Channel Integration and Loyalty in Omnichannel Retailing: The Role of Customer Experience

Abstract
To provide a holistic customer experience, retailers are moving towards an omnichannel strategy that integrates online and offline channels. While omnichannel retailing research has explored the effects of channel integration on firm performance, customer response to an integrated experience has received less attention. To fulfill this gap, we investigate the influence of perceived channel integration on customer experience, trust, and loyalty. Our paper focuses on consumers that use more than one channel to access the retailer in a given shopping journey (e.g., physical store, website, mobile app, social media). Based on survey data from 340 multichannel consumers, we examine the positive influence of perceived channel integration on customer response, highlighting the role of customer experience as the multilevel reaction to channel integration that leads to consumer's confidence in the retailer and willingness to continue the relationship. The findings have both theoretical and managerial implications, contributing to advance the field.

Keywords: channel integration; omnichannel retailing; customer experience.

1 Introduction

The integration of retail channels is gaining attention as the field moves from multichannel to omnichannel retailing. As one endpoint of a continuum, multichannel retailing means that different channels coexist without the possibility for the customer to trigger interaction. Besides, the retailer cannot control integration. On the other endpoint, omnichannel retailing implies that the customer can trigger full channel interaction and/or the retailer controls full channel integration (BECK; RYGL, 2015; VERHOEF; KANNAN; INMAN, 2015).

In this evolving landscape, retailers find it challenging to achieve a high level of channel integration (PIOTROWICZ; CUTHBERTSON, 2014) and, thus, may struggle to provide a seamless customer experience (KAHN; INMAN; VERHOEF, 2018). More than 75% of globally surveyed shoppers say they combine online and offline channels (CRITEO, 2017), but only 17% of retailer respondents were confident their omnichannel business model delivers a seamless and connected experience across channels (PWC, 2017). As firms follow a sequence of steps to adopt omnichannel (BERMAN; THELEN, 2018), the level of channel integration perceived by customers may have a significant impact on their shopping experience.

Previous studies (Table 1) investigate the effects of channel integration on firm performance and sales growth, addressing integration from the retailer's perspective. In this sense, channel integration routines (OH; TEO; SAMBAMURTHY, 2012) ignore if consumers who access the retailer through various channels perceive the coordination. Moreover, recent and/or influential articles that address the customer side restrict channel integration to the interaction between the website and the physical store, and do not account for the growing use of social media in the shopping journey (SANDS et al., 2016) or the multiplicity of e-channels available nowadays (WAGNER; SCHRAMM-KLEIN; STEINMANN, 2020). Moreover, researchers call for more investigations considering the integration of all marketing mix elements (branding, price, assortment, and promotion) (GAO; MELERO; SESE, 2019).

In light of the challenges that firms still need to face to offer a truly holistic journey, our paper focuses on the **effects of perceived integration across channels on customer response — more specifically, customer experience, trust, and loyalty.** Our investigation contributes to advance the retailing research on the strategies needed to create a seamless purchase journey across diverse channels and touchpoints (MSI, 2018; OSTROM et al., 2015), and to fulfill a

gap on quantitative investigations regarding customer experience, as the empirical approaches so far are mainly conceptual and exploratory (KUEHNL; JOZIC; HOMBURG, 2019).

Table 1 – Overview of existing studies

Papers	Customer perspective	Broad channel scope	Marketing mix	Outcomes
Bendoly et al. (2005)		(PS, W)	(P2)	Customer retention
Oh, Teo, and Sambamurthy (2012)		(PS, W)	✓ (A, B, P1, P2)	Firm performance
Cao and Li (2015)		✓ (PS, W, C, K, M, SM, CC)	✓ (A, B, P1, P2)	Sales growth
Herhausen et al. (2015)	✓	(PS, W)	(P2)	Service quality, perceived risk, purchase intention, willingness to pay
Huré, Picot-Coupey, and Ackermann (2017)	✓	(PS, W, M)	(A, P1, P2)	Shopping value
Frasquet and Miquel (2017)	✓	(PS, W)	✓ (A, B, P1, P2)	Satisfaction, loyalty
Lee et al. (2018)		(PS, W)	✓ (A, B, P1, P2)	Customer engagement
Li et al. (2018)	✓	(PS, W)	✓ (A, B, P1, P2)	Retailer uncertainty, identity attractiveness, switching costs, customer retention, interest in alternatives
Zhang et al. (2018)	✓	(PS, W)	✓ (A, B, P1, P2)	Consumer empowerment, trust, satisfaction, patronage intention
Kuehnl, Jozic, and Homburg (2019)	✓	✓ (Brand-owned touchpoints)	(B)	Brand attitude, loyalty
This paper	✓	✓ (Retailer-controlled touchpoints)	✓ (A, B, P1, P2)	**Customer experience**, trust, loyalty

Note: In the broad channel scope column, PS = physical store, W = website, C = catalog, K = kiosk, M = mobile, SM = social media, CC = call center; In the marketing mix column, A = assortment, B = branding, P1 = pricing, P2 = promotion.
Source: The authors (2020).

