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Research on the Formation Mechanism of Multichannel Retailer Loyalty Based on Experience Spillover and Channel Reciprocity

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Abstract: This study proposed a multichannel loyalty model aimed at integrating experience theory, schema theory and loyalty theory. Particularly, we built a multichannel retailer loyalty framework not only from the perspective of multichannel shopping behavior, but also from sequences of channel choices, namely shopping paths, including search online but purchase offline and search offline but purchase online. Correspondingly, this study segmented the framework into two specific models: Model1.search products in one multichannel retailer's physical, and then purchase in the same multichannel retailer's website (model 1:offline-online); Model2.search products in one multichannel retailer's website, and then purchase in the same multichannel retailer's physical store (model 2:online-offline). Besides, this study empirically tested the model by EFA and CFA with the use of Spss20 and Amos19 after developing the Structural Equation Model. As a result, we demonstrated that experience plays an important role on multichannel retailer loyalty through trust. Moreover, there exists experience spillover effect of channels. A significant interactive effect of trust on loyalty among channel has been supported.

Keywords: multichannel retailer loyalty, experience spillover effect, channel reciprocity

1. INTRODUCTION

In the context of multichannel retailing, customers tend to use two or more channels to finish transactions in order to maximize shopping benefits based on shopping motivations at different buying phases^[1]. Under this situation, customers gradually incline to fulfill their shopping needs with the use of at least two channels^[2]. To some degree, it's more challengeable for multichannel retailers to keep a long relationship with customers, which results in a paradox. Specifically, some scholars insisted that multichannel customers are less loyalty than single channel. In order to maximize benefits, customers would like to switch retailers and channels frequently^[3] as a consequence of advantages over convenience, low-cost and less human contact, which leads to a loss of customers and channel conflicts comparing prices through channels^[4]. Correspondingly, others argued that an attractive channel can strength desires to use another channel^[5]. Integrated retailing strategies bring better service to customers, stimulate customer interests and strength customer trust. It is useful to guide offline customers into online website customers and of course vice versa, resulting in a bidirectional synergetic effect to create customer stickiness and loyalty^[6]. However, compared to single channel, it's much more complex to discuss the mechanism on the formation of multichannel loyalty. Simultaneously, the role of same factors in the formation of loyalty may vary from marketing contexts. Hence, it is difficult to get the universal conclusion.

Researches centered on loyalty are scarcely based on the sequence of channel choice, namely shopping paths,. Moreover, exploring the mechanism of customer loyalty in a certain channel separately based on shopping paths shows a lack of integrity. Therefore, this paper proposed a model taking shopping paths into consideration based on experience spillover effect and interactive effects among channels by trying to answer these questions: firstly, how does experience has an impact on loyalty through trust? Secondly, what are important dimensions of experience in different channels and how these dimensions spill over between online and offline channel according to shopping paths? Thirdly, how online channel interact with offline channel and vice versa?

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2. LITERATURE REVIEW

2.1 Multichannel retailer's loyalty

From attitude perspective, customer loyalty has been defined as a preferred attitude and commitment to a retailer^[7]. From behavior theory, some researchers noted that a loyal customer tend to purchase repeatedly, spend extra money in a certain retailer^[8]. However, it is suggested that customer loyalty is influenced by some attitude factors like loyalty programs, contexts, retailers' social reputation^[7]. To some degree, it cannot reveal the real mechanism of multichannel loyalty simply from either behavior or attitude perspective. This paper try to evaluate and measure loyalty from behavior and attitude theory simultaneously .

At present, exploring the formation of multichannel loyalty combining experience with schema theory is scarce. In this paper, schema theory will be applied to analyze the spillover effect of experience. Generally speaking, previous experience from offline channel is a referential and meaningful schema which affects perceived cognitive, affective and perceived usability towards online channel, and vice versa. Specially, some scholars discovered that offline channel experience plays an important role on online shopping attitude and intention through online searching and online evaluations^[8]. Furthermore, customers who have built trust in offline channel based on previous offline experience prefer to accepting its new retail channel format^[9].

However, it still leaves some shortages to improve, though there are many important developments in the area of loyalty research. It can be divided into three phases concerned on loyalty research: The first phase is the differences between offline loyalty and online loyalty which have been demonstrated^[10]. It's based on single channel (offline or online channel) with a lack of integrity; The second is the relationship between satisfaction and loyalty in the context of single channel or multi channels, though with a pity of leaving channels' interactive effect alone; The third is the interactive effect of channels, which needs more systematic research^[11].

