognitive activity*, involving learning, information, and knowledge acquisition (Kolb, 1984), and *physical activity*, requiring body movements, as with swimming. Tourists were cognitively active mostly during the lecture session, covertly, e.g. when listening to the instructor, and overtly when asking a question. Physical activity was specific to the moment of interaction with the dolphins. These two dimensions, mental and physical activity, were reported to contribute to experience attention and memorability. From a managerial point of view, these findings may stimulate organizations to design experiences that involve learning opportunities in a leisure-based context so that tourists may feel they are acquiring new knowledge and developing new skills in a friendly, non-compromising manner. In fact, the results suggest managers need to help in creating the right blend of educational and entertainment values (Hertzman, Anderson & Rowley, 2008).

This study found that active participation in experience activities and interactions with others are significant contributors to enhanced attention. Attention was revealed by these participants as an effect of co-creation and an influencer of memorability. In turn, memorability was perceived an outcome of co-creation experiences (Bertella, 2014) and a very important issue to these visitors as it links to the meaningfulness of the experience (Minkiewicz et al., 2013). Recollection is a dimension of experiences and memorability may be facilitated by those that are felt as an "once-in-a-lifetime experience" (Tung & Ritchie, 2011a). However the relationship between co-creation of experiences and memorability needs to be further analysed from a psychological perspective that allows viewing the dynamic presence and influence of psychological processes in this experience outcome.

In this study, attention is one such a psychological process. Informants equated attention with *focus*, and *concentration*. This fits into generally accepted definitions of selective attention and sustained attention (Driver, 2001; Oken et al., 2010). Peaks of attention in this experience were described as related to the novelty and *out-of-the-ordinariness* of the encounter, such as swimming and touching the dolphins, which may indicate that respondents were mindful towards key moments of the experience (Moscardo, 1996; Tung & Ritchie, 2011a). *Novelty* has been linked to tourists' motivation for travel (Andersson, 2007; Pearce & Kang, 2009; Quan & Wang, 2004;

Thompson, 2008), and in their description of commercial experiences, Poulsson and Kale (2004) considered *novelty* (and surprise) a necessary ingredient of experiences and an experience-enhancer (Prebensen, Woo, & Uysal, 2013b). Additionally, qualitative research concluded that novelty influences the memorability of the co-creation experience (Bertella, 2014) and a quantitative study revealed that novelty is a dimension of memorable experiences (Kim et al., 2012). As focus and concentration are connected to novelty, managers are challenged to constantly align experiences with tourists' expectations towards novelty.

Another interesting finding of this study is the emphasis respondents put on close and intense human relationships, in terms of frequency (much, a lot) but also affect (fun, enjoyable, pleasant, touching), showing that far from secondary elements of the experience environment, other people are in fact at the core of the co-creation experience with consequences for its memorability. This supports prior research conducted about the importance of others in the experience environment (Arnould & Price, 1993; Bharwani & Jauhari, 2013; Minkiewicz et al., 2013; Rihova et al., 2014; Rihova et al., 2013; Wikstrom, 2008). This research has shown that human interactions and interdependence are important and high in co-creation experiences (Arnould & Price, 1993) since active participation requires harnessing of personal resources (intellectual, physical), goal setting and willingness to overcome challenges, and success in doing so depends on the intervention of skilled people (such as the instructor or trainers) or the motivational drive of other people going through the same experience (Ihamäki, 2012; Rihova et al., 2013).

Engaging in informal and ephemeral conversations, though positive for most participants, was not seen as relevant for experience memorability as the emotional intensity they carried. In this sense, socializing is a means to achieve emotional states related to *communion* and sense of *bonding* (Arnould & Price, 2013). Grouping is an element of the design of this co-creation experience, and participants understood it as an opportunity for interacting. Encounters generated positive and strong emotions. Arnould and Price (1993) reported participants in the river raft trip perceived the guides not as service providers but as *friends*, thus concluding that a sense of *communitas* develops not only between participants but also with the company's staff. This study indicates interaction with people in experiential consumption involves this emotional connectedness (Bharwani & Jauhari, 2013). Therefore *connectedness*, *bonding*,

communion are strong drivers of co-creation experiences as they connect the tourist with relatives, friends and others. These findings indicate that staff members can contribute to opportunities for greater interaction between participants and to elicit positive feelings and emotions through storytelling and pleasurable communication (Mathisen, 2013). Interactive communication skills therefore are recommended as dimensions to be further improved in the context of co-creation experiences.

The analysis also highlights the distinction between *wild events and interactions* (Scott et al., 2009), on one side, and normal, expected, planned events and interactions, on the other. Co-creation experiences accommodate high level of variability (Prahalad & Ramaswamy, 2004) that may lead to a certain degree of unexpectedness and emergence of extemporaneous or unexpected events or situations. Such informal and spontaneous events are capable of becoming memorable as much as the main event (Arnould & Price, 1993; Morgan, 2006; Tung & Ritchie, 2011a, 2011b). The memorability of an experience can be related to positive surprise and can account for manifestation of emotion, interest, excitement (Mossberg, 2008; Tung & Ritchie, 2011a) and contextual-prompted conversation (Mathisen, 2013). Lasting and impressive experiences have been reported during interactions of tourists while on a guided tour with residents and associated with the experiences' unexpectedness and spontaneity (Jonasson & Scherle, 2012). Though variability and unpredictability are characteristics long known to service managers and marketers (Hoffman & Bateson, 2011), these are inherent to experiences highly dependent on contextual variables; thus co-creation experiences require commitment to constantly observe the balance between accommodation and reduction of variability and unpredictability, as well as positive surprise.

In this study, tourists described the tourism experience as mediated by attention (Ooi, 2010). In experiential contexts, such as co-creation environments, attention can be directed to guides, instructors or trainers of different sorts and they all play a role in facilitating engagement by immersing tourists in the experience (Carù & Cova, 2007; Mossberg, 2008). On the other hand, as co-creation experiences are favourable contexts to development of skills, interactions between these facilitating mediators and tourists are increasingly decisive because it is during these interactions that attention is guided to the stimuli. This suggests that research on the role of experience mediators in co-creation experiences deserves further development.

Another finding of this study relates to the importance of the sensory dimension in co-creation experiences. The experience economy paradigm (Pine & Gilmore, 1999) and the experiential marketing approach have already called attention to the importance of the senses in consumer experience (Gentile, Milano, & Noci, 2007; Holbrook & Hirschman, 1982; Schmitt, 1999). Agapito, Mendes, and Valle (2013) have reviewed literature on the senses, discussing the relevance of the theme in the context of tourism experiences and highlighting the relevance of *sensescapes*. This multi-sensoriality leaves a permanent imprint on memory. Ballantyne, Packer, and Sutherland (2011, p. 773) reported vivid memories based on multi-sensory impressions and also that "to be physically close to the animals (…) made the experience novel or remarkable". The same is found in the *Dolphin Emotions Experience*. Nevertheless, further investigation of multi-sensoriality on attentional behaviours or memorability of co-creation tourism experiences need not be animal or nature-based since many other activities in contemporary creative tourism require the tourist's use of body and physical engagement. Artistic performances (dance, music), gastronomy or crafts are experiential contexts that allow detailing of the relationship between active participation, senses, attention and memorability.

The study has limitations in terms of scope and methodology that further research may address. The first is that only one co-creation experience was considered in this study. Thus further study could improve on broadening the scope of analysis of co-creation experience, attention and memorability to other experience modalities, e.g. involving sports and adventure or learning and skills development in language or arts and crafts. Another limitation is its narrow scope, focusing on attention and memorability. Attention is a process implicated in the perceptual functions of the individual, needed for stimulus selection and interpretation but other related processes and factors should be taken into account to refine our knowledge of motivations and their role on attention. The qualitative methods used here generate insightful conclusions about the topic analysed but studies using these category of methods lack generalizability and face issues of replicability (Finn et al, 2000). This qualitative study probed the use of scales and subsequent research should test their application adopting a quantitative methodology.

Both literature review and the study findings reveal opportunities for future research, especially empirical studies about on-site co-creation experiences and the

psychological processes involved. More particularly, research is required on a) identification and description of psychological processes (perceptual, cognitive, and affective) involved in co-creation tourism experiences that may influence memorability; b) measurement of the influence of active participation and interaction, as dimensions of co-creation, on focused attention and other psychological processes occurring during on-site experiences; c) analysis of the experience mediators' role and the extent to which they are important as attention leaders in co-creation experiences; d) investigation of the impact of the sensory dimension of co-creation experiences on memorability, but also exploration of the multiple senses as attention capturers and maintainers during these experiences; e) examination of the degree of spontaneity and unexpectedness in co-creation experiences and relevance as memorability enhancers; f) description and discussion of participants' interactions and social spheres in on-site co-creation experiences.

For tourism organizations, these research findings are of practical use when designing an experience. Effective experience design and management requires the tourist's active participation. Adopting a mix of entertainment and learning dimensions in a socially rich environment may enhance an experience by focusing attention and may lead to better knowledge acquisition and emotion elicitation. Design of the experience should take into account the individuals' sensitivity to the level of physical, intellectual or social challenge involved in activities.

This research has explored psychological reactions to a designed participative and interactive experience. The study findings support the importance of active participation and interaction in co-creation and highlights the importance of attention in co-creation tourism experiences, therefore affording grounds for further exploring inclusion of attention stimuli in the design of memorable tourism experiences. Elaborating from Ooi's (2003, 2010) reflections on attention in the context of tourism, the case study explored empirically this theme and results indicate tourists are aware of heightened attention when actively engaged and interacting with other subjects.

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CHAPTER 4
STUDY 3. CO-CREATING TOURIST EXPERIENCES: ATTENTION, INVOLVEMENT AND MEMORABILITY[3]

Highlights

➢ Conceptualization of on-site co-creation experiences

➢ Co-creation tourism experience is an antecedent of attention and involvement

➢ Application of the SEM technique shows the positive influence of antecedent constructs on experience memorability

Abstract
In this study co-creation, defined as a tourist's subjectively lived on-site experience involving actively participation and interaction, is found to enhance attention, involvement, and memorability. A conceptual model of on-site co-creation is proposed and empirically tested in the context of a dolphin theme park experiences. Results were analysed using SEM and reveal that co-creation significantly influences attention and involvement and also that the higher levels of attention and involvement generated are associated with memorability.

Keywords: Co-creation; active participation; interaction; attention; involvement; memorability

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4.1 Introduction

Long lasting vivid memories are generally acknowledged as a desired outcome of tourism experiences (Campos, Mendes, Valle, & Scott, 2016; Kim, 2010; Neuhofer, Buhalis & Ladkin, 2012; Pine & Gilmore, 1999; Tung & Ritchie, 2011a). Recently, it has been suggested by tourism researchers that co-creation affects the memorability of the experience (Andrades & Dimanche, 2014; Bertella, 2014; Campos, Mendes, Valle & Scott, 2016; Hung, Lee & Huang, 2014; Prebensen, Vittersø, & Dahl, 2013a). The concept of co-creation has received wide recognition in the management and marketing literature (Cova & Dalli, 2009; Vargo & Lusch, 2008) and is gaining increasing attention from tourism scholars (Binkhorst & Den Dekker, 2009). In tourism research, co-creation has been advocated, discussed and empirically studied in diverse contexts, such as rural destinations (Kastenholz, Carneiro & Marques, 2012), nature- and animal-based experiences (Bertella, 2014; Mathisen, 2013), hospitality (Bharwani & Jauhari, 2013; Neuhofer, Buhalis, & Ladkin, 2013a), resorts (Kreziak & Frochot, 2011; Prebensen & Foss, 2011), destination experience networks (Binkhorst, 2007), customer-to-customer (Rihova, Buhalis, Moital, & Gouthro, 2013), and heritage tourism (Minkiewicz, Evans & Bridson, 2013).

The tourism literature characterizes co-creation as the tourist's active participation and interaction during an experience (Bertella, 2014; Binkhorst & Den Dekker, 2009; Campos, Mendes, Valle & Scott, 2015, 2016; Ek, Larsen, & Hornskov, 2012; Ihamäki, 2012; MacLeod, Hayes, & Slater; 2009; Mansfeldt, Vestager, & Iversen, 2008; Mathisen, 2013; Mkono, 2012; Morgan & Xu, 2009; Prebensen & Foss, 2011; Richards & Marques, 2012; Richards & Wilson, 2006; Sfandla & Björk, 2012; Tan, Luh, & Kung, 2014). Active participation and interaction play an important role in attentional responses and involvement in experiences (Kuhl & Chun, 2014; Mathisen, 2013) and contribute positively to memorability (Chun & Turk-Browne, 2007; Kim, 2010). Both attention and involvement are considered intrinsically interwoven with the tourist experience (Andrades & Dimanche, 2014; Dimanche, Havitz & Howard, 1991; Ooi, 2010). However, little is known in tourism about the relation of co-creation and memorability, and particularly how active participation and interaction may facilitate memorability.

The present research addresses this gap, in the context of animal-based experiences, by empirically testing the influence of on-site co-creation on attention and involvement

and the memorability of the experience. Theme parks, adventure, nature- and animal-based tourism are increasingly popular (Buckley, 2009; Milman, 2008). Experiences with animals in the wild or semi-captivity settings (Burns, 2006) capture tourists' attention and activities involving proximity to animals, interplay, and sensory contact (e.g. through touching, feeding or playing) are part of a natural relationship (Holopainen, 2012). Such interactive experiences are appealing, exciting (Bulbeck, 2005), and memorable (Bertella, 2014; Mathisen, 2013; Moscardo & Saltzer, 2005).

