

A Dual-Dimensional Analysis of Factors Influencing Profitability in Entertainment Live Streaming: Streamer Characteristics and User Motivations

Zhou Yuxin

Anhui Normal University, Wuhu, Anhui, 241002, China
ahnuzyx@163.com

ABSTRACT

After rapid growth, the live entertainment industry began to face structural problems, especially the impulse purchase and sustainability of users. At present, most of the research only looks at one aspect, and does not explain how the perceptual characteristics of live broadcast translate into actual purchase behavior.

From the user's point of view, this study examines the psychological mechanism behind the consumption of live entertainment. Using the stimulus-organism-response model, she proposed that the perceptual characteristics of live broadcast indirectly affect consumption behavior through consumption motivation. Through a cross-sectional survey of 200 users, this study uses mediation analysis based on regression and Bootstrap estimation to test the proposed model.

The results show that the perceptual characteristics of live streaming media have a significant overall impact on the monthly consumption level. More importantly, consumption motivation plays a comprehensive mediating role in this relationship, accounting for 56.6% of the total effect, which is confirmed by bootstrap confidence interval. In addition, male users show higher consumption motivation and impulse tendency, which indicates that the behavior pattern has strong consumption desire and high self-awareness.

Overall, the results show that users' consumption on live streaming media is mainly caused by internal psychological mechanism, rather than direct stimulation. This study helps to explain the role of consumption motivation as an important intermediary, and provides practical suggestions for platforms and users to promote more sustainable consumption behavior.

Keywords: Entertainment Live Streaming; Consumption Motivation; Impulsive Consumption; Stimulus-Organism-Response (SOR); Parasocial Relationships

1. INTRODUCTION

With the rapid development of the Internet, live entertainment has become an important part of the digital economy, with many users and a well-functioning virtual gift system. But even if the number of users continues to grow, the industry is facing more and more problems. Things like impulse buying and excessive spending have attracted a lot of attention. People want to know whether the way of making money can be sustainable and whether we can balance the benefits of the platform and the well-being of users. These problems show that we still don't know much about how people decide to spend money on live broadcast. The completed research has provided us with important insights, but it is incomplete in some aspects. First of all, many studies only look at one factor at a time, such as social relationship, social existence or interaction mode, without explaining how all these factors jointly change user behavior. Secondly, although research shows that psychological mechanism is very important, we haven't well tested how what we see in the live broadcast becomes a purchase decision within a clear framework. Therefore, we don't know much about the connection between what the platform does, what users think and what they buy.

In order to solve these problems, this study focuses on users and studies people's thoughts when they spend money on live entertainment. Using the stimulus-organism-response model, people say that what they see in the live broadcast is like external stimulus. These stimuli change our inner feelings (our consumption motives), and then it makes us spend money. By testing this path, the research hopes to show how things on the platform make users take action.

For methods, this study uses questionnaires. They asked users of 200 live entertainment platforms. Next, the mediation model based on regression and Bootstrap estimation is used for statistical analysis. This helps us to test the connection between things and provide strong evidence for our ideas.

In a word, this study aims to better explain why people spend money on live entertainment and talk about psychological motives. Only from the user's point of view, we can make our reasoning clearer and better understand how interaction costs money.

2. LITERATURE REVIEW

Live entertainment has attracted great attention of researchers because it is at the intersection allowed by the platform, social interaction and monetization. An important information in the research is that virtual gifts can not be completely explained by purely rational "price value" logic. On the contrary, expenditure is closely related to the continuous interaction and community dynamics. In this sense, gifts, not only as an economic behavior, but also as a form of social communication, show concern, affiliation and support in the live broadcast environment^[2,7].

An important explanation for this behavior is based on the concept of parasocial relationships, which describes the quasi-social relationship between viewers and streaming media. Through repeated exposure and interaction, users will have emotional attachment, which increases their desire to donate money. Guan et al.^[2] show that closeness and belonging are important reasons for buying virtual gifts, especially in the context of China. This tells us that the purchase behavior of users comes more from relationships than just money. However, sometimes we use parasocial relations as a general explanation, without really explaining how these relations make people spend money immediately, so we don't know much about this mechanism.

