The Impact of Government Official Streamer Characteristics on Consumers' Impulsive Buying Behavior: A Case Study of Guangxi Province, China

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Abstract

This study is based on the ABC attitude theory framework, an empirical analysis of 475 viewers of government officials' live broadcasts in Guangxi, China, to analyze the impact mechanism of the characteristics of government official streamers on consumers' impulsive buying behavior. The partial least squares structural equation model (PLS-SEM) test found that: 1) The characteristics of government official streamer interactivity, expertise, and altruism have a significant positive impact on consumers' impulsive buying behavior; 2) Perceived trust plays a partial mediating role in the interaction and expertise of government official streamer on consumers' impulsive purchasing behavior. This study incorporates government official streamers into consumer behavior research, an empirical test on the applicability of the ABC attitude theory model, and provides an important supplement to the SOR theory. It also fills the theoretical gap in government departments in live streaming marketing and expands the perspective of consumer behavior research. It provides a reference practice path for government departments in live broadcasting of government affairs.

Keywords: government official streamer; impulsive buying behavior; live e-commerce

Introduction

In the post-epidemic era, the economic downturn has led to unsalable agricultural products. Chinese government officials have endorsed agricultural products through e-commerce live broadcasts, which have become an essential means to stimulate economic recovery. For example, the "Amazing Chinese Counties" event jointly launched by Pinduoduo and CCTV News attracted more than 21 million consumers to watch (CCTV News, 2023). Guangxi is an essential agricultural province in China. In 2023, due to logistics obstruction and a sudden increase in market demand, the inventory of agricultural products such as monk fruit in Guangxi was overstocked, and farmers' income was significantly reduced. In this context, local government officials promoted monk fruit and other specialty agricultural products through live broadcasting, with over 50 million views and more than 200,000 monk fruit sales (Luo, 2025). Unlike traditional online celebrity streamers, government official streamers have both public authority and government resources, and their unique identity may profoundly impact consumer behavior. However, most literature uses the SOR theory to study the relationship between the characteristics of online celebrity streamers and consumer purchase intention (Hu, 2021; Lin, 2021), and only a few studies have attempted to use the ABC attitude theory to explain consumer behavior. Although existing studies have explored the impact of government official streamers on purchase intention from the perspective of SOR theory and stereotypes, there is still a lack of research on impulsive buying behavior and its mechanism of action. Whether the identity characteristics of government official streamers can effectively promote consumers' impulsive buying behavior has not been deeply explored. In Guangxi, as an agricultural province, consumers' impulsive buying behavior is of great significance to the unsalable agricultural products and the promotion of economic recovery. For example, the emotional appeal of "helping farmers" in live broadcasts may trigger consumers' impulsive buying behavior. Therefore, studying the impact of government official streamer characteristics on impulsive buying behavior will help the government formulate more effective live broadcast sales policies and supplement existing literature, which has important theoretical and practical significance.

Research Objectives

In summary, this paper aims to explore the internal mechanism of the influence of the government official streamer characteristics of live broadcasting agricultural products on consumers' impulsive buying behavior. The research objectives are as follows:

1) Study the impact of government official streamer characteristics on consumers' impulsive buying behavior

2) Study and analyze the mediating effect of perceived trust on the influence of government official streamer characteristics on consumers' impulsive buying behavior.

Literature Review

Interactivity, Expertise, Altruism, and Perceived Trust

Interactivity refers to the dynamic communication between consumers and government officials through real–time questions, comments, and instant feedback (Zhang et al., 2022). Studies have shown that the active interaction of anchors can significantly enhance the audience's trust in their expertise and affinity (Wang, 2023). This kind of interaction not only strengthens consumers' trust in the anchor's personal experience, but also increases purchase intention through social belonging (Wang et al., 2021).