Therefore *two* main research objectives are set for this study. The *first* objective is to test a model of the influence of co-creation on experience memorability, mediated by the tourist's attention and involvement. The *second* objective is to examine whether the constructs of the model present different magnitude depending on the level of co-creation. Two experiences involving animals characterized by different levels of co-creation were chosen for analysis: the *Dolphin Emotions Experience* (DEE) and the *Dolphin Show* (DS). The first is an encounter between participants and the dolphins in a pool, requiring from them an expected high level of active participation and interaction; the second consists of a show in which participants observe dolphins and trainers performing acrobatic behaviours.

4.2 Literature review and research hypotheses

4.2.1 Co-creation tourism experiences

Recent tourism research has highlighted the importance of activity, i.e. performing roles (Mathisen, 2013), doing things, and learning (Poulsson & Kale, 2004) in experiences. Pleasurable feelings emerge by means of performance of activities that engage people sensorially, physically, intellectually/culturally, emotionally and socially (Arnould & Price, 1993; Kastenholz et al., 2012; Morgan, Elbe & Curiel, 2009; Richards, 2011). Mansfeldt et al. (2008) coined the term *performance turn* to indicate that tourists are no longer passive sightseers consuming sites in prescribed fashions (Ek et al., 2012) but are increasingly motivated by creativity, feelings of personal competence and achievement in face of challenge (Kastenholz et al., 2012), desire to learn through engaged observation of others belonging to the local culture and the experience environment (Mathisen, 2013; Prebensen & Foss, 2011; Richards, 2011), exploration and application of personal skills in the design, production and consumption of experiences

(Hung, Lee & Huang, 2014; Mkono, 2012; Perkins & Thorns, 2001; Richards, 2011; Tan et al., 2014; Tan, Kung, & Luh, 2013; Wikstrom, 2008).

There is evidence of a growing interest in new kinds of tourism (Buhalis, 2001) and alternative gazes (Woodside & Martin, 2015) that involve enactment *in loco* (Mathisen, 2013), physical participation in nature, adventure, extreme sports and animal-based experiences (Bertella, 2014; Hung et al., 2014; Mathisen, 2013; Minkiewicz et al., 2013; Nordbø & Prebensen, 2015), or attendance at science, arts or crafts workshops (Richards & Wilson, 2006). Tourism has progressively evolved into *hands-on* experiences (Richards, 2011) requiring use and development of an array of tourist resources. Physical activity or physically challenging activities have been associated with the desire for experiencing nature (Bertella, 2014) and participating in sports or adventure events (Ihamäki, 2012; Minkiewicz et al., 2013; Nordbø & Prebensen, 2015), engaging in active play (Gyimóthy & Mykletun, 2004), mastering of skills and abilities (Morgan & Xu, 2009), conferring to *the tourist gaze* an active rather than passive *"from-afar"* meaning. Touristic performativity thus becomes an exercise of reflexivity grounded in a sensing and active body (Perkins & Thorns, 2001).

Minkiewicz et al. (2013) defined co-creation as the experience that is created by the customer through active participation in activities, engagement and personalization of the experience. Following a literature review, Campos, Mendes, Valle, and Scott (2015) suggested that on-site co-creation is "the sum of the psychological events a tourist goes through when contributing actively through physical and/or mental participation in activities and interacting with other subjects in the experience environment". Mathisen (2013) found co-creation combines body and mind through the physical work involved in exploration, play and role-play during the experience activities. In a dog-sled race and a Northern Lights hunt, tourists performed roles of hunting heroes or dog-sled drivers. Ihamäki (2012) considered geocaching as an example of a transformative "learning by doing" experience embedded in skilled consumption and production. Geocaching comprises the dimension of play intertwined with physical exercise, studying and tactical thinking, in sum, the tourist active role and participation. Such active engagement leads to self-development and gaining new skills (Tan et al., 2014). Physical activities performed in adventure tourism, such as artic trekking (Gyimóthy & Mykletun, 2004), philanthropic adventure activities (Coghlan & Filo, 2013) or hiking (Nordbø & Prebensen, 2015) are markers of engagement in play and playful role-enactment and

expose the interconnectedness between the physical and mental dimensions of experiences. Minkiewicz et al. (2013) found that the consumer's active participation in performance of heritage activities involves co-production, engagement, and personalization through allowing tailoring of the experience to personal needs. More recently though, Prebensen, Kim and Uysal (2015) proposed to define co-creation as the customer's physical and mental participation in the *process* of creation of the experience. In that study, the level of co-creation was assessed by the concepts of physical participation and interest as mental participation and it was concluded that co-creation has a moderator role in the relationship between the perceived value of the travel experience and satisfaction.

Social interaction is an important dimension of co-creation (Etgar, 2008; Prahalad & Ramaswamy, 2004; Yi & Gong, 2012) and also of major significance in the context of tourism (Andrades & Dimanche, 2014; Bharwani & Jauhari, 2013; Brunner-Sperdin, Peters, & Strobl, 2012; Dong & Siu, 2013; Hjalager & Nordin, 2011; Jackson, Morgan, & Hemmington, 2009; Kastenholz et al., 2012; Kreziak & Frochot, 2011; Lugosi, 2009; Mehmetoglu & Engen, 2011; Morgan & Xu, 2009; Nuttavuthisit, 2010; Obenour, Patterson, Pedersen, & Pearson, 2006; Räikkönen & Honkanen, 2013; Ryan, 2000, 2002; Tan et al., 2013; Walls, Okumus, Wang & Kwun, 2011). This is because tourism is a system composed of the tourist, other people and the varied environments pertaining to the overall travel experience, and characterized at any stage by a high level of interaction (Binkhorst & Den Dekker, 2009; Choo & Petrick, 2014; Neuhofer, Buhalis & Ladkin, 2013b; Ooi, 2003). Interactions form the set of social relations tourists develop before, during and after the travel experience (Binkhorst & Den Dekker, 2009; Mehmetoglu & Engen, 2011). Encounters between relatives and/or friends, other visitors, company's staff, and residents are elements, sources and influencers of the tourism experience (Kastenholz et al., 2012; Minkiewicz et al., 2013; Mossberg, 2007; Choo & Petrick, 2014; Walls et al., 2011). As tourism evolves towards shorter supply chains (King, 2002) and a more participated role of the tourist (Choo & Petrick, 2014; Ihamäki, 2012), direct interactions become increasingly important. Recently, interaction with animals is found to contribute to experience memorability due to the animals' relational and emotional capabilities (Bertella, 2014).

Interactions are core aspects of tourism experiences because they fulfil tourists' social-psychological needs, namely of experiencing positive feelings and emotions

(Bigné & Andreu, 2004; Choo & Petrick, 2014). Moreover they stimulate creativity, exploration and play (Ihamäki, 2012; Kastenholz et al., 2012, Mathisen, 2013), support self-determination and learning (Binkorst & Den Dekker, 2009), and induce feelings of comfort derived from the supportive presence of others (Saxena, 2006). Consequently, tourism experiences have an affective (Choo & Petrick, 2014; De Rojas & Camarero, 2008) as well as a social dimension and carry emotional and social meaning because closely connected to tourists' needs and motivations towards pursing pleasure in socializing with others (De Rojas & Camarero, 2008; Kreziak & Frochot, 2011), sharing enjoying and playful moments with them (Mathisen, 2013), though realizing the transient nature of relationships (Cutler & Carmichael, 2010). The quality of social interaction is found to influence satisfaction with the vacation experience (Choo & Petrick, 2014; De Rojas & Camarero, 2008; Huang & Hsu, 2009), suggesting that interactions need to be "carefully designed, integrated and managed to ensure an emotional connection, loyalty and satisfaction" with brands and destinations (Lugosi & Walls, 2013:52).

4.2.2 Attention

The study of attention is found in many academic fields, such as cognitive and social psychology (Bodenhausen & Hugenberg, 2009; Mundy & Newell, 2007), neuroscience (Sarter, Givens, & Bruno, 2001), education (Sylwester & Cho, 1993), economics (Brooks, 1996), management (Cho & Hambrick, 2006; Yadav, Prabhu, & Chandy, 2007) and visitor studies (Bitgood, 2010). In tourism attention remains largely under-researched with the exception of Ooi (2010), who argued for a managerial approach to tourism experiences through application of the psychology of attention. Management of attention is pivotal in getting tourists engaged in co-creation (Andrades & Dimanche, 2014).

Attention is the psychological phenomenon of processing information originating from the external (sensations) or internal (memories and thoughts) environment (Sternberg, 2006) and influences perception, memory and learning (Dayan, Kakade, & Montague, 2000). It comprises mental activity (such as awareness, information processing, reflection, mentalizing), bodily reactions (e.g. auditory zoom in, gaze and movements of the eye, body orientation or locomotion, gestures), and neural activity (Clark, 1997). Davenport & Beck (2001) define attention as *focused mental engagement*

on a particular item among all those that we are aware of in the environment, whether external or internal (Ingram, 1990).

In face of the overload of stimuli and a finite information processing capacity (Davenport & Beck, 2001, Dijksterhuis & Aarts, 2010; Huberman & Wu, 2008), attention is directed towards those aspects of the environment which are perceived as particularly relevant in a concrete situation, therefore influencing behaviour and choice (Ocasio, 2011). Attention manifests itself overtly or covertly, as orienting of attention can be performed without observable head or eye movement (Posner, 1980).

The difference between levels of attentional effort has been highlighted by distinguishing *focus*, i.e. the action of directing the mind and senses to a particular stimulus and singling it out, ignoring by that reason competitor stimuli, from *concentration*, characterized by superior mind-processing effort and longer time span, habitual in the process of holding attention (Bodenhausen & Hugenberg, 2009). Focused attention occurs for no more than a few seconds and involve shallow cognitive processing (Bitgood, 2010) however it has also been found highly effective in the stimuli selection process (Yantis & Johnston, 1990). Changes in attentional effort influence action and choice, and consequently their outcomes. For instance, individuals actively engaged in activities are more attentive to the experience environment because active engagement requires strategic allocation of attention (Kuhl & Chun, 2014), and also they demonstrate better recall (Moscardo, 1996; Patterson & Bitgood, 1988). Similarly, research in learning contexts has found that environments which stimulate active participation and cooperative interaction between individuals lead to better performance in terms of maintaining interest and attention (Cavanagh, 2011). Accordingly, a first research hypothesis is proposed:

H1. Co-creation is expected to have a positive effect on the tourist's level of attention

4.2.3 Involvement

Involvement is a prominent construct in the marketing and consumer behaviour fields due to its recognised power to explain and predict changes in the behaviour and attitudes of consumers (Hwang, Lee & Chen, 2005; Kyle, Kerstetter & Guadanolo, 2002). It has contributed to understanding and predicting buying behaviour and decision-making (Mittal 1989), information searching and processing (Carneiro & Crompton, 2009), loyalty to brands (Michaelidou & Dibb, 2008) and product identification. Involvement is

defined the *perceived personal relevance* individuals experience in relation to objects or consumption contexts (Celsi & Olsen, 1988), 'the (…) perceived *interest* consumers attach to the acquisition, consumption, and disposition of a good, service or an idea' (Gross & Brown, 2008:1141), or 'the degree to which consumers engage in different aspects of the consumption process' (Gursoy & Gavcar, 2003:907). Thus involvement may be felt towards an activity, an issue, a product, a decision or situation, an advertisement (Bezençon & Blili, 2010) or even a particular spatial context, such as an art museum (Slater & Armstrong, 2010). Some researchers have distinguished between *enduring* and *situational* involvement (Michaelidou & Dibb, 2008; Richins, Bloch & McQuarrie, 1992) connecting the first with stable motivations and personal relevance towards objects or activities rooted in attitude structures and the second with personal relevance felt towards transitory, contextual stimuli (Celsi & Olson, 1988; Havitz & Mannell, 2005).

Conceptualization of involvement was developed and applied also in the leisure, recreation, and tourism fields (Havitz & Dimanche, 1990; Dimanche, Havitz & Howard, 1991, 1993; Jamrozy, Backman & Backman, 1996; Havitz & Dimanche, 1997, 1999; Gursoy & Gavcar, 2003; Hwang et al., 2005; Gross & Brown, 2006, 2008; Carneiro & Crompton, 2009). Involvement is a central component of the leisure experience (Dimanche et al., 1991), and is linked to tourism products (Chang & Gibson, 2011), activities/experiences (Josiam, Kinley & Kim, 2005; Gross & Brown, 2006) and destinations (Gursoy & Gavcar, 2003; Carneiro & Crompton, 2009). In tourism, research found that highly interested and satisfied tourists with experiences are most likely to be opinion leaders (Jamrozy et al., 1996). Involvement has been connected to lifestyle (Gross & Brown, 2006) and place attachment (Hwang et al., 2005; Gross & Brown, 2006, 2008), and international tourists' destination knowledge and choice (Gursoy & Gavcar, 2003). For tourists visiting recreational parks, dimensions of involvement are importance and enjoyment, self-expression and sign, risk probability and risk consequence (Hwang et al., 2005).