Closely related to this is the concept of social presence, which shows how users feel when talking with real people in real time. Lin^[6] found that when social networks are more powerful, users will be more willing to provide virtual gifts. This shows that interactive psychological perception is very important to consumer behavior. In the live broadcast environment, such as real-time feedback, visual presence and audience visibility are helpful to strengthen this perception. This creates an environment where users are more willing to spend money. However, although social presence explains why users feel involved, it does not fully explain the incentive process of transforming participation into actual consumption behavior.

In order to solve this problem, recent research focuses on the internal psychological mechanism. They say that the live broadcast function changes behavior through such things as cognitive absorption and user motivation. Hou et al.^[8] shows that social relations help to buy virtual gifts through the intermediate psychological state, while Joo and Yang^[11] find that perceived interaction indirectly changes consumers' behavior through immersion and satisfaction. These results show that the interactive function does not cost money directly, but plays a role by changing the user's internal experience. However, most of these studies are conducted under the background of live business, and they may not take into account the particularity of live entertainment, in which the main value comes from emotional and social returns, rather than buying products.

In addition to psychological mechanism, social influence also plays an important role in the way we consume.^[7] shows that the behavior of users who provide gifts is influenced by social existence, the dynamics between friends and the group rules in the live streaming environment. Similarly, Shan and Yu^[5] show that real-time interaction in comments helps to establish a common identity in the community, which can further encourage participation and spending. These findings show that the consumption of live broadcast is not a single decision, but related to a wider social background. However, these studies often focus on the interaction mode and social dynamics, without directly linking them with measurable consumption results, thus leaving a gap between social interpretation and economic behavior.

The design of the platform makes the relationship between interaction and consumption more complicated. Virtual badges, rankings and game systems can help users become more active by linking the money spent with social status and recognition. Wang et al.^[9] said that these mechanisms can greatly increase users' willingness to send virtual gifts, and Cao et al.^[10] showed that certain interaction conditions can make users change from small gifts to high-value gifts. These results tell us that the mechanism of the platform is very important for changing people's consumption patterns. But they also said that strategy alone may not be enough to make money, because things at the platform level may make interaction have a greater or lesser impact on spending.

On the supply side, the research focuses on how the characteristics and strategies of streaming media affect the audience's attention. Things like professionalism, attractiveness and interaction are important for building trust and keeping the

audience's attention. [1] shows that these things are helpful for quick links, and Chen et al. [3] The role of storytelling has an impact on the audience's reaction. However, most of the research on streaming media is mainly about subjective feedback or behavioral strategies, without showing how these things become measurable results, such as the intensity of participation or the money earned. In addition, studies on interaction strategies, such as those of Song and Licoppe [4], show that real-time communication is complicated, but they usually don't associate these practices with economic performance indicators.

Generally speaking, the research shows three important things. First of all, the consumption of live entertainment is mainly caused by emotional and social reasons, not just logical decisions. Secondly, the function and interactive process of the platform indirectly change people's behavior through their psychological mechanism. Thirdly, the characteristics and strategies of streaming media will indirectly change the results and may be limited by platform factors. But there are still major problems. Most studies only focus on one side, whether it is users or streaming media, rather than putting them in the same framework. In addition, the connection perception function, the user's motivation, and the mechanism of real consumption behavior are rarely tested in a comprehensive and organized way. Finally, the relationship between streaming media strategy and results can be measured unclear because there is not enough evidence.

In order to solve these defects, this study uses a bilateral perspective to examine the characteristics of user behavior and streaming media in the same framework. On the user side, it tests the intermediary mechanism that the perceptual characteristics of live broadcast affect consumption behavior through consumption motivation. In streaming media, she analyzed how personal characteristics, signature status and strategic participation are related to the investment intensity of real-time streaming media. By summarizing the results of both parties, this study aims to explain more clearly how interaction, motivation and strategy jointly create the profitability of real-time entertainment streaming media.

