



How convenient is it? Delivering online shopping convenience to enhance customer satisfaction and encourage e-WOM



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ABSTRACT

The purpose of this article is to identify which dimensions of online convenience affect consumers' intention of using online shopping and explore a conceptual model to measuring consumer perceptions of online shopping convenience in order to surpass the shortcomings of previous studies that did not examine the consequences of convenience shopping experience. A sample of 250 Portuguese young individuals participate in the empirical study. Confirmatory Factor Analysis (CFA) and a covariance-based Structural Equation Model (CB-SEM) were used to validate the measurement model and to test the relationships in the model. The results reveal that Possession, Transaction, and Evaluation are the dimensions with more influence in online shopping convenience. The outcomes of this study extend previous works on online convenience and help to understand which factors drive online satisfaction and enhance behavioral intentions and e-WOM. Contributions to the body of knowledge and the implications for e-commerce retailers are presented. In face of the findings, retailers should be conscious that customer expectations of online convenience have increased as a natural response to the service innovations introduced by website managers and marketers. Therefore, frequent monitoring of consumers' perceptions and expectations about online convenience is a prerequisite for achieving continuous improvement in rendering highly convenient online service.

1. Introduction

Consumer decision making is significantly influenced by both the speed and ease with which consumers can contact retail outlets. Many consumers turn to the Internet to reduce the effort associated with making a decision (Beauchamp and Ponder, 2010). While shopping consumers spend time and effort to complete multiple tasks and since today's customer is more time-starved than ever, it is appropriate to consider the benefits of providing online shopping convenience. Online convenience has been one of the principal promoters of customer's predisposition to adopt online purchasing (Jiang et al., 2013). Seiders et al. (2000) argue that the importance that customers put on convenience prompts retailers to redesign store operating systems and emphasize the efficiency of the service provided. At another level, retailers should focus on the increase of mobile apps and how they helped

fuel and define how consumers value time and energy. The present study argues that consumers favor retailers that save them time and energy. Online retailers are certainly able to supply more convenience as store location becomes irrelevant and consumers may now shop from any location, 24 h a day, seven days a week (Beauchamp and Ponder, 2010). Therefore, companies must develop a more precise understanding of the impacts of online convenience. The main goal of the present study is to explore how consumers evaluate the dimension of convenience in the context of online retail, by focusing on the consumer experience with global retailers' websites. The research gap emerges from the need to validate the research by (Jiang et al., 2013) and from questions which were not answered by later studies by Mpinganjira (2015), Mehmood and Najmi (2017), Haridasan and Fernando (2018) and Pham et al. (2018) namely the meaning of attentiveness convenience and the relationship with behavioral outcomes.

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Exploring the literature on convenience it is evident that convenience encompasses several dimensions. However, there has been no agreement on what these dimensions are (Seiders et al., 2007). Given the above reasoning, this paper seeks to deepen the understanding concerning the importance of online convenience and its dimensions. Based on (Jiang et al., 2013) proposed model the current investigation provides a theoretical contribution by expanding the capacity of the original model via the addition of attentiveness convenience construct to the original formulation. Furthermore, the current study provides an assessment of which dimensions of convenience are most important to consumers when shopping online. Lastly, since the majority of studies addressing online convenience have mainly focused on the relationship with purchase intentions (e.g. Pham et al., 2018), the current study supplements the study by Roy et al. (2016) and closes the gap by investigating the relationship between online convenience, behavioral intentions, satisfaction, e-WOM.

In a practical sense, the identification of the dimensions that positively influence purchase behavior intentions and satisfaction can help managers to overcome obstacles to the delivery of an excellent and convenient service to customers, which represent a key driving force in enhancing companies' online competitiveness.

2. Online convenience

As consumers allocate less time to shopping and more to other endeavors, their wish for convenience has grown, and consequently, their attention has turned to online shopping (Kumar and Kashyap, 2018). The shortage of consumer's available time fosters the will to save time and effort when purchasing (Berry and Cooper, 1990). The concept of convenience was first used by Copeland (1923) to denote a measure of time and effort expended in purchasing a consumer product. Thus, retail convenience can be defined as consumers' time and effort costs associated with shopping in a retail environment.

These consumer resources of time and effort are defined in marketing literature as non-monetary costs that influence purchasing behavior (Bender, 1964; Herrmann and Beik, 1968). Retailers, aware of this need, have been focusing on providing services which are able to maximize the speed and ease of consumer's buying process (Shaheed, 2004).

The time-saving aspect of convenience has been extensively studied in consumer waiting experience, particularly with respect to the consequences of long waiting times (Gehrt and Yale, 1993). Objectively, time spent waiting frequently translates into an opportunity cost (Berry et al., 2002) which may represent a valuable asset in daily life. The concept of effort-saving relates to the decrement of cognitive, physical, and emotional activities that consumers must support to purchase goods and services such as searching for product information, locating the product they wish to buy (Emrich et al., 2015) or completing the checkout process (Berry et al., 2002). The latter authors established that the greater the time costs associated with a service, the lower the degree of consumers' perceived service convenience. Hui et al. (1998) claim the more the effort made by a customer, the more customer's resources are committed, and the higher is the potential for frustration.

By saving customers time and energy through convenience improvement, retailers increase the value of their market offer (Seiders et al., 2000). The Internet is currently an appropriate option for consumers wanting to save time and effort. People find online stores more attractive because their lives are typically more time constrained due to increased professional demands, which in turn reduces the available time to daily tasks, forcing them to choose retail formats where they have to spend the least time possible (Bhatnagar et al., 2000). Their focus is on efficiently completing the shopping experience and obtaining the product with minimum effort (Kaltcheva and Weitz, 2006).

Existing empirical findings focusing on convenience indicate that this concept plays a decisive role in the relationship between customers and service providers, since the lack of convenience has been shown to

be a reason why customers churn (Keaveney, 1995; Pan and Zinkhan, 2006), whereas convenience has been shown to be a major reason for strengthening the relationship (Seiders et al., 2007).