In tourism, involvement has been studied both as an antecedent (e.g. Kim, Scott & Crompton, 1997; Gahwiler & Havitz, 1998; Kyle & Chick, 2002; Hwang et al., 2005) and as a consequent variable (e.g. Madrigal, Havitz & Howard, 1992; Zalatan, 1998; Jang, Lee, Park & Stokowski, 2000; Kyle, Absher, Hammitt & Cavin, 2006). Most researchers have assumed it as *antecedent* of behaviour (Kim et al., 1997), inducing psychological

responses (Hwang et al., 2005). Involvement modifies satisfaction or perceptions of quality (Clements & Josiam, 1995; Hwang et al., 2005), influences individuals' knowledge about a destination (Gursoy & Gavcar, 2003) and how strongly they are attached to it (Gross & Brown, 2008). The degree of involvement affects intention to participate in leisure and recreational activities and travel (Williams, 1984; Kim et al., 1997; Kyle et al., 2006; McGhee et al., 2003; Park, Yang, Lee, Jang, & Stokowski, 2002), to repeat an experience (Kyle & Chick, 2002), to engage in shopping (Josiam et al., 2005) and various types of information search behaviour, e.g. decision to search or strength of search (Carneiro & Crompton, 2009), to use the internet for search and express preferences towards information contents (Cai, Feng, & Breiter, 2004).

Several studies have studied the influence on involvement of variables such as socio-demographic characteristics (Madrigal et al., 1992; Zalatan, 1998) and motivation. Motivation is consistently found to influence involvement with destination choice, activities undertaken and perceived value (Josiam, Smeaton & Clements, 1999; Prebensen, Woo, Chen & Uysal; 2012; Prebensen, Woo & Uysal, 2013b). Prebensen et al. (2013a) found active participation and involvement in an experience leads to increased value. In this regard, the tourist own resources and behaviours, i.e. skills and knowledge, physical, social and cultural resources, act as influencers of the tourist involvement in the conception and design of their experiences. Mathisen (2013) found tourists with more interest in nature had more pleasurable experiences in a natural setting. In this study interest in nature was raised through exploration, creating a stage to play and enact roles, and providing new knowledge through these activities. These findings lead to the second research hypothesis:

H2. Co-creation is expected to have a positive effect on the tourist's level of involvement

4.2.4 Memorability

Delivery of memorable experiences lies at the core of the experience economy (Pine & Gilmore, 1999) and tourism creates experiences (Buhalis & O'Connor, 2006; Ihamäki, 2012; Ooi, 2010). The need for memorable tourism experiences is generally acknowledged (Morgan & Xu, 2009; Pizam, 2010; Tung & Ritchie, 2011a) and ability to deliver them is frequently related to organization and destination distinctiveness and competitive advantage (Kim, 2010; Kim, Ritchie & McCormick, 2012; Morgan & Xu, 2009; Neuhofer et al., 2012; Poulsson & Kale, 2004; Tung & Ritchie, 2011a). Vivid

recollections of activities, encounters, spaces and destinations are considered drivers of future consumption and travel to destinations (Braun-LaTour, Grinley & Loftus, 2006; Kim, 2010; Lehto, O'Leary, & Morrison, 2004; Marschall, 2012; Wright, 2010). Importantly, prediction of tourist behaviour depends not on the *lived* but on the *recollected experience* (Larsen, 2007; Wirtz, Kruger, Scollon, & Diener, 2003). Travel involves hedonic consumption, pleasure seeking, and positive emotions and therefore generates lasting memories which are then available to recurrent reminiscence and sharing (Andrades & Dimanche, 2014; Fesenmaier & Gretzel, 2004; Ma et al., 2013, Scott, Laws, & Boksberger, 2009).

Memorability is an important aspect of tourism experiences (Pikkemaat & Schuckert, 2007) as memory belongs to the *essence* of an experience (Poulsson & Kale, 2004) and memories of leisure experiences are likely to remain rich, vivid and detailed (Tung & Ritchie, 2011b), and never age (Cary, 2004; Wright, 2010). Memorable experiences have been described as *"special"* and *"spectacular"* (Tung & Ritchie, 2011a), *"exciting"* (Ihamäki, 2012), *"embodying superlative quality"* (Bharwani & Jauhari, 2013), *"easier to recall"* (Kim, 2010), *"unforgettable"* (Wikström, 2008). Prior research has concentrated on finding dimensions of memorable experiences (Kim, 2010; Kim et al., 2012; Tung & Ritchie, 2011a) or assessing the extent to which they were memorable (Dong & Siu, 2013; Hung et al., 2014). In this paper we seek to examine *antecedents* of memorability (Morgan & Xu, 2009: 221).

4.2.4.1 The concept of memorability

The Oxford English Dictionary (1998) defines *memorability* as the quality of an object, event, or person being memorable or worth remembered. In psychology and neuroscience, memorability is described as the property of something to endure in long-term memory and be easily recalled in detail (Anderson & Shimizu, 2007; Khosla, Xiao, Torralba & Oliva, 2012; Mancas & Le Meur, 2013; Reisberg, Heuer, McLean & O'Shaughnessy, 1988). Experiences, events or objects are memorable if characterized and described by vivid, salient, detail-rich enduring memories (Anderson & Shimizu, 2007; Reisberg et al., 1988). For the purposes of the present study, memorability is understood *subjectively*, that is, the tourist's qualitative evaluation of the recalled experience as related to current and expected long-term memory effects.

4.2.4.2 Attention and memorability

Psychology and neuroscience have begun to unravel the dynamic interconnectedness of attention and memory processes. Memory is a collective name for a set of processes comprising encoding, storage, and retrieval of information (Braisby & Gellatly, 2012; Chun & Turk-Browne, 2007; Paller & Wagner, 2002). Evidence from these fields indicates that attention is a factor influencing memorability because encoding for posterior recollection requires application of attentional resources and selection (Kuhl & Chun, 2014; Scerif & Wu, 2014; Sternberg, 2006). It is also accepted that episodic memory depends on externally oriented attention (Kuhl & Chun, 2014). Successful recollection in the long term (Chun & Turk-Browne, 2007; Kuhl & Chun, 2014) depends on the strategic allocation of attention, and, in turn, the ability to allocate it effectively is impacted by active physical and mental engagement (Kohl III & Cook, 2013). Correspondingly, in the context of this research, a third hypothesis is:

H3. The tourist's level of attention is expected to have a positive effect on the memorability of the experience

4.2.4.3 Involvement and memorability

Involvement encourages an individual's physical, mental, emotional, social, or spiritual engagement in an experience, leading to increased satisfaction and memorability (Andrades & Dimanche, 2014). Kim (2010) found that involvement, characterized by motivation and interest in experience, led to recollection and memory vividness. Kim, Ritchie and McCormick (2012) found that involvement, defined as personal relevance, contributes to memorability. Thus:

H4. The tourist's level of involvement is expected to have a positive effect on the memorability of the experience

4.2.4.4 Experience co-creation and memorability

In tourism, researchers have sought what makes an experience memorable (Tung & Ritchie, 2011a), and to measure this memorability (Kim et al., 2012). However to date there is no empirical research examining the relation between co-creation of experiences and experience memorability (Campos et al., 2016). Dong et al. (2008) have examined

the influence of co-creation behaviour on perception of value of future co-creation experiences and also on satisfaction with service recovery. Grissemann and Stokburger-Sauer (2012) studied the effect of customers' co-creation on satisfaction with the service company. The impact of social interactions on memorability (Bharwani & Jauhari, 2013; Hung et al., 2014) indicates the importance of interaction with staff and instructors involved in the experience. Prebensen et al. (2013a) suggest that the tourist's active participation and interaction with other people leads to increased memorability and value for the experience. Social interaction contributes to experience meaning and thus to memorability (Andrades & Dimanche, 2014). Campos et al. (2016) found support for a relationship between co-creation experiences and higher memorability. As a result, two hypotheses will be investigated:

H5. Co-creation is expected to have a positive effect on the level of memorability of the experience through **attention**

H6. Co-creation is expected to have a positive effect on the level of the memorability of the experience through **involvement**

Figure 4.1 shows the conceptual model adopted in this study. In Figure 1, continuous lines represent hypotheses stating direct effects **(H1, H2, H3** and **H4)** while dashed lines show indirect effects **(H5** and **H6).**
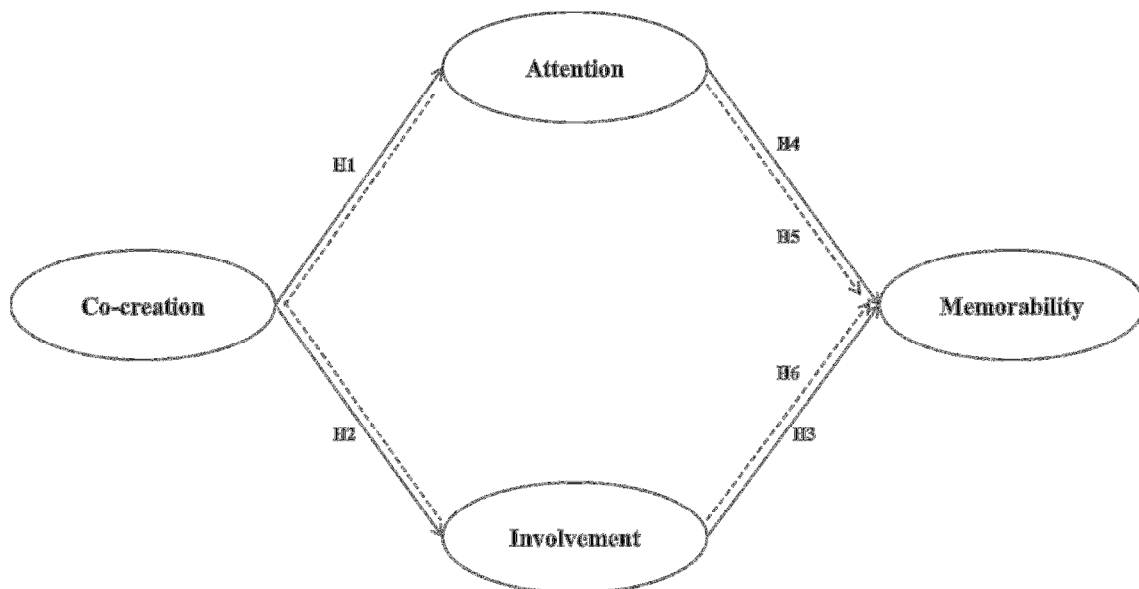
Fig. 4.1 Conceptual model

4.3. Research methodology

4.3.1 Context and study population

The setting of this study is *Zoomarine*, a major theme park focused on marine wildlife located in Albufeira in the Algarve region of Portugal. *Zoomarine* provides a wide range of opportunities for educational, leisure, entertainment, and service experiences, combined with attractions related to marine animal life for both adults and children. This park was chosen as the setting of this study and considered an ideal location for testing the hypotheses as it offers hedonic consumption experiences (Bigné Andreu & Gnoth, 2005; Ma et al., 2013) with varying degrees of visitor active participation and interaction.

National and international tourists, over 18 years old attending two attractions offered by *Zoomarine*, the *Dolphin Show* (DS) and the *Dolphin Emotions Experience* (DEE) were considered to participate in the present study. The *Dolphin Show* consists of a 30-minute show performed before an audience by a team of trainers enacting acrobatic behaviours with dolphins. The *Dolphin Emotions Experience* involves participants swimming and playing with the animals in a pool for one and a half hours. This required active participation and direct interaction with the dolphins, trainers, instructors, and a small number of other participants in an isolated area.

4.3.2 Data collection

4.3.2.1 Qualitative stage: interviews

This first stage of the research consisted of in-depth interviews performed with participants in the *Dolphin Emotions Experience* in order to clarify key constructs of the research and generate items to develop the quantitative data collection instrument (Dong & Siu, 2013; Leech & Onwuegbuzie, 2007). This context was selected for the qualitative study based on two criteria: the location, as this experience takes place in a secluded area with appropriate conditions to perform in-depth interviews; and because swimming with dolphins involves a high level of active participation and interaction. Themes explored in the interviews were *active participation, interaction*, *attention*, and *memorability*. The construct of *involvement* was not included in the interviews as measurement scales for this construct were available (Havitz & Dimanche, 1997). Purposive sampling was adopted (Kensbock & Jennings, 2011; Morse, Olson, & Spiers, 2002; Patton, 1990;

Ritchie & Lewis, 2003) and during May 2014 interviews with 22 participants were conducted immediately after the experience to allow rich and vivid information to be collected.

Interviews revealed that active participation was pleasurable and highly valued by tourists. Participants described themselves as actors, playing the roles of temporary animal trainers, gymnasts or trained swimmers executing planned behaviours while enjoying funny and playful moments with the dolphins, getting emotionally involved with them through overt affective behaviours (kissing, caressing). They distinguished between being spectators of the experience and living it as active participants. Actively participating in the experience involved physical effort. Participants valued interaction with family and friends, other visitors, specialized staff and dolphins. The experience was recalled as interaction-intense because of the dolphins. Visitors spontaneously characterized dolphin facial features as almost human, and saw them as able to develop close relationships with people, and thus more than "mere animals" or stage props. For these participants, attention meant focus and concentration on mental and physical activity and was enhanced by playing a role. Participants characterized encounters with the dolphins as "unforgettable", "enduring", an "everlasting memory", and something "I'll never forget". They could easily recollect events, describing them enthusiastically in detail and stating they could clearly picture in mind the moments of closest proximity with the dolphins. The most vivid and detailed memories referred to sensations (tactile, auditory, visual…) and the particular emotional states (happiness, joy, delight, excitement) when participants were in the water. These results provided support for the research hypotheses and helped design the questionnaire.