Thus, this paper believe that loyal multichannel customers will continue to purchase same products or patronize same retailer's channels, which gradually forming a preferred attitude and commitment to this multichannel retailer^[12], such as repeated purchasing, recommendation and preference. In addition, loyal customers will put this retailer at the first place with a good belief and positive emotion towards this retailer.

2.2 Multichannel shopping behaviors

Plenty of authors have defined multichannel customer from different views. Some believed that a multichannel shopper is the person who has purchased products or service via different channels of any kinds of retailers^[8]. Others argued that multichannel shoppers should have finished decisions making and transactions with the use of at least two channels of a same retailer in different shopping phases^[13]. However, these definitions fail in distinguishing the customer who has used different channels of various retailers from the one who only use some certain channels to search but purchase in other channels of a same retailer. Thus ,this paper concerns on multichannel customers who search information online but purchase offline or search offline but purchase online of a certain retailer in different shopping phases based on sequences of channel choice.

Shopping in the context of multichannel retailing provides customers more channels choices in different shopping phases, bring much more complexity to shopping behaviors research. A large amount of researchers are trying to discuss customer channel choices and customer channel preference in different shopping phases^[14]. What's more, from shopping motivation perspective, shopping process can be divided into the searching phase and the purchasing phase, as a result of channel choices based on channel attributes. Specifically, customers prefer to use online channel for searching because of convenience and low-cost, while choosing offline channel for the real experience of touching and examining products. Specially, the sequence of channel choices in different purchasing phases is dependent on avoiding risk and service-oriented^[15]. According to sequences of channel choices, online multichannel shoppers can be described as customers who search online but purchase offline, while offline multichannel shoppers are customers who search offline but purchase online^[16]. Thus, we

group sequences of channel choices into two categories: one is search online but purchase offline, the other is search offline but purchase online. This paper will explore customer loyalty from these two shopping sequences.

3. RESEARCH MODEL AND HYPOTHESIS

From a social network perspective, multichannel customers may think in two ways: one is based on fragment, indicating that customers evaluate and make decisions by calculating the importance of different constructs and channel characteristic while shopping. In this process, customers get an overall judgment by combining discrete information of service attributes; the other is based on category, reflecting customers extend their previous overall attitude towards original channels to another channel of a same multichannel retailer, such as previous experience, previous trust. In detail, customer experience in one channel (e.g. offline experience) has a positive impact on the next purchase. Besides, it can also affect customer attitude towards others channels(e.g. online channel) of a same multichannel retailer^[6]. In other words, previous experience and attitude from offline channel can be treated as a cognitive schema influencing customer evaluation and attitude towards online channel, and vice versa. Although there are many kinds of frameworks centered on customer loyalty, like satisfaction-loyalty^[11], most of them derive from trust-loyalty^[12, 17]. Thus, we believe that there are three kinds of influences on the formation of multichannel loyalty: the effect of customer experience on trust, experience spillover and channel reciprocity between offline and online channel.

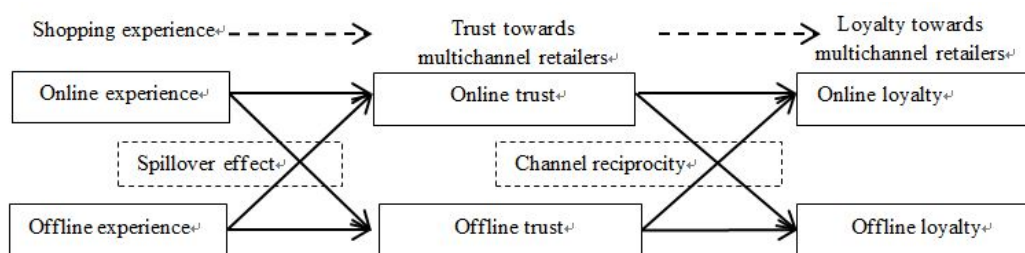


Figure 1. Research model^o

3.1 Experience, trust and multichannel loyalty

Offline experience is beneficial for customers to have a more specific and deeper understanding of retailers and identify retailers' characteristics^[18]. Additionally, the higher level of experience with retailers, the higher usage of same retailer in all purchase channels, including offline and online experience^[19]. Hence, it is clearly that experience plays an important role on the formation of multichannel loyalty.