Despite its importance, there is no general consensus on the components of online convenience. For some authors (Farquhar and Rowley, 2009) online convenience is not an inherent characteristic of a service being offered, but a proxy of the resources being used by customers. For others, (Berry, 2000; Berry et al., 2002; Yale and Venkatesh, 1986), convenience is a multidimensional construct, or as a second-order construct comprising different types of time and effort costs. Although it has been conceded that convenience encompasses several dimensions, there has been no agreement on what these dimensions are (Reimers and Chao, 2014; Seiders et al., 2007). Berry et al. (2002) suggest that service convenience is a multidimensional construct entailing five components, namely: decision convenience, access convenience, transaction convenience, benefit convenience, and post-benefit convenience. Berry et al. (2002) conceptual proposal was further developed into a five-dimension instrument - the SERVCON scale proposed by Seiders et al. (2007). However, the SERVCON scale, developed in the context of traditional offline shopping does not comprehend the unique facets of online shopping convenience. Beauchamp and Ponder (2010), conscious of this gap in the research, have developed a set of convenience dimensions, common to both online and offline shopping (access, search, transaction, possession) and examine the relative importance of each dimension from the perspective of online and offline shoppers. Lastly, based on the consumer buying stages, Jiang et al. (2013) develop five categories of convenience: access, search, evaluation, transaction, and possession/post-purchase convenience.

3. Online convenience dimensions and relationships analysis

Based on the literature, the proposed model depicts the relations among the dimensions of convenience that are crucial for improving customer's perceptions about online convenience. For that, seven dimensions of online convenience are analyzed, and the relations hypothesized.

3.1. Access convenience

According to (Seiders et al., 2000, 89) this dimension is "characterized as the speed and ease with which consumers can reach a retailer". Access convenience is a deeply important dimension of retail convenience, considering that if the consumer cannot access the retailer, then he/she will never have the opportunity to experience the service. Contrary to traditional retail where access convenience could be upgraded by moving the store location (Seiders et al., 2000) in the online environment store location becomes irrelevant (Rohm and Swaminathan, 2004) as consumers may shop online from any location. Even so, the accessibility of websites is considered as the most important factor in determining consumer perceived online shopping convenience according to King and Liou (2004). This can be accomplished using more user-friendly and easy to remember URL's, having tools for automatic bookmarking and placing ads strategically on social media websites. Based on this it is proposed that:

H1: *The greater the perceived access convenience, the greater the perceived online convenience.*

3.2. Search convenience

Beauchamp and Ponder (2010, 52) define search convenience as the "speed and ease with which consumers identify and select products they wish to buy". Internet has supplied numerous tools that allowed retailers to improve the communication with potential clients by reinforcing the capability to provide tailored information, either by placing it in their website and using paid advertising to redirect traffic, or

by disseminating information and generating buzz in social media, thus aiding them identifying and selecting the right business relations (Kollmann et al., 2012). These improved tools provide psychological benefits to consumers as it prevents them from wasting time by avoiding crowds, reducing waiting time, and expending effort traveling to physical stores (Beauchamp and Ponder, 2010).

Assuming that the more the effective retailer's efforts in facilitating customer's product searches, the quicker and easier the customer's journey through the shopping experience (Kollmann et al., 2012; Seiders et al., 2000) the following hypothesis is proposed:

H2:. *The greater the perceived search convenience, the greater the perceived online convenience.*

3.3. Evaluation convenience

Evaluation convenience is associated with the availability of detailed yet easy-to-understand product descriptions by using various presentation features, such as text, graphics, and video, on the website of the company (Jiang et al., 2013). Through these instruments, consumers are able to get a clear image of products, zoom and rotate them, change colors and assert how the products may fit their needs. They can also engage in online discussions with other consumers about the products and services they seek and compare prices easily. This type of product exposure allows the consumer to get to know the product and compare it with others as well as to make the purchase process faster. However, in recent years, the overwhelming assortment of products and detailed information that is accessible tend to make online shoppers more sensitive than ever to the efforts associated to evaluation convenience (Jiang et al., 2013) thus the following hypothesis is proposed:

H3:. *The greater the perceived evaluation convenience, the greater the perceived online convenience.*

3.4. Attentiveness convenience

As Luedi (1997) and Madu and Madu (2002) argued that due to the strong competition recorded in online marketplaces the simply exposition to product or service catalogs on the Web is not enough to guarantee the online retailer survival. The attentiveness dimension refers to the extent to which online retailers provide personalized services and attention to their customers (Jun et al., 2004) was a way to enhance time and effort reduction. To retain customers modern online retailers employ a variety of personalization features to differentiate its products and services from the competition based on the customization and personalization of the service (Jun et al., 2004) improving customer experience and perceived overall convenience. Online customers expect customized attention, personalized services better tailored to their needs which helps them to reduce the efforts and time needed to search for information and reach a purchase decision (Pappas et al., 2016). Online personalization features allow customers to perceive the information in a more easy and fluent way, leading to greater shopping enjoyment (Mosteller et al., 2014). Aware of this, online retailers are offering decision aids (i.e., recommendation agents or shopping bots) and even human assistants in order simplify the purchase decisions process and to enrich customer's experience through a customized service (Beauchamp and Ponder, 2010). Therefore, the following hypothesis is provided:

H4:. *The greater the perceived attentiveness convenience, the greater the perceived online convenience.*

3.5. Transaction convenience

Transaction convenience is defined as the “speed and ease with which consumers can affect or amend transactions” (Beauchamp and

Ponder, 2010, p. 53). Stores with quick checkouts (e.g. 1-Click ordering) and easy return policies rank high in transaction convenience (Seiders et al., 2000). One of the main benefits of shopping online is that customers never have to wait in line (Wolfenbarger and Gilly, 2001). Online shoppers are in “virtual check-out lines” where they can complete the transaction simultaneously. Privacy concerns and fear of insecure transactions have been argued to be the biggest inhibitors to shopping online and this is the reason why easy, safe and convenient online payment methods are crucial for customers (de Kerviler et al., 2016). According to Javadi et al. (2012), the risk of losing money and financial details have a negative effect on attitude toward online shopping, thus we would like to propose the following hypothesis:

H5:. *The greater the perceived transaction convenience, the greater the perceived online convenience.*

3.6. Possession convenience

Possession convenience represents the efforts in terms of time and money that consumers have to spend in order to possess what they wish (Jiang et al., 2013). Seiders et al., (2000, p. 85) define possession convenience “as the speed and ease with which consumers can obtain desired products”, which includes factors related to production planning, stocking policy and shipping and delivery times. In online stores, buyers must wait for their orders to be handled, shipped and delivered before actually being in possession of the product. This is one particular advantage of choosing traditional over online stores, i.e., the ability to leave the store with the intended product (Alba et al., 1997; Rohm and Swaminathan, 2004). The time required to complete all the steps in the online purchase process and for delivery can be considered a non-monetary cost associated with e-commerce (Beauchamp and Ponder, 2010). Besides that, according to Javadi et al. (2012) concerns about the risk of the order not being delivered have a negative impact on the online experience. Therefore, the following hypothesis is proposed:

