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Exploring the mechanism of blind box experience marketing driving consumer behavior from the perspective of biological behavioral patterns: An analysis of the mediating effect of customer surprise

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Abstract: In the current blind box consumption market, experiential marketing, as an innovative marketing strategy, is gradually becoming an important tool for businesses to attract consumers and enhance brand competitiveness. This study draws on the stimulus-body-response (SOR) theory to build a research framework of “experience marketing - customer surprise - purchase intention”, and compares the blind box experience marketing to the environmental stimulus factors faced by biology to explore its impact on consumers’ purchase intention, focusing on the intermediary role of customer surprise in this process. Studies have shown that through five dimensions of sensory, emotional, cognitive, behavioral and relational, blind-box experience marketing positively influences customer surprise just as environmental stimuli affect biological decision-making, thus effectively enhancing consumers’ purchase intention. This study not only provides a new perspective for the application of decision behavior theory in biology to social and economic phenomena, but also provides a theoretical basis for optimizing blind box marketing strategies based on biological principles, helping enterprises to innovate marketing methods, enhance market competitiveness, and promote the in-depth development of cross-field research on biology and marketing.

Keywords: experiential marketing; customer delight; purchase intention; blind box economy; analogies of biological decision-making behavior

1. Introduction

In recent years, the continuous development and upgrading of the consumer market have accelerated the rise of blind boxes as an emerging consumption model, driving the sustained growth of its market size (see **Figure 1**). According to data from 2023, the scale of China’s trendy toy market has reached 61.4 billion RMB, with the share of blind box products steadily increasing from 15% in 2019 to 37% in 2024, making it the dominant product in the trendy toy market. The “2024–2029 Blind Box Industry Status and Future Development Trend Analysis Report” released by the China Research and Consulting Industry Research Institute points out that by 2024, the market size of China’s blind box industry will reach 30 billion RMB. Blind boxes, as a packaging format where consumers cannot know the specific product contents in advance, have garnered significant market attention due to their unique sense of mystery and surprise experience. It not only represents an innovative product sales strategy but also a highly experiential consumption model, attracting the active participation of many young consumers. In this process, customer delight plays a crucial role, as it reflects consumers’ evaluations and perceptions of blind box products and related experiences, directly influencing their final purchasing decisions and behaviors. Therefore, investigating how blind box experiential marketing can promote

purchasing behavior through customer delight is of great significance for both theoretical research and practical application.

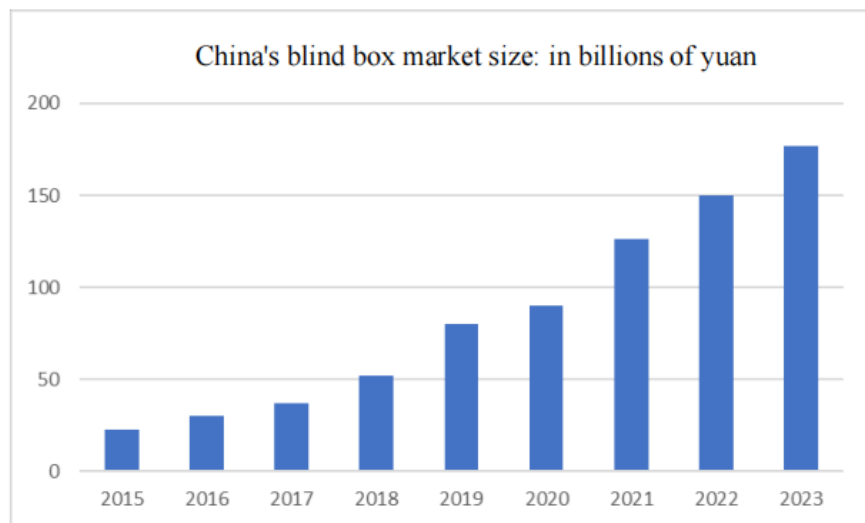


Figure 1. Market size of China's blind box industry.

Current academic research on the blind box consumption phenomenon mainly focuses on market dynamics, consumer behavior patterns, and psychological driving factors. However, there is still relatively insufficient exploration of the relationship between blind box experiential marketing and consumer purchase intention, especially in terms of explaining this relationship through the mediating variable of customer delight. Existing studies are primarily concentrated on traditional products, and in-depth research on blind boxes, as a unique product form, is lacking. Therefore, investigating how blind box experiential marketing affects customer delight and, in turn, influences consumer purchase intention will help expand and enrich academic research in the blind box consumption field, while providing new perspectives for consumer behavior and experiential marketing theory. Additionally, by offering optimization strategies for experiential marketing to companies involved in the production and sales of blind box products, it can promote innovation in blind box design and marketing methods, enhance product innovation capabilities and brand building, and ultimately increase consumer purchase intention and brand loyalty, driving the sustainable and healthy development of the blind box industry.