Generally speaking, trust is the requirement of accepting multi-channel shopping, influencing whether customers would like choose and use other channels of a same retailer to finish shopping^[9]. The relationship between trust and loyalty has been found by many scholars^[17].

Research has been increasingly focus on the influence of experience on trust in the past few years. It is noted that customer experience is helpful to build trust, because choosing different channels of a same retailer can reduce perceived risk. Most research argued that the better experience customers have, the higher level customer trust can be formed, with a significant effect on the next shopping intention^[20]. Specifically, it has been demonstrated that online cognitive experience and online usability experience both have a significant effect on online trust^[21]. Despite this, what customers need in the shopping process is not only product or service, but also emotion and affective consuming^[22]. Interactivity, aesthetics and affective can also act as an powerful inducer of trust and attitude, which determine customer purchasing decisions^[21].

Therefore, we expect that:

H1 Online experience directly and positively influences online trust.

- H1a Online cognitive experience directly and positively influences online trust.
- H1b Online affective experience directly and positively influences online trust.
- H1c Online usability experience directly and positively influences online trust.
- H2 Online trust directly and positively influences online loyalty

- H3 Offline experience directly and positively influences offline trust.
- H3a Offline cognitive experience directly and positively influences offline trust.
- H3b Offline cognitive experience directly and positively influences offline trust.
- H4 Offline trust directly and positively influences offline loyalty

3.2 Experience spillover effect

From schema theory, it is believable that schema has a close relation to contexts, which relies on sequences of things occurred in a certain situation. In the context of multichannel retailing, sequences of channel choices mainly depend on customer experience and channel attributes. It is suggested that online/offline experience is closely related to previous perceived experience which consists of used schemas. Used schemas have an advantage over gathering information, understanding, predicting and solving problems, which may have an impact on dealing with new information and is helpful to relieve emotions and affective. Namely, used schemas are stimulated, referential and predictable. In addition, researchers demonstrated that cognitive schema of experience is associated with developed psychology theory^[23]. Under this circumstance, customers prefer extending experience in one channel to another channel as to strength their shopping belief in other channels.

Therefore, for a certain retailer, previous experience in a channel can stimulates experience schemas of other channels. Later, it can be associated with previous experience schemas to predict the quality of service in other channels of a same retailer^[24]. Finally, it appears spillover effect between online and offline channels.

Thus, we expect that

- H5 Offline experience directly and positively influences online trust.
- H5a Offline cognitive experience directly and positively influences online trust.
- H5b Offline cognitive experience directly and positively influences online trust.
- H6 Online experience directly and positively influences offline trust.
- H6a Online cognitive experience directly and positively influences offline trust.
- H6b Online cognitive experience directly and positively influences offline trust.
- H6c Online usability experience directly and positively influences offline trust.

3.3 Channel reciprocity effect

In the context of multichannel retailing, there exists interactive effects and transference among customer belief, intentions and attitudes between online and offline channel^[25]. What's more, there is a synergetic effect of multichannel retailing contexts, transferring online loyal customers into offline channel based on trust^[8]. Compared with pure online store and multichannel retailing store, it is found that offline trust significantly influence online shopping intention through online trust^[26]. Recently, more and more researchers start focusing on the mechanism of channels reciprocity. Some scholars paid attention to the interactive relationship between online and offline brand image, finding that customer attitude of online and offline brand image is not only affected by brand belief in one channel, but also relative to brand belief and evaluation from other channels^[27].

Although a positive effect of trust on loyalty with respect to single or multichannel retailers has been demonstrated in both online and offline channel respectively, the research on the interactive effect of trust on loyalty both in the online and offline channel at the same time is scarce. Hence, we propose that

H7a Online trust directly and positively influences online loyalty.

H7b Online trust directly and positively influences offline loyalty.

H8a Offline trust directly and positively influences offline loyalty.

H8b Offline trust directly and positively influences online loyalty.

4. RESEARCH METHODOLOGY AND ANALYSIS

4.1 Measurement and data collection

According to previous literature, we modify measurements of factors. Offline cognitive experience and offline affective experience are measured by scales from Yang^[28]. Items measuring derived from Nambisan^[21], including online cognitive experience, online affective experience and online usability experience. Online trust are from Berra^[29] while offline trust is measured by scales from Kuan and Bock^[18]. Offline loyalty and online loyalty measurements come from Chen^[11] and Jin^[13]. We used a 7-point Likert scale to measure these items. We collected 870 questionnaires, deleting 35 disqualified questionnaires. According to sequences of channel choices, we divided them into two parts, one of them had 563 questionnaires on the sequence of searching offline but purchasing online. The other had 270 questionnaires on the sequence of searching online but purchasing offline.