H6:. *The greater the perceived possession convenience, the greater the perceived online convenience.*

3.7. Post-possession convenience

Post-possession convenience becomes important after the service exchange and relates “to the consumer's perceived time and effort expenditures when reinitiating contact with a company after purchasing the intended product” (Berry et al., 2002, p. 8). The importance of post-possession convenience has been emphasized in recent years because of difficulties encountered by consumers in returning products purchased over the Internet (Berry et al., 2002). Factors that normally determine post-possession convenience often report to the consumer need for product repair, maintenance, or exchange (Berry et al., 2002). However, other reasons may be identified, such as transaction problems, customer complaints, honoring of a guarantee, defective products or services, which can make a customer to change its evaluation of online convenience (Seiders et al., 2007). In general, the less time and effort required from consumers to effectively deal with a failed service, the greater the perceived online convenience. Therefore, the following hypothesis is proposed:

H7:. *The greater the perceived post-possession convenience, the greater the perceived online convenience.*

3.8. Online satisfaction

Customer satisfaction is frequently defined as the customers' post-purchase comparison between pre-purchase expectation and actual performance (Jun et al., 2004). Jun et al. (2004) suggest that there is a significantly positive relationship between the overall service quality

perception (i.e. overall online convenience) and satisfaction. Accordingly, customer satisfaction is positively affected by the improved convenience of the online retailer (Koo et al., 2006). This means a higher convenient service would increase the perceived value, therefore, more convenience would lead to higher satisfaction (Thuy, 2011). Hsu et al. (2010) advocated that when customers can conveniently and easily experience the benefits of the services, they are more likely to be satisfied and reuse them. If online service providers increase the convenience they will be increasing customer satisfaction (Jih, 2009), which lead us to propose the following hypothesis:

H8: *The perceived of online convenience has a positive impact on online customer satisfaction.*

3.9. Behavioral intentions

According to the model presented by Zeithaml et al. (1996), behavioral intentions can be perceived by measures as repurchase intentions, word of mouth, loyalty, complaining behavior, and price sensitivity. High service convenience (as perceived by the customer) normally leads to favorable behavioral intentions (Madlberger, 2009). A consumer's online shopping experience will have a significant effect on his/her future purchase intention for online shopping (Jayawardhena et al., 2007). Thus, we can say that the more positive the customer's experience, the more likely he or she is of reusing the service (Udo et al., 2010). This idea follows the one by Zeithaml et al. (1996) who emphasize that behavioral intentions are relevant to a customer's decision to remain with or leave the company. Kollmann et al. (2012) suggest that a higher convenience orientation will lead to a higher propensity to seek information through the online channel and will also increase the propensity to purchase online. In fact, recent studies showed that convenience has a direct effect on purchasing trends (Jiang et al., 2013; Mpiganjira, 2015). From the above, it can be construed that more convenience may affect purchase behavior. Therefore, we would like to propose the following hypothesis:

H9: *Online customer satisfaction has a positive impact on behavioral intentions.*

3.10. Electronic Word-of-mouth (e-WOM)

Hennig-Thurau et al. (2004) refer to e-WOM as any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet. The substantial growth in online social networks has vastly expanded the potential impact of (e-WOM) on consumer purchasing decisions. The e-WOM has found a new way to assert its value to product marketing in new forms of communication, such as weblogs, discussion forums, social network websites or review websites (Gruen et al., 2006).

Online shoppers always undertake a review of other shoppers' comments and experiences before they buy products online. Millions of people have access to a single online review, and this is where the power of e-WOM lies (Park et al., 2011). Customers who have good experiences with a retailer are more likely to engage in positive word of mouth (Narayandas, 1998) and as a result, receivers are most likely influenced in their decision-making because consumers place more trust in user-generated content than they do in other forms of communication (MacKinnon, 2012; Park et al., 2011). Therefore, the following hypothesis is proposed:

H10: *Online customer satisfaction has a positive impact on e-WOM.*

Based on the above reasoning Fig. 1 presents a visual representation of convenience dimensions and relationships under analysis.

4. Method

4.1. Data collection instrument and scales

To analyze the relationships hypothesized, an online survey was developed and made available in May 2016. Since the respondents were Portuguese and the original scales were in English, the survey was translated from English to Portuguese and back-translated to ensure consistency and understanding of the questions. The objectives of translating the questions to Portuguese were to raise the response rate, to facilitate the understanding and to avoid misunderstandings or doubts that could happen when responding a survey written in a foreign language. The survey was pre-tested to identify errors and problems, to analyze if the scales' items were well understood by the respondents and to guarantee the quality of the translation. The pre-test did not reveal any major concern and minor adjustments were made.

The final questionnaire was composed of two sections. The first devoted to characterizing the respondent and to guarantee its eligibility. After, a second section was expected to evaluate the different dimensions of convenience proposed in the model, using validated 5-point Likert scales. Participants were asked to indicate their degree of agreement/disagreement with statements regarding the constructs in the model. The items used to operationalize each construct were developed on the basis of existing literature as can be seen in Table 1. The scales used were all reflective since it considers that the items reflect the construct (online convenience).

4.2. Sample

The survey was distributed using the snowball technique, with the help of individuals that shared the survey with their contacts. A filter question regarding online shopping habits was included at the beginning of the questionnaire to dismiss individuals who did not shop online. A final sample of 250 responses from active online shoppers was attained.

The sample consisted of 167 women and 83 men, with the majority being under 26 (87.2%) years old. Half of the respondents had concluded high school. Professionally, 64.4% were students and 26.8% were employed on behalf of others. Almost two-thirds of the sample said to buy online up to 5 times per year and about 20% between 5 and 10 times.

4.3. Data analysis procedures

The data obtained was then analyzed using the statistical software SPSS and AMOS version 23.0. Confirmatory Factor Analysis (CFA) with the maximum likelihood discrepancy estimation method was used to assess the measurement model and AMOS covariance-based structural equation modeling (CB-SEM) used to test the hypothesized relations in the model.

5. Results

5.1. Descriptive analysis

The dimensions of purchase convenience were assessed using the mean value and standard deviation. As can be observed in Table 2, the highest average was observed in the access dimension ($M = 4.60$) and the lowest in attention dimension ($M = 3.25$). There was a greater dispersion of agreement on Post-possession ($SD = 1.028$) and lower dispersion in access ($SD = 0.620$).