2. Theoretical foundation and hypotheses

2.1. Experiential marketing

Experiential marketing is a marketing strategy that focuses on creating, delivering, and communicating consumption experiences with unique value to attract and retain consumers, thereby achieving sales goals and enhancing brand loyalty. Dr. Schmitt's research provides a detailed classification of customer experience, which includes five dimensions: sensory experience, emotional experience, cognitive experience, behavioral experience, and relational experience. Various studies have confirmed that experiential marketing plays a crucial role in significantly influencing

consumer purchase intention. Research by Chen [1] revealed through cluster analysis that consumers with purchasing experience and positive experiences are more likely to make repeat purchases. Empirical research by Hua and Wang [2] further validated the positive impact of luxury experiential marketing on consumer motivation. Xu et al. [3] pointed out that consumers' perceptions of brand products, along with the emotions and feelings generated during the entire process of product contact, selection, use, and post-use, will prompt them to take purchasing actions. Moreover, studies have found a significant correlation between users' emotional experiences, brand experiences, transaction experiences, and customer loyalty. Tang [4] argued that virtual brand communities, by building rich experiential environments, promote interaction and collaboration between customers and brands, which has a significant impact on customer brand recognition. Shao and Zhao [5] proposed that the experiential marketing model helps enhance consumer engagement and perception, allowing consumers to fully experience the novelty, fashion, and pleasure of the consumption process, thus stimulating their purchasing and word-of-mouth behaviors. By continuously improving experiential marketing strategies, brands can better meet consumer needs, increasing their brand loyalty and word-of-mouth effects.

Based on the integration of previous literature, this study proposes five key dimensions of blind box experiential marketing, including sensory, emotional, cognitive, behavioral, and relational experiences. In terms of sensory experience, blind box products not only successfully attract consumers' attention through exquisite packaging design and high-quality material texture, but also consider the touch of the packaging and the sound effect of the moment of opening the box. These details can enhance consumers' overall sensory experience, make them feel a unique sense of unboxing ritual, and thus increase the fun and anticipation of purchase. In terms of emotional experience, the surprise effect brought by the uncertainty of product content, the fun of collecting series products, and the nostalgia evoked by cultural themes can help to establish emotional connections, thereby enhancing consumers' desire to buy and brand loyalty. At the same time, research should also explore the negative emotions that consumers have when they fail to choose their favorite styles and their impact on subsequent purchases. This negative emotion may affect consumers' purchasing decisions, but it can also be alleviated by compensation mechanisms provided by brands (such as return and exchange policies or additional gifts), thereby maintaining or even enhancing brand loyalty. At the cognitive experience level, exploring creative combinations of hidden styles and toys encourages consumers to interact deeply and promotes a deep understanding of the brand. In addition, research should focus on consumers' cognition and decision-making influence on the scarcity and probability of hidden styles in blind boxes. Consumers' perception of these factors will directly affect their purchasing decisions, so brands need to provide transparent information to help consumers better understand the scarcity and probability of obtaining products, so as to make rational purchasing choices. In terms of behavioral experience, diversified purchasing methods, play and decoration behaviors, and social sharing activities enhance consumers' sense of participation and word-of-mouth effect. Brands can further enrich consumers' behavioral experience and enhance their sense of participation and satisfaction by launching online and offline linkage activities and holding fan meetings. In terms of relationship experience, limited releases, brand

cooperation, and the formation of fan communities further strengthen the connection between consumers, brands, and other consumers. By building a strong fan community, brands can enhance consumers' sense of belonging and identity and promote continuous interaction and support. In addition, brands can also consolidate their relationship with consumers and enhance brand loyalty by regularly releasing new product previews and conducting member-exclusive activities.

2.2. Customer delight

Customer delight refers to the emotional state of intense joy and satisfaction that consumers experience when their product or service encounter exceeds their expectations. Unlike satisfaction, which is a neutral response when a product or service meets expectations, customer delight is an unexpected pleasure that consumers receive, offering more depth and breadth. Customer delight is seen as a strong positive emotion that not only surpasses consumer expectations but also brings them unexpected surprises and happiness Li [6]. Zhang [7] found that customer delight is an important factor influencing consumer loyalty, and continuously creating customer delight helps improve consumer loyalty. Chuang [8] discovered that delight is a powerful positive emotion that effectively encourages consumers to feel loyalty and generate positive word-of-mouth. Liu and Li [9] found that many entrepreneurs and scholars argue that the key to success lies in moving consumers from satisfaction to delight, rather than simply aiming for consumer satisfaction. In blind box experiential marketing, customer delight plays a crucial mediating role, influencing consumer purchase intention. Based on the above analysis, this study proposes that customer delight acts as a mediator between blind box experiential marketing and consumer purchase intention.

2.3. SOR theory (stimulus-organism-response theory)

The Stimulus-Organism-Response (SOR) theory, proposed by Xu and Li [10], aims to explain how environmental stimuli affect consumers' internal states and ultimately influence their behavioral responses. In this theoretical framework, external stimuli (S) are viewed as the initial factors that trigger consumer responses, including various marketing activities, product features, and environmental factors. The organism (O) represents the consumer's internal psychological and physiological states, which encompass cognitive, emotional, and motivational factors. When consumers receive external stimuli, they process this information through internal psychological mechanisms and generate final behavioral responses (R). S (stimulus) includes visual stimulation: the unique packaging appearance of blind boxes, store display layout, series theme posters, etc. For example, exquisite packaging design and attractive store decoration can immediately grab consumers' attention and stimulate their interest. Auditory and tactile stimulation: sensory experience such as sound effects when opening the box and the touch of special materials of the product. These details enhance consumers' sense of unboxing ritual and make them feel a unique shopping experience. Limited edition and hidden models: The stimulation brought by these marketing activities is particularly significant. Limited editions and hidden models not only increase the scarcity of products, but also give consumers the

