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# PURCHASING INTENTION OF YUNNAN GREEN AGRICULTURAL PRODUCTS BASED ON SOR THEORY UNDER LIVE STREAMING COMMERCE

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#### Abstract

Background: The rise in consumption levels and awareness of green agricultural products has led consumers to increasingly prefer them. Meanwhile, the COVID-19 pandemic has disrupted traditional agricultural product marketing methods, restricting offline sales and encouraging e-commerce and social media platforms to establish new marketing channels through live-streaming commerce. As a region with favorable ecological conditions, Yunnan's green agricultural products have become particularly appealing through live-streaming promotions, making live-streaming sales a significant means to enhance farmers' income. Objective: This study investigates the dynamics of consumers' purchase intentions for Yunnan's green agricultural products within the context of live-Streaming commerce platforms. Drawing upon the Stimulus-Organism-Response (SOR) theory, one key dimension— Brand Experience is examined, with external stimuli further categorized into sensory experience, affective experience and behavioral experience. Integrating the theory of perceived value is introduced as mediating variable to formulate a comprehensive model of consumers' purchasing intentions under live streaming situations. Methodology: An online survey was conducted with 400 samples of consumers who purchased Yunnan green agricultural products through live streaming. The research objectives were analyzed using the Partial Least Squares Structural Equation Modeling (PLS-SEM). Finding: This study confirms that the proposed research model based on the SOR framework is reliable, with all hypotheses supported, demonstrating that brand experience in live-streaming e-commerce stimulates perceived value, which drives purchase intention for Yunnan green agricultural products. Moreover, These findings emphasize the need to enhance brand experience to boost perceived value and consumer purchase intentions, thereby supporting poverty alleviation and promoting Yunnan's green agricultural products.

Keywords: Living Streaming CoBackground: Merce, Brand Experience, Perceived Value, Purchase Intention.

#### 1. INTRODUCTION

With the rapid development of the Internet and information technology, live streaming e-commerce has gradually become one of the primary business models in electronic commerce. Agricultural products, as a category with unique attributes, are subject to certain limitations due to their growth environment and conditions(Lu & Chen, 2021). Yunnan, located in the southwestern region of China, is relatively remote geographically. However, owing to its distinctive geographical environment, Yunnan boasts rich and high-quality biological diversity, resulting in the production of various agricultural products such as coffee, flowers, and medicinal herbs. It is challenging to sell these agricultural products using traditional e-commerce models. Therefore, farmers have adopted the form of live streaming e-commerce to





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sell agricultural products, bridging the gap between rural agricultural production and urban consumption, thereby promoting economic circulation and interaction between urban and rural areas. According to relevant data, in 2022, there were 5.732 million rural live streaming ecommerce businesses in China, with the total online retail sales of agricultural products reaching 531.33 billion yuan. (Bussiness frocast, n.d.) In recent years, with the implementation of the national rural revitalization strategy and the continuous development of the digital economy, agricultural product live streaming has shown a rapid development trend. Compared with traditional sales methods, e-commerce live streaming broadens the sales channels for agricultural products, helping to sell agricultural products to more distant areas and solving the problem of agricultural product oversupply (Geng et al., 2023). E-commerce live streaming contributes to increasing farmers' income and promoting agricultural economic development, playing an important role in accelerating rural modernization and revitalization (L. Peng et al., 2021). Therefore, researching consumer behavior in the context of agricultural product live streaming has become a focal point for many scholars.

E-commerce live streaming contributes to increasing farmers' income and promoting agricultural economic development. It provides consumers with a platform for extensive research on e-commerce purchasing behavior, which in turn accelerates rural modernization and revitalization(Geng et al., 2023; Guo, 2022). Currently, scholars primarily focus on the impact of live streaming content, hosts, or formats on consumer purchasing behavior when studying live shopping modes. There is less consideration given to specific product categories in live streaming contexts. In this study(Wongkitrungrueng et al., 2020), the Stimulus-Organism-Response (SOR) theory is introduced to further investigate the influence of brand experience and product stimuli on consumers' internal perceptions and purchase intentions. Indepth research on fresh agricultural products through live streaming not only facilitates consumers in making informed purchases but also significantly contributes to expanding the sales channels for fresh agricultural products and promoting the marketing of unsold agricultural products.

# **Objective**

To further investigate the influence of brand experience and product stimuli on consumers' internal perceptions and purchase intentions, the Stimulus-Organism-Response (SOR) theory is introduced in this study.

#### 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

#### 2.1 Live Steaming Commerce

Live streaming commerce integrates real-time video broadcasting with e-commerce, fostering direct interaction between sellers and consumers (Cai & Wohn, 2019). Leveraging social media and influencer marketing, it offers engaging, cost-effective marketing channels. Consumers benefit from convenience, entertainment, and personalized interactions, shaping a dynamic future for online retail (Guo, 2022). Live streaming of agricultural products differs from traditional live streaming in its focus on showcasing and selling agricultural products in real-





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time. Unlike traditional live streaming, which may cover various topics or activities, agricultural product live streaming centers specifically on promoting agricultural goods, offering viewers an interactive platform to learn about and purchase fresh produce directly from farmers or producers(S. Yang et al., 2022).