In the remainder of this paper, we first review the literature on channel integration and customer experience, and present the research hypotheses. Then, we test the model with a cross-sectional survey. Finally, we discuss the findings and theoretical and managerial implications.

2 Theoretical background

2.1 Channel integration

Channel integration is a multidimensional construct reflecting "the degree to which a firm coordinates the objectives, design, and deployment of its channels to create synergies for the firm and offer particular benefits to its consumers" (CAO; LI, 2015, p. 200). However, the focus we give here is the consumer perceptions about channel integration, taking into account his/her overall shopping experience.

One may expect that coordinating online and offline channels would result in cannibalization (e.g. reduction of an offline channel's sales due to the integration with an online channel). However, studies find synergies such as an increase in perceived service quality

(HERHAUSEN et al., 2015), higher sales growth (CAO; LI, 2015), and loyalty (FRASQUET; MIQUEL, 2017).

Channel integration may increase loyalty because coordination enables retailers to provide value-added services, which improves satisfaction, and because customization encourages customer relationships (CAO; LI, 2015). Accordingly, Zhang et al. (2018) find that perceptions of channel integration empower consumers, which in turn influences trust, satisfaction, and patronage intention. Li et al. (2018) find that channel integration affects customer retention primarily through identity attractiveness, that is, customers' perceptions of attributes (e.g., brand image, competencies, product offerings, reputation, values) that can satisfy their needs. They also find that channel integration helps to reduce retailer uncertainty. In the same line, Lee et al. (2018) find that channel integration quality influences customer engagement, which in turn has a positive effect on repurchase intention. Huang and Lin (2019) find that integration quality impacts trust, which influences stickiness intention.

Although retailing research has explored outcomes of channel integration, customer response to this transformation is still underdeveloped. As scholars expect omnichannel to improve the customer experience in retailing, we also address this construct.

2.2 Customer experience

Customer experience is "a customer's cognitive, emotional, behavioral, sensorial, and social responses to a firm's offerings during the customer's entire purchase journey" (LEMON; VERHOEF, 2016, p.71). It has evolved from comprising experiential aspects of consumption under retailer's control (SCHMITT, 1999) to encompass the total experience created by elements inside and outside the retailer's control (VERHOEF et al., 2009). In this sense, Becker and Jaakkola (2020) propose four premises of customer experience: (1) it comprises spontaneous reactions ranging from ordinary to extraordinary; (2) it is dynamic and encompasses stimuli within and outside firm-controlled touchpoints; (3) it is subjective and context-specific; and (4) it is not created by firms, but can be influenced by managerial stimuli.

Several authors investigate the relationship between customer experience and customer retention. Brakus, Schmitt, and Zarantonello (2009) find that experience positively affects satisfaction and loyalty through brand personality. Other mediators already identified are: trust (KHAN; FATMA, 2017), affective commitment (IGLESIAS; SINGH; BATISTA-FOGUET, 2011), hedonic emotions (DING; TSENG, 2015), and relationship quality (FRANCISCO-MAFFEZZOLLI; SEMPREBON; PRADO, 2014).

As Brun et al. (2017) note, however, much of the research so far focus on the service sector and contexts such as tourism, and few studies explore web-based environments. Hence, there is a need to expand experience research to broader settings and to take into account the multiplicity of channels involved nowadays with the customer experience (SCHMITT; BRAKUS; ZARANTONELLO, 2015).

3 Hypotheses development

Stimulus–organism–response (S-O-R) theory describes the relationship among stimulus (S), consumers' internal (or organismic) states (O), and approach or avoidance responses (R) (VIEIRA, 2013). According to the framework by Mehrabian and Russell (1974), a particular environment offers stimuli (e.g., color and temperature) that evoke primary emotional responses (e.g., pleasure, arousal, dominance) that lead to behavioral responses (e.g. physical approach, exploration, affiliation, performance, or other verbal and non-verbal communications of preference). Since then, the model has been used to study the relationship between the retailing environment and consumer shopping behavior, including online and multichannel environments (ZHANG et al., 2018).

In line with the S-O-R framework, we propose that channel integration is environmental and firm-controlled stimuli to consumers, who react sensorially, affectively, intellectually, behaviorally, and socially to it, forming their experience. Then, the customer experience leads to external responses, such as trust and loyalty.