Expertise refers to the combination of knowledge, skills, and abilities of government officials in a specific field, which enables them to have the potential to influence consumers (Guo et al., 2022). When streamers demonstrate professional knowledge, consumers increase their trust, are likelier to adopt their suggestions, and make purchases (Qiu, 2020). Expertise explanations reduce product uncertainty, shorten the psychological distance between consumers and products, and stimulate impulse buying.

Altruism refers to consumers attributing the motivation of government officials to behaviors that improve local welfare (He et al., 2022). When streamers display altruistic behaviors (such as honest recommendations and caring about needs), consumers perceive them as symbols of trust, stimulating purchasing behavior (Zhu, 2017).

Perceived trust refers to consumers' trust in the information, products, and services provided by government official streamers, promises not to take advantage of customers (Zhang et al., 2022). In consumer behavior, perceived trust acts as a communication bridge between anchors and consumers to indirectly promote purchasing behavior. Trust further increases the

possibility of impulse purchases by reducing transaction risk perception and simplifying the decision–making process (Shamim et al., 2024).

Based on this, the following hypothesis is proposed:

H1: The interactivity of government official streamer significantly affects consumers' impulse buying behavior

H2: The interactivity of government official streamer significantly affects consumers' perceived trust

H3: The expertise of government official streamer significantly affects consumers' impulse buying behavior

H4: The expertise of government official streamer significantly affects consumers' perceived trust

H5: The altruism of government official streamer significantly affects consumers' impulsive buying behavior

H6: The altruism of government official streamer significantly affects consumers' perceived trust

H7: Consumer perceived trust significantly affects consumer impulse buying behavior

The mediating role of perceived trust

Trust is a key factor in consumer purchasing behavior, eliminating purchase hesitation and uncertainty, prompting them to accept streamer recommendations and enhancing impulse buying tendencies (Ma et al., 2022). Based on H1, H3, and H5, it is speculated that government official streamer characteristics promote impulsive buying behavior by Consumer perceived trust. Based on this, a hypothesis is proposed.

H8: Consumers' perceived trust plays a mediating role between government official streamer interactivity and consumers' impulsive buying behavior

H9: Consumers' perceived trust plays a mediating role between the expertise of government official streamer and consumers' impulsive buying behavior

H10: Consumers' perceived trust plays a mediating role between the altruism of government officials' streamer and consumers' impulsive buying behavior

Conceptual Framework

The framework diagram of this study, shown in Figure 1, was constructed based on the literature review hypothesis.

