The influence of brand loyalty on online purchasing intention of consumers in Tianqiao District Jinan, Shandong, China

Abstract

With the rapid development of digital technology and e-commerce in China, online shopping has become an integral part of urban consumption. Brand loyalty is widely recognized as a key determinant of online purchase intention and long-term customer retention. Although existing studies have examined brand loyalty from various perspectives, most focus on national samples or single loyalty dimensions, with limited attention to district-level consumers and higher-order emotional factors in e-commerce contexts. To address this gap, this study investigates consumers in Tianqiao District, Jinan City, using 400 valid questionnaires and multiple linear regression analysis to examine the effects of five brand loyalty dimensions—brand recognition, brand recall, brand preference, brand insistence, and emotional attachment—on online purchase intention. The results indicate that brand recall and brand preference significantly enhance purchase intention, while brand insistence and emotional attachment remain relatively weak. In addition, demographic factors such as age, gender, and occupation show significant differences across product categories. These findings suggest that strengthening brand memory, personalized services, and targeted communication strategies is essential for fostering higher-order loyalty and improving online conversion rates.

Keywords: Brand loyalty online, Purchase intention,Intention; E-commerce; Consumer Behavior; Tianqiao District

Introduction

The scale of online shopping users in China exceeds 900 million, and the online retail sales reached 7.0991 trillion yuan— an increase of 9.8 % year-on-year (China Internet Network Information Center [CNNIC], 2024), demonstrating a strong growth momentum. The shopping channels are diversified, covering comprehensive e-commerce platforms (such as Taobao and Pinduoduo), short-video platforms, and content platforms (like Xiaohongshu), and new technologies such as virtual reality and digital twins, along with related supportive policies, provide strong support for the market. Live-streaming e-commerce has also become an important part of retail. However, at the same time, online shopping faces issues such as product quality, after-sales service, logistics, security risks, and merchant fraud, which affect the consumer experience and set the background for research on online shopping satisfaction and related topics.

Against this backdrop, brand loyalty is widely recognized as a pivotal determinant of consumer behavior and purchase intention (Sariipek, 2023; Ranjbariyan et al., 2012). Previous studies have shown that increases in brand awareness and brand loyalty are positively related to consumer purchase intentions, as well as to repurchase and positive word-of-mouth behaviors (Foroudi et al., 2018; Porral et al., 2015; Kim & Kim, 2005). However, the specific effects of its five distinct dimensions — including brand awareness, brand recall, brand preference, brand commitment, and emotional attachment — on online purchase intention remain relatively unclear, as the literature primarily focuses on general loyalty measures rather than differentiated multidimensional impacts (Azzari & Pelissari, 2020; Balakrishnan et al., 2014). Furthermore, there is a lack of targeted research examining how demographic characteristics influence these loyalty dimensions among consumers in specific urban districts such as Tianqiao District, Jinan, which motivates the need for an empirical analysis to clarify these relationships and bridge the gap between brand operations and consumer decision-making in e-commerce contexts.

Tianqiao District is a core urban area of Jinan, covering 258.97 km² and achieving a regional GDP of RMB 84.46 billion in 2024, with approximately 3% year-on-year growth and a tertiary industry-dominated structure (English Jinan Government, 2025). Supported by strong transportation infrastructure and modern industrial parks, the district has developed key sectors such as logistics, trade, and e-commerce, reinforcing its role in Jinan's urban economic system (CSPI Ratings, 2025).

Research Objectives

This research aims to examine the influence of brand loyalty on online purchasing intention of Tianqiao District consumers.

Literature Review

-Brand loyalty

Brand loyalty refers to consumers' consistent preference and repeated purchasing behavior toward a brand (Oliver, 1999). Aaker (1991) proposed that brand loyalty develops progressively from brand awareness to emotional attachment and behavioral commitment. Previous studies commonly conceptualize brand loyalty as a multidimensional construct including cognitive, emotional, and behavioral components (Aaker, 1996). In online shopping contexts, brand recall and brand preference are found to significantly influence purchase decisions through prior experience and perceived quality, while higher-order loyalty dimensions such as brand insistence and emotional attachment are often weakened by price competition and limited personalization (Balakrishnan et al., 2014; Azzari & Pelissari, 2020).

