

The Impact of Barrage (Online Comments) on Consumer Purchase Intention in Live Streaming Sales

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Abstract: This study aims to explore the impact mechanism of barrages (online comments) on consumer purchase intentions in the context of live streaming sales, revealing the association paths between barrage characteristics and purchasing decisions. A quantitative research method was adopted, constructing an analytical framework based on social influence theory and information processing theory. A total of 486 valid samples were collected through a questionnaire survey, and structural equation modeling (SEM) was employed for empirical testing. The study first defines the four core characteristic dimensions of barrage: information quality, interaction density, emotional tendency, and social proof cues, analyzing their direct effects on consumer purchase intentions. It introduces perceived trust and perceived value as mediating variables to explore indirect impact pathways while examining the moderating role of user involvement. The findings reveal that information quality and social proof cues of barrages have a significant positive impact on purchase intentions, while emotional tendency indirectly influences purchase intentions through perceived value. The effect of interaction density is moderated by user involvement, and perceived trust fully mediates the relationship between information quality and purchase intention. The conclusions provide theoretical support for live streaming platforms to optimize barrage management and for businesses to develop marketing strategies, expanding the application boundaries of online comment influence mechanisms in real-time interactive scenarios.

Keywords: Live Streaming Sales; Barrage; Online Comments; Consumer Purchase Intention; Impact Mechanism

1. Introduction

1.1 Research Background

Live streaming sales have emerged as a significant growth driver in the digital economy, with an explosive increase in market transaction scale and a growing user base that spans all age groups and consumer tiers. During live broadcasts, barrages appear as real-time scrolls, encompassing product evaluations, usage experiences, pricing discussions, and other information, creating a unique interactive atmosphere. However, the quality of barrage information is uneven, including both genuine and useful content as well as false advertising and spam, leading to confusion in consumers' purchasing decisions. This underscores the necessity of investigating the impact of barrages on consumer purchase intentions. With technological advancements, innovative live streaming formats continue to emerge, enhancing the interactivity of barrages through features like likes, replies, and shares, further reinforcing their role in live broadcasts. The real-time interactive nature of barrages significantly differentiates them from traditional online comments, making the investigation of their impact on consumer purchase intentions more complex and requiring in-depth study.

1.2 Research Significance

1.2.1 Theoretical Significance

This research contributes to the enhancement of the theoretical framework surrounding online consumer behavior. Existing studies on the impact of online comments on consumer purchase intentions predominantly focus on static e-commerce platform reviews, with relatively few examining real-time interactive barrages in live streaming contexts. By exploring the impact mechanisms of barrages on consumer purchase intentions, this study expands the research on online comments into the realm of real-time interactions, enriching the theoretical

understanding of online consumer behavior. Additionally, the study constructs an impact model incorporating barrage characteristics, mediating variables, and moderating variables, integrating social influence theory, information processing theory, and technology acceptance model, providing a new perspective for cross-theory applications and promoting the development and integration of related theories in new contexts. Furthermore, the exploration of barrage characteristic dimensions and the mechanisms of influence offers theoretical references and frameworks for future related research, fostering deeper inquiries in this domain.

1.2.2 Practical Significance

For live streaming platforms, the research findings can guide the optimization of barrage management mechanisms. By understanding the impact of various barrage characteristics on consumer purchase intentions, platforms can devise more effective barrage filtering and recommendation algorithms to select high-quality barrage content, reduce false information and spam, enhance user experience, and strengthen competitiveness. For businesses, this study provides a basis for formulating marketing strategies. Businesses can adjust product presentation and interaction strategies based on features like emotional tendencies and information quality of barrages, fostering a positive barrage atmosphere that increases consumer purchase intentions and product sales. For consumers, the findings aid in developing a more rational approach to barrage information, helping them identify useful content and avoid misleading false information, leading to more informed purchasing decisions and protection of their consumer rights.

1.3 Review of Domestic and International Research Status

Domestically, scholars have focused on the development models, marketing strategies, and influencing factors of live streaming sales. Research on barrages has primarily concentrated on their dissemination characteristics, user behaviors, and cultural implications, with some studies examining the impacts of barrages on user viewing experiences and engagement; however, empirical studies on the relationship between barrages and consumer purchase intentions are limited. In studies focusing on influencing factors of consumer purchase

intentions, researchers have emphasized factors such as price, brand, and trust, while the specific influence of barrages in the context of live streaming remains underexplored.

Internationally, research on real-time interactive marketing has started earlier, examining the influence of social media interactions on consumer behavior, but studies specifically related to live streaming sales are relatively scarce. Research on online comments is more robust, analyzing the effects of comment quantity, quality, and sentiment on consumer purchase intentions. However, due to differences between international and domestic live streaming models, these findings may not be directly applicable to domestic contexts. Moreover, research on barrages, a uniquely Chinese interactive form, is limited, with few relevant theories and studies available.