Green agricultural products are defined as ecologically sustainable, safe, high-quality, and high-efficiency agricultural products with distinctive characteristics, cultivated through specific methods to ensure environmental preservation and consumer well-being(Khanh Chi, 2022). Yunnan's green agricultural products are ideally suited for online live streaming sales due to their unique characteristics and high quality. The visually appealing and environmentally friendly nature of these products, coupled with the immersive and interactive experience offered by live streaming platforms, make them highly attractive to consumers seeking fresh and sustainably sourced goods.

#### 2.2 SOR Theory

The SOR theory is frequently employed to elucidate consumer purchasing behavior. (Mehrabian & Russell, 1974) This study suggests that within the SOR framework, viewers of live broadcasts featuring fresh agricultural products are subjected to external stimuli (S) in the form of social presence and product stimulation. These stimuli give rise to consumers' internal perceptions, which is perceived value (O). Ultimately, purchasing intention, serving as the purchasing motivation (R), is shaped by the interplay between these internal and external stimuli. Additionally, Kang et al.'s research findings demonstrate that interactivity dynamically influences consumer engagement behavior in live-streaming e-commerce(Kang et al., 2021). In summary, the Stimulus-Organism-Response (SOR) model serves as a comprehensive framework elucidating how environmental cues in e-commerce stimulate consumers' cognitive and emotional responses, subsequently influencing their behavioral reactions. Gil and Jacob (2018) employed the SOR framework to investigate the mediating effect of green satisfaction and trust on purchase intention(Gil & Jacob, 2018).

#### 2.3 Perceived Value

Perceived value, as defined by Zeithaml (1988), is consumers' overall assessment of products and services based on what they receive and pay. It's a key predictor of purchase behavior(Zeithaml, 1988). For example, Childers et al (2001). show that both hedonic and utilitarian values boost engagement in retail shopping(Childers et al., 2001). In live-streaming commerce, Gao et.al (2021). confirm that perceived value directly impacts purchase intention(Guo, 2022).

According to Sheth et al. (1991) delved deeper into customer perceived value, introducing the comprehensive concept of consumer value. They proposed that from an overarching perspective, customer perceived value can be segmented into various dimensions, including social, emotional, functional, cognitive, and situational value(Sheth et al., 1991). Yang Xiaoyan et al. (2006) examined the attributes of green products, using green cosmetics as a case study. They discovered that besides functional, emotional, and social values, the concept of green value emerged as a significant dimension, exerting a notable influence on consumer





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behavior(Yang, Zhou, 2006). Chen and Prompanyo(2021) explored the influence of perceived value on consumer purchasing behavior, highlighting it as the primary determinant. Perceived value encompasses functional, perceived cost, and image values, directly impacting consumer buying decisions(N. Chen & Yang, 2021). Ahmed and Zhang (2020)investigated the effects of service quality and consumer's green perceptions on purchase behavior(Ahmad & Zhang, 2020). Dong et al(2022). examined the impact of live stream quality on green trust, subsequently influencing purchase intentions for green agricultural products(Dong et al., 2022).

## 2.4 Brand Experience

Brand experience encompasses the entirety of consumer interactions and perceptions associated with a brand(Schmitt, 1999). It goes beyond just the product or service itself to include every touchpoint and encounter a consumer has with the brand, whether it's through advertising, customer service, or the actual usage of the product(Voorhees et al., 2017).

In the context of live streaming commerce, brand experience plays a crucial role in shaping consumers' perceptions and behaviors. Live streaming offers a unique opportunity for brands to create immersive and interactive experiences that resonate with consumers on a deeper level. Through live broadcasts, brands can showcase their products in action, provide demonstrations, and engage directly with viewers in real-time(Lu & Chen, 2021).

Brand experience is pivotal in live streaming commerce, shaping consumer perceptions and purchasing decisions. Engaging experiences enable brands to forge deeper connections and boost sales.(X. Peng et al., 2023)

In live streaming commerce, brand experience is multifaceted, which is the process and outcome of consumers' interaction with a brand, which includes four aspects: sensory, affective, intellectual, and behavioral. (Zheng et al., 2022). In addition to the four dimensions, brand experience can also include two dimensions of relational and external. The relational dimension reflects the interaction and connection between consumers and the brand, and whether the brand can meet the consumers' social needs and sense of belonging(Zhang,Bian, 2011).

The external dimension reflects the consumers' perception of the brand's external environment and social impact, including the brand's sustainability, social responsibility, and public welfare activities(Oh et al., 2019). These two dimensions can enhance the consumers' trust and identification with the brand, thereby increasing the brand's loyalty and word-of-mouth.