-Purchasing intention

Purchase intention reflects consumers' likelihood of buying a product or service and is a strong predictor of actual behavior (Fishbein & Ajzen, 1975). In e-commerce environments, purchase intention is shaped by trust, satisfaction, and brand-related perceptions (Kim & Kim, 2005). Empirical evidence suggests that brand loyalty positively affects purchase intention by reducing perceived risk and strengthening consumer confidence (Ranjbariyan et al., 2012). However, existing research mainly focuses on overall loyalty, with limited attention to the differentiated effects of loyalty dimensions, especially at the district level in China. Therefore, further empirical studies are needed to clarify how various brand loyalty dimensions influence online purchase intention.

Related research

Previous studies confirm that brand loyalty strongly influences long-term purchasing behavior and brand preference (Aaker, 1991; Chaudhuri & Holbrook, 2001; Foroudi et al., 2018; Oliver, 1999). Brand loyalty is commonly viewed as a multidimensional construct involving cognitive, emotional, and behavioral components, shaped by factors such as product quality, brand image, and emotional connection, especially in digital environments. Consumer decision-making has also evolved from rational models toward emotional and socially influenced processes, with habit, attachment, and social interaction playing key roles. In China's rapidly expanding e-commerce context, mobile commerce, live streaming, online reviews, and personalized marketing further reshape purchasing behavior, indicating that brand loyalty and digital engagement jointly drive contemporary consumer decisions.
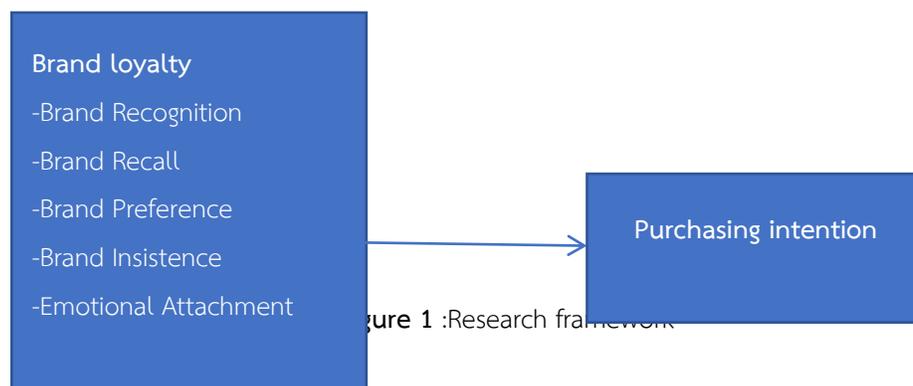
Research Framework

Brand loyalty
-Brand Recognition
-Brand Recall
-Brand Preference
-Brand Insistence
-Emotional Attachment

Purchasing intention

Figure 1 :Research framework

Hypothesis

1."Brand Recognition" have a positive impact on Purchasing intention

2 ."Brand Recall" have a positive impact on Purchasing intention

3 "Brand Preference" have a positive impact on Purchasing intention

4. "Brand Insistence" have a positive impact on Purchasing intention

5."Emotional Attachment" have a positive impact on Purchasing intention

Esearch methodology

Primary data were collected through an online questionnaire distributed via WeChat using convenience sampling, and only respondents with online shopping experience were included to ensure data relevance. Measurement items for brand loyalty were adapted from established scales proposed by Aaker (1991), Oliver (1999), and Chaudhuri and Holbrook (2001), covering brand recognition, brand recall, brand preference, brand insistence, and emotional attachment. Purchase intention items were developed based on prior consumer behavior studies (Fishbein & Ajzen, 1975; Kim & Kim, 2005) and modified to fit the Chinese e-commerce context. The questionnaire comprised screening questions, demographic information, brand loyalty dimensions, and purchase intention, all measured using a five-point Likert scale.