Confirmatory Factor Analysis (CFA) was then used to analyze the data and to assess construct validity and convergent validity. Sample size adequacy, missing data, normality and linearity, outliers and singularity and factorability were verified to conclude if data was appropriate. From the 250 responses obtained only 246 observations were

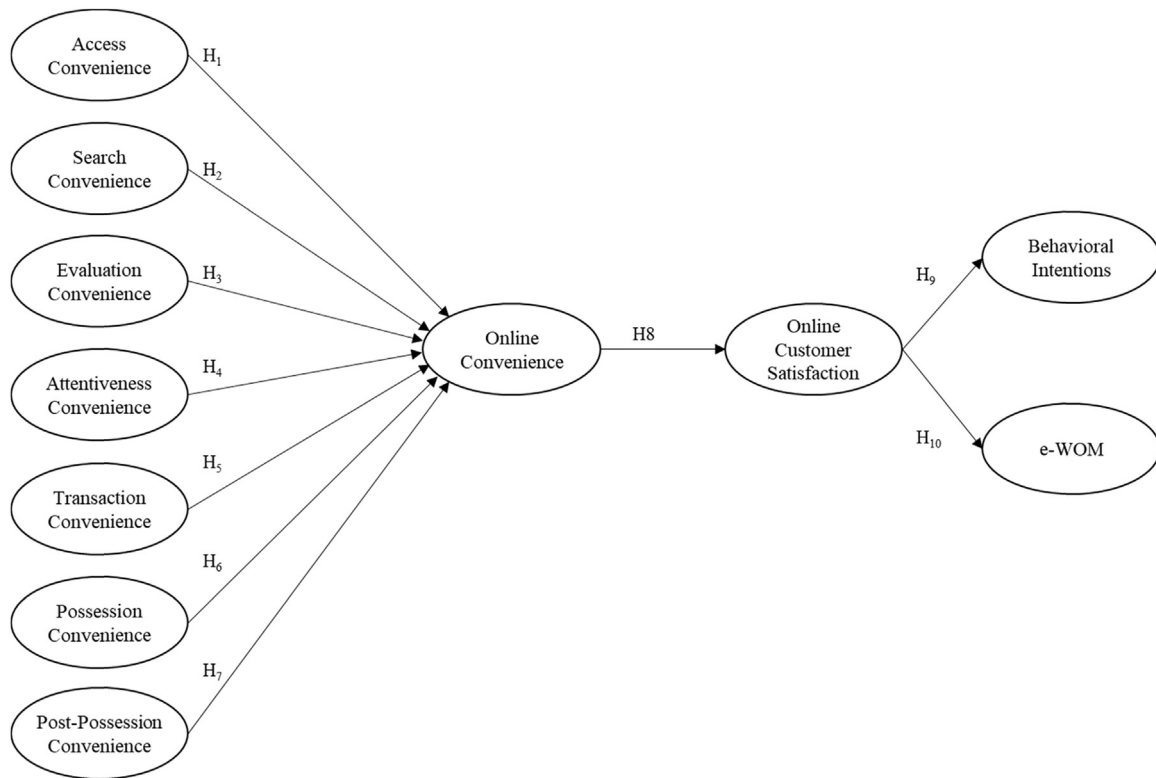


Fig. 1. Proposed Model for the assessment of online customer satisfaction.

used for the analysis since four of them were considered outliers by the *Mahalanobis d*-squared test. All the outliers were eliminated, and the non-respondents were not analyzed.

5.2. Confirmatory factor analysis

CFA is useful for scale validation (Hair et al., 2010) as well as to confirm the multidimensionality of a theoretical construct (Byrne, 2001). Using that technique, some of the scale items were removed due to low factor loadings in the standardized regression and respondents' perceived similarity between items. Comrey (1973) states that values for loadings higher than 0.63 are acceptable. Some of the retained items presented lower values than this benchmark, yet they presented values higher than 0.5 which is the minimum threshold to be accepted. Since these scales were previously used and validated, to preserve the model integrity we have decided to keep these items in the model for further analysis. Since some construct showed validation problems, the modification indices were analyzed resulting in the drop of three items on the construct related to search convenience.

The CFA revealed some minor problems in convergent and divergent validity, thus leading to the use of modification indices so to improve the model fit adjustment. The modification indices with higher absolute value were chosen. The analysis of the indices showed that some modifications in the model specification could be made to improve the global fit indices. After several interactions, Q9_3 and Q13_3 and the entire search convenience construct were deleted to improve the measurement model fit. Finally, the internal consistency was measured using the Cronbach's α value, using the minimal threshold of 0.7 suggested by Hair et al. (2006). The results of this phase are presented in Tables 3, 4.

After having made the necessary adjustments the model presented satisfactory results in terms of reliability (Cronbach's α), convergent validity (AVE) and discriminant validity since the AVE of each construct is greater than the variance shared between each construct and other constructs in the model.

5.3. Structural model analysis

The conceptual model proposed in Fig. 1 has several relationships between constructs that should be tested simultaneously. Consequently, structural equations modeling (SEM) was used in order to validate the model as a whole. As previously stated, the model using AMOS 23.0, with the maximum likelihood discrepancy estimation method. The reliability of Satisfaction ($\alpha=0.770$), Behavioral Intentions ($\alpha=0.924$) and e-WOM ($\alpha=0.772$) were measured using the Cronbach's α . Validity was assessed through AVE. All values are above the 0.5 minimum threshold.

The null model ($\chi^2 = 855.395$, $df = 513$), defined as a single-factor model without measurement errors (Hair et al., 1998), has a statistical significance level of 0.000. The normed chi-square (χ^2 / df) was of 1.667, which falls within the recommended range. The incremental fit index (IFI), Tucker-Lewis index (TLI), and comparative fit index (CFI), all reveal acceptable results as they present values above 0.9 (Hair et al., 1998). Regarding the root mean square error of approximation (RMSEA), acceptable models typically have values below 0.10 (Browne and Cudeck, 1992). According to Thompson (2004), values below 0.08 are desirable and those below 0.05 are considered outstanding. The current model revealed an RMSEA of 0.052, which represents a good result.

The model path coefficients from SEM analysis are presented in Table 5

As it can be seen, all the hypotheses present statistically significant values. The paths analysis indicates that Possession (H6), Transaction (H5) and Evaluation (H3) are the most important dimensions of online shopping convenience and Post-possession (H7) and Attentiveness (H4) are the dimensions that influence online convenience the least. Moreover, the greater the perceived access convenience, the greater the perceived overall online convenience (H1). As expected, the online convenience has a significant positive effect on satisfaction (H8), which also have a positive impact on customer's likelihood to repurchase in the same website (H9) and on the customers' willingness to share with

Table 1
Constructs and indicators.