opportunity to collect and show off, further stimulating the desire to buy. O (organism) includes psychological state: The psychological state of consumers is an important factor affecting their behavior. In the blind box experience, the following psychological states are mainly involved: Curiosity about the unknown: The unique selling point of blind boxes lies in their uncertainty. This unknown element can greatly stimulate consumers' curiosity and prompt them to buy. Desire to collect: Many consumers have a strong desire to collect blind boxes of a specific series or theme, especially when some styles are rare. This desire is even stronger. Social sharing needs: Consumers often want to share their blind box unboxing process and the surprises they get through social media to gain recognition and attention from others. R (reaction) includes purchase decisions: After consumers are stimulated by the above and have a corresponding psychological state, the most direct reaction is to make a purchase decision. Whether it is the first purchase or repeated purchase, it is a positive response of consumers to the blind box experience. Repeated purchase behavior: Due to the uncertainty and collection characteristics of blind boxes, many consumers will buy repeatedly to increase the probability of obtaining their favorite styles. Word-of-mouth communication: Consumers share their unboxing videos, pictures or comments on social media to form a good word-of-mouth communication effect and further expand brand influence. Through this detailed correspondence, we can more clearly understand how blind box experience marketing stimulates consumers' senses and psychology, and ultimately triggers their purchasing behavior and word-of-mouth communication. This framework not only makes the SOR theory more operational in blind box research, but also provides a clear direction for companies to optimize their marketing strategies. For example, companies can further enhance consumers' willingness to buy and brand loyalty by enhancing packaging design, enriching the unboxing experience, and launching limited editions and hidden models. The SOR theory model has been widely applied in research on consumer purchase intention.

According to the SOR theory, blind box marketing strategies, as a unique external stimulus, can evoke consumers' emotions and perceptions, thereby influencing their purchase decisions. In previous studies, Zhang and Zhang [11] applied the SOR model to explore how external environmental factors such as source credibility, information quality, and service quality in e-commerce live streaming affect consumers' purchasing behavior. Mo and Zhang [12] combined the SOR theory to verify the positive impact of hedonic value, utilitarian value, and sales behavior on consumers' purchase intentions toward intangible cultural heritage products. Zhou [13] used factors like brand awareness, responsibility, affinity, and interactivity as external stimuli (S), perceived risk and trust as the organism (O), and consumer purchase intention as the response (R) to study the relationship mechanisms between different characteristics of influencers, perceived risk, and perceived trust, as well as their impact on consumers' purchase intentions. Zhang [14] applied the SOR model to investigate how the visual appeal and interactive features of social media platforms serve as external stimuli (S), influencing users' emotional engagement and perceived value (O), which in turn affect their willingness to share content and make purchases (R). Their findings suggest that visually appealing content and interactive elements significantly enhance user engagement and drive consumer behavior. Ran [15] utilized the SOR framework to examine the role of personalized recommendations and user

reviews as external stimuli (S) in e-commerce platforms. They found that these factors significantly impact consumers' perceived usefulness and trust (O), ultimately leading to increased purchase intentions (R). Their study highlights the importance of personalized marketing and social proof in shaping consumer decisions.

This study introduces blind box experiential marketing as an external stimulus within the SOR framework, with customer delight as a mediating variable. It investigates how blind box experiential marketing stimulates changes in consumers' internal cognition and has a positive influence on their purchase intention, serving as the response variable.

Based on the SOR theory, this paper proposes the following hypotheses and constructs the model:

H1: Blind box experiential marketing has a positive effect on consumer purchase intention.

H2: Blind box experiential marketing has a positive effect on customer delight.

H3: Customer delight has a positive effect on purchase intention.

H4: Customer delight mediates the relationship between blind box experiential marketing and consumer purchase intention.

3. Research design

3.1. Model specification

Our research theoretical framework is based on the SOR model, establishing the "Experiential Marketing - Customer Delight - Purchase Intention" research model. The aim is to explore the impact of blind box experiential marketing on consumer purchase intention. The specific model is illustrated in **Figure 2**.

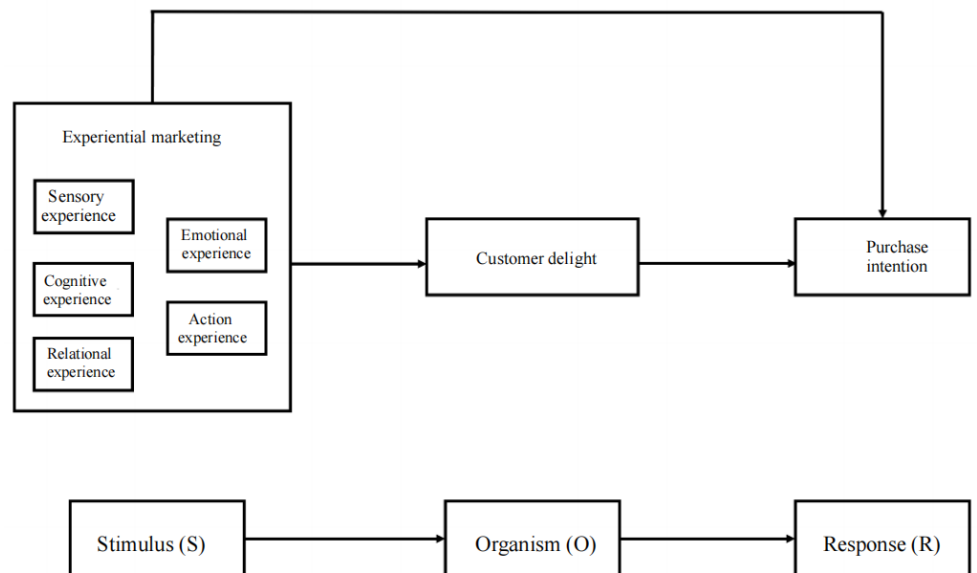


Figure 2. Influencing factors of blind box experiential marketing on consumer purchase intention.