3. RESEARCH DESIGN

This study focuses on users to understand how their brains work when they spend money on live entertainment. By using the Stimulus-Organism-Response (SOR) model, our research model shows that what you see in the live broadcast will change users' inner feelings, such as their desire for consumption, which will make them really spend money (response). By observing this road, the research aims to provide a clear and easy-to-verify explanation of how the functions of the platform make people spend money.

3.1 Research Approach

This study uses quantitative methods, because the main purpose is to test the relationship between variables and examine how consumption motivation plays an intermediate role. Compared with qualitative methods that are more suitable for exploratory understanding, quantitative analysis is helpful to systematically test the theoretical relationship with statistical models. This helps us to measure the strength of the relationship between perceptual characteristics, psychological motivation and consumer behavior, and produce more objective and generalizable results.

We use structured questionnaire as the main method to collect data. This method is good, because the important variables in this study-perceptual characteristics, motivation and consumption level-are personal experiences, which can be better measured by asking people to answer themselves. Standardized questionnaires also help to ensure that all respondents give answers in the same way, so that reliable comparisons and statistical analysis can be made.

3.2 Data Collection

We collect data through online questionnaires for Entertainment Live Streaming Platforms users. We distributed questionnaires on social media, live broadcast communities and other online channels to make different people have different habits. Participation is voluntary, and we have not collected any personal information to comply with the rules.

We have 200 valid answers and use them for analysis. We use standards such as the shortest response time to ensure that the data is good. The final sample shows different user behaviors, such as viewing frequency, consumption level and demographic characteristics, which is good for statistical testing.

3.3 Variable Measurement

The study includes three main variables:

- Independent variable (X): Perceived live streaming features, measured through items such as streamer attractiveness, interactivity, and atmosphere.

- Mediating variable (M): Consumption motivation, capturing users' internal drivers, including emotional support, desire for attention, and impulsive tendencies.
- Dependent variable (Y): Monthly consumption level, representing actual spending behavior.

All multi-item variables are measured using a 5-point Likert scale, and composite scores are calculated using mean values. Control variables such as gender, age, and viewing behavior are also included to account for potential external influences.

3.4 Analytical Method

To verify the proposed relationship, this study uses mediation analysis and follows the three-step regression method of Baron and Kenny. This method tests whether the independent variable predicts the dependent variable, whether it predicts the intermediary, and whether the intermediary affects the dependent variable when both are in the model.

In order to improve the robustness, Bootstrap resampling (5000 iterations) is also used to test the significance of indirect effect. Compared with traditional methods such as Sobel test, Bootstrap does not rely on the assumption of normality, and is considered to be more reliable in mediation analysis. All statistical analysis is carried out by SPSS to ensure the consistency and accuracy of data processing.

3.5 Research Contribution

By observing how it works on the user side, this study better explains how the perceived live broadcast function changes consumption patterns through psychological motives. This approach makes the research work simpler and strengthens the causal logic in the analysis. This helps us to better understand our behavior when watching live entertainment.

4. RESULT AND ANALYSIS

4.1 Descriptive Statistics

A total of 200 valid user questionnaires were collected and used for analysis. As shown in Table 1.

Table 1. Sample Size and Data Sources

Questionnaire	Valid Sample Size (N)	Number of Variables (Pre-processing)	Remarks
Entertainment Live Streaming User Consumption Behavior Questionnaire	200	25	Cross-sectional self-administered questionnaire
Entertainment Live Streaming Streamer Operation Questionnaire	200	36	Cross-sectional self-administered questionnaire

The sample has 200 users. There are almost as many boys and girls: 52% are men and 48% are women. The age is quite young, and many people are between 18 and 27 years old.

In order to watch videos, many users often watch them. About one-third of people said that they watched the live broadcast almost every day, and another third watched it for more than two hours at a time. This shows that there are many very active users in the sample.