Together, these dimensions of brand experience shape consumer perceptions, attitudes, and purchasing decisions in the dynamic landscape of live streaming commerce.

#### 2.5 Purchase Intention

Purchase intention refers to the likelihood of consumers making a purchase decision based on subjective evaluations of products within a certain income bracket. It represents the subjective probability of consumers buying a specific product or brand and precedes the actual behavior outcome(Sharma et al., 2021). Purchase intention falls under the category of consumer behavior intention and serves as a crucial predictor of consumer behavior(N. Chen & Yang, 2021).





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Continuous purchase intention denotes that social e-commerce consumers remain engaged in interactive and entertaining experiences, driving them to continue shopping to maintain this immersive state (F. Yang et al., 2021). Consumers typically weigh various factors before making purchasing decisions, necessitating enterprises to ensure thorough user understanding and product approval to instill a strong desire to buy(Gasior, 2021).

While consumers may not initially harbor strong purchase intentions on social media, exposure to relevant content or interactions can stimulate such intentions (Cao et al., 2021).

While consumers may not initially harbor strong Additionally, Pandey et al. propose a purchase intention relationship model to assess Indian consumers' purchase in Brand experience significantly influences perceived value, which in turn enhances brand loyalty. This relationship is mediated by factors such as brand awareness, brand association, and perceived quality. tentions for organic food.

# 2.6 Development of Hypothesis

# 2.6.1 Brand Experience and Perceived Value

Brand experience significantly influences perceived value, which in turn enhances brand loyalty. This relationship is mediated by factors such as brand awareness, brand association, and perceived quality(Gil & Jacob, 2018). Besides, Customers can co-create perceptions of brand value through their participation in a range of active behaviors, including development, feedback, advocacy, and helping.

In particular, the research analyzes the interplay between the dimensions of quality, emotional, price, and social value with respect to co-creation behavior dimension(France et al., 2020). Engaging in brand-related behaviors enhances perceived value by fulfilling emotional needs and reinforcing social identity. Positive brand experiences contribute to higher perceived value (Guo, 2022). Therefore, we propose the following hypothesis:

# Hypothesis 1: Brand experience positively influence Perceived value.

#### 2.6.2 Perceived Value and Purchase Intention.

According to the Rambitan, (2013) focus on how perceived value and brand experience affect customer repurchase intentions. •another study found that functional, emotional, conditional, and green values positively affect consumer satisfaction, which in turn promotes the intention to purchase energy-saving products(Z. Chen et al., 2020).

More paper shown that the higher perceived value leads to greater customer engagement, which enhances purchase intentions(Hu, 2011). Specific types of perceived value, such as green and luxury values, have a significant positive impact on purchase intention(Zhuang et al., 2021). Therefore, we propose the following hypothesis:

## Hypothesis 2: Perceived value positively influences Purchase intention.



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# 2.6.3 Brand Experience and Purchase Intention

A Positive Brand Experiences is that Engaging and positive brand experiences across various touchpoints (advertising, product quality, customer support) significantly enhance purchase intentions(Tali et al., 2021). Effective brand storytelling that enhances social, emotional, and cognitive values strengthens brand identity, which in turn boosts purchase intentions(Dangi et al., 2021). Therefore, we propose the following hypothesis:

## Hypothesis 3: Brand experience positively influences Purchase intention.

# 2.6.4 Brand experience, Perceived value Purchase intention

Impact of Perceived Product Value on Customer-Based Brand Equity: The role of perceived product value on brand equity, highlighting the mediating roles of brand resonance and customer affective commitment. (Qiao et al., 2022), then, Perceived value often acts as a mediator between brand experience and purchase intention. Positive brand experiences enhance perceived value, which in turn increases purchase intentions (Petravičiūtė et al., 2021). Moreover, Functional, emotional, and symbolic values are crucial in this mediation process. These values enhance brand attachment and consumer satisfaction, leading to higher purchase intentions (Pina & Dias, 2021). Therefore, we propose the following hypothesis:

# Hypothesis 4: Perceived value meditates the relationship between Brand Experience and Purchase Intention

Based on a thorough literature review and related research, the significance of the variables can be summarized as follows: The independent variable, Brand Experience, is assessed through four key dimensions: Sensory Experience, Affective Experience, Behavioral Experience, and Intellectual Experience. These dimensions help to evaluate the level of innovation across these specific measures. The mediating variable, Perceived Value, is examined using four indicators: Functional Value, Emotional Value, Environmental Performance Value, and Social Value, which collectively contribute to an understanding of perceived value from these perspectives. The proposed model and hypotheses are presented in Figure 1.