3.2. Data and variables

Table 1. Measurement items.

	Variables	Measurement Items	Indicator Sources
Experiential Marketing	Sensory Experience	The music selection in the blind box store attracts me.	Hao [16]
		The lighting arrangement and brightness conditions in the blind box store make me feel comfortable.	
		The store’s environment and display arrangements make me feel comfortable.	
		The color combination of the blind box products appeals to me.	
		The scent in the blind box store is pleasant.	
		The theme design of the blind box products makes me feel delighted.	
	Emotional Experience	The store’s decoration style is very appealing to me.	Chen and Dubinsky [17]
		The uncertainty of purchasing blind boxes excites me.	
	Cognitive Experience	I look forward to the sense of surprise that comes with opening a blind box.	Hao [16]
		Purchasing blind boxes helps me release real-world stress and emotions.	
The posters or slogans in the blind box store trigger my thoughts.			
Relational Experience	The consumption process of blind box products stimulates my imagination and creativity.	Chen and Dubinsky [17]	
	Blind box products inspire my cognitive thinking.		
	Blind box products help me learn more product-related knowledge.		
Behavioral Experience	I can participate in blind box-related topics and interactions on social platforms.	Hao [16]	
	I can discuss blind box topics with like-minded people.		
	Blind boxes allow me to make more friends with similar interests.		
Customer Delight	Participating in activities held inside the blind box store makes me happy.	Yang [18]	
	The sales staff in the blind box store interact with me.		
	The fun activities held inside the blind box store appeal to me.		
	The blind box store encourages feedback and suggestions.		
Consumer Purchase Intention	I believe the unknown aspect of the blind box opening process excites me.	Liu [19]	
	The process of opening a blind box brings me a sense of surprise.		
	Opening a blind box brings me continuous joy and excitement.		
		The items in the blind box give me a strong sense of anticipation.	
		Overall, I think purchasing blind boxes is worth the value.	
		I am willing to purchase blind boxes.	
		I am happy to recommend blind boxes to others.	
		I look forward to the opportunity to purchase blind boxes.	

This study employs a questionnaire survey to collect the necessary data. The questionnaire is designed based on the research findings of domestic and international scholars in the field of blind box consumption, combined with the study’s objectives and content. The survey consists of two main sections. The first section aims to gather basic personal information from blind box consumers, including age, gender, education level, and average monthly spending. The second section includes 26 observational variables (see **Table 1**). The questions use a Likert five-point scale for

evaluation, with scores ranging from 1 to 5, representing the respondents' attitudes from "strongly disagree" to "strongly agree." Respondents are asked to complete the questionnaire based on their own circumstances. Subsequently, statistical analysis of the respondents' scores was conducted using SPSS 27.0.

This study mainly used an online questionnaire survey method to collect data. A questionnaire link regarding consumer purchase intention for blind box products was designed and generated using the "Wenjuanxing" software. The link was then distributed to a group of university students through social media platforms, with 650 questionnaires sent out and 612 valid responses received. After preliminary screening and data analysis, a total of 576 valid questionnaires were obtained, resulting in an effective response rate of 94.1%, meeting the requirements for statistical analysis.

Table 2 presents the descriptive statistical analysis results of the relevant variables. From the sample structure analysis, it can be observed that 48.4% of the respondents were male, and 51.6% were female. The majority of respondents had an education level of undergraduate or above, with 54.7% being undergraduates and 45.3% being postgraduates. In addition, all respondents reported having heard of or purchased blind box products from different brands, which indicates a certain level of general awareness and acceptance of blind box products among the surveyed group.

Table 2. Descriptive statistical analysis.

Variables	Category	Frequency	Percentage/%
Gender	Male	279	48.4
	Female	297	51.6
Age	18	48	8.3
	19	117	20.3
	20	113	19.6
	21	98	17
	22	66	11.5
	23	30	5.2
	24	37	6.4
	25	29	5
Educational Level	Undergraduate	311	54.7
	Graduate and above	265	45.3
Grade	Freshman	102	17.7
	Sophomore	128	22.2
	Junior	101	17.5
	Senior	88	15.3
	Graduate and above	157	27.3
Monthly Expenditure	1000 yuan and below	79	13.7
	1001-2000 yuan	174	30.2
	2000 yuan and above	323	56.1

4. Empirical results and analysis

4.1. Reliability and validity analysis

Reliability analysis is the core objective of assessing the reliability of a questionnaire, ensuring the stability and consistency of the results. This study conducted a thorough reliability analysis using SPSS 27.0, with the results shown in **Table 3**. A series of key statistical indicators revealed the internal consistency of the variables in the scale. The variables of interest in this study include sensory experience, emotional experience, cognitive experience, associative experience, behavioral experience, customer delight, and purchase intention, with reliability assessed by calculating their Cronbach's Alpha coefficients. The results show that the Cronbach's Alpha values for all variables exceeded the threshold of 0.7, demonstrating that the scale has high reliability and can produce stable and consistent results, ensuring the validity and reliability of the research findings.

Table 3. Reliability analysis of each scale.