4.3.2.2. Quantitative stage: survey

The quantitative study used a questionnaire composed of three sections: the first examined visitor motivation; the second asked questions specific to the constructs under study; and the last section asked for respondents' sociodemographic data (gender, age, professional status, educational level and country of origin). The instrument was first developed and written in English then translated into Portuguese, back-translated and then re-translated to ensure comparability of data between the English and Portuguese versions of the questionnaire (Harkness, 2003). The list of items included in the questionnaire derived from literature, qualitative interviews and informed by opinions of

experts acquainted with the research's themes (see Table 1). Questions were adapted to the *Zoomarine* experiences involving dolphins. **Co-creation** was measured with **four** items based on the concepts of physical and mental active participation and interaction with experience subjects (Campos et al., 2016). A total of **six** items were used to measure **attention** following a combination of behaviours related to focus and concentration (Bitgood, 2010; Sternberg, 2006). The set of **nine** items belonging to **involvement** were derived from prior research which has extensively tested and adapted Laurent and Kapferer's (1985) CIP scale. This construct was assumed as multidimensional and measured using items associated with the three dimensions of *interest* (or *importance*) *pleasure* and *sign value*. The selection of dimensions for analysis is based on the assumption that interest, pleasure and sign value are key dimensions of the construct in the context of leisure and tourism activities because these are associated with hedonic consumption where self-expression becomes relevant to the individual (Dimanche et al., 1991). In this study no assumption was made as to a difference between enduring and situational involvement considering that conceptual overlapping between the two results in common measures (Havitz & Mannell, 2005). **Memorability** was measured with six items related to current and expected long-term memory effects, covering psychological processes related to vividness, such as easiness of recollection, expected duration of memories and perceived detail recollection (Reisberg et al., 1988). All constructs were assessed through 5-point Likert-type scales using the anchors (1) "strongly disagree" to (5) "strongly agree".

Table 4.1
Constructs, definitions and literature sources

Constructs	Construct definition	Literature source
Co-creation	The tourist's subjectively lived experience by contributing with physical and/or mental participation in activities and interaction with experience subjects	Adapted from Campos et al. (2015)
Attention	The tourist's focusing and concentration on a specific item of the experience	Adapted from Campos et al. (2016); Bitgood (2010)
Involvement	An unobservable state of motivation, arousal or interest toward a recreational activity or associated product, evoked by a particular stimulus or situation, and which has drive properties	Havitz & Dimanche (1997)
Memorability	The tourist's subjective and qualitative evaluation of the recalled experience as related to current and expected long-term memory effects	Adapted from Campos et al. (2016) and Reisberg et al. (1988)

A pilot test of the questionnaire was performed with tourists visiting *Zoomarine* during June and July 2014 to assess question formulation and simplicity of language

(Balnaves & Caputi, 2001), to evaluate the layout and length, and to refine scales, if needed, to measure the constructs. The internal reliability of the scales was assessed using Cronbach's alpha (Hair, Black, Babin, & Anderson, 2006). The results showed that the alphas of all constructs ranged from 0.70 to 0.93, matching or exceeding the cutoff of 0.70 (Hair et al., 2006).

Respondents chosen for the survey visited *Zoomarine* during the summer season of 2014 (August and September months) and participated either *the Dolphin Show* (DS) or *the Dolphin Emotions Experience* (DEE). The questionnaire was administered at various assigned days and time, and respondents were randomly invited to participate in the study. After agreeing they were informed of the study's objectives and a signed consent form was obtained. The questionnaires were distributed immediately after the experience took place and collected as soon as they were completed. A total of 385 fully completed questionnaires were collected, validated and included in the analysis.

4.4. Results

4.4.1 Sample profile

The socio-demographic characteristics of the total sample are shown in Table 4.2. About half of the total respondents are male and the other half female. The mean age is 36 years-old. Approximately 80% of the respondents were employed, 14.3% reported they were students, 3.1% domestic duties, 2.3% unemployed, 2.1% retired and 0.3% declared other occupations.

Table 4.2
Sample demographics

Sample (%)							
Gender		*Education*		*Occupation*		*Country of origin*	
Male	47.5	Primary education	1.8	Employed	77.9	Portugal	45.5
Female	52.5	Secondary education	41.8	Domestic duties	3.1	Germany	2.3
		Higher education	56.4	Student	14.3	Netherlands	5.7
Age (mean)	36			Retired	2.1	Spain	3.1
				Unemployed	2.3	France	2.6
				Other	0.3	UK	36.4
						Other	4.4

Some 56.4% held higher education degrees, 41.8% completed secondary education and 1.8% completed primary level education. Some 45.5% of the sample were

Portuguese and 36.4% were from the United Kingdom. Other nationalities were less represented: Netherlands (5.7%), Spain (3.1%), France (2.6%), Germany (2.3%), and 4.4% from other countries.

4.4.2 Exploratory factor analysis

Prior research on involvement extensively corroborates its multidimensionality (Gross & Brown, 2006; Jamrozy et al., 1996; Kyle et al., 2002). However as multifaceted scales are claimed to be more susceptible to operationalization difficulties due to the larger number of items needed to measure a construct, it is recommended to first conduct analyses in order to identify the dimensions more likely to be most useful in a given context (Carneiro & Crompton, 2009). Hence, an exploratory factor analysis (EFA) was performed preceding the SEM analysis, to determine possible sub-dimensions of the construct based on patterns of correlations among the items. The analysis was conducted using the principal factoring extraction method with varimax rotation (Hair et al, 2006). The scree plot, the Kaiser's criterion, the eigenvalues, the percentage of explained variance, the item loadings and communalities were observed in order to determine the most adequate factor solution. One item with loading lower than 0.4 in all factors was eliminated. The results for the final two-factor solution are reported in Table 4.3.

Table 4.3
Underlying dimensions of involvement

Involvement factors and items	Factor loading	Variance explained	Cronbach's alpha
F1 Pleasure/Interest		48.10%	0.86
Inv 1. It gives me pleasure to participate in this experience	0.84		
Inv 2. Participating in this experience is like giving a gift to myself	0.77		
Inv 3. This experience is somewhat of a pleasure to me	0.82		
Inv 4. I attach great importance to this experience	0.78		
Inv 5. One can say this experience interests me a lot	0.78		
F2 Sign value		22.14%	0.85
Inv 6. You can tell a lot about a person by whether or not he/she chooses to have this experience	0.86		
Inv 7. This experience gives a glimpse of the type of man/woman I am	0.92		
Inv 8. This experience tells a little bit about you	0.82		

The two factors explain 70.24% of the total variance and have eigenvalues higher than 1. This two-factor solution is also in accordance to the readings provided by the scree plot and the communities of the eight items ranged from 0.60 and 0.87, indicating that the variability of each original item is well captured by this factorial solution.

Cronbach's alpha for the two factors are higher than 0.85 suggesting high levels of internal consistency. Findings of this study are consistent with previous research on involvement, according to which interest and pleasure in the context of leisure and tourism become synonymous (Dimanche et al., 1991) and accordingly items related to interest and pleasure merged into one factor. The final two factors were labelled as *Pleasure/Interest* and *Sign value*. These sub dimensions are in accordance with those found by Madrigal et al. (2002).

4.4.3 Testing the conceptual model and the research hypotheses

The proposed model linking the constructs of co-creation and memorability, through the two constructs of attention and involvement, was estimated and tested using a SEM procedure employing the software AMOS Graphic 21. The most commonly used estimation methods in SEM require that data follow a multivariate normal distribution. In our study, all items are ordinal and report absolute values for skewness and kurtosis lower than 1 and 3, respectively. Moreover, the coefficient of multivariate kurtosis equal 5.72. Previous studies show that only values higher than 2 and 7 for skewness and kurtosis produce biased SEM estimates using the maximum likelihood estimation method (Finney & Distefano, 2006). Prior testing the research hypotheses, the overall model fit was assessed which was then followed by an evaluation of the measurement model and structural model.

4.4.3.1 Overall model fit

Results at this level show that the model reports an acceptable overall fit. Regarding absolute overall fit, a nonsignificant χ^2 value would be desirable. In the present case, the χ^2 value (681.31; $p < 0.01$) is statistically significant, which is an expected and not problematic result given the large sample size (Anderson & Gerbing, 1988). However, other measures of fit, at incremental and parsimonious levels, suggest an acceptable fit: RMSEA = 0.07, ECVI = 2.13 and RMR = 0.09. In fact, values for the RMSEA lower than 0.08, for the ECVI lower than 5 and low values for RMR are indicative of acceptable fit. Moreover, other indexes that ranges from 0 to 1, with 1 indicating perfect fit, also report good results: GFI = 0.87; NFI = 0.91; RFI = 0.89; IFI = 0.94; TLI = 0.93 and CFI = 0.94.

4.4.3.2 Measurement model fit

An adequate measurement model fit is necessary before the assessment of the structural relations and consequently of the research hypotheses. Reliability and validity are the key concepts in evaluating the measurement model. Co-creation is measured by three items related to the concept of active participation (roleplay, play and physical activity) and one item to the concept of interaction (direct contact). An attempt at using the two concepts separately was found to compromise discriminant validity. Table 4.4 presents the reliability of the latent constructs using the final items. Firstly, all alpha coefficients and composite reliability (CR) coefficients are high and exceed the recommended level of 0.7 (Bagozzi & Yi, 1988). Additionally, the average variance extracted (AVE) of the five constructs surpasses the threshold value of 0.5. These results suggest that the indicators of each constructs are strongly related and measuring the same latent variable.

Table 4.4
Results for the measurement model

Constructs and items	Mean Overall (Experience/Show)	Loading	Cronbach's alpha	CR	AVE
Co-creation	2.77 (**4.49**/1.20)		0.97	0.92	0.75
CC1. In this experience I directly interacted with the dolphins	2.88	0.95			
CC2. In this experience I've been able to act as if I were a dolphin trainer	2.50	0.83			
CC3. In this experience I had a great play time with the dolphins	2.85	0.96			
CC4. In this experience with the dolphins I have been physically active	2.83	0.96			
Attention	4.07 (**4.55**/3.64)		0.88	0.90	0.51
ATT1. I talked with others about the learning materials and presentations	3.97	0.50			
ATT2. I concentrated on my own behaviours and interactions with the dolphins	3.91	0.84			
ATT3. I listened carefully the educator/trainer	4.19	0.73			
ATT4. I was completely aware of my bodily sensations and sensory stimuli	3.96	0.82			
ATT5. I was conscious of my own emotions and thoughts	4.09	0.88			
ATT6. I often discussed with others the on-going experience	**4.34**	0.76			
Involvement					
F1. Pleasure/Interest	4.25 (**4.63**/3.92)		0.86	0.91	0.67
INV1. It gives me pleasure to participate in this experience	4.50	0.74			
INV2. Participating in this experience is like giving a gift to myself	4.17	0.72			
INV3. This experience is somewhat of a pleasure to me	4.36	0.81			

INV4. I attach great importance to this experience	4.12	0.84			
INV5. One can say this experience interests me a lot	4.13	0.72			
F2 Sign value	3.04 (**3.28**/2.83)		0.85	0.84	0.63
INV6. You can tell a lot about a person by whether or not he/she chooses to have this experience	2.92	0.73			
INV7. This experience gives a glimpse of the type of man/woman I am	2.99	0.96			
INV8. This experience tells a little bit about you	3.21	0.76			
Memorability	4.17 (**4.56**/3.84)		0.88	0.90	0.61
MM1. Interaction with the dolphins is something unforgettable	**4.64**	0.52			
MM2. I have strong images of my own behaviours and interactions that will persist	3.93	0.77			
MM3. The learning experience with the educator/trainer will remain in my memory	4.06	0.65			
MM4. I can describe in detail my bodily sensations and the sensory stimuli	3.94	0.79			
MM5. I'll always remember my own emotions and thoughts	4.09	0.83			
MM6. The overall experience setting will be an everlasting memory	4.38	0.75			

The convergent validity of each measurement scale was examined by observing each loading's magnitude and statistical significance. All loadings range from 0.50 and 0.96 and report a *t* value significant at the 0.01 level (all *p* = 0.00) (Table 4.5). To assess the discriminant validity, the AVEs of the constructs were compared with the correlations between the constructs (Fornell & Larcker, 1981). Table 4.5 shows that the squared root of each AVE, in the principal diagonal, surpass the correlation between each pair of variables, therefore providing support for the discriminant validity between the latent constructs.

Table 4.5
Correlations and squared roots of the AVEs

Constructs and items	1	2	3	4	5
1. Co-creation	**0.87**				
2. Attention	0.61	**0.71**			
3. Inv1. Pleasure/Interest	0.56	0.59	**0.82**		
4. Inv2. Sign value	0.26	0.42	0.34	**0.80**	
5. Memorability	0.54	0.70	0.64	0.48	**0.78**

Table 4.4 also shows the mean of each item and the overall mean of the items within each construct. The means are higher in the involvement dimension of *pleasure/interest* and memorability (overall averages of 4.25 and 4.17, respectively) and lower in the construct *co-creation* (overall averages of 2.77). In view of the second

research objective defined to this study, the average values of the constructs were compared between the two groups of tourists: those that performed the *Dolphin Emotions Experience* and those who participated in the more passive *Dolphin Show*. One important result is that all items and constructs report larger average values for the tourists that performed the *Dolphin Emotions Experience* in comparison to those who attended the *Dolphin Show*. All differences are significant at a 0.01 level. Table 4.4 shows these values regarding each construct. As anticipated, the larger differences are observed in the *co-creation* construct: mean=4.49 for tourists who had the *Dolphin Emotions Experience* and mean=1.20 for tourists who only attended the *Dolphin Show*. Thus, co-creation led to higher levels of active participation and direct interaction. Moreover, higher levels of *involvement*, measured by *pleasure/interest* and *sign value*, *attention* and *memorability*, were reported by tourists who participated in the *Dolphin Emotions Experience*. In order to answer the first research objective, an analysis of the structural model was performed, allowing confirmation of the extent to which the construct *co-creation* positively and significantly affects the other constructs of *attention* and *involvement* (directly) and *memorability* (indirectly).