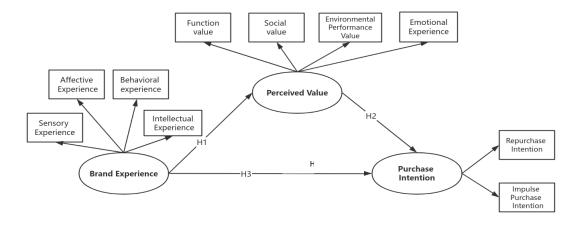


Figure 1: The Proposed Model and Hypotheses





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#### 3. METHODOLOGY

# 3.1 Population and Sampling

The survey started in July 2024 and ended on August 20, 2024. A total of 461 volunteers were recruited to participate in the questionnaire survey, and 400 valid questionnaires were collected. The survey tool used was Wenjuanxing (the most commonly used questionnaire survey tool in China). Firstly, the participants in the survey had to be customers who purchased Yunnan green agricultural products through live streaming to participate in the questionnaire. Before the final data collection, a pre-test was conducted, and the questionnaire was sent to 50 university experts in the fields of green marketing and agricultural economics. The experts' suggestions were incorporated into the final draft of the questionnaire, which helped ensure the content validity of the questionnaire. The data were analyzed using SPSS and SMART-PLS 4.0. In the sample of collected data, the number of females was higher than that of males, as females are often the decision-makers in household purchases, making them more concerned about ecommerce live streaming of agricultural products. The proportion of respondents aged 26-35 was the highest, and more than half of the respondents had a bachelor's degree or higher. The demographic characteristics of the respondents are shown in Table 1

**Table 1: Respondents' Characteristics** 

Population characteristics	Option	Frequency	Percent
1.01	Female	231	51.33
1.Gender	Male	219	48.67
	18-25	102	22.67
	26-35	135	30
2.Age	36-45	92	20.44
	46-55	78	17.33
	>=55	43	9.56
	High school diploma or below	55	12.22
3. Education Level	Bachelor	278	61.78
	Master	120	26.67
4.Income for per month	Under 3000	28	6.22
	3000-4500	120	26.67
	4500-6000	97	21.56
	6000-8000	100	22.22
	8000-10000	60	13.33
	Above 10000	45	10
5.location	Beijing	82	18.22
	Chengdu	77	17.11
	Kunming	90	20
	Shanghai	66	14.67
	Wuhan	73	16.22
	Xian	62	13.78
6.Monthly online shopping frequency	0-2 times	215	47.78
	3-5 times	141	31.33
	6-10times	65	14.44
	Above 10 times	29	6.44





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#### 4. DATA ANALYSIS

#### 4.1 Measurement Model

A reflective measurement model—indicator reliability, internal consistency reliability, convergent validity, and discriminant validity—are well-established in the field of structural equation modeling (SEM). These criteria are essential for ensuring the reliability and validity of the constructs being measured. The results generated by the PLS-SEM algorithm are displayed in Tables 2, 3, and 4, as well as in Figure 2. Cronbach's alpha may underestimate internal consistency reliability because it is sensitive to the number of items in the scale. A more accurate measure is composite reliability, which accounts for the varying outer loadings of the indicator variables, providing a better assessment of internal consistency(Sarstedt et al., 2022). The Cronbach's alpha coefficients for both first-order and second-order constructs in Tables 1 and 2 are all above 0.7, indicating that they meet the traditional standards for internal consistency and demonstrate good reliability of the scales.

Composite reliability is often considered equivalent to Cronbach's alpha. More specifically, in more advanced research, composite reliability values between 0.70 and 0.90 are considered satisfactory, while in exploratory research, values between 0.60 and 0.70 are acceptable (Hair et al., 2021). As shown in Tables 1 and 2, the CR values are from 0.6-0.9, is acceptable. Outer loadings represent the correlation between an indicator and its corresponding latent variable. A standardized outer loading of at least 0.708 is recommended because it indicates that the indicator explains more than 50% of the variance in the latent variable (since (0.708^2 \approx 0.50)) (Devinney et al., 2008)The out loadings all above 0.7078. AVE is used to measure the amount of variance captured by a construct in relation to the amount of variance due to measurement error. An AVE value of 0.50 or higher indicates adequate convergent validity, meaning that the construct explains at least 50% of the variance of its indicators(Hair et al., 2021). The extracted (AVE) values are all above 0.5 of first and second order.

It is common to use the "Fornell-Larcker Criterion" and "Cross-Loadings" to test discriminant validity (Henseler et al., 2015). Henseler proposed a new measure of discriminant validity called the "Heterotrait-Monotrait Ratio" (HTMT). According to Henseler, if the path model is conceptually highly comparable, the threshold for structural similarity is less than 0.90. As shown in Table 4, each construct demonstrates good discriminant validity.