3.1 Main effects

As a firm acts to create benefits to consumers, it affects how consumers think, feel, and behave during the shopping journey (LEE et al., 2018a). Firm actions such as brand clues and marketing communication are antecedents of brand experience (KHAN; FATMA, 2017). To the best of our knowledge, previous studies do not investigate the relationship between channel integration and customer experience. Hence, we propose:

Hypothesis 1: Perceived channel integration positively influences the customer experience.

Researchers find a positive relationship between channel integration and customer retention in several studies. The perception of channel integration empowers consumers (ZHANG et al., 2018) and increases perceived service quality (HERHAUSEN et al., 2015), identity attractiveness (LI et al., 2018), customer engagement (LEE et al., 2018b), and trust (HUANG; LIN, 2019), which ultimately leads to consumers feeling more likely to buy again from the retailer as well as recommending it to other consumers. Thus, we propose:

Hypothesis 2: Perceived channel integration positively influences (a) trust and (b) loyalty.

3.2 Mediating effects

The influence of experience on loyalty can be direct (BRAKUS; SCHMITT; ZARANTONELLO, 2009) or indirect (SANTINI et al., 2018). The literature identifies some mediators: satisfaction and brand personality (BRAKUS; SCHMITT; ZARANTONELLO, 2009), trust (KHAN; FATMA, 2017), affective commitment (IGLESIAS; SINGH; BATISTA-FOGUET, 2011), and relationship quality (FRANCISCO-MAFFEZZOLLI; SEMPREBON; PRADO, 2014). Comparing to brand personality and satisfaction, hedonic emotions are more powerful mediators (DING; TSENG, 2015). Hence, we propose:

Hypothesis 3: Customer experience positively influences (a) trust and (b) loyalty.

Hypothesis 4: Customer experience mediates the relationship between perceived channel integration and (a) trust and (b) loyalty.

According to the studies reviewed, trust also mediates the influence of channel integration on loyalty. The relationship between trust and loyalty is well-established in the marketing literature (SIRDESHMUKH; SINGH; SABOL, 2002). Therefore, we propose:

Hypothesis 5: Trust positively influences loyalty.

3.3 Moderating effects

Involvement is the level of personal relevance (affective and cognitive) of an object based on someone's inherent needs, values, and interests (ZAICHKOWSKY, 1994). Even though the customer experience happens regardless of personal connections with the brand (SCHMITT, 2010), it might be more effective when customers have high involvement with the retailer because both constructs are related (BRAKUS; SCHMITT; ZARANTONELLO, 2009). Hence, we propose:

Hypothesis 6: The influence of perceived channel integration on (a) customer experience, (b) trust, and (c) loyalty will be stronger under higher involvement with the retailer.

4 Methods

We employed a cross-sectional survey to test the proposed relationships. The target population was consumers that use more than one retail channel on the same shopping journey. We estimated the sample size at 400 individuals to ensure a minimum of five observations per variable, as recommended for multivariate analysis (HAIR et al., 2010).

Potential respondents were approached online, through e-mail and social media sites (Facebook, Linkedin, and Instagram), and invited to access a self-administered structured questionnaire hosted in Qualtrics platform. After agreeing to participate, they read a definition of retail channel and reinforced if they have made a purchase using more than one channel from the same retailer in the last 12 months. Only those who did recognize such conditions continued in the survey. Next, participants saw a list of the largest multichannel retailers in Brazil, selecting which company they have purchased from. If a participant had a company not listed in mind, he or she could add it to the list. The list of retailers resulted from revenue and order volume data published by Sociedade Brasileira de Varejo e Consumo (SBVC, 2019), Instituto Brasileiro de Executivos de Varejo & Mercado de Consumo and Fundação Instituto de Administração (IBEVAR; FIA, 2019), and E-commerce Brasil (NETRICA, 2019). After these procedures, the respondents answered the questionnaire.

We measured the constructs in multi-item scales selected from the literature (Appendix A). Perceived channel integration was measured with a 9-item scale adapted from literature (KUEHNL; JOZIC; HOMBURG, 2019; FRASQUET; MIQUEL, 2017; OH; TEO; SAMBAMURTHY, 2012). The measure reflects the extent to which participants perceive the channels they use as integrated, and covers central marketing elements of customer experience in retailing, such as branding, promotion, pricing and assortment (GAO; MELERO; SESE, 2019; VERHOEF et al., 2009). Customer experience was measured with the 12-item scale developed by Brakus, Schmitt, and Zarantonello (2009), plus the 3-item scale from Nysveen, Pedersen, and Skard (2013), who expanded the instrument to encompass the social dimension. For loyalty, we employed a 5-item scale as both mentioned studies. For trust, we used a 5-item scale as Zhang et al. (2018). For involvement with the retailer, we used a 6-item scale as Brakus, Schmitt, and Zarantonello (2009). The questionnaire presented items on 7-point Likert scales.

