

Towards a holistic approach to the travel experience: A qualitative study of bus transportation

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ABSTRACT

This article presents the results of a qualitative study with 49 bus passengers in two types of mid-distance journeys: (1) experience-centric trips (touristic), and (2) utilitarian trips (intercity transportation). Study results show that passenger travel experience encompasses all moments of contact with the transportation service, as well as aspects that are not in direct control of the transportation provider. The results also reveal that the travel experience involves a holistic set of customer responses that go beyond cognitive assessments, also comprising sensorial and emotional components. The comparison of the two transportation settings shows that both experience-centric and utilitarian trip passengers have a holistic view of the travel experience, although focusing on different experience drivers and customer responses. These findings indicate that transport providers and planners should pay attention to the overall customer travel experience from a holistic view, and that transportation services should be carefully designed and managed in a systemic way.

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1. Introduction

Customer experience can be defined as “the internal and subjective response customers have to any direct or indirect contact with a company” (Meyer and Schwager, 2007, p. 118). Voss et al. (2008) classify experience-centric services as the ones in which the customer experience is at the center of service provision (e.g., Disney theme parks or Guinness Storehouses). Customer experience has received increased attention since Pine and Gilmore (1998) advocated that a new era of Experience Economy was starting, and its focus has also evolved to a more multi-dimensional and holistic view (e.g., Gentile et al., 2007; Verhoef et al., 2009). The customer experience is important for all kinds of services, even non experience-centric ones, such as utilitarian or public transportation. Therefore, transport researchers, policymakers, vehicle designers, providers and even other interested parties are urged to better understand the factors that drive the travel experience and how it affects public transport demand in different travel settings (Paulley et al., 2006). This understanding is important to better plan transportation policy, vehicle design and service management.

Verhoef et al. (2009) argue that experiences have a holistic nature involving different experience components (ECs), which are customer’s cognitive, affective, social and physical responses to the

service. The total experience is formed through the search, purchase, consumption, and after-sale phases, and may involve multiple service channels. These authors have developed a generic experience creation model (which is adapted in Fig. 1), through which perceptions of the service provided (i.e., *experience factors* or EFs) such as social environment, service interface, retail atmosphere, assortment and price, drive customer responses (i.e., *experience components* or ECs), which form the customer experience.

In spite of the interest on customer experience in general, research on travel experience is scarce. Transport related studies have essentially evaluated transit service quality based on passenger cognitive expectations and perceptions of transportation attributes that are controlled by the transport provider (e.g., dell’Olio et al., 2011; Herrmann et al., 2000). Although some studies have addressed the uncontrolled factors to some extent, such as social aspects (e.g., Abou-Zeid and Ben-Akiva, 2011), a holistic view of the travel experience (from the first until the last moment of passenger contact with a provider) has not been addressed. When compared to traditional transit service quality, the travel experience is more complex, being influenced by various EFs, i.e., perceptions of the service provided that drive the passenger experience, some of which are not directly controlled by the transport provider or are dependent on technologic advancements that the passengers demand, such as information provision (Carreira et al., 2010). Moreover, the travel experience complexity involves other ECs beyond cognitive assessments, that result from a complex physical and psychological individual process (Oliver, 1993). Additionally the travel experience is extended in time, and it concerns all the interaction moments

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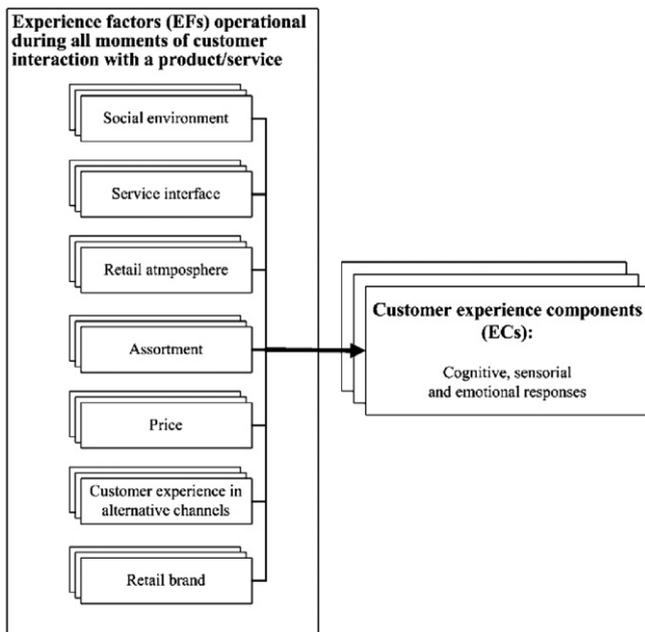


Fig. 1. Conceptual model of customer experience creation (adapted from Verhoef et al. (2009), Gentile et al. (2007)).

through multiple channels (e.g., ticket line or internet). In this context, further research is needed to address transportation experience from a holistic approach. This paper contributes to a more comprehensive understanding of the travel experience, addressing the following questions:

- (i) What travel experience factors (EFs) drive the customer experience through the different moments of contact with a transport provider?
- (ii) What experience components (ECs) form the travel experience, i.e., what are customer responses to the provision of such transport?
- (iii) Is the customer travel experience only relevant during leisure trips, or is it also relevant in other types of transportation? How do experience drivers and responses change across the different transportation services?

To provide an in-depth understanding of the travel experience, a qualitative study was undertaken in purposefully selected mid-distance bus trips, as they were considered a rich empirical ground for this study. The two different bus transportation settings included one tourism service in the north of Portugal (experience-centric trip), and one mid-distance transportation service between Portuguese cities (utilitarian trip).

The following section summarizes the literature review related to travel experience, covering extant research on three relevant areas. The methodology used in the study is described in Section 3. The study results are presented in Section 4, starting by the detailed description of each specific sample and concluding with the identification of EFs and ECs in general, and for each of the two transportation settings. Finally Section 5 discusses research and managerial implications, and points out directions for future research.

2. State of the art

Service research has evolved from a focus on quality perceptions and cognitive assessments (Parasuraman et al., 1988), to experience quality evaluation (Klaus and Maklan, 2012) and finally

to a holistic view of customer experience (Verhoef et al., 2009; Gentile et al., 2007; Mascarenhas et al., 2006; Hekkert, 2006). On the other hand, transportation research has focused on service quality assessment (e.g., Herrmann et al., 2000) that can be seen as the result of a cognitive comparison between customer expectations and perceptions of service performance (Parasuraman et al., 1988). In what concerns experience studies, they have only addressed experience-centric services, such as leisure or tourism (e.g., Zomerdijsk and Voss, 2009; Pullman and Gross, 2004), but the customer experience can also be important for other services in which it is not at the center of service provision.

Some of the customer needs are identified in the literature as instrumental factors, i.e., associated to service functionality, while others are hedonic, i.e., associated to how a service is provided, such as social environment, feeling in control or context of usage (e.g., Anable and Gatersleben, 2005; Stradling et al., 2007; Patrício et al., 2009). However, hedonic factors have more potential to delight customers (Neal et al., 1999; Chitturi et al., 2008) and enhance their experience. Even though previous studies have addressed some hedonic factors that go beyond the transportation quality approach, such as feeling free and in control (e.g., Anable and Gatersleben, 2005; Stradling et al., 2007), a holistic approach to the travel experience is still missing. Extant research has shown a consistent positive relationship between customer loyalty and firms' profitability (e.g., Zeithaml et al., 1996). Thus, a broader understanding of the customer experience can provide useful insights to transport interested parties, namely transit providers, so they can enhance customer loyalty and improve their competitive position. Building upon Meyer and Schwager's (2007) experience definition, travel experience can be adapted to the transportation context as the holistic individual response arising from the passenger interactions with all aspects (e.g., tangible factors, multi-channel services, or other passengers) and across all moments of transportation provision.

Based on the conceptual model presented in Fig. 1, the literature review is structured around EFs and ECs. As research on travel experience is still scarce, the literature review covers related research on transport quality, service quality/satisfaction and customer experience fields, in order to identify potential EFs and ECs that may be relevant for the travel experience context. This literature review shows that extant transportation and service research is mostly empirical and based on quantitative assessments of service quality and satisfaction. On the other hand, research on experience is essentially conceptual, and even though it identifies EFs and ECs for generic service provision, it has not specifically addressed the travel experience from a holistic perspective.