Table 2: Validity and Reliability for First Order Constructs

First order Constructs	Items	Outer Loading	Cronbach's Alpha	Composite reliability (CR)	AVE Value
Sensory Experience	SE1	0.72	0.77	0.85	0.66
	SE2	0.78			
	SE3	0.75			
Affective experience	AE1	0.75	0.82	0.76	0.66
	AE2	0.81			
	AE3	0.76			
	AE4	0.8			
	AE5	0.79			





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Behavioral experience	BE1	0.77	0.84	0.76	0.7
	BE2	0.83			
	BE3	0.74			
	BE4	0.85			
Intellectual experience	IE1	0.79	0.85	0.76	0.66
•	IE2	0.82			
	IE3	0.8			
	IE4	0.76			
Function Value	FV1	0.83	0.79	0.81	0.68
	FV2	0.79			
	FV3	0.81			
	FV4	0.85			
Emotional Value	EV1	0.82	0.76	0.78	0.66
	EV2	0.79			
	EV3	0.84			
	EV4	0.71			
Environmental Performance Value	EPV1	0.75	0.76	0.75	0.68
	EPV2	0.73			
	EPV3	0.74			
	EPV4	0.72			
	EPV5	0.69			
Social value	SV1	0.72	0.84	0.77	0.67
	SV2	0.78			
	SV3	0.75			
	SV4	0.75			
	SV5	0.81			
Repeat Purchase Intention	RPI1	0.8	0.77	0.77	0.68
	RPI2	0.81			
	RPI3	0.77			
Impulsive Purchase Intention	IP1	0.84	0.85	0.84	0.68
	IP2	0.82			
	IP3	0.79			

Table 3: Reliability and Validity of Second-Order Constructs

Secodly order Constructs	Indicators	Outer Loading	Cronbach's Alpha	Composite reliability (CR)	AVE Value
Brand Experience	SE	0.84	0.86	0.72	0.68
	AE	0.87			
	BE	0.91			
	IE	0.87			
Perceived Value	FV	0.84	0.89	0.74	0.62
	EV	0.89			
	EPV	0.86			
	SV	0.86			
Purchase intention	RPI	0.91	0.87	0.77	0.64
	IP	0.87			



	SE	AE	BE	IE	FV	EV	EPV1	SV	RPI	IP
SE	1									
AE	0.73	1								
BE	0.61	0.66	1							
IE	0.64	0.75	0.74	1						
II	0.78	0.62	0.68	0.61						
FV	0.74	0.67	0.63	0.79	1					
EV	0.77	0.72	0.76	0.75	0.71	1				
EPVI	0.77	0.72	0.77	0.72	0.66	0.62	1			
SV	0.65	0.62	0.66	0.73	0.65	0.79	0.73	1		
RPI	0.73	0.76	0.68	0.61	0.79	0.77	0.6	0.74	1	
IP	0.73	0.62	0.69	0.69	0.7	0.64	0.78	0.77	063	1

**Table 4: Discriminant Validity of Constructs (HTMT)** 

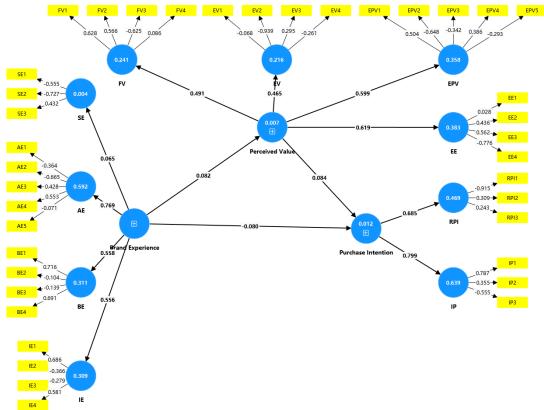


Figure 2: The Results of the Conceptual Model

# 4.2. Evaluation of the Structural Model

# 4.2.1 Assessing the Structural Model for Collinearity (The VIF)

Before evaluating the structural model, it is essential to assess collinearity, as failing to do so can lead to interpretation errors within the model. In reflective models, only the internal collinearity between variables is examined. A VIF value exceeding 5 indicates a critical level



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of collinearity(Sarstedt et al., 2017). As shown in Table 5, VIF values of internal model are no more than 3This indicates that there is no issue of construct collinearity in the structural model, which will not adversely affect the estimation of the path coefficients in the structural model.

SEΑE BE ΙE FV $\mathbf{EV}$ EPV1 SV**RPI** IP SE ΑE 1 2.254 BE 1 1 ΙE FV EV EPV1 SV2.234 **RPI** 1 IΡ 1.254

**Table 5: The VIF of Inner Model** 

# 4.2.2. Hypothesis Testing

In this study, a two-tailed test was employed with bootstrapping (5000 resamples), using a significance level of 0.05 and a critical T-value threshold of 1.96. The results are presented in Tables 6 and 7

Hypothesis	Relations	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values	Result
H1	BE->PV	0.234	0.567	0.037	12.5	0	supported
H2	PV->PI	0.789	0.678	0.035	25.64	0	supported
Н3	BE-PI	0.678	0.789	0.038	15.9	0	supported

**Table 6: Result of Path Analysis** 

As shon in Table 6, the analysis of the path coefficients, T-statistics, and P-values indicates that all three hypotheses are strongly supported. For H1 (BE -> PV), the path coefficient is 0.234, with a T-statistic of 12.50 and a P-value of 0.00, confirming a moderate and statistically significant positive relationship between Brand Experience and Perceived Value. For H2 (PV -> PI), the path coefficient is 0.789, supported by a T-statistic of 25.64 and a P-value of 0.00, indicating a robust positive effect of Perceived Value on Purchase Intention. Similarly, H3 (BE -> PI) shows a path coefficient of 0.678, with a T-statistic of 15.90 and a P-value of 0.00, demonstrating a strong and significant positive impact of Brand Experience on Purchase Intention. Thus, all three hypotheses are validated by the data.

