EFFECTS OF CUSTOMER PERCEPTIONS IN MULTICHANNEL RETAIL BANKING

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Structured Abstract

Purpose: This paper focuses on the multichannel strategy in the banking sector and its effects on customer engagement. Specifically, the study proposes a model in which customers' perceptions of offline and online channels are related to brand trust and brand commitment, which ultimately lead to customer engagement.

Design/methodology/approach: An empirical study was carried out on a sample of 306 individuals and data was analysed through partial least squares.

Findings: The results show that offline experience is more important than online experience in terms of impact on trust and commitment, which are closely linked to customer engagement. Online experience does not have a significant direct influence on brand commitment and its effect on brand trust is moderated by the customer's familiarity with the channel.

Originality/value: These findings contribute to the advance in the current knowledge of the joint role of online and offline channels with the aim of strengthening customer relationships. From a managerial viewpoint, customer perceptions formed by their experiences in bank branches are more important than customer perceptions of the website's performance in the explanation of trust and commitment.

Keywords: multichannel; customer perceptions; engagement; retail banking

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1. INTRODUCTION

In the last decade, the retail banking industry has faced important changes. Innovations based on information technology, the threat of new entrants from the computing industry, customers who are more and more technologically knowledgeable and demand more transparency and the effects of the last financial crisis have all led banks to implement actions to tackle this new environment (Alt and Puschmann, 2012). One of these actions has been to adapt client service interfaces, investing in online channels and reducing branch networks. Investment in the online channel is a bank's response to a type of consumer that is becoming more and more familiar with online transactions and demands services and information that can be accessed at anytime and anywhere from their computer, tablet, or mobile. Banks have needed to reduce the number of branches in order to remain competitive. Thus, banks need to redefine their value proposals in the current context, integrating their services in the offline and online channels (Bapat, 2017; Kingshott *et al*., 2018).

In academic literature, most research has focused either on the offline or the online contexts in isolation. Specifically, the relationship between trust and commitment in online contexts has been confirmed (Mukherjee and Nah, 2003; Sanchez-Franco, 2009; Kingshotta *et al*., 2018), as has as the effect of these factors on bank loyalty (Phan and Ghantous, 2013; Sumaedi *et al*., 2015). Empirical evidence also suggests that customers' experience with existing bank channels influences the adoption of self-service technology innovations (van Birgelen *et al*., 2006; Lee *et al*., 2007; Yap *et al*., 2010; Estrella-Ramon *et al*., 2016) and that electronic experiences influence general feelings of trust and commitment (Boateng and Narteh, 2016; Kingshott *et al*., 2018).

In the general retailing field, some studies reveal that perceptions of offline and online channels interact in the customer's mind to develop customer attitudes towards retailers (Kwon and Lennon, 2009; Carlson and O'Cass, 2011). However, to the best of our knowledge, the role of perceptions simultaneously arising from the different bank channels remains under researched. In the same way, recent banking literature addresses the development of engagement in online channels (Boateng and Narteh, 2016; Khan *et al*., 2016; Sahoo and Pillai, 2017), but there is a lack of research with a multichannel perspective. Consequently, some authors call for studies that simultaneously model the effects of offline and online encounters (White *et al*., 2013; Estrella-Ramon *et al*., 2016; Zhang *et al*., 2018).

Customers across the world are increasingly less confident in organizations (Edelman, 2018), which constitutes a serious threat for the banking sector in which confidence and trust are key aspects for achieving success (Laksamana *et al*., 2013). Customers perceive higher risk when hiring financial services than when acquiring other services (Phan and Ghantous, 2013; Marafon *et al*., 2018) and, thus, bank managers must be particularly focussed on gaining customers' confidence. Therefore, determining the roles of both banking channels in the creation of the customer's perception and attitude is of academic and managerial interest.

The main goal in this paper is to analyse the impact of customers' perceptions of bank branches (offline service perceptions) and their websites (online service perceptions) on customer attitudes and behaviour towards the bank brand. In particular, the study examines the role of brand trust, brand commitment and brand engagement. The results can contribute to extend the current state of research by intensifying the analysis of multichannel perceptions in retail banking. In addition, the study can provide bank managers with insights into which type of perception, offline or online, more affects the different outcomes considered in the analysis.

In addition to focusing on a multichannel setting, this paper discusses a construct of increasing interest in the literature, customer engagement. Customer engagement is broader in scope than customer loyalty, which is usually restricted to repeat purchase intentions and word-of-mouth (Pansari and Kumar, 2017). This work contributes by shedding light on this area of academic and managerial relevance, which is concerned with the effects of trust and commitment on customer engagement in the banking sector. Hence, this paper offers an innovative approach by integrating two powerful constructs –trust and commitment- in a model starting from service perceptions across different channels and finishing with customer engagement.

2. LITERATURE REVIEW

2.1. Conceptual background

In order to understand how customers' perceptions of offline and online channels may enhance customer engagement towards banks, this present work proposes an empirical model that relates five major factors. As shown in figure 1, the model first considers the effects of offline and online service perceptions on customer trust and commitment towards the bank, which are key determinants of strong marketing relationships (Morgan and Hunt, 1994). In turn, trust and commitment are expected to be positively related and ultimately increase customer engagement.

- Insert Figure 1 about here -

Due to their multidimensional natures, offline service perceptions, online service perceptions and customer engagement were modelled as second-order constructs. Grace and O'Cass (2004)'s framework was applied to offline service perceptions, which involved analysing the main service delivered by the bank (core service offline), employee behaviour and performance (employee service) and the visual aspects of branches and employees (servicescape). As regards online service perceptions, we focussed on Carlson and O'Cass (2011)'s dimensions by analysing the performance of the web platforms in terms of the information provided (communication), the visual aspects (aesthetic) and their suitability for making financial transactions (transaction efficiency). We select these conceptualizations of offline and online service perceptions as they cover aspects normally considered in the literature of banking services. Moreover, offline and online service perceptions both include visual, informational, and functional aspects related to the efficiency and reliability of the core service. Finally, and following Kumar and Pansari (2016), customer engagement was modelled as consisting of three dimensions that reflect purchase behaviour (own purchases) and the degree to which customers engage in social interactions (social influence) and provide feedback to their bank (knowledge sharing). Although encouraging referrals has also been suggested as a dimension of customer engagement (Kumar and Pansari, 2016; Pansari and Kumar, 2017), this practice is not common in the banking sector.