4.4.3.3 Hypotheses testing

The four hypotheses involving direct relationships between the latent constructs, H1 to H4, were evaluated by observing the sign and statistical significance of each path coefficient (Table 4.6). The estimates for the corresponding path coefficients have all the correct sign, positive, and are significant at a 0.01 level (all $t > 1.645$; $p = 0.00$). Therefore, we can conclude that the hypotheses **H1** to **H4** have been supported by the data. **H1** assumed a positive relationship between the co-creation experience and tourist attention ($\gamma = 0.657$; $p < 0.01$), thus meaning that the more co-creative the experience, the higher the level of tourist attention is expected to be. **H2** stated a positive relationship between the co-creation experience and tourist involvement ($\gamma = 0.643$; $p < 0.01$), and by the same reasoning the more co-creative the experience the higher the level of tourist involvement is likely to be. **H3** conjectured a positive relation between the level of attention and experience memorability ($\gamma = 0.603$; $p < 0.01$) and following statistical results, the higher the tourist attention, the higher too the memorability. Lastly, **H4** ($\gamma = 0.432$; $p < 0.01$) postulated a positive relation between the level of involvement and

experience memorability. So similarly, the higher the tourist involvement, the higher the memorability is expected to be.

Regarding the hypotheses implying mediating effects, **H5** and **H6**, the indirect effect was computed by multiplying the direct effects involved. Given that AMOS does not test the significance of indirect effects, the Sobel's (1982, 1986) test was implemented was implemented by computing a Z statistics which follows a standard normal distribution. The results for this statistics considering each mediating effect are presented in Table 4.6. They also surpass the critical value of 1.65. Thus, hypotheses **H5** and **H6** are supported as well, that is, both attention and involvement play a mediating role between the co-creation experience and memorability. Another important result is the high squared multiple correlation coefficient for memorability (0.771), meaning that 77.1% of the variance of this construct is explained by the proposed model.

Table 4.6
Structural model results

Research hypotheses	Standardized coefficients	Standard error	T/Z statistics	Hypotheses	
H1. Co-creation--->Attention	0.657	0.026	13.617	H1	is supported
H2. Co-creation--->Involvement	0.643	0.021	10.518	H2	is supported
H3. Attention--->Memorability	0.603	0.028	8.037	H3	is supported
H4. Involvement--->Memorability	0.432	0.044	5.590	H4	is supported
H5. Co-creation -->Attention--->Memorability	0.396	0.024	16.49	H5	is supported
H6. Co-creation-->Involvement--->Memorability	0.277	0.023	11.904	H5	is supported

4.5 Discussion and conclusion

In this study a conceptual model relating co-creation experiences, attention, involvement and memorability was proposed and tested. A number of findings are noted. Firstly, the results agree with the conceptualization of the co-creation experience as that characterized by direct interaction with a core subject, the performance of an activity through role enactment, the engagement in play and physical activity. These results partially corroborate prior studies of co-creation based on the concept of active participation (Hung et al., 2014; Lee, 2015; Prebensen et al., 2015).

Secondly, all constructs (co-creation, attention, involvement and memorability) had moderately to high means. The highest overall mean was obtained in the dimension of

pleasure/interest of involvement (4.25), followed by memorability (4.17), attention (4.07), sign value (3.04), and co-creation (2.77). Generally, tourists felt moderately to actively participate and interact in the experience, but achieved high levels of interest and pleasure in participating, were very attentive to external and internal details and to the total experience environment, believe that partaking in these experiences says something about who they are and, finally, that they have and will maintain vivid memories of the events.

As prior studies in psychology have shown, the items that scored the highest for attention are people-related suggesting the importance of direct human interaction to tourist attentive behaviour (Laidlaw, Foulsham, Kuhn & Kingstone, 2011). The highest attention items were "I listened carefully the educator/trainer" (4.19) and "I often discussed with others the on-going experience" (4.34). In contrast, memorability of the experience was highest for the encounter with the dolphins (4.64) and the overall setting of the experience (4.38). Service and marketing theory had already elaborated on the concept of *servicescape* and *experiencescape* and how it highly links to perception of quality (Bitner, 1992; Sekhon & Roy, 2015). The results for memorability suggest that (i) the core element of interaction in the experience is most easily recalled and (ii) the on-site environment also plays an important part in the process of enriching autobiographic memory and should be managed accordingly.

Additionally, the structural model substantiates the study's assumptions on the direct impact of co-creation on the tourist level of attention and involvement in the experience and the indirect effect on memorability. The strongest direct causal relationship was observed between co-creation and attention (0.657), and then between co-creation and involvement (0.643). Here co-creation was measured using the concepts of active participation and direct interaction, thereby supporting prior theoretical claims (Andrades & Dimanche, 2014; Campos et al., 2016). Interestingly, attention influences memorability more strongly than involvement (respectively 0.603, 0.432), although scores for both relationships are high. The direction of these influences (i.e. between attention and memorability and involvement and memorability) is consistent with findings from fields other than tourism (Cavanagh, 2011; Kuhl & Chun, 2014). The model also hypothesised that both attention and involvement also help to explain the relationship between co-creation and memorability. Results confirm such assumptions but scores again are higher for attention (0.396), leading to the conclusion that focus and

concentration are more important to the memorability of the experience than pleasure/interest and sign value (0.277). These results corroborate research that consistently demonstrates a strong link between attention and memory vividness or memorability (Kuhl & Chun, 2014; Chun & Turk-Browne, 2007; Reisberg et al., 2013; Sternberg, 2006).

Comparing the *Dolphin Emotions Experience* and the *Dolphin Show*, differences emerge across all constructs with the most significant being co-creation: *DEE* (4.49) against *DS* (1.20). Here the *Dolphin Show* involves a *from-afar*, passive observation of an event and *Dolphin Emotions Experience* requires acting a part by doing and creating the experience. This result is consistent with findings from other studies. If individuals actively participate in experiences with a high degree of interaction, attention increases. Interestingly, the least significant difference between these two experiences was the dimension of sign value of involvement. Apparently both *watching* dolphins and *swimming* with dolphins were perceived by participants as having similar symbolic meaning.

4.5.1 Contributions to theory

This study contributes to understanding the relationship between co-creation experience, tourist psychological processes and outcomes. Empirical studies on co-creation experience are still scarce and this investigation has shown that active participation and interaction are conducive to memorability, and notably that attention and involvement are both important in that process. The study's results provide evidence that the level of co-creation influences direct and indirect outcomes, during (attention and involvement) and immediately after the experience (memory vividness). The extent these experiences affect long term memorability was not studied and would require a different methodological approach.

Prior research on tourist experience has neglected the study of attention, though there has been recent voices arguing for its inclusion in the research agenda (Campos et al., 2016; Ooi, 2003, 2010). This study is a first attempt at including attention in the stream of empirical research on tourism experience. Furthermore, this study supports prior research that memorable experiences are more meaningful and carry higher value to tourists than mere satisfactory ones (Morgan & Xu, 2009). Memorability has been

conceptualized as the subjective evaluation of immediate and long-term memory effects, thus departing from conceptualizations that seek to define the memorable experience through essential attributes (Kim et al., 2012). Instead, the perspective of memorability here adopted centres on tourist psychology by defining it in terms of mental processes and consequences (Larsen, 2007).

Research on co-creation in tourism is still in its infancy, and this research adds to tourism studies by adopting an experience-based definition and empirically testing and measuring it. Prior research has already empirically used active participation as a concept inherent to co-creation experiences (Prebensen et al., 2015) and experiential service consumption (Dong & Siu, 2013). However in this study the meaning of active participation has been specified and expanded to include concepts such as play (Gyimóthy & Mykletun, 2004), role enactment (Mathisen, 2013) and physical activity (Ihamäki, 2012; Prebensen et al., 2015).

4.5.2 Managerial implications

Recent studies in tourism support the idea that tourists are seeking new ways of living their tourism experiences (Morgan et al., 2009). This study used the co-creation experience construct to capture these desires and behaviour (Prebensen et al., 2015). In addition the study examined memorability as an outcome rather that experience value (Andrades & Dimanche, 2014; Prebensen et al., 2012; Prebensen et al., 2013b) or satisfaction with experience (Dong & Siu, 2013; Prebensen et al., 2015). This study found that co-creation experiences are more memorable if anchored in direct interaction with a key attribute (i.e. dolphin) and it is important that providers design and communicate such central attributes. In this study, animals but also instructors, professionals, local experts were *"attention capturers"*. Furthermore, attention is a psychological process that permeates the tourist experience (Ooi, 2010), and a co-creative context increases attention bringing affective, social and mental benefits. Impersonation, joyful play, physical activity and direct interaction are found to raise attentional responses with indirect gains to memorability. The same can be said of involvement: the dimension of *pleasure/interest* was found the most important for tourists participating in both experiences but a significant difference exists between those that are more actively and directly engaged in the experience and those less so engaged.

A first recommendation based on these findings is that experience designers and managers need to articulate the experiential dimensions that are more likely to capture and maintain tourist attention and involvement during experience. Tourists are able to focus on activities such as role play that incorporate a degree of physical effort and demand performative capabilities. This could be achieved by offering themed activities with well identified roles and core attributes for tourists to interact with (e.g. an animal, an instructor). Researchers have previously noted that experiences attractive to tourists are able to engage them deeply (Gupta & Vajic, 2000). As attention and involvement are expected to increase with co-creation, the experiencescape should include stimuli orienting attention to a principal attribute and incorporating opportunities for physical action and enactment.

Secondly, as observed in this study, animals can be focal attributes and serve as leading interactive elements of an experience, influencing memorability. Thus these findings may guide future options related to experience development in nature-based tourism considering focusing on animal-human interaction, where the role of animal caretaker could fill the tourist's concurrent needs of sensing, feeling and thinking through play and learning.

4.5.3 Limitations of the study and directions for future research

This investigation presents several limitations that future research should address. Firstly this study examined only two experiences offered by *Zoomarine* and it remains to be seen how the model applies to other types of tourism experiences (sport and adventure, gastronomy) and in alternative contexts. Animals, particularly those perceived as closer to humans in nature and behaviour (Bertella, 2014; Campos et al., 2016), are great attention capturers due to the emotions they are able to elicit but other contexts should be explored. Creative experiences (Hung et al., 2014; Richards & Wilson, 2006) offer interesting opportunities, but nature-based, sports and adventure tourism are equally suitable contexts for analysis. Application of scales used to measure co-creation, attention and memorability in other contexts would contribute to scale validation and improvement.

The second limitation concerns methodology. Time restrictions did not allow examining the potential mutual influence of attention and involvement during experience

and how this mutual influence would function in co-creation experiences. There is an intuitive link between the dimension of pleasure/interest and attention and prior research psychology-oriented has already attempted to explore it through the concept of mindfulness (Moscardo, 1996) and Csikszentmihalyi's (1990) theory of flow. However future research should further examine to what extent these approaches fit in the context of tourism experiences due to the variety of co-creative settings. In the same line, it would be important to consider other potential mediating constructs apart from attention and involvement worthy of consideration in the context of co-creation, and emotion qualifies in this respect as a top construct. There is already a significant amount of research conducted in tourism highlighting the importance of emotions in tourism experiences (Brunner-Sperdin et al., 2012; Li, Scott & Walters, 2014; Ma, Gao, Scott & Ding, 2013) and psychological theory supports the link of emotions to attention and to memorability (Reisberg et al., 1988; Sander, Grandjean, Pourtois, Schwartz, Seghier, Scherer, & Vuilleumier, 2005; Zimmerman & Kelley, 2010). Studies involving long term effects and evaluations require longitudinal approaches (Dong & Siu, 2013). Comparison of psychological phenomena following experience events would allow a more precise analysis of memorability by investigating if tourists would describe it in a similar way. Lastly, as psychology theory and research are become more closely related to neuroscience approaches and methodologies, future investigations could consider the integration of instruments of analysis from this area, calling for a more inclusive and up-to-date study of attention in tourist experiences.

From this discussion, three areas for future research arise. The first is to conceptually and empirically explore the relation between attention and emotion in tourism experiences. This relationship has been studied in general psychology and neuroscience (Sander et al., 2005), but not in the context of tourism, although it has been argued that emotional tourism experiences can be elicited through attention (Ooi, 2003). The second is to examine if and how co-creation experiences contribute to a better management of top-down and bottom-up attentional processes during the consumption experience (Ocasio, 2011) as a way to better reconcile the experience environment with the tourist's needs and goals. The third is to discuss and analyse the potential use of attention-based profiles for marketing segmentation.

4.6. References

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CHAPTER 5
GENERAL CONCLUSION

The overall goal of this thesis was to study on-site co-creation from the tourist perspective and analyse how and to what extent it influences tourist's attention, involvement and memorability of the experience. In this research, analysis of co-creation was conducted against two theoretical backgrounds: firstly, the management and marketing perspective, which interprets experience as consumption of products and services in a specific environment and as a result of activities and interactions happening between consumer and providers (Mossberg, 2007); secondly, the psychological approach which defines experience as the subjectively lived events by the individual tourist (Larsen, 2007). In **Study 1**, a definition of co-creation was proposed combining these two perspectives and describing it through the concepts of active participation and interaction. The definition, which was subsequently adopted in **Study 2** and **Study 3**, focused on the on-site stage of the tourism experience, thus purposefully neglecting the fact that co-creation can apply to any stage of the overall travel experience and so be present in the tourist's diverse experience environments (Binkhorst & Den Dekker, 2009).