2.1. Experience factors

Experience factors (EFs) can be defined as customer perceptions of all aspects of a product or service that contribute to the customer experience (Patrício et al., 2008). Table 1 synthesizes factors found in the mentioned literature areas that can potentially be associated with travelling.

Extant research has focused on transport quality factors such as comfort, cleanliness, information and safety (Nathanail, 2008; Eboli and Mazzulla, 2011; dell'Olio et al., 2011; Stradling et al., 2007; Anable and Gatersleben, 2005). Other factors such as environmental protection, itinerary and number of stops, or not having to drive, have been exclusively addressed in transport research (e.g., Beirão and Cabral, 2007), but from a transit quality perspective. There is extensive literature on transport quality, but it concentrates on the cognitive assessment of the service attributes which are controlled by the transport provider and typically focus on the actual trip, instead of examining the more extended multi-channel (Patrício et al., 2008) customer experience perspective. Moreover, even though prior empirical studies consider to some extent EFs

Table 1
Extant research related with experience factors (listed in alphabetical order).

Travel EFs	Study
Atmosphere (e.g., music, lights)	Bitner (1992), Fottler & Ford (2000), Klaus & Maklan (2007), Pullman & Gross (2004)
Cleanliness	dell'Olio et al. (2011), Eboli & Mazzulla (2011), Fottler & Ford (2000), Guiver et al. (2007), Nathanail (2008), Tsauro et al. (2002)
Comfort (e.g., temperature, vibration, seat)	Beirão & Cabral (2007), dell'Olio et al. (2011), Eboli & Mazzulla (2011), Fottler & Ford (2000), Guiver et al., (2007), Lee et al. (2009), Nathanail (2008), Pullman & Gross (2004), Stradling et al. (2007), Tsauro et al. (2002), Vink & de Looze (2008)
Efficiency	Chen & Chang (2005), Patrício et al. (2009)
Entertainment (e.g., occupying time)	Anable & Gatersleben (2005), Guiver et al., (2007), Herrmann et al. (2000), LeBel (2005), Mokhtarian & Salomon (2001), Pullman & Gross (2004), Tsauro et al. (2002)
Environmental protection	Anable & Gatersleben (2005), Eboli & Mazzulla (2011), Guiver et al. (2007)
Food and beverage	Herrmann et al. (2000), Pullman & Gross (2004), Tsauro et al. (2002)
Information	Beirão & Cabral (2007), Chen & Chang (2005), Eboli & Mazzulla (2011), Guiver et al. (2007), Nathanail (2008), Patrício et al. (2009)
Itinerary and number of stops	Eboli & Mazzulla (2011), Nathanail (2008)
Multi-channel experience	Patrício et al. (2008)
Not having to drive	Anable & Gatersleben (2005), Beirão & Cabral (2007), Guiver et al. (2007)
Pre-service activities	LeBel (2005), Nathanail (2008), Neal et al. (2004), Tsauro et al. (2002)
Post-service activities	LeBel (2005), Neal et al. (2004), Pullman & Gross (2004)
Price (i.e., Value for money)	Anable & Gatersleben (2005), Beirão & Cabral (2007), Eboli & Mazzulla (2011), Guiver et al. (2007), Herrmann et al. (2000), Lu & Ling (2008), Nathanail (2008), Neal et al. (2004), Stradling et al. (2007), Tsauro et al. (2002), Verhoef et al. (2009)
Retail brand	Klaus & Maklan (2007), Ostrom et al. (2010)
Safety	Eboli & Mazzulla (2011), Fottler & Ford (2000), Guiver et al. (2007), Lu & Ling (2008), Nathanail (2008), Stradling et al. (2007), Tsauro et al. (2002)
Social interactions	Arnould & Price (1993), Abou-Zeid & Ben-Akiva (2011), Beirão & Cabral (2007), Klaus & Maklan (2007), Pullman & Gross (2004), Verhoef et al. (2009)
Staff's friendliness or professional skills	Chen & Chang (2005), dell'Olio et al. (2011), Eboli & Mazzulla (2011), Guiver et al. (2007), Klaus & Maklan (2007), LeBel (2005), Lu & Ling (2008), Nathanail (2008), Parasuraman et al. (1988), Patrício et al.(2009), Price et al. (1995), Pullman & Gross (2004), Stradling et al. (2007), Tsauro et al. (2002), Verhoef et al. (2009)
Tangibles (e.g., equipment, physical facilities)	Bitner (1992), Herrmann et al. (2000), LeBel (2005), Lu & Ling (2008), Parasuraman et al. (1988), Pullman & Gross (2004), Tsauro et al. (2002)
Time management	Beirão & Cabral (2007), Chen & Chang (2005), dell'Olio et al. (2011), Eboli & Mazzulla (2011), Friman (2010), Guiver et al. (2007), Herrmann et al. (2000), Nathanail (2008), Petit (2002), Price et al. (1995), Tsauro et al. (2002), Vink & de Looze (2008)

Table 2
Extant research related to the experience components (listed in alphabetical order).

Travel ECs	Category	Study
Cognitive	Satisfaction evaluation, quality assessment	Abou-Zeid et al. (2012), Anable & Gatersleben (2005), Beirão & Cabral (2007), Chen & Chang (2005), dell'Olio et al. (2011), Eboli & Mazzulla (2011), Ettema et al. (2010), Friman (2010), Guiver et al., (2007), Herrmann et al. (2000), LeBel (2005), Nathanail (2008), Neal et al. (1999), Oliver (1993), Parasuraman et al. (1988, 2005), Patrício et al. (2009), Price et al., (1995), Stradling et al. (2007), Tsauro et al. (2002), Wolfenbarger & Gilly (2003)
Sensorial	Travel-liking	Anable & Gatersleben (2005), Ory & Mokhtarian (2005), Zomerdijk & Voss (2009)
	Multisensory	Bitner (1992), Hekkert & Leder (2008), LeBel (2005), Pine & Gilmore (1998), Schifferstein & Spence (2008)
	Hearing	van Egmond (2008)
	Vision	Hill (2001), Larsen (2003), Nefs (2008)
Positive Emotions	Smell	Beirão & Cabral (2007), Berry et al. (2002), Carbone & Haeckel (1994), Cardello & Wise (2008), Hekkert and Leder (2008)
	Taste	Berry et al. (2002), Carbone & Haeckel (1994), Cardello & Wise (2008)
	Touch	Sonneveld & Schifferstein (2008)
Negative Emotions	Excitement/enthusiasm	Anable & Gatersleben (2005), Bloemer & de Ruyter (1999), Hanefors & Mossberg (2003), Price et al., (1995), Richins (2008)
	Joy/happiness	Anable & Gatersleben (2005), Barksy & Nash (2002), Desmet (2008), Guiver et al. (2007), Hanefors & Mossberg (2003), Herrmann et al. (2000), Hill (2001), Lumsdon (2006), Mokhtarian & Salomon (2001), Ory & Mokhtarian (2005), Price et al. (1995), Pullman & Gross (2004), Richins (2008)
Negative Emotions	Stress/Tension	Anable & Gatersleben (2005), Gatersleben & Uzzell (2007), Richins (2008)
	Fear	Hill et al. (2001), Richins (2008)
	Sadness	Price et al. (1995)
	Anger	Price et al. (1995)

that are not in direct control of the service provider, such as atmospherics or the social interactions (e.g., Abou-Zeid and Ben-Akiva, 2011) they do not analyze these factors as part of the customer experience from a holistic perspective.

2.2. Experience components

Experience components (ECs) can be defined as customer internal responses to the service provided and are driven by

customer EFs. Prior experience research (Gentile et al., 2007; Verhoef et al., 2009; Hekkert, 2006; LeBel, 2005) conceptualized three types of ECs associated with generic service provision (cognitive, sensorial and emotional) which are detailed in Table 2.

However, those studies usually address each of the ECs in isolation even though they result from a complex physical and psychological individual process (e.g., Oliver, 1993; Westbrook, 1987). Only recent experience research has advocated a more holistic conceptualization of customer experience, but empirical

studies are still scarce and have not been adapted to the transportation context.