It is significant that previous literature considers offline service perceptions and customer engagement as second-order factors (Grace and O'Cass, 2004; So and King, 2010; Kumar and Pansari, 2016), although Carlson and O'Cass (2011) considered communication, aesthetic and transaction efficiency to be first-order factors. However, we decided that a second-order structure was more appropriate to compare the roles of offline and online perceptions.

The development of the model mainly draws on the theories of hierarchy of effects, trust-commitment and social exchange. According to the first theory, customer behaviour may be depicted as a chain of relationships that involve cognitive, affective and conative factors (Fishbein and Ajzen, 1975). Thus, our model starts from customer perceptions of banks in both the offline and online channels. These perceptions will trigger an emotional response in terms of trust and commitment, which will eventually lead to customer engagement. The middle area of the model is also explained by the commitment-trust theory of Morgan and Hunt (1994), which holds that trust and commitment are the main mediating variables in the development of successful relationships. Finally, social exchange theory postulates that individuals make rational decisions to engage in social exchanges based on their perception of the costs and benefits arising from the exchange (Thibaut and Kelley, 1959). As suggested by Harrigan *et al.* (2018), customer engagement may be understood as a form of social exchange resulting from the interaction between the customer and the brand. Similarly, the development of customer commitment has been also explained based on social exchange theory (Ganesan *et al.*, 2010; Laksamana *et al.*, 2013).

To some extent, the model constitutes a meeting point between two concepts of increasing interest in the literature - customer engagement and multichannel customer perceptions - with two classical constructs that are cornerstones of relationship marketing -trust and commitment. The next section presents the specific hypotheses that connect these constructs and the underlying theory.

2.2. Hypotheses development

In the field of interpersonal relations, trust has been defined as *"one party's belief that its needs will be fulfilled in the future by actions undertaken by the other party"* (Anderson and Weitz, 1989, p. 312). This concept has been applied to the specific relationship between a consumer and a brand, which is generally referred to in the marketing literature as brand trust. Thus, Chaudhuri and Holbrook (2001, p. 82) defined brand trust as *"the willingness of the average consumer to rely on the ability of the brand to perform its stated function"*. According to these authors, beliefs about the reliability, safety and honesty of the brand are all important components of brand trust. The literature offers alternative trust conceptualizations (e.g. Chen and Dhillon, 2003; Schumann *et al.*, 2010; Sekhon *et al.*, 2014), with Bhattacherjee's (2002) dimensions of integrity, competence and benevolence being probably the best-known. However, these dimensions may also be seen as trustworthiness indicators behind the development of feelings of trust rather than representing trust itself (Shainesh, 2012). In many works, dimensions of trust and its determinants are used interchangeably (Alam and Yasin, 2010).

Customers perceive that the organization is reliable through their own experience, in such a way that brand trust is built on the customer’s experience with the brand over time (Delgado and Munuera, 2001; Ruparelia *et al*., 2010). The effect of the individual’s experience on trust towards a person is supported by social psychology theories (Rempel *et al*., 1985), and its application to the specific case of a consumer and a brand has also been demonstrated in marketing literature (Ha and Perks, 2005; Ramaseshan and Stein, 2014). Moreover, customer trust in a particular brand is also dependant on third party recommendations and comments (Ha, 2004; Srinivasan, 2004). This is consistent with the model developed by Berry (2000), where customer experience and communications, both from the company and external, are the drivers of brand equity in services. In terms of the creation of customer trust in the banking context, Järvinen (2014) discusses customer experience and the ability of the banks to behave reliably, in accordance with the regulations and to serve their customers' general interests.

Customer experience and communications with the brand, either in offline or online channels, lead the customer to become familiar and knowledgeable about the brand (Garbarino and Johnson, 1999; Ramaseshan and Stein, 2012). In every encounter with the brand, customers perceive different aspects of the product or service brand, and they can verify whether brand promises are fulfilled or disconfirmed (Dall’Olmo Riley and de Chernatony, 2000; Iglesias *et al.*, 2011). As a result of interactions with the brand, consumers perceive and evaluate different brand attributes, and they can become confident about the brand’s ability to deliver its brand promise (Phan and Ghantous, 2013). In the banking sector, aspects such as the customer perception of reliability and safety of the bank are particularly crucial to explain customer trust towards the bank brand (van Esterik and van Raaij, 2017), because it is the money of the customer that is at risk. O'Cass and Grace (2004) showed that perceptions of the bank's physical environment are important in explaining the customer's attitude towards the bank. Other studies also evidence the importance of frontline personnel on shaping customers' overall evaluations of the service brand (Berry, 2000; de Chernatony and Segal-Horn, 2003). Similarly, studies focusing on online interactions between the customer and the brand have also shown the key role of the visual appeal of the bank's website, security and ease-of-use in affecting both customer attitude towards the brand in general (Flavian *et al.*, 2005; Carlson and O'Cass, 2011) and specifically to customer trust in the bank's brand (Loureiro, 2013; Phan and Ghantous, 2013). In conclusion, customer perceptions of the brand both in the offline and in the online channel can determine the customer's trust in the bank's brand. Therefore, we posit:

H1: Offline service perceptions have a positive effect on brand trust

H2: Online service perceptions have a positive effect on brand trust

Commitment has been defined as *"an enduring desire to maintain a valued relationship"* (Moorman *et al.*, 1992, p. 316). Commitment is considered as the customer's willingness to maintain a relationship with a specific brand (Chaudhuri and Holbrook, 2001). As previously discussed, the development of trust and its link to commitment may be explained by social exchange theory (Thibaut and Kelley, 1959), in that consumer perceptions represent a form of acquisition utility in exchange relationships that influences the global perceptions of firms (White *et al.*, 2013). Furthermore, Morgan and Hunt (1994) argue that commitment and trust are two interrelated factors of pivotal importance in predicting exchange performance.