Variable	Item	CI TC	Cronbach's Alpha After Item Deletion	Alpha Coefficient
Sensory Experience	Sensory Experience Survey of Your Blind Box Purchase. The music selection in the blind box store attracts me.	0.588	0.944	0.831
	The placement and lighting conditions of the store make me feel comfortable.	0.656	0.943	
	The store's environment and decor make me feel at ease.	0.65	0.943	
	The color scheme of the blind box products is appealing to me.	0.64	0.944	
Emotional experience	The thematic design of the blind box products brings me joy.	0.618	0.944	0.746
	I am fond of the store's interior design style.	0.626	0.944	
	Emotional Experience Survey of Your Blind Box Purchase	0.642	0.944	
	The uncertainty of purchasing blind boxes excites me.	0.684	0.943	
Cognitive experience	I look forward to the surprise of opening a blind box.	0.665	0.943	0.779
	Buying blind boxes helps me release real-life stress and emotions.	0.632	0.944	
	Cognitive Experience Survey of Your Blind Box Purchase	0.654	0.943	
	Posters or slogans in the blind box store provoke my thoughts.	0.675	0.943	
	Blind box products can help me learn more product-related knowledge.	0.638	0.944	

Table 3. (Continued).

Variable	Item	CITC	Cronbach's Alpha After Item Deletion	Alpha Coefficient
Relational experience	Relational Experience Survey of Your Blind Box Purchase:	0.645	0.943	0.716
	I can participate in blind box discussions and share on social platforms.	0.659	0.943	
	I can discuss blind box topics with like-minded friends.	0.638	0.944	
Action experience	Blind boxes help me find more friends who share similar interests.	0.628	0.944	0.770
	Action Experience Survey of Your Blind Box Purchase:	0.636	0.944	
	Participating in in-store activities at blind box shops makes me happy.	0.636	0.944	
	Sales staff at the blind box store interact with me.	0.625	0.944	
Customer delight	I enjoy the fun activities held in the blind box store.	0.494	0.945	0.829
	The blind box store encourages feedback and opinions. Survey on Customer Delight:	0.514	0.945	
Purchase Intention	I think the uncertainty of opening blind boxes excites me.	0.515	0.945	0.774
	The process of opening a blind box brings me a sense of surprise.	0.532	0.945	
	Opening a blind box provides lasting joy and excitement.	0.501	0.945	
	The items revealed in the blind box give me a strong sense of anticipation.	0.536	0.945	
	Overall, I believe buying blind boxes offers great value for money.	0.482	0.945	
	Survey on Blind Box Consumers' Purchase Intentions:	0.497	0.945	

After confirming the high reliability of the questionnaire, in order to further verify the validity of the questionnaire, this study then conducted an exploratory factor analysis (EFA). This step aims to test whether the questionnaire structure is reasonable and ensure that each dimension can accurately reflect its expected content. This study conducted an exploratory factor analysis using SPSS 27.0 to verify the validity of the questionnaire. The analysis results are detailed in **Table 4**. The Kaiser-Meyer-Olkin (KMO) test yielded a coefficient of 0.791, which falls within the range of 0 to 1. The closer the value is to 1, the higher the structural validity of the questionnaire. The significance level of Bartlett's test of sphericity was extremely low, close to 0, confirming that the questionnaire has good structural validity and meets the prerequisites for conducting factor analysis. These data results provide significant support for the study, further enhancing the reliability and validity of the questionnaire in empirical research.

Table 4. KMO and bartlett's test.

KMO Measure of Sampling Adequacy	0.791
Approximate Chi-Square	7502.758
Bartlett's Test of Sphericity Degrees of Freedom	378
Significance	0

Table 5. Total variance explained.

Component	Initial Eigenvalue		Extracted Load Sum of Squares			Rotated Load Sum of Squares			
	Total	Variance Percentage	Cumulative Percentage%	Total	Variance Percentage	Cumulative Percentage%	Total	Variance Percentage	Cumulative Percentage%
1	11.545	41.231	41.231	11.545	41.231	41.231	3.323	11.867	11.867
2	2.074	7.407	48.638	2.074	7.407	48.638	3.263	11.653	23.52
3	1.211	4.323	52.961	1.211	4.323	52.961	3.243	11.582	35.102
4	0.775	2.766	55.727	0.775	2.766	55.727	2.464	8.801	43.902
5	0.727	2.597	58.325	0.727	2.597	58.325	2.316	8.27	52.172
6	0.696	2.486	60.81	0.696	2.486	60.81	1.726	6.166	58.338
7	0.655	2.338	63.148	0.655	2.338	63.148	1.347	4.81	63.148
8	0.631	2.254	65.402						
9	0.621	2.216	67.619						
10	0.61	2.178	69.797						
11	0.592	2.114	71.911						
12	0.58	2.07	73.981						
13	0.566	2.023	76.004						
14	0.55	1.963	77.967						
15	0.539	1.926	79.893						
16	0.522	1.866	81.759						
17	0.516	1.843	83.602						
18	0.489	1.746	85.348						
19	0.482	1.721	87.069						
20	0.465	1.66	88.73						
21	0.451	1.611	90.34						
22	0.437	1.561	91.902						
23	0.423	1.512	93.414						
24	0.402	1.434	94.848						
25	0.382	1.364	96.212						
26	0.376	1.344	97.556						
27	0.355	1.267	98.823						
28	0.33	1.177	100						

In the in-depth analysis, this study employed principal component analysis (PCA) for factor extraction, with the detailed analysis results presented in **Table 5**. Based on the data in the table, a total of 7 principal components were identified, which explained 11.867%, 11.653%, 11.582%, 8.801%, 8.27%, 6.166%, and 4.81% of the variance, respectively. The cumulative explained variance exceeds 50%, indicating that the 7

extracted principal components effectively account for the variation in the original variables and, to a certain extent, represent the key information of the original dataset, thereby validating their strong representativeness.