For money, most users earn little or average money. This means that the sample looks like an ordinary live entertainment client. This study is only aimed at users. The stream data is not in the analysis sequence. As shown in Table 2.

Table 2. Demographic and Behavioral Groups of the User Sample (Frequency, Percentage)

Category	Frequency	Percentage (%)
Gender: Male	104	52.00
Gender: Female	96	48.00
Age group: 18-22 years	80	40.00
Age group: 22-27years	51	25.50
Age group: 28-35 years	39	19.50
Age group: 35 years and above	30	15.00
Disposable income group	69	34.50
Disposable income group: Lower-middle	63	31.50
Disposable income group: Upper-middle	27	13.50
Disposable income group: High	41	20.50
Weekly viewing frequency group: Less than once per week	48	24.00
Weekly viewing frequency group: 1-2 times	45	22.50
Weekly viewing frequency group: 3-5 times	41	20.50
Weekly viewing frequency group: Almost every day	66	33.00
Duration per session group: ≤30 minutes	50	25.00
Duration per session group: 30 minutes to 1 hour	53	26.50
Duration per session group: 1-2 hours	29	14.50
Duration per session group: >2 hours	68	34.00

4.2 Difference Analysis

Gender differences are statistically significant, with male users scoring higher than female users in consumption motivation, impulsive tendency, and rational attitude ($p < 0.001$). This suggests that male users exhibit stronger consumption drivers alongside higher self-awareness, reflecting a tendency toward “high impulsivity and high rationality. As shown in Table 3.

Table 3. User Gender T-test (FULL)

Variable	Male Mean	Female Mean	t	p	n Male	n Female
Motivation	4.022	3.203	5.869	0.000	104	96
Impulse	3.851	3.203	4.466	0.000	104	96
Rational	3.795	3.139	4.362	0.000	104	96

4.3 Correlation and Regression Analysis

Regarding correlation analysis, the three core variables on the user side are highly correlated. The correlation coefficients between each pair of entertainment consumption motivation, impulsive consumption tendency, and rational consumption attitude all range from 0.80 to 0.83 and are all positive. As shown in Table 4.

Table 4. Pearson Correlations (Two-Tailed) for User Core Variables

	MOTIVE	IMPULSE	RATIONAL	Frequency Group	Duration Group	Monthly Consumption Group	Regret Group
MEAN_MOTIVE	1	0.797	0.826	0.605	0.599	0.34	-0.231
MEAN_IMPULSE	0.797	1	0.802	0.611	0.568	0.306	-0.241
MEAN_RATIONAL	0.826	0.802	1	0.617	0.545	0.276	-0.227
Viewing Frequency Group	0.605	0.611	0.617	1	0.372	0.182	-0.194
Single Viewing Duration Group	0.599	0.568	0.545	0.372	1	0.204	-0.183
Monthly Consumption Amount Group	0.34	0.306	0.276	0.182	0.204	1	-0.04
Impulsive Consumption Regret Group	-0.231	-0.241	-0.227	-0.194	-0.183	-0.04	1

The regression analysis further confirmed the central role of consumption motivation. When impulsive consumption tendency was set as the dependent variable, entertainment consumption motivation showed the strongest predictive power ($\beta=0.538$, significant), with the model's R^2 reaching 0.691. As shown in Table 5.

Table 5. User: Multiple Linear Regression with Impulsive Consumption Tendency as the Dependent Variable

Predictor/Constant	B	SE	t	p
Model Summary	$R^2=0.691$	Adjusted $R^2=0.688$	—	—
Intercept	0.312	0.150	2.080	0.038
MEAN_MOTIVE	0.538	0.045	11.955	0.000

When rational consumption attitude is taken as the dependent variable, both consumption motivation and impulsive consumption tendency are input into the model, and the β values are 0.432 and 0.337 (both meaningful). The explanatory power of this model is even higher, with r^2 reaching 0.773. By comparing these two modes, we can draw a general conclusion: in the context of live entertainment, impulsiveness and rationality are not opposed to each other. On the contrary, they are driven by the same consumption motivation, but they are different in their forms of expression. As shown in Table 6.