Similarly, the hypotheses about brand trust can be applied also to brand commitment. As consumers perceive and evaluate brands through their experience, they may connect and establish relationship ties with the brand (Ramaseshan and Stein, 2014). Both the offline and online service perceptions of the brand may determine the willingness of the consumer to maintain a relationship with the brand. Customers become more committed to brands when their perceptions of the brand are positive, and any brand-related stimuli that interplay in the interaction between the customer and the brand might affect brand commitment (Ramaseshan and Stein, 2012). Customer's perceptions of a service brand may lead to the development of customer-brand relational bonds. These bonds are created when the customer perceives value and benefits in the relationship (Morgan and Hunt, 1994; Reynolds and Beatty, 1999). Aspects such as the customer's perception of the seller's experience, skills and knowledge are important value-creating attributes (Vargo and Lusch, 2004; Palmatier *et al*., 2006). The core service, employee service and visual elements also influence the customers' perception of value (Bitner, 1992; Grace and O'Cass, 2004). These aspects are also reflected in online communications through the website. A positive website performance evaluation of these elements may lead the customer to engage and interact with the website (Carlson and O'Cass, 2011).

Even if brand trust and brand commitment are closely connected, they are different concepts. A customer's interaction with a brand may affect brand trust and brand commitment differently, and the effect of service perceptions can influence brand commitment both directly and indirectly through brand trust. In line with previous research, we expect that trust will be an antecedent of commitment rather than vice versa (Morgan and Hunt, 1994; Garbarino and Johnson, 1999). The development of trust involves reducing the perceived risk of opportunistic behaviours in an exchange relationship, thereby lowering transaction costs and increasing customer confidence (Morgan and Hunt, 1994). Commitment that involves a sincere emotional bond is known as affective commitment, whereas commitments resulting from high switching costs and moral obligations are known as calculative commitment and normative commitment, respectively (Allen and Meyer, 1990; Bansal *et al*., 2004). Our study focuses on affective commitment, which Arcand *et al*. (2017) consider as the most important dimension in the financial sector. As discussed by Gustafsson *et al.* (2005), affective commitment captures the trust and reciprocity in a relationship. People will be unlikely to feel committed to a brand or organization unless trust already exists (Morgan and Hunt, 1994; Garbarino and Johnson, 1999).

Empirically, several works have found evidence of a relationship between service perceptions and brand commitment, both directly and indirectly through brand trust (Iglesias *et al.*, 2011; Jung and Soo, 2012; Ramaseshan and Stein, 2014). This has also been proven in the banking industry in general (Aurier and N'Goala, 2010; Marinkovic and Obradovic, 2015), specific niches such as Islamic banking and countries with low retail banking penetration rates (Phan and Ghantous, 2013; Sumaedi *et al.*, 2015), premium banking (Laksamana *et al.*, 2013), merchant banking services (Liang and Wang, 2007) and online banking (Sánchez-Franco, 2009; Boateng and Narteh, 2016). Hence, in the specific context of this study we propose:

H3: Offline service perceptions have a positive effect on brand commitment

H4: Online service perceptions have a positive effect on brand commitment

H5: Brand trust has a positive effect on brand commitment

In the following hypotheses, we introduce the main dependent variable of the model, customer engagement. The concept of engagement is usually applied to the relationships among customers, between customers and employees, and of customers and employees within a firm (Kumar and Pansari, 2016). Focusing on brands, Hollebeek (2011, p. 6) defined customer brand engagement as *"the level of a customer's motivational, brand-related and context-dependent state of mind characterized by specific levels of cognitive, emotional and behavioral activity in brand interactions"*. Even though customer engagement encompasses perceptions, attitudes and behaviours (Brodie *et al.*, 2011), the last represents the main difference from other constructs (Verhoef *et al.*, 2010). Thus, Pansari and Kumar (2017) argue that customer engagement goes beyond loyalty and includes various forms of customer behaviour (purchases, referrals, influence and feedback).

According to the literature, customers who experience trust and commitment are more prone to cooperate with, and display positive behaviour towards, their exchange partner (Morgan and Hunt, 1994; Garbarino and Johnson, 1999; Gustaffson *et al.*, 2005). Some authors have proposed that the effect of trust on behaviour is mediated by commitment (Venetis and Ghauri, 2004; Shukla *et al.*, 2016), whereas other authors have proved that trust also exerts a direct effect on customer behaviour (Garbarino and Johnson, 1999; Chaudhuri and Holbrook, 2001; Aurier and N'Goala, 2010). The model proposed in this research takes the second view, by proposing that both trust and commitment exert direct effects on customer engagement.

The banking literature shows that developing positive brand experiences in online channels leads to engaged customers (Khan *et al*., 2016; Sahoo and Pillai, 2017; Mbama and Ezepue, 2018). While recent works may be skewed towards the analysis of digital platforms (e.g. e-mobile services, social media, etc.), studies such as Benjarongrat and Neal (2017) remind us that employee performance in terms of competence and courtesy are also strong predictors of customer engagement. Regardless of the channel used, the limited research that does exist in this area suggests that customers with favourable attitudes towards their banks show higher levels of engagement (Sahoo and Pillai, 2017). These positive effects should also be present when it comes to trust and commitment, which are attitudinal variables that indicate the quality of the relationship between the customers and banks (Brun *et al.*, 2014; Atorough and Salem, 2015). A mature relationship, which develops when customers feel both trust and commitment (Atorough and Salem, 2015), should lead to customers being more likely to continue purchasing the bank´s services, and to provide positive feedback both to the bank and their peers. In this vein, Boateng and Narteh (2016) found that trust mediates the relationship between customer commitment and customer engagement in online settings, which was measured by active participation on the bank's online platforms and social media pages.