Based on the above reliable scale and effective structure, we then explore the relationship between the variables. To this end, this study further conducted a correlation analysis to test whether there is a linear relationship between the variables. Correlation analysis not only helps to understand the internal connection between the variables, but also provides a basis for subsequent regression analysis to ensure the rationality of model construction.

4.2. Correlation analysis

After confirming the reliability and construct validity of the scale, this study further conducted correlation analysis to explore the linear relationship between the variables. According to the results shown in **Table 6**, there is a significant positive correlation between the independent and dependent variables, meaning the correlations between various experience dimensions are very clear. For example, the correlation coefficient between sensory experience and emotional experience is 0.766, with cognitive experience it is 0.790, with associative experience it is 0.774, and with behavioral experience it is 0.785. The correlation coefficient between emotional experience and cognitive experience is as high as 0.750. Most of the correlation coefficients between the experience dimensions are around 0.7 and all reach a statistically significant level. This indicates a strong internal relationship between the various experience dimensions.

Table 6. Correlation analysis matrix.

Variables	Sensory Experience	Emotional Experience	Cognitive Experience	Associative Experience	Behavioral Experience	Customer Delight	Purchase Intention
Sensory Experience	1						
Emotional Experience	0.766**	1					
Cognitive Experience	0.790**	0.750**	1				
Associative Experience	0.774**	0.716**	0.769**	1			
Behavioral Experience	0.785**	0.752**	0.753**	0.747**	1		
Customer Delight	0.507**	0.500**	0.499**	0.483**	0.473**	1	
Purchase Intention	0.474**	0.462**	0.495**	0.454**	0.460**	0.512**	1

Further analysis shows that the correlation coefficients between the different experience dimensions and customer delight range from 0.467 to 0.504, while the correlation coefficients with purchase intention range from 0.473 to 0.507. These results suggest that the various experience dimensions have a positive impact on both customer delight and purchase intention, though the influence is somewhat weaker compared to the internal correlations between the experience dimensions. Additionally,

the correlation coefficient between customer delight and purchase intention is 0.512, indicating that customer delight has a certain degree of positive influence on purchase intention.

From the perspective of correlation coefficient, the correlation coefficient between sensory experience and emotional experience is 0.766, which is at a high level, indicating that there is a close internal connection between the two, and they may play an important role in influencing consumer purchasing behavior. For example, exquisite packaging design and a comfortable shopping environment (sensory experience) can enhance consumers' sense of pleasure and excitement (emotional experience), thereby enhancing the overall shopping experience. In contrast, the correlation coefficient between sensory experience and purchase intention is 0.474, which is relatively weak, indicating that its direct impact on purchase intention is small, but it is still not negligible, and may indirectly affect purchase intention by affecting other variables. For example, although exquisite packaging design itself may not directly lead to purchase behavior, it can enhance consumers' emotional experience and thus increase purchase intention. The correlation coefficient between emotional experience and cognitive experience is 0.750, which is also at a high level, indicating that when consumers experience the surprise and pleasure brought by blind boxes, they often stimulate their thinking and cognitive interest. This mutually reinforcing relationship helps consumers understand brands and products more deeply, thereby increasing the possibility of purchase. In addition, the correlation coefficients between different experience dimensions and customer surprise ranged from 0.467 to 0.504. These moderately strong correlations indicate that each experience dimension can trigger a sense of surprise in customers to varying degrees. In particular, the correlation coefficient between emotional experience and customer surprise was 0.500, indicating that the sense of surprise brought about by uncertainty is largely driven by positive emotional experience. Moreover, the correlation coefficient between customer surprise and purchase intention was 0.512, indicating that customer surprise has a certain positive effect on purchase intention. This means that when consumers feel unexpected surprises during the shopping process, they are more likely to convert into actual purchasing behavior. This finding emphasizes the importance of creating surprises in marketing strategies.

Through correlation analysis, we found that there is a significant correlation between the experience dimensions and between them and customer surprise and purchase intention, which laid a solid foundation for further regression analysis. Next, we will use regression analysis to explore the causal relationship between these variables and their influence.

4.3. Empirical analysis

The correlation analysis revealed a clear positive relationship between experiential marketing, customer delight, and purchase intention. Based on this finding, the study further conducted regression analysis to explore the extent of the association between experiential marketing, customer delight, and purchase intention. Experiential marketing was taken as the independent variable and purchase intention as the dependent variable, with SPSS 27.0 software used for the analysis. The results

in **Table 7** show that experiential marketing has a significant positive effect on blind box purchase intention, with the regression coefficient expressed by a Beta value greater than 0. The standardized regression coefficient is 0.522, and the relationship with the dependent variable is statistically significant, with a *P*-value less than 0.000. This result further validates Hypothesis H1, indicating that experiential marketing has a positive impact on blind box purchase intention.

Table 7. Regression analysis of the impact of experiential marketing on blind box purchase intention.

	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Significance
	<i>B</i>	Standard Error	Beta		
(Constant)	1.24	0.157		7.896	0
Experiential Marketing	0.642	0.044	0.522	14.655	0

By performing regression analysis using SPSS 27.0, the study explored the impact of experiential marketing on customer delight. According to the data in **Table 8**, experiential marketing has a significant impact on customer delight, with a regression coefficient of 0.548 and a *p*-value less than 0.000. Additionally, the Beta value is greater than 0, indicating that experiential marketing has a positive effect on customer delight. This confirms Hypothesis H2, suggesting that experiential marketing has a positive impact on customer delight.