Table 6. User: Multiple Linear Regression with Rational Attitude as the Dependent Variable (Selected Coefficients)

Predictor/Constant	B	SE	t	p
Model Summary	R ² =0.773 F=81.116	Adjusted R ² =0.763 p=0.0000	— —	— —
Intercept	0.205	0.159	1.285	0.2005
C (freq_g) [T.2]	0.253	0.125	2.022	0.0446
C (freq_g) [T.3]	0.409	0.148	2.765	0.0063
C (freq_g) [T.4]	0.352	0.136	2.599	0.0101
C (sess_g) [T.2]	0.428	0.114	3.749	0.0002
C (sess_g) [T.3]	0.434	0.145	2.999	0.0031
C (sess_g) [T.4]	0.24	0.127	1.889	0.0605
MEAN_MOTIVE	0.432	0.066	6.585	0
MEAN_IMPULSE	0.337	0.063	5.315	0

(1) Streamer-Side Regression Analysis

Correlation analysis shows a strong positive relationship between personal charm strategies and perceived traffic effectiveness, while other variables exhibit weak or insignificant associations. Regression results further indicate limited explanatory power, with low overall model fit. This suggests that streamer self-reported data may not adequately capture actual operational outcomes, likely due to external constraints such as platform mechanisms. Therefore, streamer-side results are not discussed in detail. As shown in Table 7.

Table 7. Pearson Correlations of Streamer Core Variables (Excerpt)

	CHARM	TRAFFIC	q11n	INC_DIV	N_Q12	N_Q13	N_Q8
MEAN_CHARM	1	0.898	-0.049	0.454	0.023	-0.013	-0.001
MEAN_TRAFFIC	0.898	1	0.013	0.45	0.037	-0.015	-0.028
q11n	-0.049	0.013	1	-0.029	0.021	-0.069	0.057
MEAN_INC_DIV	0.454	0.45	-0.029	1	0.12	-0.024	-0.005
N_Q12	0.023	0.037	0.021	0.12	1	0.019	0.042
N_Q13	-0.013	-0.015	-0.069	-0.024	0.019	1	-0.004
N_Q8	-0.001	-0.028	0.057	-0.005	0.042	-0.004	1

4.4 Mediation Model Specification

This study tests the mediating path of “perceived live-stream characteristics → consumption motivation → gifting behavior” using the independent user sample.

- X (Perceived live-stream characteristics): The mean of items m7 (streamer charm), m8 (live-stream interaction), and m9 (live-stream atmosphere).
- M (Consumption motivation): The mean of items m10 (supporting the streamer), m11 (gaining attention), and m12 (impulsive consumption).
- Y (Outcome variable): Q13, the level of monthly consumption amount.

4.4.1 Three-Step Regression Results

After running the three-step regression, the differences between paths became clear.

Step 1: Total Effect

Looking at the total effect, the direct predictive power of X on Y is as follows: the total effect c of perceived live-stream characteristics on monthly consumption amount is equal to 0.325, with $p < 0.001$ and the model's R^2 is 0.104. In other words, the streamer charm, interaction style, and atmosphere intensity perceived by users when watching live streams do explain how much they end up spending. While the effect size is not particularly large, it is stable. As shown in Table 8.