In previous literature on banking, several empirical studies argue that trust and commitment are significantly related to customer loyalty in terms of repeated purchases and/or word-of-mouth. Thus, a number of studies have found a direct relationship between trust and attitudinal loyalty (Lewis and Soureli, 2006; Phan and Ghantous, 2013) and specific behaviours such as the customers' likelihood of increasing their savings or borrowings and to subscribe to complementary services, including insurance, shares and bonds (Aurier and N'Goala, 2010). On the other hand, other studies have successfully tested the relationship between commitment and loyalty (Liang and Wang, 2007; Sumaedi *et al.*, 2015). While this previous research has not strictly focused on customer engagement, their results are in line with the following hypotheses:

H6: Brand trust has a positive effect on customer engagement

H7: Brand commitment has a positive effect on customer engagement

Finally, the model proposes that familiarity with the bank in the offline channel (familiarity offline) and familiarity with the bank in the online channel (familiarity online) moderate the relationships between service perceptions and brand trust and the relationships between service perceptions and brand commitment. Specifically, the moderating effects analysed in this study focus only on familiarity with the bank in a specific channel (e.g. familiarity online) and service perceptions in the same channel (e.g. online service perceptions). As indicated previously, interactions with a brand result in customers becoming more familiar and knowledgeable about that brand (Garbarino and Johnson, 1999; Ramaseshan and Stein, 2012). Similarly, customer interactions with a brand in a specific channel lead customers to become familiar and knowledgeable about the service offered by that brand in that specific channel. Customer assessment of a brand is based on the information gathered from the brand. When information gathered is mainly offline, it is expected that customer assessment of the brand will be predominantly based on their perception of the brand in the offline channel, whereas when information is gathered mostly online, customer assessment of the brand will be predominantly based on the perceptions of the online channel. In other words, familiarity with a brand in a particular channel determines the importance given to the customer's perceptions in that particular channel to assess the brand.

Some consumers are prone to buy through traditional channels while others prefer to buy online. Several works have analysed the characteristics and motivations of the customer to buy online, and the differences between types of products and brands (Brown *et al.*, 2001, Gehrt *et al.*, 2007). The study developed by Lee and Tan (2003) showed that a preference for one channel over another depends mainly on the consumer´s perception of the utility of the channel and perceived risks. Perception of risk associated with safety on the Internet is crucial in banking services; many customers are users of online banking for reasons of convenience and the utility provided by the online channel (Flavian *et al.*, 2005; Marafon *et al*., 2018). It is expected that an individual who usually goes to a bank´s branches, and rarely visits its website, will give more importance to the experience offered by the offline channel than to the experience offered by the online channel in his or her assessment of the bank. This assumption has some analogies with the model proposed by Berry (2000), where the consumer´s own experience is the main determining factor of customer evaluation of the service brand. In a similar vein, Phan and Ghantous (2013) proposed that customers' reliance on experience-based associations is greater for customers with high direct experience of the brand than for customers with little direct experience of the brand. These authors tested this moderating effect in the banking sector by measuring the customers' length of relationship with a bank and the frequency of their visits to the bank´s branches, and their results partially lend support to their hypotheses. Hence, we propose the following:

H8a: The effect of offline service perceptions on brand trust is stronger when familiarity offline is high than when familiarity offline is low

H8b: The effect of offline service perceptions on brand commitment is stronger when familiarity offline is high than when familiarity offline is low

H8c: The effect of online service perceptions on brand trust is stronger when familiarity online is high than when familiarity online is low

H8d: The effect of online service perceptions on brand commitment is stronger when familiarity online is high than when familiarity online is low

3. METHODOLOGY

The hypotheses underlying the model were tested through data collected from a sample of customers in the banking sector. Specifically, data was gathered by means of a personal survey carried out in Spain by a market research company in the last quarter of 2017. Through a non-probabilistic quota sampling procedure, the sample size was proportionally adjusted to the population of each of the top 10 Spanish cities across different regions.

The study participants were approached by an interviewer in well populated areas of the cities selected. These individuals had to give their opinions on their main bank, provided that they had visited any of the bank´s offices and had accessed its online services platform in the previous year. After excluding three questionnaires because of very low levels of familiarity reported with either the online or the offline channel, the valid sample was composed of 306 individuals. Table 1 presents the characteristics of the final sample.

- Insert Table 1 about here –

Regarding the variable measurement, we employed ten-point Likert questions based on scales previously tested in the marketing literature. Table 2 shows the composition of the scales, their references to prior works and the information about means and standard deviations. The scales used in this study were simple, clear and concise, and no special problems were noticed during the fieldwork. Because the questionnaire was presented in the Spanish language, a team of researchers reviewed the scales in advance of the survey to remove any discrepancies in the translation. As commented in the previous section, all the constructs are unidimensional except for offline service perceptions, online service perceptions and customer engagement.

- Insert Table 2 about here -

It should be noted that several analyses were performed to guarantee the quality of the data. In addition to following standard procedures to control the fieldwork, the marketing research company conducted an additional control of veracity on 20% of the questionnaires. Then, the authors of this research work undertook an analysis of outliers and conducted two statistical tests to discard the existence of problems related to common method bias (Podsakoff *et al.*, 2003). First, it was checked that the model´s variables are not significantly correlated with two non-related questions included in the questionnaire. Second, a full collinearity test was carried out following the work by Kock (2015). The results show that the values of the Variance Inflation Factor (VIF) are lower than the threshold of 3.3, which led us to disregard problems in common method bias.

4. RESULTS

The proposed model was examined using partial least square (PLS) regression with SMART-PLS software. Due to the multidimensional nature of the offline and online service perceptions and customer engagement, these constructs were operationalized as second-order factors. In relation to convergent validity analysis, two factor loadings were below the common threshold of 0.7 and therefore these items were eliminated from the analysis (OFFESC1, ENSOC2). All the other factor loadings were statistically significant and above that limit (see Table 3). Moreover, Cronbach's alpha, composite reliability (CR) and Average Variance Extracted (AVE) were also above or close to the recommended thresholds of 0.8, 0.7 and 0.5 respectively (Hair *et al.*, 2010). These results provide support for the convergent validity and reliability properties of the scales.

- Insert Table 3 about here –

The discriminant validity of the scales was analysed by comparing every construct's AVE with the squared correlation of that construct in relation to the rest of variables (Fornell and Larcker, 1981). As can be seen in Table 4, the AVE for any two constructs was greater than the squared correlations in all cases. These results lead us to disregard problems in the discriminant validity of the scales.

