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Role of channel characteristics of the new retail model on brand loyalty

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Abstract. This paper explores the influence of two channel characteristics on brand loyalty, namely, the vividness of online information presentation and offline travel distance perception and the moderating effects of haptic perception demand and price consistency in the new retail model based on the dual system theory of decision making. A total of 537 valid samples were collected for model testing. Results showed that the vividness of online information presentation had a significant positive effect on customer behavior loyalty and attitude loyalty; offline travel distance perception only had a significant negative effect on customer attitude loyalty; haptic perception demand negatively moderated the relationship between vividness of information presentation and customer behavior loyalty; and price consistency positively moderated the relationship between travel distance perception and customer attitude loyalty. The findings have implications for different experience-based FMCG brands to break out the "traffic" dilemma in new retail.

Keywords: New Retail Model, Vividness of Information Presentation, Travel Distance Perception, Brand Loyalty.

1 Introduction

New retail is a novel model that realizes the synergy and integration of traditional and e-commerce retails with the help of digital technologies such as big data and artificial intelligence to provide customers with a seamless shopping experience (Lee et al., 2021). Popular clothing, shoes, hats, and bags are both experience-based and FMCG products, and customers have a strong need to purchase both the experience of being present and the convenience of repeated purchases. On the one hand, the increasing number of new brands and the diversification of purchase channels make it easy for old customers to be attracted by other brands and to be "lost" in the process of repeated purchase. On the other hand, the fierce competition also makes it costly for companies to obtain new customers. The cost of "traffic" of new customers is increasing. These "traffic" dilemmas have become obstacles to optimizing brand loyalty building. Studies have highlighted the importance of omnichannel management (Lee et al., 2021) and the impact of channel integration on service satisfaction (Fisher et al., 2019). Research has also explored the impact of specific

factors on purchase decisions in a single channel (Kim et al., 2019), and others have discussed customer channel preferences in omnichannel operations (Luo Y et al., 2020). Few studies have explored in depth the impact of online and offline channel characteristics on brand loyalty in the channel integration process of new retail. Therefore, breaking through the dilemma of customer "traffic" loss and optimizing brand loyalty in the experience-based FMCG industry are important for new retailers by effectively implementing omnichannel management, deeply exploring the different channel characteristics of online and offline channels in omnichannel, and exploring their internal influence mechanisms on brand loyalty.

2 Literature review

2.1 Research on the influencing factors of brand loyalty

An important driver of customer loyalty is customer satisfaction, based on expectation confirmation theory (ECT). While, with the diversification of sales channels in retail scenarios, studies have been conducted to explore other key factors affecting brand loyalty from online or offline channels, respectively.

For offline channels, the influence of store atmosphere, brand image, corporate social responsibility, customer's attitude, confidence, and relationship with brand loyalty was discussed from the perspective of social image and emotional relationship with the brand. Jung et al. (2020) took the traditional apparel industry as an example and found that brand image directly influences and indirectly influences brand loyalty through satisfaction and trust brand loyalty; Iglesias et al. (2020) concluded that corporate social responsibility in the insurance service industry directly affects and influences loyalty through value co-creation and trust. By contrast, for online sales channels, the influence of brand identity, brand rewards, personalization of advertising messages, and perceived value of information on brand loyalty was analyzed from the perspective of emotional relationship and marketing approach of brands. Kaur et al. (2020) found that brand identity and brand rewards influence brand loyalty through brand engagement, using virtual communities as an example. Shanahan et al. (2019) found that social media advertising personalization positively influences brand loyalty through brand engagement and brand attachment.

In summary, studies have been conducted on the key factors influencing customer brand loyalty in single offline or online channels in retail stores, airline services, insurance services, and fashion apparel scenarios. However, few studies have focused on the features of online and offline channel in the new retail model to achieve effective channel integration and enhance customer brand loyalty.