**Table 7: Mediation test path** 

Hypothesis	Relations	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values	Result
H4	BE->PV->PI	0.234	0.567	0.031	22.47	0	supported





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The results for H4 (BE -> PV -> PI) demonstrate a statistically significant indirect effect of Brand Experience on Purchase Intention through Perceived Value. The path coefficient of 0.234, with a T-statistic of 22.47 and a P-value of 0.00, confirms that Perceived Value effectively mediates the relationship between Brand Experience and Purchase Intention, with strong statistical support for the proposed hypothesis.

# 4.2.3 Model Interpretation Ability

The coefficient of determination ( $R^2$ ) measures how well a statistical modelpredicts an outcome. The outcome is represented by the model's dependent variable,.  $R^2$  ranges from 0to 1, with higher levels indicating higher explanatory power(Hair et al., 2021). As we can see the table that the model demonstrates strong explanatory power. Brand Experience (BE) significantly influences Perceived Value (PV) and Purchase Intention (PI), with  $R^2$  values of 0.715 and 0.778, respectively. The effect of BE on PI is substantial, as indicated by a high  $f^2$  value of 0.625. Meanwhile, the PV to PI relationship shows strong predictive power ( $R^2 = 0.793$ ) but with a smaller effect size ( $f^2 = 0.071$ ). These results highlight the critical role of BE in driving PI, with PV as a secondary contributing factor.

Independent latent variable Dependent latent variable R² R<sup>2</sup>adjusted BE PV0.715 0.7200.051 BEPΙ 0.778 0.751 0.625 PV ΡI 0.779 0.793 0.071

Table 8: Model Interpretation Ability (R<sup>2</sup> and f<sup>2</sup>)

#### 5. DISCUSSION

The research model proposed in this study, based on the SOR framework, is reliable, and all hypotheses are supported. Specifically, the brand experience of products in live-streaming e-commerce (S) stimulates consumers to generate perceived value (O), which in turn leads to the purchase intention (R) of Yunnan green agricultural products. Additionally, it examines the mediating role of brand experience and purchase intention.

The analysis shows that various dimensions of brand experience-such as sensory, affective, behavioral, and intellectual experiences-contribute to shaping consumers' perceived value. In turn, perceived value, characterized by its sub-dimensions (functional value, social value, environmental performance value, and emotional value), plays a crucial role in influencing both repurchase and impulse purchase intentions.

Moreover, perceived value serves as a key mediator between brand experience and purchase intention, highlighting its pivotal role in the decision-making process. These findings underscore the importance of enhancing brand experience to elevate perceived value and, consequently, strengthen consumer purchase intentions in the context of green agricultural products marketed through live streaming, thereby contributing to poverty alleviation and the promotion of Yunnan's green agricultural products.





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#### 6. LIMITATIONS AND FUTURE DIRECTIONS

In the context of live-streaming Yunnan green agricultural products, brand trust and image, high-quality interaction, and effective product presentation are crucial for enhancing purchase intentions. However, challenges like technical issues, resource constraints, and variability in consumer perception can impede effectiveness. To overcome these, it is recommended to invest in advanced streaming technology, train hosts for better engagement, standardize product information, and strengthen consistent brand messaging to build trust and ensure high-quality customer service. These measures will bolster consumer interest and drive sales, fostering long-term brand loyalty.