4.2 Measurement model analysis.

First, we used EFA to test reliability and validity of questionnaires by Spss 20.0. The overall KMO was 0.917, reflecting that the data was suitable for factor analysis. SPSS reliability test generally requires $\alpha > 0.7$, and this paper α was 0.934, indicating a high reliability. We calculated reliability coefficients of latent variables, which showed that Cronbach α coefficients were all higher than 0.7, referring to a good reliability. CR (composite reliability) values were all greater than 0.7, showing a high convergent validity; AVE values were almost greater than 0.5, indicating a pretty good discriminant validity.

Table 1. Summary of measurement scales

Constructs	Cronbach α	CR1(model1)	CR2(model2)	AVE1(model1)	AVE2(model2)
Offline cognitive experience	0.874	0.879	0.885	0.647	0.656
Offline affective experience	0.873	0.875	0.88	0.638	0.648
Offline trust	0.912	0.91	0.891	0.718	0.698
Offline loyalty	0.785	0.815	0.818	0.596	0.599
Online cognitive experience	0.882	0.884	0.881	0.659	0.65
Offline affective experience	0.904	0.911	0.886	0.719	0.661
Online usability experience	0.797	0.794	0.811	0.510	0.522
Online trust	0.918	0.919	0.867	0.740	0.621
Online loyalty	0.834	0.829	0.776	0.619	0.536

4.3 Structural model analysis

We classified our data into two groups based on sequences of channel choices. Correspondingly, using CFA with Amos19.0, we tested two structural equation models, named model1(offline→online) and model2(online→offline). The model fit of offline→online (model1) (CMIN/DF=4.451, RMSEA = 0.078, GFI = 0.792, AGFI = 0.761, NFI = 0.831, CFI=0.863, IFI=0.864, RFI=0.817) was almost accepted. Online → offline(model2) (CMIN/DF=2.337, RMSEA = 0.069, GFI = 0.793, AGFI = 0.762, NFI = 0.805, CFI = 0.877, IFI = 0.878, RFI = 0.788) had an accepted model fit values. Therefore, this two models were supported.

Figure2 showed t-values and standardized path coefficients. For offline →online model1, the relationship between online experience and online trust was positive and significant (t absolute values were all bigger than 1.96), supporting H1. The relationship between online trust and online loyalty was also positive and significant

($t=11.69$), supporting H3. The effect of offline experience on offline trust was positive and significant (t absolute values are all bigger than 1.96), supporting H2. The effect of offline trust on offline loyalty was significant ($t=-9.31$), and H4 was supported. The relationship between offline experience and online trust was positive and significant (t absolute values were all greater than 1.96), supporting H5. For channel reciprocity paths, they were all positive and significant (t values were all bigger than 1.96), supporting H7 and H8.

For online \rightarrow offline model2, the relationship between online experience and online trust was positive and significant (t absolute values were all bigger than 1.96), supporting H1. The relationship between online trust and online loyalty was also positive and significant ($t=7.32$), supporting H3. The effect of offline experience on offline trust was positive and significant (t absolute values were all greater than 1.96), supporting H2. The effect of offline trust on offline loyalty was significant ($t=-6.54$), and H4 was supported. Specifically, online cognitive experience ($t=2.01$) and online usability experience ($t=2.18$) both had a significant influence on offline trust, supporting H6a and H6c. However, the effect of online affective experience on offline trust was negative ($t=-2.52$), with a negative path coefficient, showing H6b was not supported. For channel reciprocity paths, they were all positive and significant (t values were all bigger than 1.96), supporting H7 and H8a, but not the effect of offline trust on online loyalty ($t=1.90$), failing in supporting H8b.