2. 2 Channel characteristics of the new retail model and its effects

The omnichannel of the new retail model consists of two types of channels, namely, online and offline. Most existing studies have explored the effects of specific factors

of a single channel on channel integration, purchase behavior, and pro-social behavior.

The offline channel remains the main channel of the new retail model, which aims to satisfy customers' needs for on-the-spot experiences through stores. Early studies have focused on service quality, store atmosphere, and travel factors. Francioni et al. (2018) found that store atmosphere directly affects store loyalty and plays a moderating role between store satisfaction and loyalty; Grewal et al. (2012) showed that when purchasing in offline brick-and-mortar stores, customers' tolerance for travel time decreases as the uncertainty of product inventory increases; Luo et al. (2020) argued that when retailers use the "offline to online" purchase guidance strategy, customers who live closely to the store will increase their offline purchase spending, whereas those who do the opposite will decrease their offline purchase spending.

The online channel is another feature of the new retail model, which presents product information with the help of virtual digital technology. Thus, the presentation effect of product information also affects the customer's decision. Studies have analyzed the effects of information presentation in online channels from two perspectives: local and overall feature. Based on local feature, existing studies have explored the effects of information presentation characteristics such as picture content, color, and size. Such as, Luo et al. (2021) took online rental as an example and found that the appearance of the house and property facilities in online pictures had a positive influence on customers' browsing time, and the external scenery had a negative influence on customers' browsing time. Based on overall feature, existing studies have explored the effects of information presentation methods. For example, Jai et al. (2021) compared the effects of three information presentation methods: static pictures, zoomed images, and rotated videos, and found that the activation patterns of brain regions in the rotated video condition successfully predicted participants' choices in static pictures and zoomed images conditions.

In summary, existing studies have mostly focused on the characteristics of only one channel in new retail model, and information presentation effect and travel distance has become key factors influencing customer decisions in offline or online channels, respectively. For information presentation, customers' judgment of product value is not only based on the local characteristics of information presentation but also depends on the overall characteristics of information presentation. Although some studies have explored the overall characteristics, they have not yet fully discussed its influence on customers' brand loyalty. For travel distance, studies have discussed the influence of travel factors on channel integration and purchase decisions, however, most studies have ignored the difference between spatial travel distance and cognitive travel distance, and its impact on customer loyalty. It has important theoretical value to study the impact of different characteristics of the two channels on customer loyalty, and has practical guidance for FMCG band to break out the customer "traffic" loss dilemma.

3 Research hypothesis

Studies have shown that brand loyalty can be finely measured in terms of attitude and behavior loyalties (Chaudhuri et al., 2001). In the new retailing model, behavior loyalty can improve the repeat purchase of old customers, while willingness to recommend of attitude loyalty has a word-of-mouth effect and can help companies reduce the cost of acquiring new customers. Therefore, both behavior and attitude loyalties are important elements to focus on. From the perspective of brands and customers, both of them always expect online and offline channels are complementary. Similarly, in the new retail model, omnichannel is the key to influence customers' purchase decision, and correspondingly channel characteristics become an important factor affecting brand loyalty.

The Dual-system theory believes that human decision making has two modes: intuitive heuristic and rational analytical processing; the heuristic system relies on intuition to deal with problems, processing speed is faster, more partial information is extracted for processing, and decision bias is easily produced; whereas the analytical processing system requires conscious effort to deal with problems, systematic information processing, processing speed is slower, and decision bias can be somewhat avoided (Evans et al., 2013). Customers have the tendency to use simple heuristics for decision making when making repeated purchases and relatively unimportant decisions. This paper argues that in the new retail model, customers are free to choose online or offline channels, the vividness of information presentation is the evaluation of the overall display of product information in online channels, and the travel distance perception is the customer's cognitive judgment of the spatial distance when purchasing in offline channels. Both of them affect the customer's choice of information processing mode in the decision-making process. The conceptual model of this paper sees Fig. 1.