The three studies that comprise the thesis have been conducted to scrutinize the direct and indirect influence of co-creation on psychological phenomena. Following the completion of this process, it is believed that the thesis accomplished the overall and specific objectives initially proposed, therefore contributing to the body of tourism studies by connecting analysis of the tourist experience with co-creation, described by some scholars as a major and consistently observed trend in management, marketing and consumer behaviour (Driggs & Jensen, 2014; Prahalad & Ramaswamy, 2004; Ramaswamy & Gouillart 2010; Seppä & Tanev, 2011). However these contributions are less important *per se* than if they carry practical advantage in the management and marketing of tourism experiences centred on the active role of tourists. The sections below identify and discuss in what way the work and findings of the thesis may add value to both tourism theory and practice.

5.1 Contribution to tourism studies

Tourism research is a result of application of critical thinking to the practice of tourism and this thesis makes contributions to the body of knowledge in this area in several aspects. *Firstly*, the thesis comprises a conceptual study on co-creation which summarizes and clarifies current thinking and research in the context of tourism (**Study 1**: Campos, Mendes, Valle & Scott, 2015). Theory on co-creation has been developing in management and marketing literatures (Dong, Evans & Zou, 2008; Edvardsson, Tronvoll & Gruber, 2011; Etgar, 2008; Füller, Hutter & Faullant, 2011; Grönroos & Voima, 2013; Gummesson & Mele, 2010; Payne, Storbacka & Frow, 2008; Prahalad & Ramaswamy, 2004; Vargo & Lusch, 2004; Wang, Hsieh & Yen, 2011) and tourism researchers are advocating its application to tourism recommending its potential to advance our comprehension of the tourist behaviour, the tourism experience, and tourism consumption environments (Bertella, 2014; Binkhorst & Den Dekker, 2009; De Jager, 2009; Mathisen, 2013; Prebensen & Foss, 2011; Rihova, Buhalis, Moital, & Gouthro, 2013; Salvado, 2011). Suggestions for adoption of the co-creation orientation are made on account of the need for businesses and destinations to face competition and provide superior value and distinctiveness to tourists (Ciasullo & Carrubbo, 2011; De Jager, 2009; Neuhofer, Buhalis, & Ladkin, 2012) while aligning with their current needs and expectations towards playing more active roles during consumption. However co-creation concepts (Majboub, 2014; Pini, 2009; Prahalad & Ramaswamy, 2004; Vargo & Lusch, 2004, 2008) have been used in tourism in various ways (Bertella, 2014; Bharwani & Jauhari, 2012; Grissemann & Stokburger-Sauer, 2012; Minkiewicz et al., 2013, Prebensen & Foss, 2011), assuming different focuses, which may hinder consensual understanding and consequently common empirical application and useful measurement of the construct. In this sense, **Study 1** has proposed a definition of on-site co-creation by capturing the concepts that were found in the literature reviewed and assumedly best describe it. Such a definition hopefully would allow framing future endeavours on the subject through empirical exploration of adequate experience settings and participants and this much was subsequently done. As such, **Study 2** and **Study 3** extended the path made possible by **Study 1**, through empirically (i.e. applying qualitative and afterwards quantitative research methods) and contextually (experiences in a theme park) examining the potential of the definition to understand the tourist experience.

Secondly, another contribution to tourism theory relates to the concept of attention. Though psychology has been acknowledged as a scientific field suitable to the study of tourism experiences (Larsen, 2007) and many issues related to the tourist experience have been addressed using the lens of psychological concepts (Cutler & Carmichael, 2010), attention has not received up to the moment the necessary consideration from tourism scholars. Ooi (2010) has been a clear exception to this fact, proposing an interpretation of the tourism experience based on the psychology of attention, arguing the need to manage tourist experiences through the management of attention. However Ooi's (2010) approach is theoretical in nature and centres the analysis on the significance of tourism as a mediated phenomenon which needs to be under the control of attention leaders, such as businesses and destinations. This thesis progresses in the study of the tourist experience using the psychological concept of attention and applying it to concrete tourist experiences. In particular it assumes that knowledge of tourist attention is advantageous to the management and marketing of experiences as long as mediators inquire and acquire knowledge of what tourists pay attention to (focus), how concentrated they are during consumption (level), and what evidence of attention tourists present (behaviour). **Study 2** has highlighted several facts, namely: that attention is involved in tourism experiences, tourists are able to account for their attentional behaviours, overt or covert, that direct interaction with core subject of the experience, learning, physical activities and expectations towards accomplishment of tasks and goals are strong capturers and concentrators of attentional efforts. **Study 3**, concretely, has shown that higher levels of attention are observed during experiences with also higher levels of active participation and interaction, and thus that there is a relation between the two constructs that might deserve further examination. As Ooi (2010) argued, attention mediators are very important players in the tourist experience, as their participation affects the tourist's appraisal of services and the interpretation of attractions, thus playing a part in the process of constructing the meaning of the experience. This thesis has found evidence that people are relevant attention capturers and enhance the interest and participation in the experience. Expectedly the more relevant to the experience an interactive subject is perceived to be, the more attention it will receive from the individual tourist.

Thirdly, the thesis also makes a contribution to the knowledge of tourist involvement. Although the application of the construct is far from new in the fields of

leisure, recreation and tourism, the approach followed in this thesis built on the assumption that co-creation enhances involvement of tourists during consumption (Study 3), corroborating recent conceptual investigation on involvement (especially in what concerns stimulation of interest and pleasure) that argues for its critical importance in the context of co-creation oriented organizations (Andrades & Dimanche, 2014). The relation of physical activity with leisure and tourist involvement had already been examined (Coghlan & Filo, 2013), and findings indicated chosen tourism destinations and experiences are seen by tourists as opportunities to engage in preferred physical activities (Chang & Gibson, 2011). However, in this investigation involvement was put in a different and simultaneously more complex perspective. On the one hand, it was examined as a consequent variable, little prior research has analysed it this way and it was limited to the study of motivation and socio-demographic characteristics (Madrigal et al., 1992; Zalatan, 1998). **Study 3** found that higher levels of involvement are present in more actively participated and interactive experiences, and particularly that pleasure and interest are very important facets of these. On the other hand, involvement was explored as a direct effect of experiences that include dimensions other than the physical activity. This in fact suggests that in order to understand tourists' involvement, or measure it, it is important to study a set of experiential antecedents. Moreover, the thesis brings renewed evidence of the influence of involvement on the outcomes of the experience by linking it with memorability. Recent research has found that involvement is a dimension of memorable experiences (Kim, 2010; Kim, Ritchie & McCormick, 2012) and this thesis substantiates those findings, stressing however that it is necessary to go further back to experiential antecedents of involvement to comprehend and predict memorability effects.

Fourthly, this thesis offers an innovative contribution to the methodology in the context of co-creation research. Literature review reveals that prior empirical studies on co-creation experience have embraced qualitative (Bertella, 2014; Prebensen & Foss, 2011) as well as quantitative methodologies (Prebensen et al., 2015). In this thesis however both types of methods have been employed. This research design included the exploration of measurement scales for the constructs of co-creation, attention and memorability. In both empirical studies it has been argued that how tourists perceive psychological processes during experience is critical for both understanding how and to what extent a co-creation experience affects them. It is expected that key findings from this research prove useful in future research on a variety of experience settings where

tourist attention and involvement are important (e.g. learning-type experiences as workshops or courses or adventure, nature and animal-based experiences). Additionally, in terms of involvement, it must be noted that through the years the construct has been operationalized in many different perspectives and contexts, but most research has used it as antecedent of behaviour, explaining for instance information processing, decision-making and responses to advertising, travel motivation, activity and destination choice, and place attachment (**Study 3**). Less research adopts the perspective of involvement as a consequent variable. Involvement was found to enhance with high co-creation, and the active participation of the tourist, as well as the interaction focus were important for this enhancement.

5.2 Implications to the management and marketing of tourism experiences

From a managerial point of view, the thesis also presents some insights for tourism managers concerned with experience design and marketing. One of the most important findings is the importance of co-creation to enhance the tourist's attention and involvement with the experience, as active participation and interaction directly influence them.

The studies conducted during this research corroborate Ooi's (2010) concern about the need to manage attention given the fact that tourism experiences are mediated by attentional capturers and focuses, and business competitiveness is dependent on directing, sustaining and enhancing the tourist's attention. Thus, a *first* general implication is that attention to tourist's *attention* and *involvement* in experiences should become a management priority, particularly in more easily controlled environments, which is the case of theme parks, by means of designing experiences allowing higher degrees of active participation and interaction. Experiences thus characterized are, as found in this thesis, greatly appealing for tourists who are today responsive to stimulating and challenging propositions. Therefore, in order to increase tourist's attention and involvement, managers are recommended to better identify *external*, highly salient stimuli potentially characteristic of the organization and the specific experience environment, and *internal* stimuli, and subsequently devise how their combination can be maximized in experience activities. The saliency of stimuli is, to a varied degree, under the control of the organization and external stimuli can be used to induce interest and prospects of pleasure. These can be sensory (e.g. sounds, colours and smells) or cognitive

(a thinking game, a memory notepad) and combine in a stimulating activity. In some experiences, for instance as those with animals or occurring in natural settings, appealing to the senses is particularly relevant. Opportunities to feel with all the senses (Agapito, Mendes & Valle, 2013) should be further developed and harmonized with propositions of activity tasks and goals. These are related with motivation and interest in the experience and their fulfilment contributes to a sense of achievement which is conducive to feelings of pleasure.

Moreover, as **Study 2** and **Study 3** have shown, physical activity is a component of co-creation and also relevant to attention. The movement of the body and the sensory organs combine in an articulated manner to achieve a goal, and attentional processes are comprised in this combination (Centers for Disease Control and Prevention, 2010). However although tourists taking part in the same experience may be willing to have physical activity and believe they will succeed, but they don't have equal skills and capabilities. Identification of degrees in physical capacity would lead to a higher sensitivity to the differentiation of tourists participating in the same experience. Frustration or sadness may follow from failing the experience goals or the expectations of performance. As vividness is related to the strength of memories more than with their quality, i.e. positive versus negative (Reisberg, Heuer, McLean & O'Shaughnessy, 1988), a *second* general recommendation is that managers consider the integration of physical tasks adequate to the tourists' different physical skills and capabilities in the planning of experiences and help tourists avoiding unpleasant feelings and negative evaluations.

From the above, *specific* suggestions are: (i) to *diversify the propositions of role play* in a sensory appealing environment able to increase interest and direct attentional efforts to a set of tasks the tourist wishes to successfully accomplish; this way the tourist's sense of play and accomplishment would be emphasized. To play a dolphin trainer in order to aptly instruct the dolphin or a dog-sled driver with the objective of running a race and win are examples found in animal-based tourism but other options might be explored, as theme parks, although concentrating on a *leitmotiv*, are spaces with the potential of creatively augmenting the diversity of roles in the experience; the study conducted by Mathisen (2013) reported a dog-sled experience in a natural setting in Norway in which tourists were able to experience a sense of play by impersonating a sled driver but also of a handler, a journalist and a photographer; (ii) *to flexibilize the design of the experience* to accommodate different levels of ability to perform actively, since

tourists wishing the same experience may present nonetheless varying degrees of skills or preferences; and last, (iii) and finally *to emphasize the use of cues*, e.g. verbal, visual or behavioural, in key moments to stimulate the tourist's enactive imagery (Moutinho, Ballantyne & Rate, 2011), enhance attention, involvement and consequently the memorability of the experience; regarding this aspect, the role of mediators becomes very important, as they are in close proximity to tourists and possess the required knowledge of meaningful details of the experience.

5.3 Implications to the management and marketing of tourism experiences at *Zoomarine*

Based on the marine life theme, alternative motivations can be pursued by tourists visiting *Zoomarine*, namely entertainment, learning and education or relaxation. Also, by providing a variety of experiences that require from them different levels of physical and cognitive participation and interaction, it accommodates segmentation profiles which would deserve more consideration. In fact, this is the case with the *Dolphin Show* and the *Dolphin Emotions Experience*, two experiences with dolphins comprehending, respectively, a low and high level of co-creation. Tourists who choose to participate in the *Dolphin Emotions Experience* expectedly wish to directly interact with animals, to have fun through playing roles, and are predisposed to have physical activity.

However, participants desire to mentally, physically and socially engage in the experience in different levels, will react distinctively to the direct encounter with the animal and be able to perform some tasks better than others. As vivid memories depend on pleasurable events as much as on painful and frustrating ones, a *first* suggestion to this park managers would be to consider inquiring prior to the experience about physical capabilities and expectations of role playing in order to improve communication with tourists, organize the experience and act upon detected differences more effectively before the consumption encounters. In this context, disabled tourists deserve special concern. *Secondly*, as role enactment is intimately related to ludicity and is a crucial manifestation of tourist performance, it is recommended that the focus on dolphins integrates additional parts for tourists to play, such as a dolphin doctor, a marine biologist or reporter and so on.

5.4 Limitations of the thesis and directions for future research

This thesis's limitations are related with *theoretical framework*, *scope* and *methodology*, as discussed below.