2.2.1. Cognitive component

The cognitive component of the customer experience has been more extensively studied in prior research than the other components. It involves customer mental processes such as satisfaction or quality assessment of a service or product (Parasuraman et al., 1988). Transportation researchers (e.g., Ettema et al., 2010) advocate that customer accumulated satisfaction reveals a progressive cognitive adaptation to transport services.

Ory and Mokhtarian (2005) contest the view that transport is strictly a cost to be minimized, arguing that, in some instances, transport can be the desired activity in itself. According to these authors, this travel-liking attitude also represents a rationalization process, in which the desired choice an individual must make to travel “just for fun is mentally positioned as one s/he likes to make” (Ory and Mokhtarian, 2005, p. 111).

2.2.2. Sensorial component

Public transportation vehicles may provide a hyper sensuous experience of seeing to the customers, so vision comes to dominate all the other senses (Larsen, 2003). However, passengers use all sensory systems during transportation, and aesthetics is also related with the human senses based on the sensory interpretation of an object or environment (Hekkert, 2006). Thus, the aesthetic concept is not limited to the visual domain; things can also be aesthetic or pleasant to listen to, touch, smell, or taste (Hekkert and Leder, 2008). The sensory stimulants should however be coherent, and also support and enhance the experience theme in order for it to be more effective and memorable (Pine and Gilmore, 1998; Schifferstein and Spence, 2008). Therefore the multisensory aesthetic response is considered fundamental for the passenger travel experience, and should be studied in more detail.

2.2.3. Emotional component

The studies detailed in Table 2 have assessed the customer generic service and experience emotional responses (e.g., Price et al., 1995; Pullman and Gross, 2004). However, the transport literature rarely identifies specific customer emotions, and has instead been based on service affective assessment (e.g., Stradling et al., 2007; Anable and Gatersleben, 2005) using the pleasure-arousal-dominance (PAD) scale (Mehrabian and Russell, 1974). The consumption emotion set (CES) (Richins, 1997) synthesizes the most frequent emotions associated with consumption situations like excitement, joy or even nervousness and fear that may be associated with travel experiences. Even though the PAD scale constitutes a relevant source of affective assessment, it is important to identify the specific passenger emotional responses to public transportation, in order to obtain a holistic understanding of travel experiences. As can be concluded from the studies listed in Table 2, emotions, in particular the negative ones have been inadequately addressed by prior research.

In summary, further research is needed for a full understanding of the travel experience from a holistic perspective, both in terms of travel EFs and ECs. Moreover, as extant research has focused on experience-centric services, it is important to understand whether the travel experience is only relevant within experience-centric trips or if and how it is also relevant for utilitarian travel contexts. Additional studies in this area can enable a better understanding of travel experiences and provide insights for transport researchers, providers and planners to enhance the design and management of transportation provision.

3. Method

This study aimed at an in-depth understanding of customer perceptions and responses to address the complex and unstudied phenomenon of travel experience, and as such, a qualitative approach was adopted. One of the major trade-offs between qualitative and quantitative methods is between depth and breadth (Strauss and Corbin, 1998). Qualitative methods based on grounded theory (Strauss and Corbin, 1998; Neuman, 2006) can be used to obtain the intricate details about phenomena such as feelings, thought processes, and emotions that are difficult to extract or learn about through quantitative methods. Moreover, several researchers (e.g., Dahan and Hauser, 2001; Sandén et al., 2006) advocate that interviews and focus groups are more appropriate for identifying factors that customers are able to verbalize, whereas customer observation and experimental trials are considered more appropriate for obtaining their latent needs.

Several procedures should be followed to improve the quality and validity of the research (Maxwell, 1992; Tracy, 2010; Strauss and Corbin, 1998). Following these procedures, data collection covered all sources of relevant variability in each studied setting, until the samples were saturated (Strauss and Corbin, 1998). Various triangulation procedures (Patton, 1990; Tracy, 2010) were also undertaken. In what concerns data triangulation, data collection involved both observation and interviews, not only with passengers, but also with tour guides, drivers and transport managers. The latter interviews were important to better interpret and code the interviews with passengers, which were the focus of the study. To ensure researcher triangulation, data analysis was constantly and thoroughly discussed with all the members of the research team. Following theory triangulation, the literature review covered a diversified set of related research areas, such as transport, service, and experience; these different fields enriched data analysis and theory development. Finally, different samples of experience-centric and utilitarian passengers provided a better understanding of the travel experience from a broad perspective, enabling the transferability of the results (Tracy, 2010) to other settings.

Following grounded theory, each sample was defined according to the theoretical relevance of cases and until it was saturated (Strauss and Corbin, 1998). To cover all factors of variability in each setting, the interviewees were progressively selected in each sample to include different passenger ages, occupations, and also alternative bus trip destinations, time schedules and weather conditions. The interviews were therefore progressively performed and transcribed in different moments until no new categories emerged from the data coding.

3.1. Data collection

Before collecting the data with the passengers, the researchers visited the different transport providers' facilities and undertook interviews with transport managers and other interested parties, to better understand the services provided to the passengers. The definition of journey routes, time schedules and other trip variables was made at this stage, in order to consider all factors of variability in each setting to perform the passengers' observations and interviews that followed.

According to Chiseri-Strater and Sunstein's (1997) recommendations, the observation of passengers inside the buses and in the companies' facilities used pre-defined observation guidelines, to systematically register information that concerned all moments of the trips. Several observations were performed on each setting before undertaking the interviews, to analyze happenings relevant to the research study, to understand passenger behavior and also to help structure the interview guide. This guide included

questions that covered the passenger trip from the first moment of trip planning until the post-trip phases.

Taking into account the research objectives, the subsequent interviews were semi-structured (Pawson, 1996). Open-ended questions (Foddy, 1993) were developed considering all the phases of the passenger journey to enable them to express a comprehensive perspective regarding travel EFs, as well as their cognitive assessment, senses and emotions.

Observation continued even during the interviews to notice every relevant aspect (e.g., the estimated interviewees' age or their stature, which could influence their body comfort) and the non-verbal behavior of the interviewees or other passengers. Other information gathered included the facilities' and vehicles' interior and exterior environments (e.g., the weather), the places where the bus traveled, or any unusual event that influenced the interviewees' point of view. All interviews were be digitally recorded and literally transcribed (Maxwell, 1992).

3.2. Data analysis

The process of data preparation and collection previously described contributed to a better understanding of passengers' verbal comments and actions, which facilitated the interview content analysis (Neuman, 2006). Moving between an inductive and a deductive approach, the initial coding of the interviews were essentially open, but as the coding was refined, attempts were made of concept-driven coding (Strauss and Corbin, 1998), building upon some of the EFs and ECs obtained in the literature. On the other hand, the observation notes clarified the data coding, for example some of the interviewees' verbal comments were associated to different EFs than the ones suggested by the data or the literature. The software NVivo was a valuable tool to help in the data coding, but also in its refinement based in the de-contextualization (Gibbs, 2002) and afterwards re-contextualization of the text.

In a first stage the interview texts were analyzed line by line, and pertinent excerpts were assigned provisional conceptual codes (i.e., EFs or ECs). The next stage involved an iterative search for relationships between the codes and their aggregation into categories. The goal of the inductive–deductive approach was to systematically develop codes and categories consistent with both the qualitative data and the literature, which were reviewed after the initial data coding. This process allowed for the theory (i.e., transportation codes and categories) to emerge from the data in order to enhance the understanding of the travel experience with the transportation providers in different settings.

4. Results

To get an in-depth understanding of the travel experience, the study focused on mid-distance bus journeys, as they were considered a rich ground for the study. These trips take above one hour on average, and as such passengers have more opportunities of interacting with the bus interior environment and with other passengers, of experiencing the comfort in the waiting rooms or the service provided in other off-board facilities. This study involved both observations and interviews in two different bus transportation settings that used the same kind of mid-distance buses: a tourism transport provider, and a regional transportation service. Observations were performed on two trips of each setting before undertaking the interviews, which took 30 min on average. Taking Voss et al. (2008) research into consideration, the bus tourism service was considered experience-centric, whereas regional trips were considered as essentially having a utilitarian value of reaching a destination, following Guiver et al. (2007) definition.