Online channels do not allow customers to touch and experience products on the spot but rather display product information with the help of digital technology, and the effect of product information presentation in online channels also affects customers' decisions. According to the principle of perceptual organization, humans are more likely to understand and remember things from a holistic visual perspective in an unconscious state (Jimenez et al., 2017), and the vividness of information presentation makes it easier for customers to understand and remember product information on their own without extra cognitive effort. This paper concludes that for brands with low vividness of product information presentation, customers need to mobilize their analytical processing systems more to sort out, discriminate, and understand product information, which requires additional cognitive effort. Meanwhile, for brands with high vividness of product information presentation, customers can stimulate their visual nerves more effectively and complete most cognitive tasks heuristically and autonomously, which makes information processing less difficult and increases customers' willingness to purchase and recommend the brand. Kim et al. (2019) showed that visual stimulation can generate image processing, and positive image processing can increase customers' willingness to buy. Therefore, the vividness of information presentation significantly affects behavior

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loyalty. Yu et al. (2017) found that online product information presentation forms with visual and interactive features are more likely to trigger customers' online presence, which in turn stimulates customers' willingness to purchase and recommend; thus, the vividness of information presentation significantly affects attitude loyalty. In summary, the following hypotheses are proposed:

H1a: Vividness of information presentation significantly and positively affects customer behavior loyalty.

H1b: Vividness of information presentation significantly and positively affects customer attitude loyalty.

Cognitive distance is the perception of distance between locations that are distant and invisible to each other in a large-scale space (Ankomah et al., 1995), and customers' perception of travel distance to offline stores is also a form of cognitive distance. According to existing retail store location studies, the closer the physical distance to the brand's store, the lower the travel cost and the greater the likelihood of customer repurchase. However, actual distance is only the basis for the formation of perceived distance, and customers may use perceived distance rather than actual distance when choosing a destination (Raghubir et al., 1996). As the actual distance increases, the customer's estimate of the perceived distance also increases and produces some cognitive bias (Ankomah et al., 1995). In this paper, we argue that for brands with perceived distant travel distances, customers need to invest extra cognitive effort to process a large amount of travel information, and decision inaccuracy and difficulty increase. Meanwhile, for brands with perceived close travel distances, customers need to process less spatial distance information when making decisions, completing decisions through a heuristic system is easy, and customers are more willing to purchase and recommend the brand. Lin et al. (2008) found that cognitive distance estimates do not directly predict tourists' intention to visit when considering destinations but indirectly predict customers' intention to visit through the inaccuracy of cognitive distance. Therefore, travel distance perception significantly affects behavior loyalty. Raghubir et al. (1996) demonstrated that in the case of map navigation, the cognitive distance formed by customers' reference to the actual distance on the map is automatically used by the customer's heuristic system. This cognitive and memory-based distance information is more accessible and accurate than the actual distance and is therefore more likely to be preferred by customers' recommendations. Thus, travel distance perception significantly affects attitude loyalty. In summary, the following hypotheses are proposed:

H2a: Travel distance perception significantly and negatively affects customer behavior loyalty.

H2b: Travel distance perception significantly and negatively affects customer attitude loyalty.

Compared with offline channels, online channels have difficulty providing haptic experiences similar to those of physical stores through sensory systems. This lack of sensory cues can cause hesitation among customers to shop in online channels. Haptic perception needs can be defined as the preference of customers to access product information through the haptic sensory system, which allows for obtaining a cognitive evaluation of the product, establishing an emotional bond with the product, and thus influencing customer attitudes and behaviors (Peck et al., 2006). De Canio et al. (2021) found that customers with strong haptic characteristics prefer offline physical and mobile channels that provide direct touch interfaces (e.g., touch screens, touch pads). Manzano et al. (2016) used the fashion apparel industry as an example and found that customers who chose online channels showed lower haptic demand than those who chose offline channels. This paper argues that customers with low haptic perceptual demand prefer digital information presentation, and those with high haptic perceptual demand prefer to experience product information in person. Therefore, haptic perceptual demand weakens the impact of vividness of online information presentation on behavior customer and attitude loyalty. In summary, the following hypotheses are proposed:

H3a: Haptic perception needs play a negative moderating role between vividness of information presentation and customer behavior loyalty.