Construct	Authors	Indicators
Access convenience	(Jiang et al., 2013)	Could shop anytime I wanted. Could order products wherever I am. The website is always accessible.
Search convenience	(Beauchamp and Ponder, 2010) (Beauchamp and Ponder, 2010)	The website was easy to find. It was easy to navigate the website. I could find what I wanted without having to look elsewhere. The website provided useful information. It was easy to get the information I needed to make my purchase decision.
Evaluation convenience	(Jiang et al., 2013)	Provides detailed product specifications. Uses both text and graphics in product information. Sufficient information to identify different products.
Attentiveness convenience	(Jun et al., 2004)	The online retailer gave me personalized attention. The website had a message area for customer questions and comments. I received a personal “thank you” note via e-mail or other media after I placed an order.
Transaction convenience	(Jiang et al., 2013) (Beauchamp and Ponder, 2010)	Flexible payment methods. The check-out process was fast. My purchase was completed easily. It did not take a long time to complete de purchase process.
Possession convenience	<i>New</i> (Jiang et al., 2013)	I felt safe to provide my personal and private data. I got exactly what I wanted. My order was delivered in a timely fashion. Undamaged delivered goods. Received all items I ordered.
Post-possession convenience	(Beauchamp and Ponder, 2010)	I was properly notified of my order status. It took a minimal amount of effort on my part to get what I wanted. It was easy to take care of returns and exchanges with the retailer X takes care of product exchanges and returns promptly.
Online customer satisfaction	(Udo et al., 2010)	Any after-purchase problems I experience are quickly resolved by the retailer Online shopping is a pleasant experience.
Behavioral Intentions	(Jiang et al., 2013)	I am satisfied with my previous online shopping experience. I will continue to shop online at this retailer. I encourage others to shop online at this retailer. I will use this retailer website more often for online purchases.
e-WOM	(Park et al., 2011) (Goyette et al., 2010)	I always share my knowledge and information. I always read online consumer reviews when I was shopping. I recommended this company. I speak of this company's good sides. I am proud to say to others that I am this company's customer. I strongly recommend people buy products online from this company. I have spoken favorably of this company to others.

Table 2
Mean and Standard Deviation for constructs.

Constructs	M	SD.
Access (4 items)	4.60	0.620
Search (4 items)	4.23	0.674
Evaluation (3 items)	3.96	0.737
Attentiveness (4 items)	3.25	0.921
Transaction (5 items)	4.26	0.764
Possession (6 items)	4.26	0.734
Post-possession (3 items)	3.28	1.028
Online Satisfaction Conv. (2 items)	4.05	0.780
Behavioral intention (3 items)	4.27	0.799
E-Wom (6 items)	3.66	0.687

others their experience (H10).

The graphical results are presented in Fig. 2, with the standardized parameter estimate above and t-value below the arrow. The tests performed reveal that the model proposed fits the data well

6. Conclusions and implications

With the strong development of the internet, web, and mobile applications, customers have gained unconstrained access to information concerning products and companies, providing them with a wide range of choices from where to choose products and services at highly competitive prices. Therefore, in addition to offering competitive prices

sustaining a high level of online shopping convenience has become a strategic driving force for online retailers to promote and preserve customer loyalty (Haridasan and Fernando, 2018). The main goal of this investigation was to examine what convenience dimensions more heavily influence consumers' satisfaction and intention to engage and recommend online shopping. Previous studies that investigated convenience have mainly focused on the relationship with purchase intentions (Pham et al., 2018) disregarding other outcomes of the online convenience. The current study has addressed some of those factors, namely: satisfaction, e-WOM, and behavioral intentions, highlighting the deep connection between satisfied consumers and their willingness to reuse and recommend the online service. This inclusion was important because e-WOM and behavioral intentions proved to be relevant indicators of system success and customer loyalty. In what concerns satisfaction, the findings show a positive relationship between the perceived online convenience and customer satisfaction. This assessment is important because satisfaction is a major factor in maintaining and improving competitive advantage. Besides that, the study points out that online convenience is actually a multidimensional construct composed of several dimensions. Consumers' service convenience perception is influenced not only by the characteristics of the service and individual consumer differences but also by firm-related factors. Marketers can do much to improve consumers' convenience perceptions. They can lower consumers' actual time and effort costs in many cases and improve consumers' satisfaction.

The analysis of paths coefficients revealed that possession is the dimension that most influences the perception of online convenience.

Table 3
Results of the CFA: Reliability, average variance extracted and factor loadings.

Items	Factor loadings	AVE	Cronbach's alpha
Access (M = 4.6, SD = 0.620)			
Q8_1	0.553		
Q8_2	0.706		
Q8_3	0.745		
Q8_4	0.859	0.524	0.800
Evaluation (M = 3.96, SD = 0.737)			
Q10_1	0.821		
Q10_2	0.789	0.532	0.727
Q10_3	0.548		
Attentiveness (M = 3.25, SD = 0.921)			
Q11_1	0.719		
Q11_2	0.841	0.593	0.812
Q11_3	0.745		
Transaction (M = 4.26, SD = 0.764)			
Q12_1	0.767	0.644	0.901
Q12_2	0.882		
Q12_3	0.822		
Q12_4	0.842		
Q12_5	0.684		
Possession (M = 4.26, SD = 0.734)			
Q13_1	0.788		
Q13_2	0.776		
Q13_4	0.687	0.548	0.851
Q13_5	0.756		
Q13_6	0.688		
Post-possession (M = 3.28, SD = 1.028)			
Q14_1	0.935	0.795	0.920
Q14_2	0.877		
Q14_3			

Table 4
Fit measures for CFA.

Fit Indices	Value
CMIN / DF	1.706
Goodness of Fit Index (GFI)	0.884
Adjusted Goodness of Fit Index (AGFI)	0.849
Normed fit index (NFI)	0.894
Incremental Fit Index (IFI)	0.953
Non-normed fit index (NNFI) or (TLI)	0.944
Comparative fit index (CFI)	0.953
Root mean square residual (RMR)	0.053
Root mean square residual of Approximation (RMRA)	0.054

Possession convenience ($\beta = 0.86$; $p = 0.001$) has turned out to be the foremost driver of online shopping convenience and it is the main reason why consumers engage in online shopping – to get the intended product without investing resources such as time and effort. Thus,

Table 5
Regression weights and statistical significance.