Theoretically, the thesis is delimited by the psychological focus on the tourist experience according to which it is a collection of psychological processes that occur before, during and after the travel (Larsen, 2007), and concepts derived from general psychology are accepted as foundational to analyse it. This approach stands on the assumption that application and development of psychological knowledge of the tourist is required to the management and marketing of tourism experiences. However, it is also accepted that the tourist is a consumer of experiences (Cutler & Carmichael, 2009; Dimanche & Samdahl, 1994). This considered, the thesis assumes the two perspectives of the experience as closely related. Current marketing thinking adheres to the experiential view of consumption (Holbrook & Hirschman, 1982), interpreting consumer decisions as based on expectations of hedonic (feelings, fantasy and fun) and other experiential benefits. So according to the second perspective, the tourist is a consumer, emotionally, physically, intellectually, or even spiritually engaged in the consumption of experiences during which resources are employed, activities are performed, interactions occur and value is created (Mossberg, 2007; Tsiotsou & Ratten, 2010; Vargo & Lusch, 2004; Wikström, 2008).

Concerning scope, as co-creation was considered the tourist's subjective experience when actively participating and interacting within one individual component of a holiday travel - i.e. a personal and single experience that took place in a theme park visited at the destination -, this thesis was limited in three ways. *Firstly*, the perspective of the tourist experience as the overall travel experience, acknowledged by researchers as a separate entity from the individual components of a holiday, has been neglected (Ryan, 2002; Silva, Mendes & Guerreiro, 2001). This disregard ruled out the study of co-creation considering experiences in diverse organizational contexts, providing activities and services other than recreational. *Secondly*, by adopting the view of the *phasic nature* of the tourism experience, the analysis was circumscribed to the on-site stage (Cutler & Carmichael, 2010), and the review of literature revealed that co-creation is equally viable in the pre-travel and the post-travels stages (Neuhofer et al., 2012). *Thirdly*, only the psychological processes of attention and involvement have been analysed within the

processes equally related to consumer experiences, such as motivations, expectations or behavioural intentions, as with recommendation or loyalty. Emotional responses to co-creation experiences have been left out, though prior research widely recognizes the hedonic dimension of consumption experiences (Morgan, Elbe & Curiel, 2009) and the importance of emotions in evaluation of the experience and the memories of it (Ma, Gao, Scott & Ding, 2013).

Regarding methodology, three main limitations are considered. Due to reasons of time constraints, this thesis confined the study of co-creation to a theme park context which is a kind of tourism setting with a delimited range of potential experiences. Hence this is the *first* limitation of this thesis. Additional investigation would be needed to expand the analysis to other contexts also viewed as experiential and appropriate for high active participation and interaction. Sport and adventure tourism, but also sorts of cultural tourism varieties are increasingly demanded by tourists. The theoretical and empirical approaches used in this thesis could be applied in these types of tourism for comparison of findings and validation of scales implemented in **Study 3**. Additional hypothesis testing then would allow deeper understanding of the influence of co-creation on tourist attention and involvement and the mediated effects on memorability. The *second* limitation is related to the fact that the questionnaire's scales used in **Study 3**, with the exception of the scale employed to measure involvement, were mainly based on the information extracted from interviews. In this research, mitigation of this weakness was attempted by using literature sources whenever pertinent. Qualitative methods are commonly employed to assist in the development of quantitative data collection instruments on account of their potential to hint at relevant information. However this potential is counterbalanced by the possibility of biasing the construction of the questionnaire, as the items included in the measurement scales are limited to a small piece of data collected. A *third* limitation is related to the perspective selected to analyse and discuss in this thesis. In fact, as the review of literature has properly shown (**Study 1**), co-creation can be understood in alternative ways, and the focus on experience led to emphasize the role of the tourist and how it co-creates the experience, but plenty of research has stressed the fact that the co-creation of the experience is dependent on the inclusion of staff, other consumers, and relatives or friends. This perspective should thus be complemented with the views of other contributors to the experience, and thus apply

different research methods to determine how and to what extent they influence tourist attention, involvement and memorability.

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APPENDICES

APPENDIX 1
Research Project Information Sheet – Interviews April/May 2014

(English and Portuguese versions)

Research Project Information Sheet

1. Background of the Study

I am a PhD student in the Tourism Doctoral Program from the Faculty of Economics, University of Algarve. The study I would like you to participate in is part of a PhD research project, exploring tourists perceptions on activities and interactions experienced during their visit to the Zoomarine Park.

More particularly, I wish to invite you to participate in interviews that will be carried out as part of this research. I would like you to share with me your views on activities and interactions and how you see their connection to attention, involvement with and memorability of events.

Research Project Title: *Co-creation Tourism Experience, its Impacts on Tourist Attention, Involvement, and Experience Memorability in a Theme Park Setting*

Researcher: Ana Cláudia Campos (PhD Candidate)

Supervisors: Prof. Doutor Júlio Mendes, Profª. Doutora Patrícia Oom do Valle

2. The Role of Participants

As a participant in this study, your role is to help me to get a better understanding of tourist experiences in a theme park context. Your involvement in the study will require your availability to hold an individual interview with me. Thus it will always be understood as a voluntary participation.

If you don't want to take part in it or you wish to end our conversation at any time, you are not required to justify or explain your reasons. Please be assured that no pressure will be put on you so that you change your mind. If your decision is to withdraw from interview, all information you provided will be destroyed and will not be used for any reason and purpose.

3. Interview Process and Ethical Procedures

I will ask for your permission to audio-record the interview, because I would like to have a written record allowing me not to miss or forget anything from our conversation. Mind that all the information you give me will be confidential and used for academic purposes only. The interview transcript will be saved with a code number on a password-protected computer. And if at any stage I need to quote your own words, your identity will always be protected by the use of that code. Once my research is completed, all records related to your participation in the study will be erased and destroyed immediately. In this way I will assure your anonymity. Interviews are a means of clarifying my understanding of your answers and ensure that I properly represent your views in the best way possible. The interviews will last no longer than 30 minutes.

4. Further Information

If you find you are not sure about something, please ask me to clarify you. If you agree to take part, please sign the consent form I present to you. This form will not be used to identify you because it will be stored separately from all other information. If, after the interview, you would like to know any information about my study, you can contact me through the following email addresses: acalves@ualg.pt; aclaudiacampos@yahoo.co.uk.

This research follows the Guidelines of the PhD Process of The University of Algarve. Please contact the Faculty's Director Professor Efigénio Rebelo for any additional information you may find necessary (diretorfeualg@ualg.pt).

THANK YOU VERY MUCH FOR YOUR TIME AND HELP!

UAlg FE
UNIVERSIDADE DO ALGARVE
FACULDADE DE ECONOMIA **Informação sobre o projecto de investigação**

1. Contexto do estudo

Sou uma aluna de doutoramento do programa de Doutoramento em Turismo da Faculdade de Economia da Universidade do Algarve. O estudo no qual gostaria muito de contar com a sua participação é parte constitutiva de um projecto de tese que pretende explorar as percepções dos turistas acerca das actividades realizadas e interacções vividas durante a sua visita ao Zoomarine.

Em particular, gostaria de convidá-lo(a) a participar nas entrevistas que integram este projecto de trabalho. Gostaria que partilhasse comigo a sua visão acerca da experiência e como perspectiva a relação entre actividades e interacções com a sua atenção, o seu envolvimento e a memorabilidade dos acontecimentos.

Título do projecto: *Co-creation of Tourist Experience Attention, Involvement, and Memorability*

Investigadora: Ana Cláudia Campos (aluna de doutoramento)

Orientadores: Professores Doutores Júlio Mendes e Patrícia Oom do Valle

2. O papel dos participantes

Como participante neste estudo, o seu papel é ajudar-me a compreender melhor as experiências turísticas neste contexto deste parque temático. O seu envolvimento no estudo requer a sua disponibilidade para realizar uma entrevista comigo e será sempre entendida como uma participação voluntária.

Se não deseja participar ou entende em qualquer momento que deseja pôr termo à entrevista, não necessita prestar qualquer esclarecimento ou justificação. Nenhuma pressão será exercida sobre si se se mudar de ideias. Se a sua decisão for parar com a entrevista, toda a informação entretanto transmitida será destruída e em nenhum caso usada.

3. O processo das entrevistas e procedimentos éticos

Solicitarei a sua autorização para gravar a entrevista porque gostaria de ficar com um registo escrito que me permitisse não omitir ou esquecer qualquer aspecto ou detalhe da nossa conversa. Relembro que toda a informação que me prestar é confidencial e usada apenas para fins de investigação académica. A transcrição da entrevista será armazenada com a atribuição de um número código e lida num computador protegido com palavra-passe. Se necessitar de citar as suas próprias palavras, a sua identidade estará sempre protegida mediante o uso desse código. Uma vez que a minha investigação esteja terminada, todos os registos relacionados com a sua participação serão imediatamente destruídos e assim o seu anonimato ficará assegurado. As entrevistas são uma forma de clarificar o meu entendimento das suas respostas e também de assegurar que represento correctamente a sua visão. As entrevistas durarão em média 30 minutos.

4. Informação adicional

Se entender que não está seguro sobre algum assunto ou aspect deste processo, por favour pergunte-me o que achar necessário. Se concordar em participar, peço que assine o respectivo documento que lhe apresento. O impresso não servirá para o identificar e será arquivado separadamente do resto da documentação. Se, após a entrevista, estiver interessado (a) em conhecer alguma informação sobre o meu estudo, poderá contactar-me através dos seguintes endereços de email: acalves@ualg.pt; aclaudiacampos@yahoo.co.uk.

Esta investigação está conforme o regulamento do programa de doutoramento da Universidade do Algarve. Poderá contactar o Director da Faculdade de Economia Professor Doutor Efigénio Rebelo para obter qualquer esclarecimento adicional (diretorfeualg@ualg.pt).

MUITO OBRIGADA PELO SEU TEMPO E PARTICIPAÇÃO!

APPENDIX 2
Interview Consent Form
(English and Portuguese versions)

Interview Consent Form and Data Protection

April/May 2014

Dear Participant,

I would like to invite you to participate in a PhD research project, which analyses tourists' experiences at Zoomarine Park. The study will require you to speak directly to me about your experience at the Zoomarine. This will take the form of an interview, which will be held during April and May 2014. The aim of the interview is to discuss your experiences and clarify my interpretations of them.

It is hoped that you will enjoy taking part in the research and your agreement to participate is very important in ensuring that we better understand tourist experiences in theme parks. I would also like you to complete the slip below and return it to me. By signing this slip you give me permission to record your interview. I will use this information for research purposes only. All material used will not include your name or source of collection.

Thank you very much for your assistance.

Yours sincerely,

Ana Cláudia Campos

✂--

I _____ give / do not give permission to participate in the research described above (delete as appropriate).

Signed: _____ Date: _____

Consentimento de Participação na Entrevista e Protecção de Dados

Abril/Maio de 2014

Caro participante,

Gostaria de convidá-lo a participar num projecto de investigação de Doutoramento, que pretende estudar experiências turísticas no Zoomarine. O estudo implica conversar directamente comigo acerca da sua experiência. A conversa tem a forma de entrevista e decorrerá neste período. O objectivo da entrevista é falar sobre a sua experiência e clarificar as minhas interpretações das suas palavras.

Espero que goste de participar neste projecto de investigação e a sua concordância é muito importante para nos permitir compreender melhor as experiências turísticas no contexto deste parque. Pedir-lhe-ei que preencha o destacado e mo devolva como comprovativo da sua anuência. Com este documento está a dar-me autorização para gravar a entrevista e a usar a informação nela contida, apenas para fins académicos. O seu nome não constará de qualquer documento escrito.

Muito obrigada pela sua colaboração.

Com os mais respeitosos cumprimentos,

Ana Cláudia Campos

✂--

I _____ give / do not give permission to participate in the research described above (delete as appropriate).

Signed: _____ Date: _____

APPENDIX 3
Interview Outline

INTERVIEW OUTLINE MAY 2014

OPENING THE INTERVIEW

Establish rapport

• Introduce myself, the study and its purposes and collaboration expected from participants in interviews
• Introductory and warm-up questions (descriptive and reflective):
  o Is it your first time visiting Zoomarine?
  o How many times have you visited the park?
  o How did you learn about it?
  o Why did you decide to come, was it important to you?