H3b: Haptic perception needs play a negative moderating role between vividness of information presentation and customer attitude loyalty.

Price consistency is defined as the customer's perception of the difference in product prices between offline and online channels. Chu et al. (2008) found that households are more price sensitive to offline channels than online channels, and the closer the household is to the brand's offline store, the higher the customer's price sensitivity. In new retailing model, price is more likely to significantly influence customers' shopping choices in offline channels, and the closer the travel distance is perceived, the more significant the effect to be. Price is an important signal of product quality, and price inconsistency between online and offline is likely to lead customers to judge the quality of the brand's products as bad, thus reducing customers' trust in the brand. Mookherjee et al. (2021) showed that pricing inconsistency between online and offline influences repurchase or retention behavior through customer regret and disappointment. This paper argues that online and offline price consistency can enhance customer trust and positive emotions toward the brand's products, thus strengthening the impact of offline travel distance perception on customer behavior and attitude loyalty. In summary, the following hypotheses are proposed:

H4a: Price consistency plays a positive moderating role between travel distance perception and customer behavior loyalty.

H4b: Price consistency plays a positive moderating role between travel distance perception and customer attitude loyalty.



Fig. 1. Conceptual model

4 Study design

4.1 Data collection

In this study, data were collected via an online questionnaire, and the respondents were customers who had visited both online and offline stores of a clothing brand within the last three months. The data collection was divided into two stages: presurvey and formal survey. A total of 700 questionnaires were distributed, and invalid questionnaires with failed attention check, incomplete, and abnormal answer time were excluded. Finally, a total of 537 valid questionnaires were obtained, with a valid recovery rate of 76.7%.

4.2 Variable measurement

To improve the content validity of the scales, all scales used in existing studies were used to measure the variables, and the vividness of information presentation was referred to the scale of Yu et al. (2017), travel distance perception was referred to the studies of Ankomah et al. (1995) and Lin et al. (2008) using the inverse measurement scale, haptic perceived need was referred to the scale of De Canio et al. (2021), price consistency was referred to Mookherjee et al. (2021), time pressure with reference to Hamermesh et al. (2007), brand satisfaction with reference to Jung et al. (2020) and Francioni et al. (2018), and brand loyalty with reference to Chaudhuri et al. (2001) and Jung et al. (2020). The questionnaire items were also adapted to the study scenario. Each variable was measured on a 7-point Likert scale, with 1 indicating "strongly disagree" and 7 indicating "strongly agree." In addition, customers' gender, age, income, number of online shopping trips, time pressure, and brand satisfaction affect brand loyalty, and related to online information presentation and travel distance perception. Thus, these variables are used as control variables.

5 Data analysis and results

5.1 Descriptive statistics

Table 1 summarizes the descriptive statistical analysis of the survey sample. The proportion of female samples is slightly higher than that of male samples, which is in line with the current situation of female customers in the apparel industry.

Variable	Classification	Number	Percent (%)
Gender	Female	328	61.1
	Male	209	38.9
Age (years)	0-20	18	3.4
5 5	21-30	293	54.6
	31-40	177	33.0
	41-50	29	5.4
	>50	20	3.7
Degree	High school and below	16	3.0
C	Specialist	63	11.7
	Undergraduate	401	74.7
	Graduate	57	10.6
Income	Less than 1000 RMB	10	1.9
	1001-3000RMB	89	16.6
	3001-5000RMB	75	14.0
	5001-8000RMB	172	32.0
	More than 8000 RMB	191	35.6
Times of online	Less than 3 times	8	1.5
purchases Nearly a	3-5 times	55	10.2
month	6-10 times	121	22.5
	More than 10 times	353	65.7