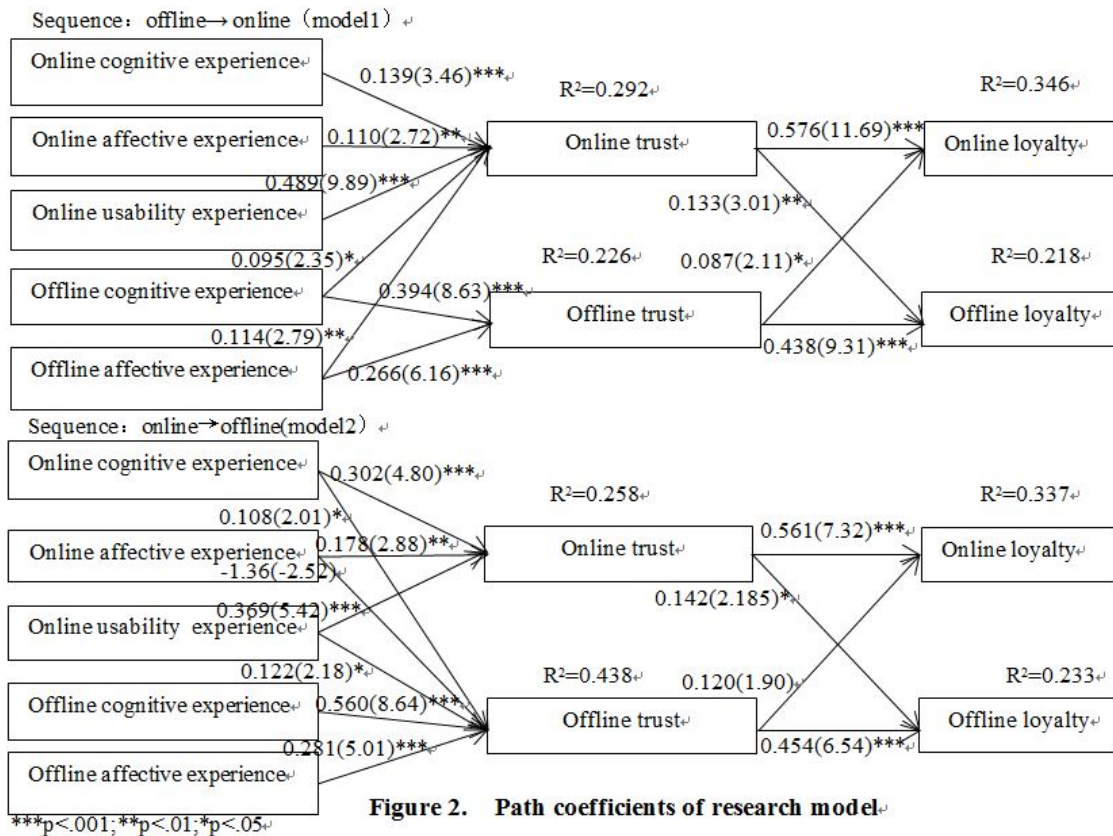


Figure 2. Path coefficients of research model

5. DISCUSSION AND CONCLUSIONS

This study uncovered key factors in the formation of customer loyalty. First of all, we identify critical dimensions of online and offline experience respectively. Simultaneously, this paper clarifies the importance of these dimensions. For example, in the model2, it's clearly that online usability experience is the most important one, and cognitive is less important while affective experience is the least one on the effect of online experience on online trust. However, it varies from sequences of channel choice with a different path coefficient. Secondly, with differences of channel choice sequence, our results show a distinguished importance of experience spillover.

In model 1, there are two dimensions of offline experience, including cognitive experience and affective experience, playing a key role on online trust. However, in model 2, cognitive and usability of online experience spillover do benefit to offline trust, but not affective experience. We may explain that there is still a lack of channel integrity between online and offline channels for multichannel retailers. Furthermore, we demonstrate the effect of experience spillover on trust. That is, if a customer has either positive or negative experiences from previous interaction with retailers in the online or offline channel, which does not fit prior offline or online experience with the multi-channel retailer, the level of online or offline trust on retailers can be influenced or modified. Last but not least, the findings of this study show us that, no matter what sequence of channel choice customers may have, online trust does have an impact on offline loyalty of a same retailer in the multichannel retailing context based on the reciprocity among channels, and vice versa. Additionally, as a lack of channel integrity, in the model 2, the effect of offline trust on online loyalty is not significant while the relationship between them in model 1 is supported. In conclusion, there is channel reciprocity between online and offline channel. In other words, the higher level of trust multichannel shoppers have, the stronger loyalty may be built.

6. LIMITATION AND FUTURE RESEARCH

Despite these findings, we must exercise great care in the interpretation of our results, considering the following limitations of to our study. Although we reflected the direct influences of online and offline experience in the formation of multichannel loyalty, many other factors were not included in this research as we focused principally on experience and trust, such as product type, retailers' type. Future research may further examine the experience spillover based with some moderators.

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