Additionally, we conducted a qualitative pre-test with 10 respondents to ensure the meaning of the instrument and to minimize response errors. After minor adjustments in the questionnaire, the data collection started.

For data analysis, we used SPSS 18 and SmartPLS 3 (RINGLE; WENDE; BECKER, 2015) packages. As this research has an exploratory objective and aims to predict relationships between constructs, we adopted the partial least squares approach (PLS) to structural equation modeling (SEM). Following Coltman et al. (2008) and the papers that provided the scales for the survey, the latent constructs are reflective, which means that the indicators are manifestations of the construct, not defining characteristics (JARVIS; MACKENZIE; PODSAKOFF, 2003). As such, one can leave any single item out without changing the meaning of the construct (SARSTEDT et al., 2016).

After model specification, we ran the PLS algorithm with 300 iterations to produce the results. To evaluate the significance, we ran PLS bootstrapping to create 5,000 subsamples from the original data. We evaluated the results in two steps. In the first one, we assessed the measurement model. Following Hair, Howard, and Nitzl (2020), we evaluated the psychometric properties of each latent variable, checking for convergent and discriminant validity. In the second step, we assessed the structural model, estimating the path coefficients and their significances. Moreover, we evaluated the model predictive power by the coefficient of determination (R^2) and assessed the predictive relevance of the model through the blindfolding procedure. It is worth noting that PLS-SEM has no adequate global measure of goodness of fit, as the objective is theory building instead of theory testing (CHIN, 2010). However, some researchers argue that one can assess the overall fit of models estimated by PLS-SEM through

the standardized root mean square residual (BENITEZ et al., 2020). Hence, we also provided the SRMR value.

5 Results and discussion

The data collection happened between December 2019 and January 2020. The initial sample was composed of 573 respondents that agreed to participate. Of these, 440 answered "yes" to the filter question ("Have you made a purchase using more than one channel of the same retailer in the last 12 months?") and accessed the questionnaire. Of these, 332 completed the survey. To avoid losing information, all respondents who answered at least 30% of the questionnaire were retained in the initial analysis (N=362).

After confirming the randomness of missing data by Little's test of MCAR, $\chi 2$ (114) = 97.791, p = 0.861, we replaced the missing values with maximum likelihood estimation by performing the expectation-maximization algorithm. Then, we removed 22 multivariate outliers identified by the Mahalanobis distance. Thus, the final sample comprised of 340 respondents.

5.1 Sample profile

The sample contains 199 respondents identified as females (58.53%), 111 as males (32.65%), and 30 missing values (8.82%). The average age is 31.92 years old (SD = 9.63, range 18–80 years). Although not equally, respondents from all five regions of Brazil accessed the survey, and 69.71% of them reported living in the state capital or metropolitan areas. The sample is highly educated, as 68.5% of respondents have at least a college degree.

The most frequent retailers were Magazine Luiza (selected by 14.41% of respondents), Lojas Americanas (13.82%), Panvel (8.24%), Lojas Renner (7.94%) and Casas Bahia (4.41%). The retailer's website is the channel that respondents use most: 86.18% of them marked this option. Moreover, 70.88% visit physical stores, 35.59% access the mobile app, and 18.82% check the retailer profile on social media.

5.2 Measurement model

We first performed an Exploratory Factor Analysis (EFA) with Varimax rotation to assess the dimensionality of each construct. Perceived channel integration has three factors: aligned retailer image (ARI), aligned price and promotion (APP), and aligned product and service (APS). Customer experience also comprises three factors: sensorial, intellectual, and social dimensions. The analysis suggested dropping all items of the affective dimension — a possible explanation is that the measure initially proposed focuses on iconic brands, such as Lego and Ferrari (BRAKUS; SCHMITT; ZARANTONELLO, 2009), which may trigger stronger emotions than retailers in this study. As for the behavioral dimension, the analysis recommended retaining just one item, merging it with the intellectual dimension. Moreover, trust, loyalty, and involvement are unidimensional constructs. One item of the trust measure had an extremely low communality, and thus we chose to drop it.

Then, to evaluate the psychometric properties of the measures, the measurement model was assessed in the lower-order level, that is, considering the three dimensions of perceived channel integration and the three dimensions of customer experience as separated first-order latent variables. All indicators loaded above 0.60 in their respective latent variable. Table 2 displays the values of Cronbach's alpha and composite reliability (CR), all above 0.7, except for the alpha value of APS, which is satisfactory for exploratory research (HAIR et al., 2010). Besides, all constructs achieved the threshold for the average variance extracted (AVE), which is 0.5. Hence, the analysis supports convergent validity. Further, Table 2 shows that one can assume discriminant validity, as the square root of AVE is higher than the correlations between latent variables, following the Fornell-Larcker (1981) criterion. The heterotrait-monotrait ratio

of correlations (HTMT) also confirms the discriminant validity of the constructs — the highest value was 0.722, between APP and APS, well below the cutoff score of 0.85 (HAIR; HOWARD; NITZL, 2020).