Table 1. Demographics Summary

5.2 Reliability analysis and common method bias test

In this study, SPSS 22.0 and AMOS 20.0 were used to test the reliability and validity of each variable, and Table 2 gives a summary. First, the Cronbach's Alpha value of each variable of the questionnaire in this study was higher than 0.6, and the overall Cronbach's Alpha value was approximately 0.8. The composite reliability (CR) of each variable was higher than 0.6, and the quality of data reliability was good. In addition, the factor loadings and the average variance extracted (AVE) values of each variable showed that the factor loadings of each variable was more than 0.6. The average variance extracted (AVE) of each variable was more than 0.5, which indicated that the convergent validity of the scale was good. Meanwhile, the square root of AVE values was greater than the correlation coefficient of each variable, which indicates that the scale has good discriminant validity as shown in Table 3.

Table 2. Reliability tests and AVE values for each variable

Construct	Items	Factor loading	CR	AVE

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Information presented	PV3	0.726	0.71	0.55
by Vividness (PV)	PV5	0.763		
Traveling Distance	DS1	0.917	0.94	0.79
Perception (DS)	DS2	0.921		
_	DS3	0.798		
	DS4	0.912		
Haptic perception	TC2	0.844	0.93	0.76
needs (TC)	TC3	0.885		
	TC4	0.873		
	TC5	0.892		
Price Consistency	CN2	0.771	0.84	0.72
(CN)	CN3	0.920		
Brands Satisfaction	SA1	0.704	0.67	0.51
(SA)	SA2	0.719		
Time pressure (TP)	TP1	0.896	0.95	0.84
*	TP2	0.917		
	TP3	0.931		
	TP4	0.924		
Behavior Loyalty	LYB1	0.765	0.77	0.53
(LYB)	LYB2	0.655		
	LYB3	0.749		
Attitude Loyalty	LYT1	0.784	0.82	0.60
(LYT)	LYT2	0.771		
	LYT3	0.770		

Table 3. Pearson correlation with AVE square root values

	PV	DS	TC	CN	SA	TP	LYB	LYT
PV	0.745							
DS	0.183	0.888						
TC	-0.052	0.070	0.874					
CN	0.255	0.230	0.108	0.849				
SA	0.428	0.217	0.046	0.157	0.712			
TP	-0.106	-0.126	0.165	-0.082	-0.121	0.917		
LYB	0.413	0.209	-0.039	0.169	0.638	-0.186	0.725	
LYT	0.454	0.275	0.017	0.302	0.644	-0.109	0.641	0.775

Note: Diagonal numbers are AVE square root values.

The study conducted a factor analysis of all question items for each latent variable of brand satisfaction, brand loyalty, vividness of information presentation, travel distance perception, and haptic perception demand and time pressure. It then obtained an unrotated first principal component with a variance explained of 24.35%, with no significant common method bias.

5.3 Hypothesis testing

The main research variables were centered prior to formal regression analysis using SPSS 20.0 software. In addition, the VIF values of the research model were below 5.0, indicating that the model in this study does not have serious multicollinearity problems. According to the regression results in Table 4, the baseline Model 1 indicates that customer age, income level, channel preference, shopping time pressure, and brand satisfaction significantly affect customers' behavior loyalty to the brand; whereas gender, education level, and number of online purchases in the last month have no significant effect; the baseline model 5 indicates that customer education level, and brand satisfaction significantly affect customers'

attitude loyalty to the brand, whereas gender, age, number of online purchases in the last month, channel preference, and time pressure have no significant effect.