PACING THE INTERVIEW

Probing into substantive areas
• Descriptive and reflective questions on:
  o This particular experience
    ▪ Could you please explain to me why did you choose this particular experience at the park, is it important to you?
    ▪ How interested in the activity were you before your began?
  o Active participation
    ▪ Could you describe what did you do/were asked to do?
    ▪ Could you tell which did you find your most important tasks/behaviours/ performances?
    ▪ Could you tell what did it mean to you to participate in this experience?
    ▪ *Providing cues:* in relation to active part and role playing (do you feel you've been actively engaged in this experience?, how would you describe this engagement…?)
  o Interaction
    ▪ Do you feel you socialized during this experience?
    ▪ Did you find this experience important as an opportunity to socialize with people?
    ▪ Could you tell who did you most relate to during the experience?
    ▪ How would you describe those interactions and most influential aspects?
    ▪ How did you feel about others' presence and participation during the experience?
    ▪ *Providing cues:* in relation to subjects such as relatives, friends, other visitors, staff… in relation to nature ou significance of interactions (were they based on affective ties, information, knowledge, learning, sharing of life stories…?)
  o Attention
    ▪ Could you tell what captured and kept your attention in a higher degree during this experience? Which aspects or parts of it did you attend to most?
    ▪ Could you tell why you were particularly attentive in those

moments?
- ▪ What impact do you feel being a participant in the experience and socializing with others had on the attention you paid to events?
- ▪ Could you tell more about it?
- ▪ *Providing cues:* in relation to stimuli and origin (the lecture, the trainer's behaviour, conversation with other visitors, asking and answering questions, repeating of observed behaviour, the display of contents, observation of others' behaviours, task performance, sensory stimuli…); discussion of attentional behaviours and expectations towards the experience.
- o Memorability
  - ▪ What did this experience mean to you, do you find it memorable?
  - ▪ Could you explain why?
  - ▪ Could you detail most impressive moments or aspects of this experience?
  - ▪ Do you find being a participant in the experience and socializing with others influenced in any degree how memorable the experience is?
  - ▪ Could you tell me more about it?
  - ▪ *Providing cues:* as to aspects that were memorable (episodes, people, smells, sounds, shapes, images, words…)
- • Evaluative questions on (using exploratory bipolar scales with anchors 1-very low to 10-very high):
  - o Active participation
  - o Interaction
  - o Attention
  - o Memorability
  - o Importance of active participation to attention and to memorability
  - o Importance of interaction to attention and to memorability
- • Reflective question on scale adequacy (comments and suggestions on dimensionality, easiness of response…)

TERMINATING THE INTERVIEW

Prepare for closure
- • Descriptive questions on socio-demogaphic information
  - o Gender, age group, occupation, education, country of origin
- • Additional comments and opinions, review of covered topics
- • Thank the contribution to the study

APPENDIX 4
The Survey Questionnaire: English Version

UAlg FE
UNIVERSIDADE DO ALGARVE
FACULDADE DE ECONOMIA

Survey August 2014 – English version

Dear visitor,

I am a PhD student interested in learning about visitors' experiences at the *Zoomarine Park*. **The purpose of this research is to understand visitors' behaviours and psychological processes (such as, attention, involvement, and memorability) involved in experiences.** The surveys collected will remain anonymous with no data on individual responses published. Participation in this pilot survey is completely voluntary. Thank you very much for your collaboration.

SECTION 1. Information on experience

1.1 Please, identify the experience you've just participated in:

Dolphin Show ☐   Dolphin Emotions Experience ☐

1.2 Why did you choose this particular experience? (You can select several options)

A	To have fun and entertainment	
B	To learn new knowledge	
C	To have time w/ friends and relatives	
D	To live a special and unique experience	
E	To celebrate a meaningful event	
F	To live positive emotions	
G	To allow a one-time experience to family	
H	Other:	

1.3 To what extent do you agree with the following statements regarding your participation and interaction during this experience? Circle your answer in each line (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree).

In this experience I directly interacted with the dolphins	1	2	3	4	5
In this experience I've been able to act as if I were a dolphin trainer	1	2	3	4	5
In this experience I had a great play time with the dolphins	1	2	3	4	5
In this experience with the dolphins I have been physically active	1	2	3	4	5

1.4 To what extent do you agree with the following statements regarding the attention you paid to aspects of your experience? Circle your answer in each line (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree).

I talked with others about the learning materials and presentations	1	2	3	4	5
I was concentrated on my own behaviours and interactions	1	2	3	4	5
I listened carefully the educator/trainer	1	2	3	4	5
I was completely aware of my bodily sensations and sensory stimuli	1	2	3	4	5
I was conscious of my own emotions and thoughts	1	2	3	4	5
I often discussed with others the on-going experience	1	2	3	4	5

1.5 How do you evaluate whether the following factors influenced your attention during the experience? Circle your answer in each line (1=not at all important, 2=slightly important, 3=important, 4=very important, 5=extremely important).

Being engaged in doing something and not just watching	1	2	3	4	5
Being a novel experience	1	2	3	4	5
Being a one-life experience	1	2	3	4	5
Going swimming with the dolphins	1	2	3	4	5
Loving these animals	1	2	3	4	5
Being with friends and relatives	1	2	3	4	5
Expecting to learn new things	1	2	3	4	5
Expecting to behave as expected from others	1	2	3	4	5
Expecting to meet new people	1	2	3	4	5
Being an exciting and new environment	1	2	3	4	5
Other:	1	2	3	4	5

1.6 To what extent do you agree with the following statements regarding your involvement in this experience? (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree).

It gave me pleasure to participate in this experience	1	2	3	4	5
Participating in this experience was like giving a gift to myself	1	2	3	4	5
This experience was somewhat of a pleasure to me	1	2	3	4	5
I attached great importance to this experience	1	2	3	4	5
One can say this experience interested me a lot	1	2	3	4	5
This experience left me totally indifferent	1	2	3	4	5
You can tell a lot about a person by whether or not he/she chooses to have this experience	1	2	3	4	5
This experience gives a glimpse of the type of man/woman I am	1	2	3	4	5
This experience tells a little bit about you	1	2	3	4	5

1.7 To what extent do you agree with the following statements regarding the memorability of your experience? (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree)

Interaction with the dolphins is something unforgettable	1	2	3	4	5
I have strong images of my own behaviours and interactions that will persist forever	1	2	3	4	5
The learning experience with the educator/trainer will remain in my memory	1	2	3	4	5
I can describe in detail my bodily sensations and the sensory stimuli	1	2	3	4	5
I'll always remember my own feelings and emotions	1	2	3	4	5
The overall experience setting will be an everlasting memory	1	2	3	4	5

SECTION 2. Socio-demographic information

2.1 Gender

Male ☐   Female ☐

2.2 Age _____

2.3 Occupation

Employed ☐   Domestic ☐   Student ☐
Retired ☐   Unemployed ☐   Other ☐ _____

2.4 Education

Primary Education ☐   Secondary Education ☐   Higher Education ☐

2.5 Country of origin

Portugal ☐   Germany ☐   Netherlands ☐
Spain ☐   France ☐   U.K ☐
Other ☐ _____

Thank you for your participation!

APPENDIX 5
The Survey Questionnaire: Portuguese Version

UAlg FE
UNIVERSIDADE DO ALGARVE
FACULDADE DE ECONOMIA

Questionário Agosto 2014 – Versão Portuguesa

Caro visitante,

Sou uma estudante de doutoramento interessada em conhecer as experiências dos turistas durante a sua visita ao Zoomarine. **O objectivo da minha investigação é compreender os seus comportamentos e atenção, o seu envolvimento nas experiências em que participam e aspectos relacionados com as memórias que guardam delas.** Os questionários são anónimos e toda a informação é confidencial. A participação neste estudo é voluntária.

PARTE 1. Informação sobre a experiência

1.1 Por favor, indique a experiência em que acabou de participar:

Show dos Golfinhos ☐   Experiência Dolphin Emotions ☐

1.2 Porque escolheu participar nesta experiência em particular? (Pode assinalar várias opções)

A	Para me diverter	☐
B	Para aprender coisas novas	☐
C	Para passar o tempo com amigos e familiares	☐
D	Para viver uma experiência única e especial	☐
E	Para celebrar um evento especial	☐
F	Para viver emoções positivas	☐
G	Para proporcionar uma experiência única aos familiares	☐
H	Outra:	☐

1.3 Em que medida concorda com as seguintes afirmações relativas à sua participação e interacção durante esta experiência? Assinale a sua resposta em cada uma das alíneas (1=discordo totalmente, 2=discordo, 3=nem concordo nem discordo, 4=concordo, 5=concordo totalmente)

Nesta experiência interagi directamente com os golfinhos	1	2	3	4	5
Nesta experiência pude fazer de conta que era um treinador de golfinhos	1	2	3	4	5
Nesta experiência tive um grande momento de brincadeira com os golfinhos	1	2	3	4	5
Nesta experiência com os golfinhos estive fisicamente activo(a)	1	2	3	4	5

1.4 Em que medida concorda com as seguintes afirmações em relação à atenção que deu aos seguintes aspectos da sua experiência? Assinale a sua resposta em cada uma das alíneas (1=discordo totalmente, 2=discordo, 3=nem concordo nem discordo, 4=concordo, 5=concordo totalmente)

Falei com as outras pessoas sobre os audio-visuais e apresentações	1	2	3	4	5
Concentrei-me nos meus próprios comportamentos e interacções	1	2	3	4	5
Ouvi atentamente os monitores/treinadores	1	2	3	4	5
Apercebi-me completamente das minhas sensações e estímulos sensoriais	1	2	3	4	5
Estive consciente das minhas emoções e pensamentos	1	2	3	4	5
Discuti frequentemente com os outros a experiência que estava a acontecer	1	2	3	4	5

1.5 Como avalia os seguintes factores em termos de influência sobre a sua atenção durante a experiência? Assinale a sua resposta em cada uma das alíneas (1=nada importante, 2=pouco importante, 3=importante, 4=muito importante, 5=extremamente importante).

Ir fazer alguma coisa e não apenas observar	1	2	3	4	5
Ser uma experiência nova	1	2	3	4	5
Ser uma experiência única	1	2	3	4	5
Ir nadar com os golfinhos	1	2	3	4	5
Adorar estes animais	1	2	3	4	5
Estar com amigos e familiares	1	2	3	4	5
Ter a expectativa de ir aprender coisas novas	1	2	3	4	5
Desejar comportar-me como esperado de mim	1	2	3	4	5
Ter a expectativa de conhecer novas pessoas	1	2	3	4	5
Ser um ambiente excitante e novo	1	2	3	4	5
Outro: _____	1	2	3	4	5

1.6 Em que medida concorda com as seguintes afirmações relativas ao seu envolvimento nesta experiência? Assinale a sua resposta em cada uma das alíneas (1=discordo totalmente, 2=discordo, 3=nem concordo nem discordo, 4=concordo, 5=concordo totalmente)

Dá-me prazer participar nesta experiência	1	2	3	4	5
Participar nesta experiência é um pouco como oferecer um presente a mim próprio	1	2	3	4	5
Esta experiência é um prazer para mim	1	2	3	4	5
Dou grande importância a esta experiência	1	2	3	4	5
Pode dizer-se que esta experiência que interessa muito	1	2	3	4	5
Esta experiência deixa-me totalmente indiferente	1	2	3	4	5
Pode dizer-se muito sobre uma pessoa se ela escolhe ou não ter realizar esta experiência	1	2	3	4	5
Esta experiência dá uma ideia do tipo de pessoa que sou	1	2	3	4	5
Esta experiência diz alguma coisa sobre mim	1	2	3	4	5

1.7 Em que medida concorda com as seguintes afirmações relativas à memorabilidade da sua experiência? Assinale a sua resposta em cada uma das alíneas (1=discordo totalmente, 2=discordo, 3=nem concordo nem discordo, 4=concordo, 5=concordo totalmente).

A interacção com os golfinhos é algo de inesquecível	1	2	3	4	5
Tenho imagens fortes dos meus comportamentos e interacções que ficarão para sempre	1	2	3	4	5
A experiência de aprendizagem com o monitor/treinador permanecerá na minha memória	1	2	3	4	5
Posso descrever com detalhe as minhas sensações e os estímulos sensoriais	1	2	3	4	5
Recordarei para sempre os meus sentimentos e emoções	1	2	3	4	5
A experiência no seu todo será uma memória duradoura	1	2	3	4	5

PARTE 2. Informação sócio-demográfica

2.1 Género

Masculino ☐   Feminino ☐

2.2 Idade _____

2.3 Ocupação

Empregado(a) ☐   Doméstico(a) ☐   Estudante(a) ☐

Aposentado(a) ☐   Desempregado(a) ☐   Outra(a) ☐ _____

2.4 Educação

Educação Básica ☐   Educação Secundária ☐   Educação Superior ☐

2.5 Nacionalidade/País de origem

Portugal ☐   Alemanha ☐   Holanda ☐

Espanha ☐   França ☐   Reino Unido ☐

☐   ☐   Outra ☐ _____

Obrigada pela sua colaboração!

APPENDIX 6

Clustering tourist involvement in a rural destination[4]

[4] Campos, A. C., Agapito, D., Valle, P. (2014). Clustering tourist involvement in a rural destination. *Revista Turismo & Desenvolvimento*, 21/22, 245-246.

APPENDIX 7
Sensations, perception, and co-creation in rural tourism experiences[5]

[5] Agapito, D., Almeida, H. & Campos, A. C. (____). Sensations, perception, and co-creation in rural tourism experiences. Book chapter submitted to Cambridge Scholars Publishing, E. Kastenholz (Ed.) *Meeting Challenges for Rural Tourism through Co-Creation of Sustainable Tourist Experiences*.

APPENDIX 8

Attention, emotion and hedonic service experiences. Managing and delivering services in the Asian Century[6]

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[6] Ma, J., Campos, A. C., Li , S., Gardiner, S, & Scott, N., (2016). Attention, emotion and hedonic service experiences: managing and delivering services in the Asian Century. *Worldwide Hospitality and Tourism Themes*, 8(1), 53 – 60.

ANNEX A
Ethical Approval Letter

Ethical Clearance Approval

9th April 2014

Dear Ana,

Subject: Ethical Clearance for PhD Empirical Research and Data Collection

I have examined your Application for Ethical Clearance for your study entitled: Cocreation Tourism Experience, its Impacts on Tourist Attention, Involvement and Experience Memorability in a theme park setting.
In regard to your application,

• You state that in the qualitative stage of your research you will interview approximately 15 tourists using a purposeful sampling methodology and intend to explain your project to them and if they agree to be interviewed.

• I am pleased that you emphasised they are not obliged to be involved in your study.

• In addition, I recognise you have stressed in the consent form the confidential nature of the study and the right of participants to withdraw at any stage if they feel uncomfortable with any of the questions.

I have also examined the questions that you intend to ask respondents and thus inform you that there are no other ethical considerations that need further attention and I give you permission to proceed to collect your data.

Good luck with your study.
Best wishes,

_____

Professor Efigénio Rebelo, Dean
Faculdade de Economia
Universidade do Algarve