Table 2 – Consistency, reliability, AVE, and correlation matrix (lower-order model)

	α	CR	AVE	1	2	3	4	5	6	7	8	9
1. ARI	0.871	0.921	0.795	**0.891**								
2. APP	0.915	0.946	0.854	0.416	**0.924**							
3. APS	0.677	0.824	0.614	0.408	0.575	**0.784**						
4. SENSE	0.816	0.886	0.728	0.321	0.268	0.315	**0.853**					
5. INTEL	0.823	0.883	0.654	0.257	0.248	0.248	0.586	**0.809**				
6. SOCIAL	0.831	0.898	0.747	0.217	0.283	0.314	0.470	0.559	**0.864**			
7. TRU	0.909	0.937	0.789	0.476	0.182	0.308	0.354	0.316	0.295	**0.888**		
8. LOY	0.832	0.881	0.599	0.517	0.319	0.362	0.508	0.459	0.516	0.619	**0.774**	
9. INV	0.927	0.942	0.730	0.327	0.216	0.250	0.313	0.367	0.358	0.308	0.436	**0.855**

Note 1: The values in the diagonal are the square root of the AVE. Note 2: Correlations are significant at p<0.001.
Source: The authors (2020).

After assuring the reliability of the first-order constructs, we specified the higher-order reflective constructs following the embedded two-stage approach (SARSTEDT et al., 2019). In this case, we interpreted the relationship between the higher and the lower-order components as loadings (BIDO; DA SILVA, 2019; SARSTEDT et al., 2019). Table 3 shows that the higher-order model also achieved convergent and discriminant validity.

Table 3 – Consistency, reliability, AVE, and correlation matrix (higher-order model)

	A	CR	AVE	1	2	3	4	5
1. PCI	0.864	0.843	0.642	**0.801**				
2. CE	0.878	0.868	0.686	0.398	**0.829**			
3. TRU	0.909	0.937	0.789	0.401	0.381	**0.888**		
4. LOY	0.832	0.881	0.598	0.500	0.581	0.624	**0.774**	
5. INV	0.927	0.942	0.730	0.330	0.415	0.308	0.437	**0.855**

Note 1: The values in the diagonal are the square root of the AVE. Note 2: Correlations are significant at p<0.001.
Source: The authors (2020).

After completing the measurement model assessment in both levels, we examined the structural model and tested the hypotheses.