- Insert Table 4 about here –

Once the validity and reliability properties were checked, the next steps were to determine the statistical significance of the structural parameters and to assess the proposed relationships. A bootstrap resampling technique with 5,000 subsamples was used; the results show that the factorial loadings of the different indicators on their respective latent variables were significant at 1%. In addition, all the Q^2 values evaluating predictive relevance were positive and all the R^2 values were above the critical threshold of 10% (Falk and Miller, 1992). Hence, we focussed on the relationships underlying the structural model, their standardized coefficients and their statistical significance. These figures can be seen in Table 5.

- Insert Table 5 about here –

Regarding the determining factors of brand trust, the results show that the effects of offline service perceptions (β=0.47, $p<0.05$) and online service perceptions (β=0.33 $p<0.05$) are positive and statistically significant, which lends support to hypotheses 1 and 2. It is also interesting to highlight that the effect of offline service perceptions on this variable is higher than the effect of online service perceptions.

In relation to the determining factors of brand commitment, the results show that the direct effect of offline service perceptions is positive and significant at 10% (β=0.12, $p<0.1$), the direct effect of online service perceptions is not significant (β=-0.04, $p>0.1$) and the direct effect of brand trust is positive and significant (β=0.57, $p<0.05$). These results give support to hypotheses 3 and 5 and lead us to reject hypothesis 4. Customer commitment towards the bank is mainly determined by their trust in the bank. Again, we can see that the effect of offline service perceptions is higher than the effect of online service perceptions on this outcome.

In order to analyse the mediating effect of brand trust, we followed the confidence intervals method suggested by Chin (2010) and Williams and MacKinnon (2008), to test multimediator models with PLS. The results show that the indirect effect of offline service perceptions on brand commitment mediated by trust is significant (confidence interval: 0.20, 0.34). The same is the case with the indirect effect of online service perceptions on brand commitment (confidence interval: 0.12, 0.27). Therefore, we conclude that there are significant indirect effects of offline and online service perceptions on brand commitment mediated by brand trust. As offline service perceptions also have a direct and significant effect on brand commitment, we conclude that brand trust partially mediates the effect that offline service perceptions have on brand commitment. Given that the direct effect of online service perceptions on brand commitment is not significant, we say that brand trust fully mediates the effect that online service perceptions have on brand commitment.

Finally, the results show that both brand trust (β=0.16, $p<0.05$) and, with a higher coefficient, brand commitment (β=0.61, $p<0.05$), exert positive and statistically significant effects on customer engagement. These results provide support to hypotheses 6 and 7. In consequence, it can be concluded that customer engagement is determined by both brand trust and brand commitment. Similarly, we calculated the mediating effect of brand commitment in the relation between brand trust and customer engagement. The results show that there is an indirect and significant effect (confidence interval: 0.02, 0.17). As brand trust also has a significant direct effect of on customer engagement (β = 0.16, $p<0.05$), we conclude that brand commitment partially mediates the effect that brand trust has on customer engagement.

Multi-group analyses were performed to analyse the moderating influence of offline and online familiarity on the model. This approach requires a process of dichotomization to divide the original sample into subsamples after eliminating central cases. Consequently, for offline familiarity, two subsamples were obtained: individuals with low offline familiarity (N-low=113; M-low=3.65) and individuals with high offline familiarity (N-high=133; M-high=7.55) that were statistically different (t=28.05; p=0.000). Similarly, for the online familiarity, two subsamples were obtained: individuals with low online familiarity (N-low=93; M-low=5.37) and individuals with high online familiarity (N-high=142; M-high=9.18) that were also statistically different (t=23.84; p=0.000). The hypotheses on familiarity were subsequently tested by comparing path coefficients in the structural models estimated for each group (Keil *et al.*, 2000). Results of these analyses can be seen in Table 6.

- Insert Table 6 about here –

As shown in the table, familiarity online moderates the relation between online service perceptions and brand trust. Differences between both channels are statistically significant (t-value=2.20, $p<0.05$) and the effect is more positive for those individuals with high levels of familiarity online (β=0.37, $p<0.05$) than for those individuals with low levels of familiarity online (β=0.22, $p<0.05$). These results give support to hypothesis 8c and lead us to reject hypotheses 8a, 8b and 8d. Despite the moderating effects not being significant in the remainder of the cases, it can be seen that all effects are more positive when familiarity is high than when familiarity is low, as postulated in the hypotheses.

5. DISCUSSION

5.1. Theoretical Implications

The results obtained in this paper allow a series of conclusions to be drawn that contribute to the previous literature and can be of interest for bank managers. From the academic point of view, we extract a series of conclusions.

First, results of this analysis show that customer perceptions of their banks, both offline and online, have positive and direct effects on brand trust. These findings are consistent with works in multichannel retailing, such as that of White *et al.* (2013), where both offline service quality and online service quality exert an influence on consumer perceptions of retailer brand equity. The results are also in line with other works on service research and with studies focussed on the online channel (So and King, 2010; Carlson and O'Cass 2011). Moreover, our study represents an advancement of previous research by analysing in the same model the effects of customers' perceptions both in the offline and online channel in the banking context. The results show that the effect of offline service perceptions on trust is higher than the effect of online service perceptions. The reason may be that, in banking, personnel-brand associations might be the main determinant of customer attitudes and behaviours towards a bank, particularly for non-routine services (van Birgelen *et al*., 2006; Phan and Ghantous, 2013). In fact, some bank customers are likely to distrust online channels that are not backed by a bank offering a quality offline service (Yap *et al*., 2010).

Second, our results show that brand commitment is mainly determined by brand trust and to a lesser extent by the direct effect of offline service perceptions. The mediating role of brand trust on commitment is in line with the work by Boeateng and Narteh (2016). These results contribute to advancing prior research by providing additional empirical evidence to the commitment-trust theory of Morgan and Hunt (1994), which had been previously reported in the banking sector (e.g. Marinkovic and Obradovic, 2015). They are also in line with the hierarchy of effects theory (Fishbein and Azjen, 1975), by revealing that customer perceptions trigger an emotional response that leads to customer commitment (Iglesias *et al.*, 2011; Jung and Soo, 2012). And, more interestingly, this work is an advance on prior literature as we suggest that the customer's desire to maintain a relationship with the bank brand (i.e. brand commitment) is more contingent on the perceptions gained from physical experiences in the bank´s branches than online. These different effects may be explained by the fact that customers perceive higher risk in online that in offline channels, which is especially evident for goods and services with financial risk such as e-banking services (Marafon *et al*., 2018).