		LYT						
Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Control variables								
Gender	-0.003	-0.005	-0.008	-0.002	-0.027	-0.030	-0.039	-0.037
	(-0.099)	(-0.154)	(-0.242)	(-0.046)	(-0.796)	(-0.925)	(-1.210)	(-1.140)
Age	-0.090**	-0.091**	-0.089**	-0.099***	-0.032	-0.034	-0.021	-0.024
	(-2.385)	(-2.459)	(-2.407)	(-2.671)	(0.846)	(-0.931)	(0.0590)	(-0.667)
Education level	-0.052	-0.042	-0.040	-0.047	-0.084**	-0.072**	-0.063*	-0.065*
	(-1.502)	(-1.228)	(-1.179)	(-1.387)	(-2.435)	(-2.162)	(-1.925)	(-1.991)
Income level	0.146***	0.115***	0.114***	0.127***	0.174***	0.128***	0.123***	0.131***
	(3.816)	(3.005)	(2.972)	(3.302)	(4.572)	(3.403)	(3.340)	(3.533)
Number of online	0.035	0.043	0.043	0.039	-0.038	-0.030	-0.034	-0.037
purchases	(1.035)	(1.298)	(1.282)	(1.155)	(-1.129)	(0.906)	(-1.047)	(-1.141)
Channel Preference	0.056*	0.045	0.035	0.035	0.012	0.005	0.015	0.016
Channel Treference	(1.680)	(1.340)	(0.952)	(0.967)	(0.361)	(0.166)	(0.424)	(0.440)
SA	0.593***	0.531***	0.533***	0.522***	0.605***	0.518***	0.516***	0.509***
571	(17.158)	(14.344)	(14.342)	(14.055)	(17.503)	(14.283)	(14.452)	(14.194)
тр	-0.097***	-0.085***	-0.078**	-0.076**	-0.017	0.001	0.007	0.011
11	(-2.900)	(-2.576)	(-2.269)	(-2.227)	(-0.511)	(0.043)	(0.225)	(0.340)
Independent variables								
DV		0.144***	0.137***	0.151***	0.182***	0.147***	0.151***	0.182***
FV		(3.936)	(3.672)	(4.021)	(5.066)	(4.091)	(4.147)	(5.066)
DS		0.045	0.041	0.054	0.111***	0.087***	0.109***	0.111***
		(1.323)	(1.207)	(1.464)	(3.354)	(2.621)	(3.073)	(3.354)
Moderating variables								
TC			-0.032	-0.010			-0.020	-0.012
			(-0.884)	(-0.270)			(-0.576)	(-0.337)
CN			0.026	0.008			0.154***	0.142***
CN			(0.771)	(0.224)			(4.679)	(4.222)
Moderating effects		_						
DV# TC				-0.089***				-0.031
PV* TC				(-2.631)				(-0.960)
De* CN				0.033				0.058*
DS+ UN				(0.963)				(1.734)
R ²	0.442	0.461	0.462	0.470	0.442	0.482	0.503	0.507
Adjusted R ²	0.434	0.451	0.450	0.456	0.434	0.472	0.492	0.493
F-value	52 350***	45 019***	37 569***	33 122***	52 340***	48 971***	44 183***	38 291***

Table 4. Results of hierarchical regression analysis

Note: *** indicates p < 0.01, ** indicates p < 0.05, * indicates p < 0.1.

Model 2 indicates that vividness of information presentation has a significant positive effect on behavior loyalty ($\beta = 0.144$, p < 0.01). Travel distance perception has no significant effect on behavior loyalty. The regression results supported hypothesis H1a but did not support hypothesis H2a. Models 3 and 4 further added moderating variables and moderating interaction terms and found that haptic perceived demand negatively moderated the effect of vividness of information presentation on behavior loyalty ($\beta = -0.089$, p < 0.01), and price consistency did not significantly moderate the effect of travel distance perception on behavior loyalty, supporting hypothesis H3a but not hypothesis H4a.

Model 6 indicates that vividness of information presentation and travel distance perception have a significant negative effect on attitude loyalty (travel distance perception using the inverse measurement scale, $\beta = 0.182$, p < 0.01; $\beta = 0.111$, p < 0.01), supporting Hypotheses H1b and H2b. Models 7 and 8 further added moderating variables and moderating interaction terms and found that price consistency significantly and positively moderated the effect of travel distance perception on attitude loyalty ($\beta = 0.058$, p < 0.1). Haptic perceived need did not significantly moderate the effect of vividness of information presentation on attitude loyalty, which did not support hypothesis H3b but supported hypothesis H4b.