#### References

- 1) Ahmad, W., & Zhang, Q. (2020). Green purchase intention: Effects of electronic service quality and customer green psychology. *Journal of Cleaner Production*, 267, 122053. https://doi.org/10.1016/j.jclepro.2020.122053
- 2) Cai, J., & Wohn, D. (2019, February 11). Live Streaming Commerce: Uses and Gratifications Approach to Understanding Consumers' Motivations.
- Cao, X., Wu, X., & Huang, X. (2021). How Does the Interactivity of Social Media Affect the Adoption of New Green Products? *Frontiers in Psychology*, 12. https://www.frontiersin.org/articles/10.3389/fpsyg.2021.786372
- 4) Chen, N., & Yang, Y. (2021). The impact of customer experience on consumer purchase intention in cross-border E-commerce—Taking network structural embeddedness as mediator variable. *Journal of Retailing and Consumer Services*, 59, 102344. https://doi.org/10.1016/j.jretconser.2020.102344
- 5) Chen, Z., Cao, H., Xu, F., Cheng, M., Wang, T., & Li, Y. (2020). Understanding the Role of Intermediaries in Online Social E-commerce: An Exploratory Study of Beidian. *Proceedings of the ACM on Human-Computer Interaction*, 4(CSCW2), 114:1-114:24. https://doi.org/10.1145/3415185
- 6) Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing*, 77(4), 511–535. https://doi.org/10.1016/S0022-4359(01)00056-2
- 7) Dangi, A., Saini, C. P., Singh, V., & Hooda, J. (2021). Customer perception, purchase intention and buying decision for branded products: Measuring the role of price discounts. *Journal of Revenue and Pricing Management*, 20(2), 194–203. https://doi.org/10.1057/s41272-021-00300-7
- 8) Devinney, T., Coltman, T., Midgley, D., & Venaik, S. (2008). Formative Versus Reflective Measurement Models: Two Applications of Formative Measurement. *Journal of Business Research*, 61, 1250–1262. https://doi.org/10.1016/j.jbusres.2008.01.013
- 9) Dong, X., Zhao, H., & Li, T. (2022). The Role of Live-Streaming E-Commerce on Consumers' Purchasing Intention regarding Green Agricultural Products. *Sustainability*, 14, 4374. https://doi.org/10.3390/su14074374
- 10) France, C., Grace, D., Lo Iacono, J., & Carlini, J. (2020). Exploring the interplay between customer perceived brand value and customer brand co-creation behaviour dimensions. *Journal of Brand Management*, 27(4), 466–480. https://doi.org/10.1057/s41262-020-00194-7
- 11) Gasior, M. (2021). Environmental Attitudes and Willingness to Purchase Online—Classification Approach. *Sustainability*, *13*(15), Article 15. https://doi.org/10.3390/su13158592





DOI: 10.5281/zenodo.13832453

- 12) Geng, Y., Liu, L., & Chen, L. (2023). Rural revitalization of China: A new framework, measurement and forecast. *Socio-Economic Planning Sciences*, 89, 101696. https://doi.org/10.1016/j.seps.2023.101696
- 13) Gil, M. T., & Jacob, J. (2018). The relationship between green perceived quality and green purchase intention: A three-path mediation approach using green satisfaction and green trust. *International Journal of Business Innovation and Research*, 15(3), 301–319. https://doi.org/10.1504/IJBIR.2018.089750
- 14) Guo, M. (2022). The Impacts of Service Quality, Perceived Value, and Social Influences on Video Streaming Service Subscription. *International Journal on Media Management*, 24(2), 65–86. https://doi.org/10.1080/14241277.2022.2089991
- 15) Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook*. Springer International Publishing. https://doi.org/10.1007/978-3-030-80519-7
- 16) Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8
- 17) Hu, Y. (2011). Linking Perceived Value, Customer Satisfaction, and Purchase Intention in E-Commerce Settings. In D. Jin & S. Lin (Eds.), *Advances in Computer Science, Intelligent System and Environment* (pp. 623–628). Springer. https://doi.org/10.1007/978-3-642-23753-9\_100
- 18) Kang, K., Lu, J., Guo, L., & Li, W. (2021). The dynamic effect of interactivity on customer engagement behavior through tie strength: Evidence from live streaming commerce platforms. *International Journal of Information Management*, 56, 102251. https://doi.org/10.1016/j.ijinfomgt.2020.102251
- 19) Khanh Chi, N. T. (2022). Driving factors for green innovation in agricultural production: An empirical study in an emerging economy. *Journal of Cleaner Production*, 368, 132965. https://doi.org/10.1016/j.jclepro.2022.132965
- 20) Lu, B., & Chen, Z. (2021). Live streaming commerce and consumers' purchase intention: An uncertainty reduction perspective. *Information & Management*, 58(7), 103509. https://doi.org/10.1016/j.im.2021.103509
- 21) Mehrabian, A., & Russell, J. A. (1974). The Basic Emotional Impact of Environments. *Perceptual and Motor Skills*, 38(1), 283–301. https://doi.org/10.2466/pms.1974.38.1.283
- 22) Oh, J., Connerton, T. P., & Kim, H.-J. (2019). the Rediscovery of Brand Experience Dimensions with Big Data Analysis: Building for a Sustainable Brand. *Sustainability*, 11(19), Article 19. https://doi.org/10.3390/su11195438
- 23) Peng, L., Lu, G., Pang, K., & Yao, Q. (2021). Optimal farmer's income from farm products sales on live streaming with random rewards: Case from China's rural revitalisation strategy. *Computers and Electronics in Agriculture*, 189, 106403. https://doi.org/10.1016/j.compag.2021.106403
- 24) Peng, X., Ren, J., & Guo, Y. (2023). Enhance consumer experience and product attitude in E-commerce live streaming: Based on the environmental perspective. *Industrial Management & Data Systems*, 124(1), 319–343. https://doi.org/10.1108/IMDS-12-2022-0743
- 25) Petravičiūtė, K., Šeinauskiené, B., Rūtelionė, A., & Krukowski, K. (2021). Linking Luxury Brand Perceived Value, Brand Attachment, and Purchase Intention: The Role of Consumer Vanity. *Sustainability*, *13*(12), Article 12. https://doi.org/10.3390/su13126912
- 26) Pina, R., & Dias, Á. (2021). The influence of brand experiences on consumer-based brand equity. *Journal of Brand Management*, 28(2), 99–115. https://doi.org/10.1057/s41262-020-00215-5
- 27) Rambitan, T. F. (2013, October 27). *The Effect Of Perceived Value And Brand Experience On Customer Repurchase Intention*. https://www.semanticscholar.org/paper/The-Effect-Of-Perceived-Value-And-Brand-Experience-Rambitan/c7e34ae3a1fd66f47c68d89be6f291ab9df39c64