Table 8. Regression analysis of the impact of experiential marketing on customer delight.

	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Significance
	<i>B</i>	Standard Error	Beta		
(Constant)	1.236	0.145		8.518	0
Experiential Marketing	0.634	0.04	0.548	15.679	0

The regression analysis conducted using SPSS 27.0 (**Table 9**) shows that the regression coefficient of customer delight on blind box purchase intention is significant, with a standardized regression coefficient Beta value of 0.512 and a *p*-value less than 0.000. This indicates that customer delight has a positive impact on purchase intention. This result confirms the research hypothesis H3, suggesting that customer delight has a positive effect on blind box purchase intention.

Table 9. Regression analysis of the impact of customer delight on blind box purchase intention.

	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Significance
	<i>B</i>	Standard Error	Beta		
(Constant)	1.613	0.136		11.896	0
Customer Delight	0.543	0.038	0.512	14.269	0

In the analysis of the mediating variable, customer delight, this study first examines whether the causal relationship between the independent variable, experiential marketing, and the dependent variable, purchase intention, is significant. Next, the study investigates the effect of the independent variable, experiential marketing, on the mediating variable, customer delight, and tests the causal

relationship between the mediating variable, customer delight, and the dependent variable, purchase intention. Finally, it comprehensively considers the joint impact of the independent variable, experiential marketing, and the mediating variable, customer delight, on the dependent variable, purchase intention, to provide a comprehensive analysis of the complex relationship between experiential marketing, customer delight, and purchase intention, thereby better understanding and predicting customer behavior.

Based on the data analysis results from **Tables 7–9**, significant causal relationships exist between experiential marketing and purchase intention, experiential marketing and customer delight, and customer delight and purchase intention, supporting the validity of Hypotheses H1, H2, and H3. In summary, this study further analyzes the combined impact of experiential marketing and customer delight on purchase intention, with the specific results presented in **Table 10**.

Table 10. Hierarchical regression analysis of the mediating effect of customer delight.

	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Significance
	<i>B</i>	Standard Error	Beta		
(Constant)	1.236	0.145		8.518	0
Experiential Marketing	0.634	0.04	0.548	15.679	0
(Constant)	0.816	0.158		5.16	0
Customer Delight	0.343	0.043	0.323	7.988	0
Experiential Marketing	0.424	0.05	0.345	8.541	0

By performing multiple regression analysis using SPSS 27.0, with experiential marketing and customer delight as the independent variables and purchase intention as the dependent variable, the results show that after introducing the mediating variable, customer delight, the standardized regression coefficient of experiential marketing decreased from 0.548 to 0.345, with a significance level of $p < 0.000$, indicating that a significant causal relationship still exists. Meanwhile, the standardized regression coefficient for customer delight is 0.323, with a p -value also less than 0.000. Therefore, it can be concluded that customer delight plays a partial mediating role between experiential marketing and purchase intention, thereby confirming Hypothesis H4 and validating the partial mediating effect of customer delight in the relationship between experiential marketing and purchase intention.

Through the above step-by-step analysis, we not only verified the correlation between the variables, but also further clarified the causal relationship between them through regression analysis. Finally, by introducing the mediating variable customer surprise, we have a more comprehensive understanding of the impact mechanism of experiential marketing on purchase intention.

5. Conclusion, implications, and future outlook

5.1. Research conclusions

This study reveals the significant impact of blind box experience marketing on customer surprise and purchase intention through systematic empirical analysis.

The validity of the questionnaire design was verified by reliability analysis and factor analysis, in which the Cronbach's Alpha value of each variable was higher than 0.7, indicating that the data has high reliability. For example, the Alpha coefficient of sensory experience is 0.831, emotional experience is 0.746, cognitive experience is 0.779, relationship experience is 0.716, behavioral experience is 0.770, customer surprise is 0.829, and purchase intention is 0.774. These results ensure the stability and consistency of the research results.

Correlation analysis shows that there is a significant positive correlation between the various experience dimensions. From the perspective of correlation coefficient, the correlation coefficient between sensory experience and emotional experience is 0.766, which is at a high level, indicating that there is a close internal connection between the two, and they may play an important role in influencing consumer purchasing behavior. In contrast, the correlation coefficient between sensory experience and purchase intention is 0.474, which is relatively weak, indicating that its direct impact on purchase intention is small, but it is still not negligible, and it may indirectly affect purchase intention by affecting other variables.

Further regression analysis shows that experiential marketing has a significant positive impact on blind box purchase intention, with a standardized regression coefficient of 0.522 ($P < 0.000$), which verifies hypothesis H1. In addition, experiential marketing also has a significant impact on customer surprise, with a standardized regression coefficient of 0.548 ($P < 0.000$), which supports hypothesis H2. This shows that the experiential marketing strategy implemented by the company can effectively stimulate consumers' joyful emotions and thus affect their purchasing decisions.

Customer surprise also has a significant positive impact on purchase intention, with a standardized regression coefficient of 0.512 ($P < 0.000$), which verifies hypothesis H3. This finding emphasizes the importance of creating unexpected surprises during the shopping process. When consumers feel more pleasure than expected, they are more likely to make a purchase.