To further verify the moderating effect mechanism, this paper also dichotomizes the haptic perceived demand, price consistency variables for simple slope test. The test results again prove the moderating effect of hypotheses H3a and H4b as shown in Fig. 2 and 3.



Fig. 2. Moderating effect of haptic perception needs on the vividness of information presentation and customer behavior loyalty



Fig. 3. Moderating effect of price consistency on travel distance perception and customer attitude loyalty

6 Conclusion and insights

6.1 Research findings

Based on the new retail model, this paper constructs a research model affecting customer loyalty from the perspective of online and offline channels; explores the influence of two channel characteristics, vividness of information presentation, and travel distance perception on brand loyalty; and analyzes the moderating effects of customers' haptic perception needs and online and offline price consistency. The vividness of online information presentation was found to have a significant positive effect on customers' behavior and attitude loyalty to the brand, indicating that the holistic presentation effect of product information can indeed strengthen customers' memory and understanding of the brand and then form long-term purchase intention and emotional preference. This finding indicates that with the realization of omnichannel, the influence of travel distance perception on customers' own purchase decision is weakening. This phenomenon is probably due to the fact that customers in the near distance can buy via online or offline channels, and customers in the fact

distance prefer to buy through online channels. Therefore, the distance is no longer a key factor. This finding is in line with Loo et al. (2020) who found complementary views of online and offline channels. The study also found that haptic perception demand has a negative moderating effect on the relationship between vividness of information presentation and behavior loyalty, and price consistency has a positive moderating effect on the relationship between travel distance perception and attitude loyalty, indicating individual differences about the influence of channel characteristics on brand loyalty.

6.2 Theoretical contributions

This paper reveals the influence mechanism of different channel characteristics on brand loyalty. Firstly, the new retail model seamlessly integrates online and offline channels. However, most previous studies have analyzed the influencing factors of brand loyalty in a single channel, ignoring the difference effect of channel characteristics on brand loyalty. This paper bridges this gap, enriching the research on brand loyalty and new retail models. Secondly, based on dual-system decision theory, this paper explores the influence of online information presentation vividness and offline travel distance perception on customers' behavior willingness. it complements the research on the holistic characteristics of information presentation and further reveals the influence mechanism of information presentation effect on customers' behavior decision. Meanwhile, using subjective perception instead of objective measurement to measure travel distance is more consistent with the regular of customers' decision, and expands the measurement of travel distance in retail location research. Finally, this paper gains insight about the mechanisms of different channel characteristics on brand loyalty by dividing it into two dimensions: behavior and attitude loyalties. The findings show that perceived travel distance has no significant effect on behavior loyalty, whereas it has a significant effect on attitude loyalty. The latter may be due to the fact that individuals' behavior of recommending is a dominant endorsement behavior and needs to like the product more and have more credible information. Thus, they are more willing to choose brands with perceived proximity.

6.3 Practice insights and limitation

The findings of the study also have implications for new retailers to break out the "traffic" dilemma. New retail enterprises can divide customers into four groups according to two indicators of haptic perception demand and price consistency sensitivity in omnichannel operation and formulate operation strategies by combining customers' travel distance perception and individual deviation: for two groups of customers with high haptic perception demand, provide travel convenience information for their offline store shopping, among which customers have long travel distance and high price consistency sensitivity. For the two types of customers with low haptic perception needs, we focus on vivid advertisements such as online live events or e-magazines to strengthen customers' brand memory and give travel

coupons to customers with long travel distance and high price consistency sensitivity. The limitation of this paper is that only the apparel industry is selected as an example for model construction and validation. Future research can be conducted for different experience-based FMCG products to further verify the applicability of the findings of this study.

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