Third, the results indicate that customer engagement towards banks hinges upon commitment and trust partially mediates this effect. The direct effect of trust was weaker, yet significant, which in some regards reconciles the two streams of research that propose either a direct effect on customer behaviour or a totally mediated effect through commitment, in line with Chaudhuri and Holbrook (2001). Moreover, this research goes a step beyond previous research, which mostly analyses the effects of trust and commitment on loyalty in terms of repeat purchases (Liang and Wang, 2007; Phan and Ghantous, 2013). Drawing on recent studies, we focus on customer engagement, which is a richer construct than loyalty and embraces purchase behaviour, social influence and knowledge sharing (Kumar and Pansari, 2016).

Fourth, the results show that the effect of online service perceptions on brand trust is stronger when familiarity online is high than when familiarity online is low. Familiarity with the bank's online channel plays a moderating role in this relationship, which is in line with the idea that brand trust arises out of high involvement and familiarity with a brand (Ramaseshan and Stein, 2012), and also with the general idea that direct experience is the most important source of information for brand assessment (So and King, 2010). Our work contributes to previous research by showing that the extent of customers' familiarity with the bank in the online channel affects the relative importance of the information gathered from the online channel in order to determine brand trust.

5.2. Managerial Implications

From a managerial perspective, the results obtained also allow us to draw a series of conclusions that can be of interest for bank managers. Customer perceptions of the bank from both channels determine trust and commitment towards the bank's brand. Banks need to invest and pay attention to the service offered in both channels, because both are important to building brand trust and brand commitment. In a different context, the hospitality industry, So and King (2010) propose that hotel services be monitored by means of focus group interviews and mystery shoppers. These practices are also suitable for analysing the service provided by bank branches. Wallace and de Chernatony (2011) stressed the idea of analysing service with "brand as experience" indicators instead of "product plus" metrics. In the offline channel, we suggest banks monitor the customer's perception of the core services offered in the branches, the customer's interaction with personnel and the customer's perception of the visual elements. In the online context, the design of the website should rely on its effectiveness as a communication channel and to perform financial transactions in a safe environment, but not neglect sensorial appeal.

An interesting insight provided by these results is that perceptions of the bank in the offline channel exert higher effect on brand trust and brand commitment than perceptions of the bank in the online channel. That is, customer perceptions formed by their experiences in bank branches are more important than customer perceptions of the website's performance in the explanation of trust and commitment. This finding leads us to recommend that banks should think carefully about their branch network strategy. Despite the costs associated with maintaining bank branches, managers need to carefully balance these with the value that branches generate. This should be looked at in terms of both the economic benefits and the trust and commitment generated by frontline employees. Thus, it is important to highlight that physical bank branches can be strong differentiators from the pure online players and potential entrants from the technology sector. The results obtained in this work demonstrate that physical branches are still the main determinant of customers' trust in banks. Customers are likely to place trust in brick and mortar retailers because of the belief that the company can be held accountable (Benedicktus *et al.*, 2010). In this sense, banks with offline branches still have a competitive advantage over online-only banks, which might be exploited in the bank communications addressed to customers.

As claimed by Yap *et al*. (2010), banks cannot merely rely on size and reputation to sell their e-banking services. They face the challenge of integrating their online platforms into their relational efforts by offering a consistent customer experience in all their service channels (Verhoef *et al*., 2009; Kingshott *et al*., 2018). In practice, our findings suggest that brand trust may be achieved by good management of three major factors underlying offline service perceptions – core service, employee service and servicescape - and three main factors behind online service perceptions – aesthetic, communication and transaction efficiency. In our view, success in the current banking landscape will involve managing these elements in an integrated way and by keeping in mind that customers want to interact with people as well as with machines.

5.3. Limitations and further research

Limitations of this study lead us to propose future lines of research. The results obtained should be interpreted in light of the characteristics of the context of the analysis. The variables and scales used in the study have been selected because of their suitability with the objectives of this study. However, there are other interesting possibilities for measuring customers' perceptions, attitudes and behaviours, and other methodologies and approaches that could complement this work and help to generalize its results. In this vein, trust and commitment might be examined as multidimensional constructs by using alternative scales based on the dimensions of the integrity- competence-benevolence triad for trust (Bhattacherjee, 2002; Chen and Dhillon, 2003) and the affective-calculative-normative framework for commitment (Bansal *et al*., 2004).

Furthermore, it would be also be interesting to analyse how the customer´s perceptions of the bank in one channel may affect perceptions of the bank in the other channel. Kwon and Lennon (2009) showed that having a strong prior offline brand image might mitigate the impact of negative online performance. Thus, future works could analyse the relevance of these effects in the banking sector. Finally, other interesting avenues of research could study differences in typologies of customers. Not all bank customers are looking for the same benefits nor give the same importance to costs (Dimitriadis, 2011). Consequently, further studies could analyse the effects of online and offline channels in different client segments. Thus, it would be interesting to analyse differences between consumers and organizations, differences in the model in relation to the number and type of products and services or, in the case of organizations, differences in relation to the size of the company. Bank managers may need to be aware of these potential differences to develop differential strategies according to each segment's needs.