Model path		Estimate Regression Weight	Estimate Standardized Regression Weight	S.E.	t-value	P	Result
Online convenience	→ Satisfaction	0.589	0.884	0.052	11.350	***	S
Satisfaction	→ Behavioral intentions	1.060	0.891	0.083	12.714	***	S
Satisfaction	→ e-WOM	0.271	0.839	0.099	2.738	0.006	S
Evaluation	→ Online convenience	0.412	0.685	0.059	6.948	***	S
Attentiveness	→ Online convenience	0.269	0.327	0.063	4.277	***	S
Transaction	→ Online convenience	0.569	0.836	0.056	10.087	***	S
Access	→ Online convenience	0.346	0.654	0.041	8.490	***	S
Possession	→ Online convenience	0.530	0.864	0.051	10.330	***	S
Post-Possession	→ Online convenience	0.441	0.462	0.066	6.727	***	S

*** $p < 0.001$.

achieving the intended product with a minimal amount of effort, undamaged and delivered in a timely fashion are some of the main motives that lead consumers to engage in online shopping. Although [Beauchamp and Ponder \(2010\)](#) stated that one of the main motives for selecting traditional stores over online stores is the ability to leave the store with the desired product, the present findings suggest that online customers are not obsessed with the delivery. They value more the convenience experience that saves them time and effort.

The transaction also presents a strong impact on the perceived online convenience and the current findings suggest that the convenience associated with finalizing or amending a purchase surely makes the difference. [Seiders et al. \(2000\)](#) argument that transaction convenience demonstrates an evident impact in online shopping because the waiting for paying is especially ungrateful for consumers. Online shopping facilitates the check-out process since this task is performed by the consumer itself and doesn't take much time to complete. The entire process can be done in less than one minute, enabling customers to save time and effort, as intended. In fact, [Kin and Farida \(2016\)](#) and [Mehmood and Najmi \(2017\)](#) established a relation between transaction convenience and consumer's satisfaction.

With respect to evaluation, this dimension also revealed some notoriety in the online consumer perspective. Looking for an appropriate product on a website is often time-consuming even when customers know specifically what they want. In online platforms, customers can search for and compare products and costs without physically visiting different locations to find the better offers. Thus, is extremely important for customers to have detailed descriptions and images of the product since intangibility presented in a clear and clean way to save time. Extensive and clear descriptions will clarify consumers about the product composition and appearance will increase convenience and it will make them feel more confident about the purchase. It seems important for online consumers to have the advantage of shopping at any time, wherever they are, without any kind of effort (access convenience). As stated by [Jiang et al. \(2013\)](#), consumers enjoy the benefits of the extended accessibility to products and stores that are not available or close to the location where they live or work through a simple and always available website.

Post-possession revealed itself as one of the dimensions with less importance. Nevertheless, consumers must be properly secured of the company's exchange policies in order to feel secure and do not be afraid to engage in an online purchase. Regarding attentiveness, this factor presents the lower value ($\beta = 0.33$) when compared with other dimensions. Customizing the service is least important online convenience dimension according to customers' perceptions. [Luedi \(1997\)](#) and [Madu and Madu \(2002\)](#) argued that the mere presence in the online marketplace is not enough to assure consumer loyalty. As [Hsu et al. \(2010\)](#) stated, when customers can conveniently and easily experience the benefits of the services, they are more likely to be satisfied, repeat the process and recommend the company to others. Thus, customers who have good experiences with a retailer are more likely to engage in positive word of mouth, reuse the service and strongly recommend

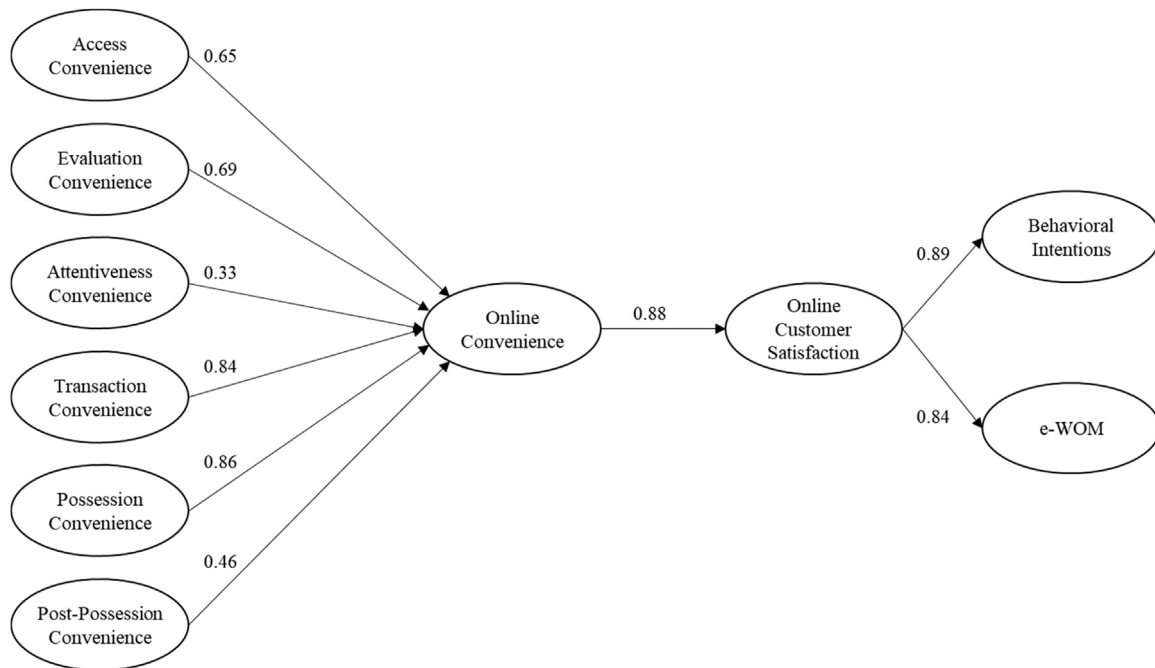


Fig. 2. Graphical Results.

people to buy products online from the company.

From a theoretical perspective, this study adds to the field in two additional ways. First, the study retests the framework proposed by Jiang et al. (2013) to understand online shopping convenience, revealing that some items may present problems across samples. Second, the findings extend the existent knowledge on the relationships of convenience by evidencing the significant effect of online shopping convenience on online satisfaction, which for its turn has an impact on the behavioral intention and on e-WOM behavior, stressing the importance of convenience in the online environment.