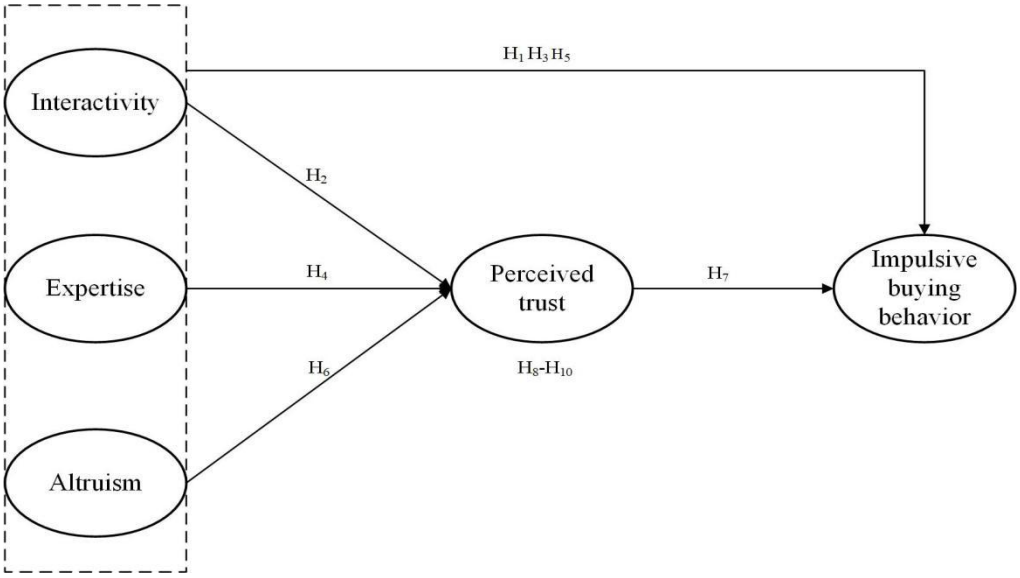

Figure 1: Conceptual Framework

Research Methodology

Sample and data collection

This study collected data through China's leading online survey platform, "Survey Jump" (https://www.wjx.cn/, market share 68.3%). The platform is used by 31 provincial governments in China for government surveys and serves 90% of Chinese universities. Data protection strictly complies with China's "Personal Information Protection Law". Study using a non-probability convenience sampling method. The data collection object is the consumers who watched the government official streamer's live broadcast of agricultural products in Guangxi Province, China, in the past three months. The data collection time is 30 days from December 1 to December 30, 2024. A total of 500 questionnaires were collected, and after eliminating invalid questionnaires, 475 valid questionnaires were retained for analysis.

Measures

Based on the literature review, this paper adopts a quantitative research method and designs a questionnaire using the Likert five-point scale (Likert, 1932). The questionnaires in this study are all adapted from previous mature scales. The interactivity of government official

streamer is measured using the scales of Zhang et al (2022), and the expertise of government official streamer comes from Guo et al., (2021); the altruism of government official streamer is measured using He et al. (2022); consumers' perceived trust and impulsive buying behavior use Zhang et al., (2022) and Ming et al. (2021); the questionnaire was finally approved by the STIU–HREC101/2024 ethical review certification.

Data analysis

In this study, data were analyzed using SPSS 26.0 and PLS–SEM. SPSS 26.0 was first used for descriptive statistical analysis to provide auxiliary verification for the subsequent PLS–SEM analysis. PLS–SEM was then used to analyze the data and test the hypotheses.

Research Results

Sample Characteristics

Table 1 shows a balanced gender distribution of consumers watching government live streams for agricultural products (49.1% male, 50.9% female). Most are aged 18–35 (53.3%) and hold a bachelor's degree or higher (83.8%). The largest income group earns 3001–5000 yuan monthly (38.7%), indicating middle–income consumers are prone to impulsive purchases under promotions. The sample is representative and well–distributed.

Table 1: Descriptive statistical analysis

Variable	Categories	Frequencies	Percentage
Gender	Man	233	49.1%
	Woman	242	50.9%
Age	18–25 years	64	13.5%
	26–35 years	189	39.8%
	36–45 years	159	33.5%
	46+years	63	13.3%
Education Level	Associate or below	77	16.2%
	Bachelor	219	46.1%
	Master	114	24%
	Doctorate	65	13.7%
Occupation	Self–employed persons	172	36.2%
	Party and government organ personnel	16	3.4%
	Employees of Public Institutions	135	28.4%
	Students	55	11.6%
	Freelancers	92	19.4%
	Retirees	5	1.1%
Monthly Income	Below 3000 RMB	60	12.6%
	3001–5000 RMB	184	38.7%
	5001–8000 RMB	125	26.3%
	8001–10000 RMB	61	12.8%
	Above 10001 RMB	45	9.5%
Total		**475**	**100%**

Reliability and Validity Analysis

Table 2 shows that all variables exhibit Cronbach's alpha values exceeding 0.7, indicating high reliability, stability, and internal consistency (Fornell & Larcker, 1981). Construct validity, assessed through convergent and discriminant validity (Hair et al., 2011), is supported by AVE values above 0.5 and AVE values exceeding squared inter–construct correlations Table 3, confirming robust convergent and discriminant validity.