The experience-centric trip sample comprised 22 tourists with an average age of 60 years, coming from the United Kingdom, but also from Finland, France, and Switzerland. The utilitarian trip sample comprised 27 passengers, 70% of which were frequent bus users, travelling at least once a month, while 25% even travelled twice a week. They were 40 years old on average and were 92% Portuguese and 8% Brazilian. Both samples had 40% males and 60% females.

The socio-demographics of the two samples were different, but this was due to the characteristics of the original populations. The experience-centric trip sample comprised tourists who were taking a one-week river cruise in the north of Portugal and travelled by bus to several ground destinations in an average of one hour per trip and approximately a total of ten hours during the week. Whereas experience-centric tourists were mostly seniors, utilitarian trip passengers were essentially students and weekly commuters, who were travelling between different Portuguese cities in a regular bus service that took an average of two hours. The different sample composition raised measurement reliability issues and as such, several procedures were undertaken as means to overcome these limitations. Potential biases were considered (Tracy, 2010), such as the fact that most of the tourists were British, and they were interviewed in English inside the ship, after the bus trips, whereas the utilitarian trip passengers were interviewed in Portuguese during or immediately after their trip. To overcome that possible language partiality, the interviews were literally transcribed (Maxwell, 1992), and the iterative process of analysis was iteratively discussed with the research team members, namely the coding and the translation of the Portuguese utilitarian trip sample categories. To ensure researcher triangulation, although only one researcher performed data collection, participating in the cruise, and travelling on all of the associated bus trips, data analysis was constantly and thoroughly discussed with the other members of the research team.

The study results showed that the travel experience is formed through many contacts with the transport provider, from the planning of the trip or ticket purchase using different service channels, through the actual transportation and interaction with other passengers or the staff, and until after the trip when the passengers need support or information about the place where they arrived at. The qualitative data analysis and the coding process enabled the identification of a comprehensive set of travel EFs and ECs, which go beyond traditional service quality factors and outcomes. Section 4.1 describes the travel EFs for the aggregate sample, while in Section 4.2 the ECs are detailed in a similar manner. The cross-sample comparison of the EFs and ECs results is presented in Section 4.3, focusing on the differences found.

4.1. Travel experience factors (EFs)

Based on data analysis of observations and interviews, most of the travel EFs associated with overall transportation characteristics was grouped into two higher-level categories, as shown in Table 3: *trip conditions*, and *supplementary services*. Besides these two higher-level categories, two other factors emerged, more related with the human interaction during the trips: *social environment*, and *staff's skills*. All EFs (and categories) were explored in more detail based on transcriptions of the passengers' comments.

4.1.1. Trip conditions

The *trip conditions* were considered the fundamental core aspect of the overall transport service, including the moments before and after the actual trip, which were spent by the passengers in facilities that were not always directly managed

Table 3
Travel EFs and categories.

Experience Factors	Examples
Trip conditions	
Cleanliness	Overall facilities, restrooms' maintenance and availability, vehicles and seats
Comfort	Physical, thermal, sound, bus interior aesthetic appeal and maintenance
Easy accessibility	Easy walking access during the trip, and also to and from the bus
Safety	Seatbelts, bus maintenance, road maintenance, weather conditions
Visibility of the scenery	Wide and clear view outside, photo shooting, people's activities outside the bus
Waiting time	Punctuality, frequency of bus departures, waiting for other passengers, traffic
Supplementary services	
Information provision	Schedules, rules on board, comprehensive destination displays, clear bus ID
On-board entertainment	Bus sound system, music, movies, MP3 player, laptop, book, etc.
Off-board services	Quickness, friendliness, professionalism in the different service channels
Social environment	Interaction with other people
Staff's skills	Bus personnel's awareness, friendliness and professionalism

by the transport provider. This category involved EFs essentially associated with tangible characteristics such as physical facilities or equipment, which were previously identified in extant research (e.g., Lu and Ling, 2008; Herrmann et al., 2000; Parasuraman et al., 1988). Comfort and safety were considered as especially relevant, and were mentioned by almost all interviewees, but a rich set of other EFs also emerged. Although cleanliness, comfort, safety and waiting time have been widely studied in the transport literature, the passengers mentioned various new characteristics related with these EFs from a holistic perspective.

In addition to extant literature on comfort, the passengers even mentioned other aspects as related to overall comfort like the aesthetic appeal of the bus trip, or the bus interior adequate maintenance: "I also consider the bus as more comfortable when its interior is aesthetically appealing". [M, 50s, Portuguese, utilitarian trip]

The broader perspective of customer experience adopted in this study highlighted the importance of the EFs safety and waiting time related with external aspects to the trip *per se* that could not be fully managed by the transportation provider. These factors were related to road maintenance or weather conditions, and waiting for other passengers or traffic. Safety was also associated to other EFs, such as the safe accessibility to and from the bus, the provision of information related with safety procedures, or trusting the driver, which was related with staff's skills: "That is the reason why I prefer to travel by bus, a person feels safe because the bus is well maintained and is driven consciously." [M, 60s, English, experience-centric trip]. Data analysis also showed that passengers who occupied their time with other activity perceived that their travel waiting time was shorter: "The trip has been very quick so far! I have been able to read this magazine that I bought in the bus terminal, and now I am distracted by the landscape which is new to me!" [F, 40s, Portuguese, utilitarian trip]. Having easy accessibility has been rarely addressed in extant research, and from a holistic perspective it involves the different moments of the trip: "I liked the idea that the bus had two doors you can go on and off, because it facilitates getting on and off." [F, 70s, English, experience-centric trip]

Finally, the visibility of the scenery was further detailed when compared to prior research, where it was rarely mentioned as a

potential factor for passenger valuing travel for its own sake (Salomon and Mokhtarian, 1998). Data analysis and passenger observation showed that watching the landscape is an activity that was performed by a great majority, if not by all the passengers: "The scenery is very pleasant.... all the surroundings covered with snow are extraordinary! The trip is already worthwhile!" [M, 60s, Portuguese, utilitarian trip]

4.1.2. Supplementary services

Trip conditions comprised EFs traditionally addressed in transport literature such as comfort, safety or time. However, the qualitative results also revealed other factors related with *supplementary services* that went beyond the core *trip conditions*. This category was not only related with basic transport service characteristics but with additional aspects that added value to the passenger total experience in different service channels, such as off-board services, on-board entertainment or information before, during and after the bus trip. The emergence of this category showed that transportation was not just moving from an origin to a destination. Passengers also looked for other services, usually based on new technologies that could enhance their experience during the overall trip. Passengers mentioned information provision and on-board entertainment as they requested better conditions to be informed, or to do new things during all moments of a trip and even before it: "The information provided should be improved, by informing the passengers of the programmed schedule and eventual delays, not only in the bus terminal, but also during the trip in the bus, and even before it through the internet or telephone." [M, 30s, Portuguese, utilitarian trip]. On-board entertainment involved activities in which the passengers engaged, either using the equipment available in the bus or their own, such as a MP3 player, laptop or a book: "Sometimes I take the laptop and work, which I haven't opened today. I would like to use it more frequently if there would be an electrical plug or wireless internet available in the buses." [M, 50s, Portuguese, utilitarian trip]

In what concerns the off-board services provided before or after the actual trip (e.g., ticketing, check-in), they have been rarely addressed in the transportation literature and were usually considered external to the customer experience, i.e., pre- or post-trip services that are not directly managed by the transport provider: "When I arrived at the bus terminal, I bought the ticket, and the service was very quick and professional. In other occasions, I had to wait for a while, because there were other people at the line buying tickets for this and also for other bus companies, and I could have missed my bus!" [F, 30s, Portuguese, utilitarian trip]

4.1.3. Social environment

Social environment has been considered in the literature, however with this study it appeared as a more clarified experience driver before, during and after transportation. The social environment has a potentially profound effect on the passenger experience, even though it is not fully controlled by transportation providers. Communicating and interacting with others was considered a way for the passengers to be entertained and even for them to co-create a travel experience, but it could also influence the trip negatively.

"I like the contact with the other passengers... usually nice people, who don't know us, and simply talk with us!" [F, 30s, Portuguese, utilitarian trip]

The interaction with the staff was also associated to this EF, mostly based on the information gathered during the passengers' observations, because sometimes either the driver or the tour guide were mediators of the inter-customer conversations. Other social aspects mentioned by passengers were related with the negative impact (i.e., noise, disturbance) of other passengers, and

as a consequence, with their frequent need of having increased privacy.