In a managerial perspective, the findings provide managers with deeper insights into what dimensions of convenience they should focus to enhance the overall level of online convenience and thereby enhancing the level of customer satisfaction and e-WOM. The online shopping convenience model investigated can be regarded as a diagnostic tool for online retailers to understand what convenience dimensions and related features their customers value most. The findings also provide an important starting point to conduct effective online shopping convenience management. Retailers should be aware that possession, transaction, and evaluation are the three most essential dimensions that lead customers to engage with online shopping, as previously suggested in the study by Mehmood and Najmi (2017). The decision to engage in online shopping depends on the easiness with which consumers gain access to products, pointing to the need to improve shipping methods and times. Complementary actions should then be taken into account as Portuguese online shoppers are concerned with the difficulties in returning an item or having their money back. Investing on innovative ways to ensure online customers trust and compensate them for a deal that did not go well may play a keystone role increasing online convenience and satisfaction and, therefore the willingness to reuse and recommend the online service. These can be attained by giving extra attention to the packing of goods to avoid damage during transportation, as well as to the place and time of delivery, warranty and return policy.

The current findings direct companies to the need to assure consistency between expectations and the actual delivery. Providing detailed information about the product and providing efficient customer assistance during and after the online purchase are other recommendations that stand for Portuguese online shopping companies.

Specifically, detailed and accurate product information, complemented with a variety of flexible, convenient, and simple payment methods, must be provided. As customer expectations of convenience have increased as a natural response to the service innovations introduced by website managers and marketers, some online retailers may have to reorganize the assortment of products and revise the information in the websites. Hence, frequent monitoring of consumers' perceptions and expectations about online convenience is a prerequisite for achieving continuous improvement in rendering highly convenient online service.

7. Limitations and future research

One of the major limitations of this study is that there is a significant lack of prior research concerning online shopping convenience and its dimensions, in general, and in the Portuguese market. Second, despite the efforts of the authors to attain a large sample, the number of respondents was disappointing and unsatisfactorily diversified since a significant part are students, which may have influenced the findings. Thus, a more large and diversified sample could produce different conclusions. The findings also indicate that the results would benefit from improved measures for several constructs, namely: search, possession and transaction convenience. In future studies, a better discrimination between possession and transaction convenience is also encouraged.

It is also recommended that future research investigate the how the customer perception of online shopping convenience change over time by employing a longitudinal research method and maybe add additional dimensions to refine online convenience conceptualization.

References

- Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A., Wood, S., 1997. Interactive home shopping: consumer, retailer, and manufacturer incentives to participate in electronic Marketplaces. *Source J. Mark.* 61 (3), 38–53.
- Beauchamp, M.B., Ponder, N., 2010. Perceptions of retail convenience for in-store and online shoppers. *Mark. Manag. J.* 20 (1), 49–65.
- Bender, W., 1964. Consumer purchase costs—Do retailers recognize them? *J. Retail.* 11 (1), 1–8.
- Berry, L.L., 2000. Cultivating Service Brand Equity. *J. Acad. Mark. Sci.* 28, 128–137.
- Berry, L.L., Cooper, L.R., 1990. Competing with time-saving service. *Business* 40 (2), 3–7.
- Berry, L.L., Seiders, K., Grewal, D., 2002. Understanding service convenience. *J. Mark.*