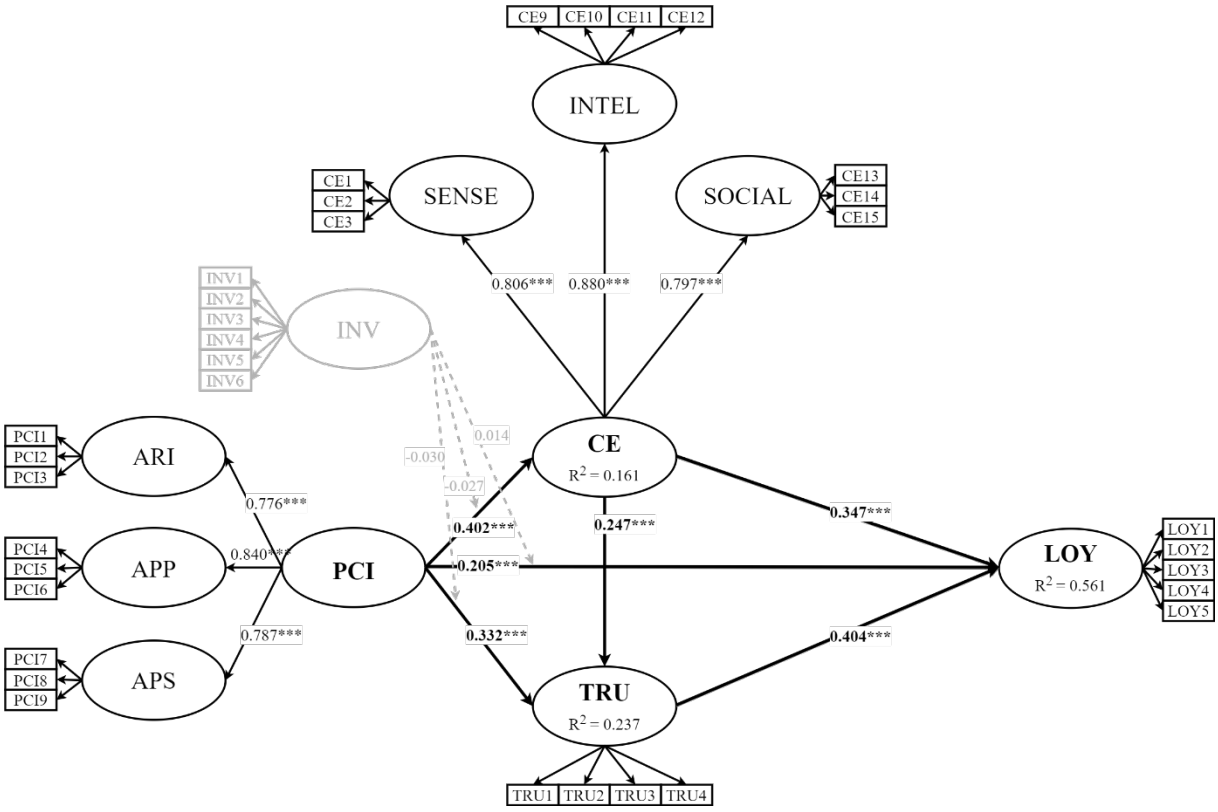
5.3 Structural model

In line with Hair, Howard, and Nitzl (2020), the first step to evaluate the structural model results is to determine if there is high multicollinearity between constructs. As VIF values ranged from 1.000 to 1.337, below the threshold of 3.0, multicollinearity was not a concern. Besides, VIF values below the threshold also suggest that common method bias was not a threat in this study (KOCK, 2015).

Structural model results (Figure 2) show that perceived channel integration positively influences customer experience, confirming H1, as well as trust and loyalty, confirming H2a and H2b respectively. The total effects (the sum of direct and indirect effects) are 0.402 ($p < 0.001$) for customer experience, 0.431 ($p < 0.001$) for trust, and 0.519 ($p < 0.001$) for loyalty.

Also, customer experience positively influences trust and loyalty, confirming H3a and H3b respectively. Likewise, trust positively influences loyalty, confirming H5.

Figure 2 – Structural model results



Note: *** p<0.001.
Source: The authors (2020).

Overall, the model has good prediction power. The coefficient of determination (R^2) is moderate, indicating that perceived channel integration, customer experience, and trust explain 56.1% of the variance in loyalty. The Q^2 value of 0.552 indicates a large model predictive relevance (HAIR; HOWARD; NITZL, 2020). Perceived channel integration has a medium effect on customer experience ($f^2 = 0.192$), and a small effect on trust ($f^2 = 0.121$) and loyalty ($f^2 = 0.072$) (CHIN, 2010). Finally, it is worth noting that the SRMR value for the estimated model is 0.085, slightly above the suggested threshold of 0.08 (BENITEZ et al., 2020).

To assess the mediating effects of customer experience and trust, we analyzed direct, indirect, and total effects of perceived channel integration on loyalty (PREACHER; HAYES, 2008; ZHAO; LYNCH; CHEN, 2010) because PLS can test mediating effects in a single model (NITZL; ROLDAN; CEPEDA, 2016). The analysis indicates that perceived channel integration has a positive and direct effect on loyalty ($\beta = 0.205$, $p < 0.001$), and also a positive and indirect effect through both mediators, customer experience ($\beta = 0.139$, $p < 0.001$) and trust ($\beta = 0.134$, $p < 0.001$). Moreover, the relationship between perceived channel integration and loyalty is positive and significant when customer experience is connected with trust ($\beta = 0.040$, $p < 0.001$), indicating a sequential mediating path (KLARNER et al., 2013). The results show that customer experience and trust are partial mediators of the positive effect of perceived channel integration on loyalty, confirming H4a and H4b. Thus, customer experience is the multilevel response evoked by perceived channel integration that leads to consumer's confidence in the retailer and willingness to continue the relationship.

The moderation effect was not significant in the tested relationships: PCI and CE (β = -0.027, p = 0.585), PCI and trust (β = -0.030, p = 0.630), and PCI and loyalty (β = 0.014, p = 0.745). Accordingly, the analysis rejects H6a, H6b, and H6c. One possible explanation could be that the affective dimension of the customer experience is not relevant in the context of this research, which deals with customers of retailers whose brands are not as iconic as those used in previous studies investigating customer and brand experience. Involvement, as the level of perceived importance and personal relevance (ZAICHKOWSKY, 1985), can be characterized as mildly affective (BRAKUS; SCHMITT; ZARANTONELLO, 2009). In this sense, the construct may lose importance when the affective dimension is not salient.

In sum, structural relationships indicate that the overall perception of integration between channels positively influences overall customer experience, trust, and loyalty when customers are shopping from multiple channel retailers. Moreover, customer experience and trust partially mediate the positive effect of perceived channel integration on loyalty. Involvement with the retailer does not moderate these relationships.