Table 2: Reliability and Validity

Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
AM	0.799	0.809	0.881	0.712
EE	0.833	0.839	0.888	0.665
IBB	0.893	0.894	0.926	0.757
IY	0.856	0.862	0.902	0.697
PT	0.830	0.830	0.898	0.746

Note:AM=Altruism; EE=Expertise; IBB=Impulsive buying behavior; IY=Interactivity; PT=Perceived trust;

Table 3 Discriminant Validity

Variable	AM	EE	IBB	IY	PT
AM	0.844				
EE	0.250	0.816			
IBB	0.405	0.346	0.870		
IY	0.317	0.239	0.407	0.835	
PT	0.325	0.373	0.480	0.398	0.864

Note: AM=Altruism; EE=Expertise; IBB=Impulsive buying behavior; IY=Interactivity; PT=Perceived trust;

Hypothesis Tests

Table 4: Research hypothesis path test

Hypothesis	Path	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (IO/STDEVI)	P values	Results
H5	AM -> IBB	0.221	0.221	0.047	4.660	0.000	Supported
H6	AM -> PT	0.170	0.170	0.047	3.648	0.000	Supported
H3	EE -> IBB	0.141	0.142	0.049	2.897	0.004	Supported
H4	EE -> PT	0.264	0.265	0.041	6.379	0.000	Supported
H1	IY -> IBB	0.192	0.192	0.050	3.844	0.000	Supported
H2	IY -> PT	0.280	0.280	0.047	5.983	0.000	Supported
H7	PT -> IBB	0.279	0.279	0.047	5.937	0.000	Supported

Note: AM=Altruism; EE=Expertise; IBB=Impulsive buying behavior; IY=Interactivity; PT=Perceived trust;

According to Table 4, all 7 research hypothesis paths of this study were supported. The altruism of government official streamer significantly affects consumers' impulsive buying behavior (β=0.221, p<0.001) and perceived trust (β=0.170, p<0.001), the expertise of government official streamer significantly affects consumers' impulsive buying behavior (β=0.141, p<0.01) and perceived trust (β=0.264, p<0.001), and the interactivity of government official streamer significantly affects impulsive buying behavior (β=0.192, p<0.001) and perceived trust (β=0.289, p<0.001), which verifies the hypothesis H5, H6, H3, H4, H1, and H2. Consumers' perceived trust significantly affects impulsive buying behavior (β=0.279, p<0.001), which verifies the hypothesis H7.

Mediation Effects

Based on Hair et al. (2011), VAF analysis in Table 5 indicates that consumer perceived trust (PT) partially mediates the relationships between interactivity (IY) and impulsive buying behavior (IBB) (β=0.078, p<0.001, VAF=29%) and between expertise (EE) and IBB (β=0.074, p<0.001, VAF=27%). However, for altruism (AM) and IBB (β=0.048, p<0.05, VAF=18%), perceived trust does not significantly mediate, as most effects occur through direct paths. Thus, H8 and H9 are supported, while H10 is not.

Table 5: Mediation Effect Checklist

Path	Effect	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (IO/STDEVI)	P values	VAF	Results
IY -> PT -> IBB	Indirect	0.078	0.078	0.019	4.086	0.000	29%	partial mediation
	Total	0.270	0.270	0.050	5.357	0.000		
AM -> PT -> IBB	Indirect	0.048	0.047	0.015	3.148	0.002	18%	no mediation
	Total	0.268	0.269	0.048	5.546	0.000		
EE -> PT -> IBB	Indirect	0.074	0.074	0.017	4.266	0.000	27%	partial mediation
	Total	0.270	0.270	0.050	5.357	0.000		

Note: AM=Altruism; EE=Expertise; IBB=Impulsive buying behavior; IY=Interactivity; PT=Perceived trust;

Discussion

The expertise of government official streamers significantly improved consumers' perceived trust (β=0.264, p<0.001) and impulsive buying behavior (β=0.141, p<0.01). Government official streamers enhanced consumers' perceived trust by providing authoritative agricultural product information and leveraging their special status, thereby promoting impulsive buying behavior, consistent with Meng et al.'s research (2023). In addition, perceived trust partially mediates the impact of expertise on impulsive buying behavior (β=0.074, p<0.001), indicating that expertise directly affects consumer behavior and indirectly strengthens its influence through trust.