4.1.4. Staff's skills

The bus driver's or tour guide's service provision and social abilities were considered very relevant for the passengers, because they were the human face with whom the passengers contacted directly during the bus trip. This EF was related with the other categories and EFs because of the staff's different facets: their friendliness was associated to the *social environment*, while their awareness and their professional skills were both related to *trip conditions* and *supplementary services*: "The drivers actually go slowly so you can see things. And I really take my hat off to them, because they're driving these massive big buses in the narrow and steep mountain roads!" [M, 50s, English, experience-centric trip]

The concept of awareness (Endsley, 1995) was a new aspect that had not been previously addressed in transport or service literatures, because it also deals with aspects traditionally outside of the transport providers' control. Relative to staff awareness, the passengers expected that the bus driver (or tour guide) were conscious of all the trip events that could affect the passenger experience in the bus internal or external environments, and also had adequate preventive control capability over those events. This introduced new demands to the staff's abilities but also to the vehicle's equipment necessary to enable the staff to be aware at all times. The following citation of a Portuguese female utilitarian trip passenger in her 60s exemplifies the need for driver's awareness of the passengers' safety: "In double-decker buses the driver cannot see the passengers in the upper deck, so the driver cannot assure the passenger safety when someone is standing, because there is the risk that s/he might fall or get hurt while the bus is moving or stopping!"

4.2. Travel experience components (ECs)

Based on data analysis, the ECs were organized in three categories: *cognitive*, *sensorial* and *emotional*. These three categories reflected the intricate activities associated with the customer experience.

4.2.1. Cognitive assessment

To address cognitive assessments, passengers were asked to evaluate their specific trip, since the beginning of the global journey, and including every mode of contact with the transportation service. Most of the passengers related the overall transport quality assessment to the comparison of expectations and performance of various EFs. In addition, other cognitive evaluations were mentioned by most of the passengers, for instance related with satisfaction: "I am actually rather satisfied with the overall transportation service so far!" [M, 40s, Finnish, experience-centric trip]

The halo effect between the trip and the activities conducted at the destination was one travel-liking attitude (Ory and Mokhtarian, 2005) here reported in the following cognitive comment of a utilitarian trip Portuguese passenger in his 60s: "The trip has been very good and relaxing and so I am satisfied because I am travelling to visit family who I haven't seen for a long time!"

4.2.2. Sensorial component

All the senses were mentioned by the passengers as being activated during their trips, due to their strong interdependency. For instance the passengers respectively declared to have visual and sound responses to different aspects of the trips:

"I loved going round there, and I was looking out and seeing those little narrow alleys on the top. It was absolutely fascinating! And seeing the different styles of architecture. And that's what I like!" [F, 60s, Swiss, experience-centric trip]

"And so, I think I always get a seat in front of passengers that talk and talk during the whole trip (laughs), so there's no way of sleeping!" [F, 20s, Portuguese utilitarian trip]

The multisensory aspect of the trips was also mentioned as very relevant from a holistic perspective: "During the trip, sometimes I watch the landscape, and although not being new to me, there are always some details that catch my attention....one of the things I like, is seeing the persimmon trees. The leaves fall, but the orange fruits don't, and thus it is very beautiful ... What really catches my attention are the bright fruit colors, but as I like to eat the fruits, I almost get the sensation that I can also smell them inside the bus!" [F, 60s, French, experience-centric trip]

4.2.3. Emotional component

During the interviews, it was difficult for the passengers to identify and express the emotions they had throughout the trips, even when asked specifically about them. The observation of bus trips was therefore important to better understand passenger emotions, because they were usually unaware of them. Using an iterative process of observation, interview data analysis and literature review, emotions were aggregated into the affective groups listed in Table 4, which are based on the consumption emotion set (CES) (Richins, 1997, 2008). The identification of specific positive and negative emotions, instead of the perceived pleasure, arousal or dominance (PAD) scale, provided a better understanding of the complex travel experience.

Excitement was one of the most mentioned emotions. For instance, a 60 year old Swiss female tourist was excited by one of the trips in a windy road: "Last night I didn't even feel any scare at all while I was up there! I was just caught by the landscape, and I forgot about the road!"

Moreover, many interviewees described having at least one of the positive emotions that fit in the "Joy Descriptor Set" (Richins, 1997) such as happiness, pleasure, and cheerfulness either related with the pleasantness of the overall trip, the scenery or with the social interaction with others: "...because when you travel, you're happy, and you enjoy everything..." [F, 30s, Portuguese, utilitarian trip]

In what concerns negative emotions, the passengers frequently described feeling annoyed as a consequence of anything that disturbed them significantly: "I get annoyed by all the cameras,(...) and this man next to me had a camera, and he was leaning across me to photograph the scenery..." [M, 70s, English, experience-centric trip]

The interviewees also mentioned discontentment when they complained about issues such as the off-board services: "If I get to the bus terminal ticket-line, and the personnel are not able to provide

Table 4
Passengers' emotions categories.

Emotions	Examples
Positive	
Excitement	Related with overall trip or visibility of the scenery
Joy	Related with the trip or with other passengers
Negative	
Annoyance	In relation to other customers' actions
Discontentment	Related with difficult accessibility, lack of information or comfort
Nervous	Not to wake up to get off the bus, being late, etc.
Fear	Associated with unsafe feelings such as the driving or the bus mechanical noises

me information about every bus connections available, I get very discontent and I actually complain to the transport company's representatives!" [M, 60s, Portuguese, utilitarian trip].

4.3. Cross-sample comparison

In both samples the passengers pointed out a rich variety of EFs and ECs, which provided a better generic understanding of travel experiences from a holistic perspective. As described in Sections 4.1 and 4.2, several EFs and ECs were relevant in bus transportation for the aggregate sample. For example cleanliness is an EF which basically had the same meaning and relevance for both samples. Nevertheless, this study also revealed that there were differences between the two samples in the passenger perceptions and responses demonstrating that transportation services should be differently managed according to the type of trip. Experience-centric passengers essentially focused their touristic experience on the core *trip conditions* and revealed positive emotions, while the utilitarian trip passengers had a broader perspective involving the overall EFs and ECs. Thus, each type will be described focusing on the differences found.

4.3.1. Experience-centric trip

From the tourists' point of view, a positive experience started by having pre-trip information about the tour and by having easy and safe access to and from the bus in all moments of the trip. During the actual journey, the experience was essentially determined by the bus interior and seat comfort, and by a conscientious driver. Additionally, the visibility of the outside world was especially relevant for these passengers, since they wanted to see the local people outside, and to film and take photographs very frequently. Moreover, both touristic information and regional music provision in the bus were ways for the tourists to be entertained on-board and were considered pleasant complements for the passengers to watching the scenery.

In these trips the staff comprised a driver and a tour guide. The driver was basically associated by the tourists with the *trip conditions*, and was moreover involved in the enhancement of adequate visibility of the scenery, when s/he slowed down or stopped according to the touristic attractions. On the other hand, in order to enhance the customer experience, the tour guide was essentially related by the passengers with the *supplementary services* and *social environment*, as an extension of his/her performance in the off-board services. Establishing social contacts in the bus was apparently less relevant for the tourists, because they wanted to enjoy the trips as much as possible without distractions.

For the tourists the travel experience was essentially sensorial and emotional, even though they also performed cognitive evaluations, which were mostly related with transport quality assessment. The sensorial and emotional component of the travel experience can be illustrated by the following comment of a Swiss male tourist in his 70s: "It is absolutely fascinating to leave the boat, and afterwards to return to it from a different place or with a different landscape as, or even more beautiful than the previous one.... Especially because today we wouldn't have seen new things, different from the ones we already knew on our way to the monastery! And can't do that by boat!"

As the tourists were on holidays with an overall cheerful mood, they usually evaluated the transportation mostly by positive emotions such as excitement and joy. Among negative emotions, some discontentment was present in the touristic trips associated with difficult accessibility.

4.3.2. Utilitarian trip

For the intercity passengers the travel experience was firstly driven by having prior access to adequate trip information both by telephone or internet channels, and also by having a high frequency of bus departures to their intended destination.