6 Conclusion

As multiple channel retailing research moves towards omnichannel, scholars and practitioners dedicate increasing attention to understanding how channel integration strategies impact customer response and retention. In the path to omnichannel retailing, firms face a new level of complexity because it represents not only a broadening of the scope of channels but also highlights the interplay between them (VERHOEF; KANNAN; INMAN, 2015). In this sense, the synergic management of channels aims to deliver a seamless customer experience (BRYNJOLFSSON; HU; RAHMAN, 2013).

In this scenario, our motivation was to investigate outcomes of an omnichannel strategy adoption (i.e., channel integration). Addressing the customer's side, we examined the influence of perceived channel integration on customer experience, trust, and loyalty. Channel integration here reflects the feeling that there is an alignment between the channels that a consumer uses to access a retailer. This alignment concerns retailer image, price, promotion, product, and services across channels.

Following stimulus-organism-response (S-O-R) framework, perceived channel integration is a stimulus (S) that affects one's internal states (O), in this case, the sensorial, intellectual, and social dimensions that encompass the customer experience. In its turn, customer experience drives behavioral responses (R), such as trust and loyalty towards a retailer. In other words, as consumers see consistencies between channels, their experience is enhanced and leads to a positive response towards the retailer.

The results reinforce previous findings indicating that channel integration influences consumer empowerment (ZHANG et al., 2018), perceived service quality (HERHAUSEN et al., 2015), identity attractiveness (LI et al., 2018), and customer engagement (LEE et al., 2018b), leading to customer retention. More importantly, this research shows the mediating effect of customer experience in the relationship between channel integration and loyalty, providing empirical evidence of the role of customer experience as the raw data that shapes customer response (DE KEYSER et al., 2015). To the best of our knowledge, this is the first study to explore empirically customer experience as an outcome of channel integration.

6.1 Theoretical and managerial implications

This research offers new insights on the outcomes of channel integration by demonstrating that customer perception of alignment in retailer image, price, promotion, product, and service across channels improves trust and loyalty. Besides, results highlight the role of customer experience as a mediator between perceived channel integration and loyalty.

As customer experience measurement is still evolving, the scale of brand experience (BRAKUS; SCHMITT; ZARANTONELLO, 2009) is considered a starting point to identify general principles of experience (BECKER; JAAKKOLA, 2020; LEMON; VERHOEF, 2016; SCHMITT; ZARANTONELLO, 2013). This research contributes to advance the field as it suggests that customer experience (through sensorial, intellectual, and social dimensions) drives outcomes of omnichannel adoption.

This research also contributes to the application of the S-O-R framework from the field of environmental psychology to retailing research by testing a more comprehensive model of customer response in omnichannel retailing.

Overall, the results have relevant managerial implications as they shed light on the payoffs of channel integration. Moreover, the dimensions of perceived channel integration — alignment in retailer image, alignment in price and promotion, and alignment in product and service — point to what stands out as integration in the consumers' perspective, and, thus, where efforts to achieve consistency should concentrate.

Although integration is a challenging task, the findings indicate the need to bring channels and touchpoints closer together to evoke sensorial, intellectual, and social experiences that ultimately lead to more trust and loyalty. A starting point is to pay more attention to social media channels and verify if these new touchpoints are consistent with more traditional channels (i.e. website and physical stores) in terms of retailer image, promotion, and services.

6.2 Limitations and future research

Our findings rely on cross-sectional survey research that employed a non-probabilistic sampling technique, which does not allow generalizations. Thus, the results should be interpreted in light of its exploratory purpose, not accounting for particularities on customers' characteristics and channel preferences. Future research should delimitate omnichannel customer segments to explore since researchers have already identified differences among them and variables that define membership (VALENTINI; NESLIN; MONTAGUTI, 2020; HERHAUSEN et al., 2019; NAKANO; KONDO, 2018;).

Another limitation is that respondents had to choose a retailer and recall several aspects of their experience. As the literature bases customer experience on spontaneous responses, researchers recommend attention to the timing of its measurement (BECKER; JAAKKOLA, 2020). The experimental design based on a fictitious scenario might avoid problems of individuals recalling specific details of past situations, which are important factors to evaluate the experience. Also, longitudinal field studies should better capture the dynamic effect of multiple stimuli on customer experience, not only over time but also across touchpoints and devices. To this end, future studies might rely on real-time tracking methods (BAXENDALE; MACDONALD; WILSON, 2015).

Additionally, future investigations should explore the effects of specific cross-channel combinations on customer experience, such as in-store mobile use (GREWAL et al., 2018) and webrooming (FLAVIÁN; GURREA; ORÚS, 2019).