The interactivity of government official streamers has a significant positive impact on impulsive buying behavior (β=0.192, p<0.001), which is partially achieved through perceived trust (β=0.289, p<0.001). High interactivity reduces consumers' rational thinking and prompts them to make impulsive purchases, which is consistent with the research of Li et al. (2021). Perceived trust also partially mediates the impact of interactivity on impulsive buying behavior (β=0.078, p<0.001), indicating that interactivity further strengthens its influence through trust.

In contrast, the altruism of government official streamers has a significant positive impact on both impulsive buying behavior (β=0.221, p<0.001) and perceived trust (β=0.170, p<0.001), which is consistent with the research of Park and Cho (2015). However, perceived trust did not play a mediating role, which may be because consumers are more concerned about their sense of social responsibility than trust when faced with the altruism of a government official streamer. The altruism of government officials ' statements may directly affect consumer behavior through psychological factors such as emotion or moral identity.

New Knowledge from Research

This study contributes to the study of e-commerce live streaming by exploring the unique perspective of government official streamers, which starkly contrasts with the research influence of traditional internet celebrities or celebrity anchors. This study emphasizes the influence of official anchor characteristics on consumers, combines the ABC attitude theory, and introduces government official streamer characteristics' interactivity, expertise, and altruism into the framework to explain how these characteristics affect the emotional response to consumption and trigger consumption behavior. The results verify the applicability of ABC attitude theory in consumer behavior and emphasize the mediating role of emotional perception trust in converting

government official streamer characteristics into impulse buying behavior, providing new insights into the dynamics of live streaming e-commerce.

Conclusions

Through empirical analysis, this study concluded that the interactivity, expertise, and altruism of government official streamer characteristics significantly affect consumers' impulsive buying behavior, among which consumer perceived trust plays a mediating role in the impact of government official streamer characteristics' interactivity and expertise on consumers' impulsive buying behavior. Specifically, this study uses consumers in Guangxi Province as samples, and the results show that Guangxi consumers show higher impulsive buying behavior when watching government official streamer live broadcasts. It also showed a strong interest in local agricultural products. The government official streamer interactivity (β=0.192, p<0.001), expertise (β=0.141, p<0.01), and altruism (β=0.221, p<0.001) all have significant positive effects on consumers' impulsive buying behavior. Among them, consumer perceived trust was verified to have a significant mediating effect on the paths of interactivity (β=0.078, p<0.001, VAF=29%) and expertise (β=0.074, p<0.001, VAF=27%), but no significant mediating effect was found on the path of altruism. In addition, Guangxi consumers are more inclined to trust the recommendations of government official streamers, and most respondents believe that the identity of government official streamer enhances their purchasing confidence, which may be related to the public authority background and the motivation of "helping farmers". Theoretically, this study extends the ABC attitude theory to the special situation of government official streamers. It combines it with the regional consumption characteristics of Guangxi consumers, further enriching the theoretical research in consumer behavior.

Suggestions

Government official streamers play a unique role in live broadcast marketing, integrating public services and commercial promotion. They lead the new trend in the live broadcast field and show significant development potential. Future research should focus on in-depth analysis of the applicability of different types of products in government official streamer live broadcasts, explore the potential impact of different regional cultural backgrounds on live broadcast effects and their mechanisms, and compare with other types of anchors. It can also analyze how consumer values

affect repeat purchase behavior in official live broadcasts. At the same time, in order to support the development of this trend in Guangxi, government agencies can take measures to formulate policies to regulate the behavior of government official streamer, enhance consumer trust and purchase experience; provide marketing and communication training for government official streamer to enhance their professionalism and personal involvement; use big data to analyze consumer preferences, combine agricultural live broadcasts with cultural tourism, promote Guangxi's characteristic products, enhance consumer awareness and promote regional economic development. These strategies deepen consumer satisfaction and provide a path for the sustainable practice of the government official streamer model, which is worthy of further research and application.

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