Descriptive and inferential statistical methods were applied using SPSS. Descriptive statistics summarized respondents' demographic characteristics and online shopping behaviors, while means and standard deviations assessed key variables. Multiple Regression Analysis (MRA) was employed to examine the effects of brand loyalty dimensions on purchase intention, providing empirical evidence for relationships among the study variables.

Result and Conclusions

The sample consists of 400 respondents with a balanced gender distribution. Most participants are aged 19–25 (64.25%) and are students (63.2%), with the majority holding a bachelor's degree or above. Monthly income mainly falls between 1,000 and 4,000 RMB, while food and cosmetics are the most frequently purchased online products. Over 60% of respondents shop online more than five times per month, indicating high engagement with e-commerce platforms. In addition, nearly half of the participants spend less than 200 yuan per month on online shopping, suggesting generally moderate consumption levels.

Table 1 Results of Linear Regression Analysis of Brand on Purchase intention

Model	Purchasing intention						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Diagnostics	
	B	Std. Error	Beta			VIF	Tolerance
(Constant)	1.027	0.123		8.363	.000***		
Brand Recognition	0.081	0.037	0.116	2.189	.029*	2.099	0.476
Brand Recall	0.130	0.043	0.168	3.014	.003**	2.326	0.430
Brand Preference	0.119	0.044	0.144	2.682	.008**	2.158	0.463
Brand Insistence	0.128	0.043	0.145	2.979	.003**	1.777	0.563
Emotional Attachment	0.241	0.039	0.282	6.128	.000***	1.586	0.631
R	R^2	Adjust R^2	SE(est.)	F	Sig.		
0.687	0.473	0.466	0.549	70.625	0.000 ***		

*p-value <.05 **p-value<.01 ***p-value <.001

Multiple linear regression results show that Brand Recognition, Brand Recall, Brand Preference, Brand Insistence, and Emotional Attachment all have significant positive effects on purchase intention (p < 0.001). The model explains 47.3% of the variance in purchase intention (R^2 = 0.473), and the overall regression is statistically significant (F = 70.625, p < 0.001). Among all predictors, Emotional Attachment demonstrates the strongest influence, followed by Brand Recall, Brand Insistence, Brand Preference, and Brand Recognition. These findings confirm that emotional and cognitive aspects of brand loyalty jointly play important roles in shaping consumers' online purchasing intentions.

Table 2 Summary of hypothesis testing

Hypothesis	Results
H1.1 "Brand Recognition" have a positive impact on Purchasing intention	support
H1.2 "Brand Recall" have a positive impact on Purchasing intention	support
H1.3 "Brand Preference" have a positive impact on Purchasing intention	support
H1.4 "Brand Insistence" have a positive impact on Purchasing intention	support
H1.5 "Emotional Attachment" have a positive impact on Purchasing intention	support

This study validates Aaker's brand loyalty framework in Tianqiao District, revealing that brand recall and brand preference are the strongest predictors of online purchase intention. However, brand insistence and emotional attachment remain weak, suggesting that consumers are easily swayed by price competition and lack deep emotional bonds with platforms. Overall, brand loyalty is at a moderate level, highlighting the need for e-commerce platforms to enhance emotional branding, personalization, and community engagement to promote higher-order loyalty.

Discussion and conclusion

This study examines consumers in Tianqiao District, Jinan, to explore the impact of brand loyalty on online purchase intention in a digital commerce context. Based on Aaker's (1991) brand loyalty framework and 408 valid questionnaires, the results confirm a significant positive relationship between brand loyalty and purchase intention, with brand recall and brand preference showing the strongest effects, while brand commitment and emotional attachment remain relatively weak. These findings indicate that although consumers recognize and prefer certain platforms, deep emotional bonds and long-term commitment are still limited. The study contributes to brand loyalty theory in e-commerce settings and suggests that platforms should enhance emotional engagement and personalized interaction to strengthen customer retention.

Recomendation

To enhance brand recognition, platforms should maintain a consistent visual identity across all touchpoints, including logos, colors, typography, and brand voice. Increasing brand exposure through digital channels such as social media, advertising, and app notifications can further strengthen consumer recall. As noted by Keller (2003), repeated brand exposure improves memory encoding and facilitates brand retrieval during purchase decisions.

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