After arriving at the bus terminal, the most relevant EFs were comfort, information and off-board services provided in the physical facilities, even though they were usually managed by various transportation companies. The service provided at the ticket-line or other off-board services should be seamless, while the waiting rooms, or other physical facilities should be well maintained. The spoken or written information provided about trip delays or about the identification of the buses' destinations and intermediate stops should be clear and easily available during all moments. Moreover, there should be safe and easy accessibility from the waiting room to the bus, which should be clearly identified. The driver should be friendly and professional when handling the passengers' luggage, so that it was not damaged during the trip.

In addition to extant research on comfort, it was found that the passengers considered that having adequate conditions to sleep during the trip influenced their overall comfort conditions, beyond mere physical support. These passengers had the perception that the first row seats were apparently more dangerous than the other ones, even though during the observations it was acknowledged that the ones who sat there, frequently wanted to talk more amongst them and even with the driver, who sometimes mediated their conversations. Additionally they showed concern in relation to potential unsafe objects inside the bus (e.g., laptop computer, or personal bags) that might harm someone in case of an unexpected sudden stop. On-board entertainment might not be fully controlled by the transportation provider, especially when frequent passengers took their own entertainment equipment because they knew there was no other available during the trips. Additionally, the *social environment* was also an extension of the on-board entertainment as a way of occupying the passenger travel (i.e., waiting) time. Talking was an easy way to occupy their time and sometimes they did it with passengers they already knew from previous trips. On the other hand, the passengers who sat further in the back of the bus usually preferred to be silent and to do something else during the trip.

The role of the bus driver was at the center of the travel experience, since s/he was the only staff member during the actual trip. In what concerned the visibility of the scenery, as some of the passengers travelled frequently, they were accustomed to the landscape, and thus declared no relevant interest in looking outside. Nevertheless, it was possible to observe that they also watched the scenery, especially when they had nothing else to do.

In the end of the trip the driver might also be again involved in the luggage handling or provision of information about directions or other trips, because sometimes the end of a trip did not mean that the passengers arrived at their final destination. Thus the travel experience was again driven by the conditions available in the bus terminal to which the passengers arrived.

The utilitarian trip passenger cognitive assessment was closely associated with the evaluation of the overall transportation and service quality. The study results contributed to the finding that, as some of the passengers did not have their own vehicle, they assessed the trips positively with a sense of belongingness (Mael and Ashforth, 1992) to the transportation provision. Passengers revealed belongingness when they identified with the service provider, and took on and accepted the provider's interests as his or her own, thus creating loyalty behavior. This cognitive concept has not been addressed by transport literature and was also

reflected in the social interactions created by some of the frequent passengers with others or even with the driver. Additionally, the utilitarian frequent passengers revealed being naturally influenced by their previous trips originating progressive satisfaction with the transport service: *"It's funny! When I started travelling by bus to come to University, I was worried thinking what to do during the 1,5 h of trip. And it was very difficult in the beginning! As the scenery isn't very beautiful, we get used to it very fast....But after some journeys, we get used to the trip and it is quick and useful to study or to plan our week."* [F, 20s, Portuguese, utilitarian trip]

The results also revealed that the cross-sample differences found in emotions was related with the utilitarian trip's purpose (i.e., frequently to work or study), which negatively influenced the passengers' state-of-mind concerning the assessment of the journey.

"Usually I couldn't sleep during the trip because I was always nervous to check when the bus would arrive at my stop!" [F, 60s, Portuguese, utilitarian trip]

"When I sit in these seats, I feel a little bit frightened watching the road ahead and having no seat in front of me!" [F, 70s, Portuguese, utilitarian trip]

Nevertheless, the utilitarian trip passengers also revealed positive emotions, mostly excitement with the overall trip or with some extraordinary aspect of the scenery, such as snow.

In summary, the cross-sample comparison showed that tourists mostly mentioned the core *trip conditions*. Nevertheless, the overall *supplementary services* were relevant to both samples in all moments of the trips, even though the related EFs were more intricate when mentioned by the intercity passengers. The ECs results indicated that the experience-centric and utilitarian trip passengers activated their multiple senses in a similar way and felt the same positive emotions. In addition, passengers of both samples evaluated their trips cognitively with a positive perspective.

These results show that a holistic perspective of the travel experience is crucial for both experience-centric and utilitarian transport services, but different EFs and ECs come into play in these two contexts. Therefore transport companies should have a more holistic management of the customer experience for transportation in general, but should also make adaptations taking the specific settings into account.

5. Research and managerial implications, and future research

The results of this qualitative study reveal that the travel experience is more complex than traditional transit service quality. This article contributes to a broader understanding of the passenger experience in terms of both EFs and ECs. Nevertheless, these results are also important for other types of transportation as the EFs found do not seem to be specific to mid-distance trips, but may also be applicable to other settings. These findings also derive relevant implications for the design and management of public transportation in general.

The current study addressed the transport experience from a holistic perspective, covering all moments of contact, before, during and after the actual transportation service, in two types of trips. This holistic perspective allowed for an understanding of the broad categories of EFs, i.e., *trip conditions*, *supplementary services*, and also of the interaction factors, i.e., *social environment*, and *staff's skills*. This study also introduced novel EFs, such as accessibility conditions, visibility of the scenery, and services provided through different channels before, during or after a trip. Some of these factors may have been addressed in prior transport research studies, but previously there has not been an integrated view of the overall travel EFs. These results therefore show that

the travel experience is formed by all moments of contact with the transport provider and that a rich set of EFs should be considered beyond traditional transit quality factors. Additionally, policy makers and transport providers using different kinds of vehicles should also consider elements that they may not completely control, such as safety conditions, on-board entertainment, off-board services or social environment. As these elements influence the travel experience considerably, they should be better addressed by closer collaboration between the various transport interested parties, such as managing the physical facilities which are used by different transit providers, or training the staff so they provide the same service level across the all moments of the customer experience. Other transport interested parties, such as vehicle manufacturers, should also have a broader understanding of the travel experience, so they can better design transportation vehicles to enhance it, and promote customer loyalty and usage of public transportation.

This study also covered a holistic set of experience responses to transportation, defined as ECs. The study identified various ECs, which are interdependent and go beyond cognitive assessments to also include sensorial and emotional components associated with the intricate customer experience process. These holistic ECs include multisensory responses, and specific positive and negative emotions, such as excitement and annoyance, evolving from previous studies which have concentrated on the Pleasure-Arousal-Dominance (PAD) scale. The study shows that, in addition to traditional customer cognitive satisfaction, passenger experience is also formed through positive emotions and pleasant sensorial feelings, so transport providers should better understand what emotions and senses are originated during the trips. These results highlight the need for public transportation interested parties to pay attention to all passenger ECs, considering the cognitive assessments, but also taking into account the emotional and sensorial aspects that are crucial for the travel experience. As transport management has traditionally focused on the drivers of cognitive evaluations, such as transport quality, there may be significant opportunities to enhance the customer experience by better managing its emotional and sensorial components.

This study provides a first understanding of the travel experience, but further research should explore it in other contexts and through other approaches. Mid-distance bus trips provided a rich context, but it would be interesting to replicate the current study with different trip purposes (e.g., urban trips), alternative modes, or multi-modal transportation. This would enable better understanding which EFs and ECs are shared and which change for different transport alternatives.

To complement the travel experience understanding provided by this qualitative approach, quantitative studies could enable the measurement and analysis of the impact of EFs (i.e., drivers of the travel experience) on outcomes of the travel experience such as ECs or loyalty. Such study would be important to explain which EFs have a stronger influence on each experience outcome, in order to better predict future use of transit services. Additionally, the study identified ECs almost from an independent perspective, but prior research shows that they are part of a complex physical and psychological individual process (e.g., Oliver, 1993). Future research should also address the ECs' interdependency, uncovering how they interact throughout the customer experience.