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Figure 1. Model proposed

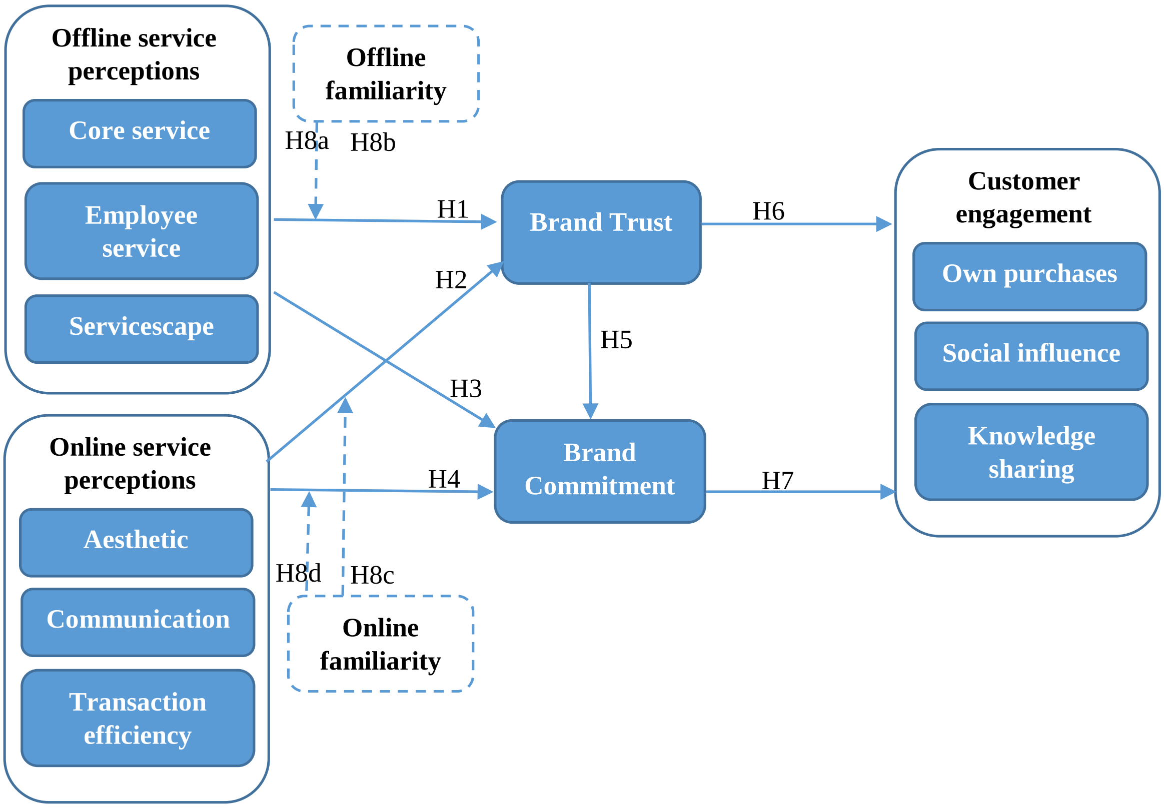

Table 1. Characteristics of the sample

Gender (%)	
Men	45.9
Women	54.1
Age (%)	
18–30	20.8
31–40	29.0
41–50	26.4
51–65	20.1
Over 65	3.6
Years as a customer (%)	
Until 5	21.1
6–10	31.4
11–15	17.2
16–20	11.9
Over 20	18.5

Table 2. Composition of the scales

Scales		Mean	St. Dev.
OFFLINE SERVICE PERCEPTIONS (based on Grace and O'Cass, 2004; So and King, 2010)			
Core Service			
OFFCOR1	The banks' offices suits my needs	6.86	1.92
OFFCOR2	They are reliable	7.05	1.90
OFFCOR3	They are better than those of other banks	6.04	1.76
OFFCOR4	They offer good services	6.86	1.75
OFFCOR5	They offer quality services	6.91	1.70
Employee Service			
OFFEMP1	Employees provide a prompt service	6.21	2.09
OFFEMP2	They are willing to help	6.23	2.12
OFFEMP3	They always find time for you	6.11	2.11
OFFEMP4	I can trust employees	6.66	2.15
OFFEMP5	I feel safe with them	6.56	2.20
OFFEMP6	Employees are polite	8.21	1.55
OFFEMP7	They give personal attention	7.26	1.85
Servicescape			
OFFESC1	Employees are neat*	8.21	1.49
OFFESC2	Facilities suit service type	7.38	1.52
OFFESC3	Facilities are up to date	7.39	1.81
OFFESC4	Facilities are attractive	6.98	1.91
ONLINE SERVICE PERCEPTIONS (based on Carlson and O'Cass, 2011)			
Aesthetic			
ONAES1	The website is visually pleasing	7.23	1.75
ONAES2	It looks attractive	7.02	1.85
ONAES3	Its colors and graphics are appealing	7.00	1.84
Communication			
ONCOM1	Information on the website is useful	7.58	1.55
ONCOM2	It has enough data to make informed decisions	6.83	1.94
ONCOM3	It provides in-depth information	7.03	1.76
ONCOM4	It allows to find information and services according to my needs	7.08	1.72
ONCOM5	It allows personalized communication	6.06	2.30
ONCOM6	It allows interaction to get information tailored to my specific needs	6.15	2.13
Transaction Efficiency			
ONTRA1	The website allows transactions to be easily completed on-line	7.94	1.71
ONTRA2	All my business needs can be completed via the website	7.28	2.22
ONTRA3	I think that the website has adequate security features	7.36	1.95
ONTRA4	The website keeps my personal information safe	7.40	1.99

BRAND TRUST (based on Chaudhuri and Holbrook, 2001)			
TRUST1	I trust this bank	6.67	2.10
TRUST2	This is an honest bank	6.17	2.33
TRUST3	I rely on this bank	6.21	2.43
TRUST4	This bank is safe	6.92	2.04
BRAND COMMITMENT (based on Dimitriades, 2006; Bravo et al., 2010)			
COMMI1	I feel identified with the bank	4.68	2.79
COMMI2	I feel committed with the bank	3.89	2.90
COMMI3	I would be sad if I had to change banks	3.80	3.18
CUSTOMER ENGAGEMENT (based on Kumar and Pansari, 2016)			
Own Purchases			
ENPUR1	I will continue buying the bank's services in the near future	6.58	2.43
ENPUR2	My operations with this bank make me content	6.59	2.32
ENPUR3	I get my money's worth for the bank's services	5.73	3.12
ENPUR4	Being a customer of this bank makes me happy	3.86	2.94
Social Influence			
ENSOC1	I love talking about my experience with the bank	2.93	2.66
ENSOC2	I talk about this bank on the Internet or any other media*	1.15	1.88
ENSOC3	I discuss the benefits that I get from this bank with others	2.46	2.62
ENSOC4	I am a part of this bank and mention it in my conversations	1.83	2.37
Knowledge Sharing			
ENKNO1	I provide feedback to the bank about my experiences with it	2.17	2.66
ENKNO2	I provide suggestions to the bank for improving its performance	2.35	2.75
ENKNO3	I provide suggestions to the bank about its current services	2.28	2.73
ENKNO4	I provide suggestions to the bank for developing new services	1.79	2.47
OFFLINE FAMILIARITY (based on Dawar, 1996)			
OFFFAM1	I am familiarized with the banks' offices	6.49	2.18
OFFFAM2	I often visit the offices	4.64	2.61
OFFFAM3	I know the offices well	6.08	2.23
ONLINE FAMILIARITY (based on Dawar, 1996)			
ONFAM1	I am familiarized with the webpage	7.69	1.87
ONFAM2	I often visit the webpage	7.75	2.19
ONFAM3	I know the webpage well	7.58	2.03