DOI: 10.5281/zenodo.13832453

- 28) Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial Least Squares Structural Equation Modeling. In C. Homburg, M. Klarmann, & A. Vomberg (Eds.), *Handbook of Market Research* (pp. 1–40). Springer International Publishing. https://doi.org/10.1007/978-3-319-05542-8 15-1
- 29) Sarstedt, M., Ringle, C. M., & Hair, J. F. (2022). Partial Least Squares Structural Equation Modeling. In C. Homburg, M. Klarmann, & A. Vomberg (Eds.), *Handbook of Market Research* (pp. 587–632). Springer International Publishing. https://doi.org/10.1007/978-3-319-57413-4\_15
- 30) Schmitt, B. (1999). Experiential marketing: How to get customers to sense, feel, think, act, and relate to your company and brands. Free Press.
- 31) Sharma, A., Dwivedi, Y. K., Arya, V., & Siddiqui, M. Q. (2021). Does SMS advertising still have relevance to increase consumer purchase intention? A hybrid PLS-SEM-neural network modelling approach. *Computers in Human Behavior*, 124, 106919. https://doi.org/10.1016/j.chb.2021.106919
- 32) Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2), 159–170. https://doi.org/10.1016/0148-2963(91)90050-8
- 33) Tali, M. A., Mohmad, A., & Wani, N. (2021). *The Power of Branding Influencing Consumer Purchase Decision: A Comprehensive Literature Review*. 5362–5387. https://doi.org/10.17051/ilkonline.2021.06.519
- 34) Voorhees, C. M., Fombelle, P. W., Gregoire, Y., Bone, S., Gustafsson, A., Sousa, R., & Walkowiak, T. (2017). Service encounters, experiences and the customer journey: Defining the field and a call to expand our lens. *Journal of Business Research*, 79, 269–280. https://doi.org/10.1016/j.jbusres.2017.04.014
- Wongkitrungrueng, A., Dehouche, N., & Assarut, N. (2020). Live streaming commerce from the sellers' perspective: Implications for online relationship marketing. *Journal of Marketing Management*, 36(5–6), 488–518. https://doi.org/10.1080/0267257X.2020.1748895
- 36) Yang, F., Tang, J., Men, J., & Zheng, X. (2021). Consumer perceived value and impulse buying behavior on mobile commerce: The moderating effect of social influence. *Journal of Retailing and Consumer Services*, 63, 102683. https://doi.org/10.1016/j.jretconser.2021.102683
- 37) Yang, S., Liu, L., Jiang, J., & Ren, S. (2022). Purchase Intention in Agricultural Products Live-Streaming Commerce: A S-O-R Model. In M. Rauterberg, F. Fui-Hoon Nah, K. Siau, H. Krömker, J. Wei, & G. Salvendy (Eds.), *HCI International 2022 Late Breaking Papers: HCI for Today's Community and Economy* (pp. 268–279). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-18158-0\_20
- 38) Yang, Zhou, X., Yijin. (2006). Green value: A new dimension of customer perceived. *China Inndustrial Economy*, 7, 110–116. https://doi.org/10.19581/j.cnki.ciejournal.2006.07.015
- 39) Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52(3), 2–22. https://doi.org/10.2307/1251446
- 40) Zhang,Bian, zhengxing, yajing. (2011). Brand Experience—Concepts, Dimensions and Scale Construction. *Statistics and decision-making*, *10*, 177–179. https://doi.org/DOI:10.13546/j.cnki.tjyjc.2011.10.040
- 41) Zheng, R., Li, Z., & Na, S. (2022). How customer engagement in the live-streaming affects purchase intention and customer acquisition, E-tailer's perspective. *Journal of Retailing and Consumer Services*, 68, 103015. https://doi.org/10.1016/j.jretconser.2022.103015
- 42) Zhuang, W., Luo, X., & Riaz, M. U. (2021). On the Factors Influencing Green Purchase Intention: A Meta-Analysis Approach. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.644020
- 43) BusinessForcaste. (n.d.). Retrieved February 6, 2024, from https://cif.mofcom.gov.cn/cif/html//MarketReport/app\_home/2023/2/1676956787527.html