Table 8. Mediation Test: Path c - Total Effect (Y = Ordered Monthly Consumption Amount ~ X = Perceived Characteristics (Mean of m7–m9))

Item	B	SE	t	p
Model Summary	R^2	0.104	Adjusted R^2	0.099
	$F = 22.954$	22.954	$p =$	0.0000
Intercept	0.555	0.258	2.154	0.0324
X (Perceived Characteristics, mean of m7–m9)	0.325	0.068	4.791	0

Step 2: Path a (X → M)

In the second step, examining the path from X to M, this step shows the strongest explanatory power in the entire model. The effect of perceived live-stream characteristics on consumption motivation (path coefficient a) is 0.779, with the p-value far less than 0.001. The model's R^2 jumps to 0.678, meaning nearly 68% of the variance in consumption motivation is explained. This indicates a very high efficiency in the conversion process from users' "perception of the streamer" to the "generation of consumption impulses," reflecting a very close association between external stimuli and internal motivational drives. As shown in Table 9.

Table 9. Mediation Test Path a: M (Gifting Intention-Impulse Chain, mean of m10, m11, m12) ~ X (Perceived Antecedents, mean of m7–m9)

Item	B	SE	t	p
Model Summary	R^2	0.678	Adjusted R^2	0.677
	F	417.836	p	0
Intercept	0.712	0.145	4.911	0
X Perceived Antecedents (mean of m7–m9)	0.779	0.038	20.441	0

In the third step, after including M, the results change. When controlling for consumption motivation, the direct effect of X on Y (c') drops to 0.141, with a p-value of 0.236, which is no longer significant. That is, once the motivation to gift is controlled for, the contribution of users' perceived streamer characteristics to actual consumption amount becomes very weak. On the path from M to Y, the coefficient b is 0.236, with a p-value of 0.062, which is marginally significant. At this stage, the model's R^2 is 0.120. As shown in Table 10.

Table 10. Mediation Test Path b, c' : Y (Ordered Monthly Consumption Amount) ~ X (Perceived Antecedents, mean of m7–m9) + M (Gifting Intention-Impulse Chain, mean of m10, m11, m12)

Item	B	SE	t	p
Model Summary	R^2	0.12	Adjusted R^2	0.111
	F	13.385	p	0

Table 10. (continued) Mediation Test Path b, c': Y (Ordered Monthly Consumption Amount) ~ X (Perceived Antecedents, mean of m7–m9) + M (Gifting Intention-Impulse Chain, mean of m10, m11, m12)

Item	B	SE	t	p
Intercept	0.388	0.271	1.428	0.1549
X Perceived Antecedents (mean of m7–m9)	0.141	0.119	1.188	0.2364
M Gifting Intention-Impulse Chain (mean of m10, m11, m12)	0.236	0.126	1.877	0.062

When examining the three paths together, a clear pattern emerges: perceived characteristics do not directly drive users to spend money. Instead, they first activate the user's consumption motivation, which then promotes the final gifting behavior. The path from X to M is the most critical step, with strong predictive power. Although the path from M to Y is only marginally significant, the direction is consistent with expectations. Overall, the data supports the indirect transmission logic of "perceived characteristics → consumption motivation → consumption behavior", rather than a direct effect of X on Y.

4.4.2 Mediation Effect Decomposition and Testing

The point estimate of the indirect effect is $a \times b = 0.184$. The Sobel test yields a statistic of 1.869, with $p = 0.062$, which is at the marginal significance level under the conventional 0.05 threshold.

Given that the Sobel test relies on the large-sample normality assumption and has limited statistical power, this study further employs the Bootstrap method (5000 resamples) for nonparametric estimation of the indirect effect. The results show that the 95% confidence interval of the indirect effect is [0.001, 0.368]. The lower bound of this interval is close to 0 but does not contain 0. Based on this, it can be concluded that the mediating effect of consumption motivation is significant at the 0.05 level. As shown in Table 11.

Table 11. Mediation Effect Decomposition (Point Estimates, Standard Errors, and p-values, $n=200$)

Effect	Symbol	Point Estimate (B)	Standard Error	p	Remarks
Total Effect (Path c)	c	0.325	0.068	0	Y on X
Path a	a	0.779	0.038	0	M on X
Path b	b	0.236	0.126	0.062	M on Y, controlling for X
Direct Effect (Path c')	c'	0.141	0.119	0.2364	X on Y, controlling for M
Indirect Effect (Product, $a \times b$)	$a \times b$	0.184	0.098	0.0616	Sobel $z=1.869$ (approximate normality)

The Baron-Kenny stepwise conditions are verified as follows:

- Step 1 (X-Y, path c significant): Satisfied
- Step 2 (X-M, path a significant): Satisfied
- Step 3 (MY|X, path b significant): Marginally satisfied (at the edge of the significance threshold)
- Step 4 (X-Y|M, path c' not significant): Satisfied

As shown in Table 12.