The results also reveal that the travel experience is relevant for both experience-centric and utilitarian trips. Utilitarian passengers mention a broader set of EFs when compared to the tourists in terms of *trip conditions* and *supplementary services*, such as waiting time and on-board entertainment. This may be due to the fact that intercity passengers are mostly frequent travelers and therefore spend much more time traveling when compared to experience-centric passengers. On the other hand, the tourists are

much more stimulated by aspects beyond the trip itself, such as outside views and places to visit, and therefore the EFs they mentioned are more focused on core *trip conditions*. Previous customer experience literature has focused on experience-centric services, as during tourism trips such as cruises, the passenger experience is at the center of service provision. However, the present study results show that the passenger experience is also holistic in nature in other kind of trips, so a broader view of the travel experience is important for both experience-centric and utilitarian transport providers. These findings highlight the need for all transport interested parties to carefully understand, design and manage the travel experience for transit in general from a holistic perspective.

Overall, even though the study analyzes mid-distance bus trips in two specific settings, it provides insights for transport providers, vehicle manufacturers and policymakers in general to assure an integrated design and management of all components that contribute to the travel experience. The travel experience is influenced by the core transport service provided, by the vehicle, by the waiting physical facilities, and even by the safety conditions (e.g., road maintenance). Improving usage of public transport therefore requires an integrated approach to all the product-service system (Goedkoop et al., 1999) aspects that drive the travel experience as a whole. In this context, the collaboration between diverse transport interested parties can enable better designing and managing the entire transport service ecosystem. This is a challenging task, but the study indicates that this systemic approach in future research plays an important role in enhancing the customer experience and therefore promote customer loyalty and usage of public transportation. This study will hopefully motivate further research on a more holistic approach to the design and management of travel experiences.

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References

- Abou-Zeid, M., Ben-Akiva, M., 2011. The effect of social comparisons on commute well-being. *Transportation Research Part A: Policy and Practice* 45 (4), 345–361.
- Abou-Zeid, M., Witter, R., Bierlaire, M., Kaufmann, V., Ben-Akiva, M., 2012. Happiness and travel mode switching: Findings from a Swiss public transportation experiment. *Transport Policy* 19 (1), 93–104.
- Anable, J., Gatersleben, B., 2005. All work and no play? The role of instrumental and affective factors in work and leisure journeys by different travel modes. *Transportation Research Part A: Policy and Practice* 39 (2–3), 163–181.
- Arnould, E.J., Price, L.L., 1993. River magic — extraordinary experience and the extended service encounter. *Journal of Consumer Research* 20 (1), 24–45.
- Barksy, J., Nash, L., 2002. Evoking emotion: affective keys to hotel loyalty. *Cornell Hospitality and Restaurant Administration Quarterly* 43 (1), 39–46.
- Beirão, G., Cabral, J.A.S., 2007. Understanding attitudes towards public transport and private car: A qualitative study. *Transport Policy* 14 (6), 478–489.
- Berry, L.L., Carbone, L.P., Haeckel, S.H., 2002. Managing the total customer experience. *MIT Sloan Management Review* 43 (3), 85–89.
- Bitner, M., 1992. Servicescapes: The impact of physical surroundings on customers and employees. *The Journal of Marketing* 56 (2), 57–71.
- Bloemer, J., de Ruyter, K., 1999. Customer loyalty in high and low involvement service settings: The moderating impact of positive emotions. *Journal of Marketing Management* 15, 315–330.
- Carbone, L.P., Haeckel, S.H., 1994. Engineering customer experiences. *Marketing Management* 3 (3), 8–19.
- Cardello, A., Wise, P., 2008. Taste, smell And chemesthesis in product experience. In: Schifferstein, H., Hekkert, P. (Eds.), *Product Experience*, pp. 91–131.
- Carreira, R., Patrício, L., Natal, R., Marques, A. & Magee, C., (2010). Incorporating Customer Experience Requirements In New Product Development: Understanding Bus Travel Experiences. In: *Proceedings of the 17th International Product Development Management Conference*, 14 - 15 June 2010 Murcia University, Spain. 51–63.
- Chen, F.Y., Chang, Y.H., 2005. Examining airline service quality from a process perspective. *Journal of Air Transport Management* 11 (2), 79–87.
- Chiseri-Strater, E., Sunstein, B.S., 1997. *FieldWorking: Reading and Writing Research*. Prentice Hall.
- Chitturi, R., Raghunathan, R., Mahajan, V., 2008. Delight by Design: The Role of Hedonic Versus Utilitarian Benefits. *Journal of Marketing* 72 (3), 48–63.
- Dahan, E., Hauser, J.R., 2001. Product Development - Managing a Dispersed Process. In: Wensley, B.W. a.R. (Ed.), *Handbook of Marketing*.
- dell’Olio, L., Ibeas, A., Cecin, P., 2011. The quality of service desired by public transport users. *Transport Policy* 18 (1), 217–227.
- Desmet, P.M.A., 2008. Product emotion. In: Schifferstein, H., Hekkert, P. (Eds.), *Product Experience*, pp. 377–395.
- Eboli, L., Mazzulla, G., 2011. A methodology for evaluating transit service quality based on subjective and objective measures from the passenger's point of view. *Transport Policy* 18 (1), 172–181.
- Endsley, M.R., 1995. Toward a theory of situation awareness in dynamic systems. *Human Factors* 37, 32–64.
- Ettema, D., Gärling, T., Eriksson, L., Friman, M., Olsson, L.E., Fujii, S., 2010. Satisfaction with travel and subjective well-being: Development and test of a measurement tool. *Transportation Research Part F: Traffic Psychology and Behaviour* 14 (3), 167–175.
- Foddy, W. (1993). *Constructing Questions for Interviews and Questionnaires: Theory and Practice in Social Research*. Cambridge University Press.
- Fottler, M.D., Ford, R.C., 2000. Creating a healing environment: The importance of the service setting in the new consumer oriented healthcare system. *Journal of Healthcare Management* 45 (2), 91–106.
- Friman, M., 2010. Affective dimensions of the waiting experience. *Transportation Research Part F: Traffic Psychology and Behaviour* 13 (3), 197–205.
- Gatersleben, B., Uzzell, D., 2007. Affective appraisals of the daily commute. *Environment and Behavior* 39 (3), 416–431.
- Gentile, C., Spiller, N., Noci, G., 2007. How to Sustain the Customer Experience:: An Overview of Experience Components that Co-create Value With the Customer. *European Management Journal* 25 (5), 395–410.
- Gibbs, G. R. (2002). *Qualitative data analysis - Explorations with NVivo*.
- Goedkoop, M., Van Halen, C. & Te Riele, H. (1999). *Product service systems, ecological and economic basics*, Amersfoort, The Netherlands., The Hague : Ministry of Housing, Spatial Planning and the Environment, Communications Directorate.
- Guiver, J., Lumsdon, L., Weston, R., Ferguson, M., 2007. Do buses help meet tourism objectives? The contribution and potential of scheduled buses in rural destination areas. *Transport Policy* 14 (4), 275–282.
- Hanefors, M., Mossberg, L., 2003. Searching for the extraordinary meal experience. *Journal of Business and Management* 9 (3), 249–270.
- Hekkert, P., 2006. Design aesthetics: principles of pleasure in design. *Psychology Science* 48 (2), 157–172.
- Hekkert, P., Leder, H., 2008. Product Aesthetics. In: Schifferstein, H., Hekkert, P. (Eds.), *Product Experience*, pp. 259–285.
- Herrmann, A., Huber, F., Braunstein, C., 2000. Market-driven product and service design: Bridging the gap between customer needs, quality management, and customer satisfaction. *International Journal of Production Economics* 66 (1), 77–96.
- Hill, R., Pine, Ii, B.J., Gilmore, J.H., Betts, P.J., Houmann, L., Stubblefield, A., 2001. Welcome to the experience economy. *Health Forum Journal* 44 (5), 10–16.
- Klaus, P., Maklan, S., 2007. The role of brands in a service-dominated world. *The Journal of Brand Management* 15, 115–122.
- Klaus, P., Maklan, S., 2012. EXQ: A Multiple-Item Scale for Assessing Service Experience. *Journal of Service Management* 23, 1.
- Larsen, J., 2003. *Tourism Mobilities and the Travel Glance: Experiences of Being on the Move*. *Scandinavian Journal of Hospitality and Tourism* 1 (2), 81–98.
- LeBel, J.L., 2005. Beyond the friendly skies: an integrative framework for managing the air travel experience. *Managing Service Quality* 15 (5), 437–451.
- Lee, J.H., Jin, B.S., Ji, Y., 2009. Development of a structural equation model for ride comfort of the Korean high-speed railway. *International Journal of Industrial Ergonomics* 39 (1), 7–14.
- Lu, J.L., Ling, F.I., 2008. Cross-cultural perspectives regarding service quality and satisfaction in Chinese cross-strait airlines. *Journal of Air Transport Management* 14 (1), 16–19.
- Lumsdon, L.M., 2006. Factors affecting the design of tourism bus services. *Annals of Tourism Research* 33 (3), 748–766.
- Mael, F., Ashforth, B., 1992. Alumni and their alma matter: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior* 13, 103–123.
- Mascarenhas, O., Kesavan, R., Bernacchi, M., 2006. Lasting customer loyalty: a total customer experience approach. *Journal of Consumer Marketing* 23 (7), 397–405.
- Maxwell, J.A., 1992. *Understanding and Validity in Qualitative Research*. Harvard Educational Review 62 (3, Fall 1992), 279–300.
- Mehrabian, A. & Russell, J. A. (1974). *An approach to environmental psychology*, Cambridge, MA, MIT Press.