Note: All the factors were measured by means of ten-point Likert scales. *These items were deleted in the analysis process due to low factor loadings

Table 3. Results of the reliability and convergent validity analyses

	λ	α	CR	AVE		λ	α	CR	AVE
OFFLINE SERVICE PERCEPTIONS									
OFFCOR1	0.74	0.84	0.89	0.62	ONTRAN1	0.77	0.78	0.86	0.60
OFFCOR2	0.77				ONTRAN2	0.74			
OFFCOR3	0.67				ONTRAN3	0.81			
OFFCOR4	0.87				ONTRAN4	0.79			
OFFCOR5	0.86				**BRAND TRUST**				
OFFEMP1	0.79	0.92	0.93	0.67	TRUST1	0.90	0.92	0.95	0.81
OFFEMP2	0.86				TRUST2	0.92			
OFFEMP3	0.89				TRUST3	0.94			
OFFEMP4	0.86				TRUST4	0.84			
OFFEMP5	0.87				**BRAND COMMITMENT**				
OFFEMP6	0.66				COMMI1	0.88	0.86	0.91	0.78
OFFEMP7	0.76				COMMI2	0.91			
OFFESC2	0.78	0.81	0.89	0.72	COMMI3	0.86			
OFFESC3	0.90				**CUSTOMER ENGAGEMENT**				
OFFESC4	0.86				ENPUR1	0.83	0.83	0.89	0.66
ONLINE SERVICE PERCEPTIONS					ENPUR2	0.86			
ONAEST1	0.94	0.93	0.95	0.87	ENPUR3	0.77			
ONAEST2	0.94				ENPUR4	0.79			
ONAEST3	0.92				ENKNO1	0.81	0.91	0.94	0.79
ONCOM1	0.77	0.89	0.92	0.65	ENKNO2	0.93			
ONCOM2	0.86				ENKNO3	0.93			
ONCOM3	0.87				ENKNO4	0.89			
ONCOM4	0.83				ENSOC1	0.84	0.84	0.91	0.76
ONCOM5	0.77				ENSOC3	0.89			
ONCOM6	0.75				ENSOC4	0.89			

Note: OFFCOR: Offline-core service; OFFEMP: Offline-employee service; OFFESC: Offline-servicescape; ONAEST: Online-aesthetic; ONCOM: Online-communication; ONTRAN: Online-transaction efficiency; TRUST: Brand trust; COMMI: Brand commitment; ENPUR: Engagement-own purchases; ENKNO: Engagement-knowledge sharing; ENSOC: Engagement-social influence. CR: Composite Reliability; AVE: Average Variance Extracted.

Table 4. Results of the discriminant validity analysis

	OFFCOR	OFFEMP	OFFESC	ONAEST	ONCOM	ONTRAN	TRUST	COMMI	ENPUR	ENKNO	ENSOC
OFFCOR	**0.62**										
OFFEMP	0.36	**0.67**									
OFFESC	0.37	0.32	**0.72**								
ONAEST	0.21	0.17	0.29	**0.87**							
ONCOM	0.15	0.25	0.19	0.34	**0.65**						
ONTRAN	0.09	0.10	0.09	0.19	0.42	**0.60**					
TRUST	0.39	0.32	0.27	0.28	0.27	0.23	**0.81**				
COMMI	0.18	0.16	0.13	0.12	0.11	0.05	0.39	**0.78**			
ENPUR	0.34	0.26	0.27	0.25	0.18	0.11	0.51	0.43	**0.66**		
ENKNO	0.03	0.02	0.01	0.01	0.02	0.01	0.02	0.15	0.05	**0.79**	
ENSOC	0.09	0.11	0.11	0.09	0.07	0.03	0.19	0.44	0.31	0.31	**0.76**

Note: OFFCOR: Offline-core service; OFFEMP: Offline-employee service; OFFESC: Offline-servicescape; ONAEST: Online-aesthetic; ONCOM: Online-communication; ONTRAN: Online-transaction efficiency; TRUST: Brand trust; COMMI: Brand commitment; ENPUR: Engagement-own purchases; ENKNO: Engagement-knowledge sharing; ENSOC: Engagement-social influence. Figures in the diagonal present the AVE values. Off-diagonal figures represent the constructs' squared correlations.

Table 5. Results of the structural model

HYPOTHESES	β (t)	R^2
H1: Offline service perceptions – Trust	0.47 (8.49)**	0.51
H2: Online service perceptions – Trust	0.33 (6.26)**	
H3: Offline service perceptions – Commitment	0.12 (1.80)*	0.39
H4: Online service perceptions – Commitment	-0.04 (0.69)	
H5: Trust – Commitment	0.57 (9.85)**	
H6: Trust – Customer Engagement	0.16 (2.76)**	0.53
H7: Commitment – Customer Engagement	0.61 (13.35)**	

Note: ** significant at $p<0.05$, * significant at $p<0.1$

Table 6. Results of the multi-sample analyses

	OFFLINE FAMILIARITY		ONLINE FAMILIARITY		t – statistics
	Low	High	Low	High	
Offline service p. – Trust	0.39**	0.58**			0.72
Offline service p. – Commitment	-0.01	0.15			0.69
Online service p. – Trust			0.22**	0.37**	2.20**
Online service p. – Commitment			-0.17*	0.16*	1.57

Note: ** significant at p<0.05, * significant at p<0.1