- Am. Mark. Assoc. (AMA) 66 (3), 1–17.
- Bhatnagar, A., Misra, S., Rao, H.R., 2000. On risk, convenience, and Internet shopping behavior. *Commun. ACM Assoc. Comput. Mach. (ACM)* 43 (11), 98–105.
- Browne, M.W., Cudeck, R., 1992. Alternative ways of assessing model fit. *Sociol. Methods Res.* 21 (2), 230–258.
- Byrne, B.M., 2001. *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*. Lawrence Erlbaum Associates, Publishers, Mahwah, New Jersey.
- Comrey, A.L., 1973. *A First Course in Factor Analysis*. Academic Press, New York.
- Copeland, M.T., 1923. Relation of consumers' buying habits to marketing methods. *Harv. Bus. Rev.* 1 (3), 282–289.
- Emrich, O., Paul, M., Rudolph, T., 2015. Shopping Benefits of Multichannel Assortment Integration and the Moderating Role of Retailer Type. *Journal of Retailing* 91. New York University, pp. 326–342.
- Farquhar, J.D., Rowley, J., 2009. Convenience: a services perspective. *Marketing Theory* 9. SAGE Publications, pp. 425–438.
- Gehrt, K.C., Yale, L.J., 1993. The dimensionality of the convenience phenomenon: a qualitative reexamination. *J. Bus. Psychol.* 8 (2), 163–180.
- Goyette, I., Ricard, L., Bergeron, J., Marticotte, F., 2010. E-WOM scale: word-of-mouth measurement scale for e-services context. *Can. J. Adm. Sci.* 27 (1), 5–23.
- Gruen, T.W., Osmonbekov, T., Czaplewski, A.J., 2006. eWOM: the impact of customer-to-customer online know-how exchange on customer value and loyalty. *J. Bus. Res.* 59 (4), 449–456.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., 2006. *Multivariate Data Analysis* (6th ed.), *Analysis*, p. 4.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L., Black, W.C., Hair Jr., J.F., et al., 2010. *Multivariate Data Analysis*, Prentice Hall, 5th ed. Prentice Hall International, New Jersey.
- Haridasan, A.C., Fernando, A.G., 2018. Online or in-store: unravelling consumer's channel choice motives. *J. Res. Interact. Mark.* 1–16.
- Hennig-Thurau, T., Gwinner, K.P., Walsh, G., Gremler, D.D., 2004. Electronic word-of-mouth via consumer-opinion platforms: what motivates consumers to articulate themselves on the Internet? *J. Interact. Mark.*
- Herrmann, R.O., Beik, L.L., 1968. Shoppers' Movements outside Their Local Retail Area. *J. Mark.* 32 (4), 45–51.
- Hsu, C.-L., Chen, M., Chang, K.-C., Chao, C.-M., 2010. Applying loss aversion to investigate service quality in logistics: a moderating effect of service convenience. *Int. J. Oper. Prod. Manag.* 30 (5), 508–525.
- Hui, M.K., Thakor, M.V., Gill, R., 1998. The effect of delay type and service stage on consumers' reactions to waiting. *J. Consum. Res.* 24 (4), 469–479.
- Javadi, M.H.M., Dolatabadi, H.R., Poursaedi, A., Asadollahi, A.R., 2012. An analysis of factors affecting on online shopping behavior of consumers. *Int. J. Mark. Stud.* 4 (5), 81.
- Jayawardhena, C.C., Wright, L.T., Charles, D., Tiu Wright, L., Dennis, C., 2007. Consumers online: intentions, orientations and segmentation. *Int. J. Retail Distrib. Manag. Emerald* 35 (6), 515–599.
- Jiang, L. (Alice), Yang, Z., Jun, M., 2013. Measuring consumer perceptions of online shopping convenience. *J. Serv. Manag. Emerald* 24 (2), 191–214.
- Jih, W.-J. (Kenny), 2009. Service features, customer convenience, and shopping intention in the context of mobile commerce. In: Wang, T.-Y. (Ed.), *Comparison-Shopping Services and Agent Designs*. IGI Global, Hershey, New York, pp. 134–150.
- Jun, M., Yang, Z., Kim, D., 2004. Customers' perceptions of online retailing service quality and their satisfaction. *Int. J. Qual. Reliab. Manag. Emerald* 21 (8), 817–840.
- Kaltcheva, V.D., Weitz, B.A., 2006. When should a retailer create an exciting store environment? *J. Mark. Am. Mark. Assoc. (AMA)* 70 (1), 107–118.
- Keaveney, S.M., 1995. Customer switching behavior in service industries: an exploratory study. *J. Mark.* 59 (2), 71–82.
- de Kerviler, G., Demoulin, N.T.M., Zidda, P., 2016. Adoption of in-store mobile payment: are perceived risk and convenience the only drivers? *J. Retail. Consum. Serv.* 31 (No. July), 334–344.
- Kin, N., Farida, N., 2016. Effects of convenience online shopping and satisfaction on repeat-purchase intention among students of higher institutions in Indonesia. *J. Internet Bank. Commer.* 21 (2), 1–19.
- King, S.F., Liou, J.-S., 2004. A framework for internet channel evaluation. *Int. J. Inf. Manag.* 24 (6), 473–488.
- Kollmann, T., Kuckertz, A., Kayser, I., 2012. Cannibalization or synergy? Consumers' channel selection in online-offline multichannel systems. *J. Retail. Consum. Serv. Elsevier* 19 (2), 186–194.
- Koo, D., Kim, J., Lee, S., 2006. Personal values as underlying motives of shopping online. *Asia Pac. J. Mark. Logist. Emerald* 20 (2), 156–173.
- Kumar, A., Kashyap, A.K., 2018. Leveraging utilitarian perspective of online shopping to motivate online shoppers. *Int. J. Retail Distrib. Manag.* 46 (3), 247–263.
- Luedi, A.F., 1997. Personalize or perish. *Electron. Mark.* 7 (3), 22–25.
- MacKinnon, K. a., 2012. User generated content vs. advertising: do consumers trust the word of others over advertisers? *Elon J. Undergrad. Res. Commun.* 3 (1), 14–22.
- Madlberger, M., 2009. Exogenous and endogenous antecedents of online shopping in a multichannel environment. In: Wan, Y. (Ed.), *Comparison-Shopping Services and Agent Designs*. IGI Global, Hershey-New York, pp. 196–216.
- Madu, C.N., Madu, A. a., 2002. Dimensions of e-quality. *Int. J. Qual. Reliab. Manag.* 19 (3), 246–258.
- Mehmood, S.M., Najmi, A., 2017. Understanding the impact of service convenience on customer satisfaction in home delivery: evidence from Pakistan. *Int. J. Electron. Cust. Relatsh. Manag.* 11 (1), 23–43.
- Mosteller, J., Donthu, N., Eroglu, S., 2014. The fluent online shopping experience. *J. Bus. Res. Elsevier Inc.* 67 (11), 2486–2493.
- Mpinganjira, M., 2015. Online store service convenience, customer satisfaction and behavioural intentions: a focus on utilitarian oriented shoppers. *J. Econ. Behav. Stud.* 7 (1), 36–49.
- Narayandas, D., 1998. Measuring and Managing the Benefits of Customer Retention. *J. Serv. Res. SAGE Publ.* 1 (2), 108–128.
- Pan, Y., Zinkhan, G.M., 2006. Exploring the impact of online privacy disclosures on consumer trust. *J. Retail.* 82 (4), 331–338.
- Pappas, I.O., Kourouthanassis, P.E., Giannakos, M.N., Chrissikopoulos, V., 2016. Explaining online shopping behavior with fsQCA: the role of cognitive and affective perceptions. *J. Bus. Res. Elsevier Inc.* 69 (2), 794–803.
- Park, C., Wang, Y., Yao, Y., Kang, Y.R., 2011. Factors influencing eWOM effects: using experience, credibility, and susceptibility. *Int. J. Soc. Sci. Humanit.* 1 (1), 74–79.
- Pham, Q., Tran, X., Misra, S., Maskeliūnas, R., Damaševičius, R., 2018. Relationship between convenience, perceived value, and repurchase intention in online shopping in Vietnam. *Sustainability* 10 (2), 1–14.
- Reimers, V., Chao, F., 2014. The role of convenience in a recreational shopping trip. *Eur. J. Mark. Emerald* 48 (11/12), 2213–2236.
- Rohm, A.J., Swaminathan, V., 2004. A typology of online shoppers based on shopping motivations. *J. Bus. Res.* 57 (7), 748–757.
- Roy, S.K., Lassar, W.M., Shekhar, V., 2016. Convenience and satisfaction: mediation of fairness and quality. *Serv. Ind. J.* 36 (5–6), 239–260.
- Seiders, K., Berry, L.L., Gresham, L.G., Leonard, L., Larry, G., 2000. Attention, retailers! How convenient Is your convenience strategy? *Sloan Manag. Rev.* 41 (3), 79–89.
- Seiders, K., Voss, G.B., Godfrey, A.L., Grewal, D., 2007. SERVCON: development and validation of a multidimensional service convenience scale. *J. Acad. Mark. Sci. Springe. Nat.* 35 (1), 144–156.
- Shaheed, A., 2004. How convenience has changed the nation. *Brand Strategy* 44–46.
- Thompson, B., 2004. *Exploratory and Confirmatory Factor Analysis*. American Psychological Association (APA), Washington, DC.
- Thuy, P.N., 2011. Using service convenience to reduce perceived cost. *Mark. Intell. Plan. Emerald* 29 (5), 473–487.
- Udo, G.J., Bagchi, K.K., Kirs, P.J., 2010. An assessment of customers' e-service quality perception, satisfaction and intention. *Int. J. Inf. Manag.* 30, 481–492.
- Wolfenbarger, M., Gilly, M.C., 2001. Shopping online for freedom, control, and fun. *Calif. Manag. Rev.* 43 (2), 34–55.
- Yale, L., Venkatesh, A., 1986. Toward the construct of convenience in consumer research. *Adv. Consum. Res.* 13 (1), 403–408.
- Zeithaml, V.A., Berry, L.L., Parasuraman, A., 1996. The behavioral consequences of service quality. *J. Mark.* 60 (2), 31.