Table 12. Baron-Kenny Stepwise Mediation Test Conditions ($\alpha=0.05$)

Step	Regression Path	Coefficient	p	Common Criterion (Exploratory)
1	X→Y (Total Effect)	0.325	0	Yes ($p < \alpha$)
2	X→M (Path a)	0.779	0	Yes ($p < \alpha$)
3	M→Y	X (Path b)	0.236	0.062
4	X→Y	M (Path c')	0.141	0.2364
—	Indirect Effect (Sobel)	0.184	0.0616	No ($p \geq \alpha$)

4.4.3 Bootstrap Testing

This pattern — significant total effect, significant path a, non-significant path c', combined with the Bootstrap indirect effect confidence interval not crossing zero — collectively indicates that consumption motivation plays a full mediating role between perceived live-stream characteristics and gifting behavior. Hypothesis H5 is supported. The indirect effect accounts for 56.6% of the total effect (0.184/0.325), meaning more than half of the effect of perceived characteristics on consumption behavior is realized through the psychological path of consumption motivation. As shown in Table 13.

Table 13. Bootstrap Percentile Confidence Intervals for the Indirect Effect (Case Resampling, B=5000, Consistent with Common Settings of Hayes PROCESS Model 4)

Indicator	Value
Indirect effect point estimate $a \times b$ (original sample)	0.184
Mean of the bootstrap indirect effect distribution	0.183
95% CI lower bound (2.5th percentile)	0.001
95% CI upper bound (97.5th percentile)	0.368
Does the 95% CI exclude 0?	Yes

5. CONCLUSIONS

This study aims to understand how people spend in live entertainment. Using the stimulus-organic-response (SOR) model, people's live broadcast characteristics are considered to affect their consumption, but not directly affect their consumption motives. We conducted a study with figures, asked 200 users to fill out a questionnaire, and tested our ideas by mediation analysis and Bootstrap method.

The results show that our model is good. The functions of live broadcast, such as interaction, atmosphere and the role of streaming media, have a great influence on users' consumption. But this effect is not direct. In fact, consumption motivation plays a very important role: it explains almost all the connections between characteristics and expenses. This means that users don't just react to what they see. First of all, these characteristics must become internal forces, such as the need for emotional support, the desire or impulse to attract attention, and then they can promote their consumption.

This result shows that psychological mechanism is very important for understanding users' behavior in live entertainment. This means that consumption motivation is the main link between what users see and what they do. In addition, it is found that male users have more consumption motives, more impulsive tendencies and more rational consciousness. This shows that strong consumption impulse and cognitive understanding coexist, which means that impulse and rationality are not antagonistic, but can work together to shape users' behavior.

Despite these contributions, some limitations must be recognized. First of all, the study uses a cross-sectional design, which can prevent the causal relationship from being found in time. Future research may use longitudinal or experimental design to better understand the changes in user behavior. Then, the study is based on self-reported data, which may be affected by the response and may not necessarily show the real consumption pattern. Finally, this study only pays attention to the

user's point of view, and does not use platform-level data or behavior tracking, which may also affect the consumption results.

In a word, this study provides a clearer and more accurate explanation for how the consumption behavior in live entertainment is formed. Consumption motivation is the key mechanism, which provides theoretical and practical insights. The results show that it is more important to improve meaningful interaction and understand users' psychology than just using external rewards. For the future, further research can continue this framework by adding multi-dimensional data and looking at a wider range of factors to better understand the complexity of digital consumption behavior.

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