- Meyer, C., Schwager, A., 2007. Understanding Customer Experience. *Harvard Business Review*, February, 117–126.
- Mokhtarian, P., Salomon, I., 2001. How Derived is the demand for travel? Some Conceptual and Measurement Considerations. *Transportation Research Part A: Policy and Practice* 35 (8), 695–719.
- Nathanail, E., 2008. Measuring the quality of service for passengers on the hellenic railways. *Transportation Research Part A: Policy and Practice* 42 (1), 48–66.
- Neal, J.D., Sirgy, M., Uysal, M., 1999. The Role of Satisfaction with Leisure Travel/Tourism Services and Experience in Satisfaction with Leisure Life and Overall Life. *Journal of Business Research* 44 (3), 153–163.
- Neal, J.D., Sirgy, M.J., Uysal, M., 2004. Measuring the effect of tourism services on travelers' quality of life: further validation. *Social Indicators Research* 69 (3), 243–277.
- Nefs, H., 2008. On the visual appearance of objects. In: Schifferstein, H., Hekkert, P. (Eds.), *Product Experience*, pp. 11–39.
- Neuman, W. L. (2006). *Field Research. Social Research Methods - Qualitative and Quantitative Approaches*. 6th ed.: Pearson International Edition.
- Oliver, R., 1993. Cognitive, Affective, and Attribute Bases of the Satisfaction Response. *Journal of Consumer Research* 20 (3), 418–430.
- Ory, D.T., Mokhtarian, P.L., 2005. When is getting there half the fun? Modeling the liking for travel. *Transportation Research Part A: Policy and Practice* 39 (2–3), 97–123.
- Ostrom, A.L., Bitner, M.J., Brown, S.W., Burkhard, K.A., Goul, M., Smith-Daniels, V., Demirkan, H., Rabinovich, E., 2010. Moving forward and making a difference: research priorities for the science of service. *Journal of Service Research* 13 (1), 4–36.
- Parasuraman, A., Zeithaml, V.A., Berry, L.L., 1988. SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing* 64 (1), 12–40.
- Parasuraman, A., Zeithaml, V.A., Malhotra, A., 2005. E-S-QUAL — a multiple-item scale for assessing Electronic Service Quality. *Journal of Service Research* 7 (3), 213–233.
- Patrício, L., Cunha, J.F., Fisk, R.P., 2009. Requirements engineering for multi-channel services: The SEB method and its application to a multi-channel bank. *Requirements Engineering* 14 (3), 209–227.
- Patrício, L., Fisk, R.P., Cunha, J.F., 2008. Designing Multi-Interface Service Experiences: The Service Experience Blueprint. *Journal of Service Research* 10 (4), 318–334.
- Patton, M.Q., 1990. *Qualitative research and evaluation methods*. SAGE Publications, Newbury Park, California.
- Paulley, N., Balcombe, R., Mackett, R., Titheridge, H., Preston, J., Wardman, M., Shires, J., White, P., 2006. The demand for public transport: The effects of fares, quality of service, income and car ownership. *Transport Policy* 13 (4), 295–306.
- Pawson, R., 1996. Theorizing the interview. *The British Journal of Sociology* 47 (2), 295–314.
- Petit, J., 2002. Characterizing travel behaviour as a social experience. *Éditions scientifiques et médicales Elsevier SAS et INRETS* 76, 190–207.
- Pine, B.J., Gilmore, J.H., 1998. Welcome to the experience economy. *Harvard Business Review*, July–August Vol. 76 (4), 97–105.
- Price, L.L., Arnould, E.J., Tierney, P., 1995. Going to Extremes - Managing Service Encounters and Assessing Provider Performance. *Journal of Marketing* 59 (2), 83–97.
- Pullman, M.E., Gross, M.A., 2004. Ability of experience design elements to elicit emotions and loyalty behaviors. *Decision Sciences* 35 (3), 551–578.
- Richins, M., 1997. Measuring emotions in the consumption experience. *Journal of Consumer Research* 24 (2), 127–146.
- Richins, M., 2008. Consumption Emotions. In: Schifferstein, H., Hekkert, P. (Eds.), *Product Experience*, pp. 399–422.
- Salomon, I., Mokhtarian, P.L., 1998. What happens when mobility-inclined market segments face accessibility-enhancing policies? *Transportation Research Part D: Transport and Environment* 3 (3), 129–140.
- Sandén, B., Matthing, J., Edvardsson, B., 2006. New Service Development: Learning from and with Customers. In: Edvardsson, B., Gustafsson, A., Kristensson, P., Magnusson, P., Matthing, J. (Eds.), *Involving Customers in New Service Development*. Imperial College Press, pp. 99–126.
- Schifferstein, H., Spence, C., 2008. Multisensory Product Experience. In: Schifferstein, H., Hekkert, P. (Eds.), *Product Experience*, pp. 133–156.
- Sonneveld, M., Schifferstein, H., 2008. The tactual experience of objects. In: Schifferstein, H., Hekkert, P. (Eds.), *Product Experience*, pp. 41–68.
- Stradling, S., Carreno, M., Rye, T., Noble, A., 2007. Passenger perceptions and the ideal urban bus journey experience. *Transport Policy* 14 (4), 283–292.
- Strauss, A. & Corbin, J. (1998). *Basics of Qualitative Research*. SAGE Publications.
- Tracy, S.J., 2010. Qualitative Quality :Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry* 16 (10), 837–851.
- Tsaur, S.-H., Chang, T.-Y., Yen, C.-H., 2002. The evaluation of airline service quality by fuzzy MCDM. *Tourism Management* 23 (2), 107–115.
- van Egmond, R., 2008. The experience of product sounds. In: Schifferstein, H., Hekkert, P. (Eds.), *Product Experience*, pp. 69–86.
- Verhoef, P.C., Lemon, K.N., Parasuraman, A., Roggeveen, A., Tsiros, M., Schlesinger, L.A., 2009. Customer Experience Creation: Determinants, Dynamics and Management Strategies. *Journal of Retailing* 85 (1), 31–41.
- Vink, P., de Looze, M., 2008. Crucial elements of designing for comfort. In: Schifferstein, H., Hekkert, P. (Eds.), *Product Experience*, pp. 441–460.
- Voss, C., Roth, A.V., Chase, R.B., 2008. Experience, Service Operations Strategy, and Services as Destinations: Foundations and Exploratory Investigation. *Production & Operations Management* 17 (3), 247–266.
- Westbrook, R.A., 1987. Product/ Consumption-Based Affective Responses and Postpurchase Processes. *Journal of Marketing Research* 24 (3), 258–270.
- Wolfenbarger, M., Gilly, M.C., 2003. eTailQ: dimensionalizing, measuring and predicting retail quality. *Journal of Retailing* 79 (3), 183–198.
- Zeithaml, V.A., Berry, L.L., Parasuraman, A., 1996. The Behavioral Consequences of Service Quality. *Journal of Marketing* 60 (2), 31–46.
- Zomerdiijk, L.G., Voss, C., 2009. Service Design for Experience-Centric Services. *Journal of Service Research* 13 (1), 67–82.