Lastly, we conducted this study shortly before the Covid-19 pandemic. As future research in various fields will investigate the world after the crisis, retailing is likely to be one of the areas where the "new normal" will have a significant impact. Regarding omnichannel retailing, the pandemic might accelerate the need for integration due to restrictions on the access to physical channels and even redesign the journey to be digital-first (MOORMAN; MCCARTHY, 2020). Besides, the pandemic might significantly change the role of physical stores, which had been transforming into hubs that aggregate other touchpoints and places focused on customer experience (PIOTROWICZ; CUTHBERTSON, 2014). Instead of fun and entertainment, from now on customers may evaluate these places on their ability to promote a safe and socially distanced shopping experience (ROGGEVEEN; SETHURAMAN, 2020).

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Appendix A – Constructs

Perceived channel integration

Dimension	Item		Source	Mean	SD
Aligned retailer image (ARI)	PCI1	I perceive uniformity in the retailer's appearance across its different channels.	Adapted from Oh et al. (2012) and Kuehnl et al. (2019)	5.65	1.347
	PCI2	I perceive uniformity in the retailer's speech across its different channels.		5.43	1.414
	PCI3	The retailer conveys a uniform impression across its different channels.		5.35	1.520

Aligned price and promotion (APP)	PCI4	I find the same promotions across different channels of the retailer.	Adapted from Oh et al. (2012)	3.77	1.878
	PCI5	I find the same prices across different channels of the retailer.		3.79	1.963
	PCI6	I find the same discounts across different channels of the retailer.		3.45	1.852
Aligned product and service (APS)	PCI7	I find the same product mix across different channels of the retailer.	Adapted from Oh et al. (2012) and Frasquet and Miquel (2017)	3.78	2.003
	PCI8	I find the same product information across different channels of the retailer.		4.54	1.818
	PCI9	I find the same loyalty program across different channels of the retailer.		4.69	1.828
Customer experience					
Dimension	Item		Source	Mean	SD
Sensorial	CE1	This retailer makes a strong impression on my visual sense or other senses.	Brakus. Schmitt. and Zarantonello (2009)	4.16	1.655
	CE2	I find this retailer interesting in a sensory way.		4.51	1.618
	CE3	This retailer does not appeal to my senses. (R)		4.17	1.810
Affective	CE4	This retailer induces feelings and sentiments.		3.96	1.604
	CE5	I do not have strong emotions for this retailer. (R)		3.68	1.837
	CE6	This retailer is an emotional retailer.		3.48	1.704
Behavioral	CE7	I engage in physical actions and behaviors when I use this retailer.		3.35	1.641
	CE8	This retailer results in bodily experiences.		3.31	1.667
	CE9	This retailer is not action oriented. (R)		3.54	1.886
Intellectual	CE10	I engage in a lot of thinking when I encounter this retailer.		3.72	1.790
	CE11	This retailer does not make me think. (R)		4.26	1.994
	CE12	This retailer stimulates my curiosity and problem solving.		4.22	1.767
Social	CE13	As customer of this retailer feel like I am part of a community.	Nysveen, Pedersen, and Skard (2013)	3.17	1.785
	CE14	I feel like I am part of the retailer family.		2.33	1.546
	CE15	When I use this retailer I do not feel left alone.		3.01	1.769
Trust					
	Item		Source	Mean	SD
	TRU1	This retailer is reliable.	Zhang et al. (2018)	6.13	1.004
	TRU2	This retailer is trustworthy.		6.06	1.026
	TRU3	This retailer's products and service are dependable.		6.12	0.922
	TRU4	This retailer offers secure Web transactions.		6.21	0.994
	TRU5	It is unnecessary to be cautious with this retailer.		4.18	1.836
Loyalty					
	Item		Source	Mean	SD
	LOY1	In the future. I will be loyal to this retailer.	Brakus. Schmitt. and Zarantonello (2009)	3.79	1.756
	LOY2	I will buy from this retailer again.		5.88	1.260
	LOY3	This retailer will be my first choice in the future.		4.40	1.609

LOY4	I will not buy from other retailers if I have the option of buying from this retailer.		3.61	1.880
LOY5	I will recommend this retailer to others.		5.48	1.394
Involvement with the retailer				
Item		Source	Mean	SD
INV1	unimportant to me/important to me	Brakus. Schmitt. and Zarantonello (2009)	5.12	1.569
INV2	of no concern to me/of concern to me		5.15	1.572
INV3	irrelevant to me/relevant to me		5.10	1.600
INV4	means nothing to me/means a lot to me		4.32	1.468
INV5	useless to me/ useful to me		5.32	1.676
INV6	insignificant to me/significant to me		4.88	1.647