Through the mediation effect analysis, it was found that customer surprise played a partial mediating role between experiential marketing and purchase intention, which verified hypothesis H4. Specifically, after the introduction of the mediating variable customer surprise, the standardized regression coefficient of experiential marketing dropped from 0.548 to 0.345, but it was still significant ($P < 0.000$), and the standardized regression coefficient of customer surprise was 0.323 ($P < 0.000$). This shows that customer surprise not only directly promotes purchase intention, but also plays an important bridge role between experiential marketing and purchase intention.

In summary, this study not only verifies the significant association between experiential marketing, customer surprise and purchase intention through detailed empirical analysis, but also reveals the partial mediating role of customer surprise. These findings provide strong theoretical support and practical guidance for enterprises to optimize blind box marketing strategies, help enterprises better understand and predict consumer behavior, and thus achieve sales growth and brand loyalty.

5.2. Research implications

To deeply explore and optimize experiential marketing strategies, companies should focus on five key dimensions in blind box marketing: sensory, emotional, cognitive, behavioral, and associative experiences. **Sensory Experience:** It is essential to continually improve the packaging design of blind box products and the environment of specialty stores. Using more attractive music, creating comfortable lighting, and adopting appealing interior decoration styles can enhance the consumers' visual and auditory experiences. **Emotional Experience:** The sense of surprise brought by uncertainty should be enhanced. For example, designing blind box series with more suspense, and using cultural themes to evoke emotional resonance from consumers, allowing them to enjoy positive emotional experiences during their purchase process. **Cognitive Experience:** Encourage consumers to freely create their own combinations of blind box products. In-store posters and slogans should be designed to stimulate consumers' thoughts during the shopping experience. **Behavioral Experience:** Enrich in-store activities and strengthen the interaction between sales personnel and consumers. Actively encourage consumers to provide feedback, which can improve product and service quality, enhancing consumer loyalty. **Associative Experience:** Focus on managing topics on social media platforms to promote interaction and sharing among consumers. Actively carry out limited edition and co-branded events to expand fan communities and build a broader brand community.

By comprehensively considering and optimizing these five dimensions, the appeal and innovation of blind box marketing strategies can be enhanced, which will improve consumers' shopping experience and brand awareness, ultimately leading to steady sales growth for the company.

Focusing on Stimulating and Utilizing Customer Delight: A deep understanding of consumers' inner needs and preferences is crucial for developing personalized marketing strategies. For example, customizing product recommendations based on customers' purchase histories and creating unique shopping experiences that align with the blind box themes. Stores can be designed with dreamlike fairy-tale or futuristic sci-fi themes, while providing thoughtful after-sales service. Quickly resolving after-sales issues, offering small gifts, and other similar strategies can trigger customers' delight, increasing their purchase intention.

Enhancing Product Innovation and Strengthening Brand Building for Competitive Advantage: First, companies need to increase investment in product design and creativity, consistently launching unique blind box series to meet the ever-changing demands of consumers. Only through continuous innovation can companies keep their products fresh and appealing, standing out in fierce market competition. Secondly, companies should focus on building brand image. By offering high-quality products and services, companies can communicate their values and philosophy, building consumer trust and loyalty. A company with unique brand charm will have a competitive advantage in the market, continuously attracting consumers and ensuring stable growth. In the highly competitive blind box market, companies with unique brand appeal will have a greater chance of achieving long-term, sustainable development.

5.3. Research limitations and outlook

This study primarily focuses on university students, a group with unique consumption behaviors and attitudes, which may not fully represent the entire blind box market. Therefore, there are certain limitations when generalizing the findings to other consumer groups. Future research should broaden the focus to include a wider range of consumer demographics, such as varying ages, professions, and regional backgrounds, to comprehensively understand the impact of experiential marketing on purchase intentions across different consumer groups. This will provide more accurate guidance and suggestions for market strategies. In addition, this study uses a questionnaire survey method, which may be subject to subjective bias. Questionnaire surveys rely on self-reports from respondents and are susceptible to social desirability effects and personal memory biases. In addition, the design of the questionnaire and the wording of the questions may also lead to inaccurate or misunderstood answers. Future studies can consider combining multiple data collection methods, such as experimental methods, interview methods, and observation methods, to reduce subjective bias and improve the reliability of the data. Moreover, this study explores the influence mechanism of blind box experience marketing based on the stimulus-organism-response (SOR) theory. However, the applicable boundaries of the SOR theory in the blind box context need further exploration. For example, whether the high uncertainty and randomness of blind boxes fully conform to the assumptions of the SOR theory still needs to be verified. Future studies can explore more theoretical frameworks applicable to blind box marketing to more comprehensively explain consumer behavior. In addition, there may be measurement errors in the process of variable measurement. Although we have conducted validity and reliability analyses, some potential measurement errors are still difficult to avoid completely. For example, some items may fail to fully capture the true meaning of the variables, or there are differences in the respondents' understanding of the items. Future studies can reduce measurement errors and improve measurement accuracy through pre-testing, multiple rounds of modification, and improvement of the scale. In addition, this study used correlation and regression analysis. Although these methods can reveal the relationship between variables, they cannot completely rule out the influence of other unobserved factors. In addition, multiple regression analysis assumes a linear relationship between variables, while the actual situation may be more complicated. Future research can use more advanced statistical methods, such as structural equation modeling (SEM), path analysis, or multilevel linear models, to more accurately describe the complex relationship between variables.

This study explored the characteristics of blind box products in the current market environment. As the market evolves rapidly and the blind box industry continues to grow, new marketing models, product forms, and shifts in consumer demand are likely to emerge. Therefore, further research in the field of blind box marketing is needed to improve and supplement existing knowledge.

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