Overall, existing research has notable deficiencies: firstly, insufficient investigation into the relationship between barrages and consumer purchase intentions in live streaming contexts, lacking systematic empirical analysis; secondly, inadequate exploration of the underlying mechanisms through which barrages influence consumer purchase intentions, failing to clarify the roles of mediating and moderating variables; thirdly, a disconnect exists between domestic and international research, which has not fully integrated the characteristics of domestic live streaming sales into targeted studies. This research addresses these gaps by exploring the impact mechanisms of barrages on consumer purchase intentions in live streaming sales.

1.4 Research Content and Methods

The main content of this study includes: defining the core concepts of live streaming sales, barrages (online comments), and consumer purchase intentions; constructing a theoretical model for the impact of barrages on consumer purchase intentions and proposing research hypotheses; collecting data through questionnaire surveys and testing hypotheses using structural equation modeling; analyzing research results and drawing conclusions while providing corresponding strategic recommendations.

The research employs quantitative methods, specifically: first, literature review to analyze existing research outcomes in the fields of live streaming sales, barrages, and consumer

purchase intentions, providing a basis for the theoretical framework and hypothesis formulation; second, a targeted questionnaire survey to gather data on consumer perceptions of barrages and purchase intentions during live broadcasts; third, statistical analysis utilizing SPSS software for descriptive statistics, reliability and validity tests, and common method bias checks, and AMOS software for constructing structural equation models to empirically test research hypotheses.

2. Theoretical Framework and Research Hypotheses

2.1 Core Concept Definitions

2.1.1 Live Streaming Sales

Live streaming sales refer to a novel marketing model where merchants or hosts promote products or services to viewers through real-time demonstrations, explanations, and showcases on internet live streaming platforms. This model integrates entertainment, social interaction, and shopping, characterized by real-time interactivity, intuitiveness, and convenience. During the live broadcast, hosts can engage in real-time communication with viewers, who can ask questions instantaneously, enhancing the interactive shopping experience. Additionally, hosts demonstrate product usage and showcase details, allowing consumers to understand the products better, thereby reducing information asymmetry.

2.1.2 Barrage (Online Comments)

In this study, barrage refers to real-time online comments sent by viewers during the live streaming sales process, displayed as scrolling text on the broadcast screen. Barrages are characterized by their real-time nature, interactivity, and public visibility. The real-time aspect means that comments from viewers appear instantly, synchronized with the live content; interactivity allows viewers to communicate through barrages and engage with the host, creating a group discussion atmosphere; and public visibility indicates that all viewers can see these barrage contents. The content of barrages is diverse, including product evaluations, expressions of purchase intentions, and interactions among viewers.

2.1.3 Consumer Purchase Intention

Consumer purchase intention refers to the likelihood and tendency of consumers to purchase a specific product or service under

particular circumstances. It serves as an important precursor to purchasing behavior, effectively predicting actual purchase actions. In the context of live streaming sales, consumer purchase intention is influenced by various factors, including product characteristics, host charisma, and barrage information. In this study, consumer purchase intention specifically refers to the subjective willingness of consumers to purchase products or services influenced by barrages during live streaming.

2.2 Theoretical Foundations

2.2.1 Social Influence Theory

Social influence theory posits that individual behavior is affected by others, primarily through informational and normative influences. Informational influence occurs when individuals refer to others' opinions and behaviors when uncertain about something; normative influence refers to the tendency to conform to group norms and expectations to gain acceptance. In live streaming sales, barrages express collective opinions that exert social influence on consumers. By viewing product evaluations and purchase behaviors shared in the barrages, consumers gather relevant information influencing their purchasing decisions, exemplifying informational influence. Concurrently, when a majority expresses endorsement and purchase intentions for a specific product, consumers may experience group pressure, leading to conformity and affecting their purchase intention, reflecting normative influence.

2.2.2 Information Processing Theory

Information processing theory suggests that individuals undergo a series of processes when handling information, including reception, encoding, storage, extraction, and utilization. In consumer contexts, individuals actively collect and process product-related information to make informed purchasing decisions. Barrages serve as an information source that consumers receive and process. Consumers filter, evaluate, and interpret the information in barrages, assessing its authenticity and utility. High-quality barrage information can aid consumers in understanding products better, reducing information processing difficulties, thus influencing their purchase intentions.

2.2.3 Technology Acceptance Model

The technology acceptance model primarily explains and predicts individuals' acceptance of

information technology, focusing on perceived usefulness and perceived ease of use as core variables. Perceived usefulness refers to the degree to which individuals believe that using a particular technology enhances their work or life efficiency; perceived ease of use refers to the perceived difficulty of using a particular technology. In the context of live streaming sales, barrages as a technological application can influence consumers' acceptance of live broadcasts. If consumers perceive barrages as providing useful information (perceived usefulness) and find it convenient to interact and gather information via barrages (perceived ease of use), they are more likely to engage in live interactions, positively impacting their purchase intentions.

2.3 Research Hypotheses

2.3.1 Direct Effect Hypotheses of Barrage Characteristics on Purchase Intention

Higher quality of barrage information—characterized by accurate, detailed, and useful product information—enables consumers to better understand product characteristics and advantages, thereby enhancing purchase intentions. Therefore, the hypothesis is proposed: The quality of barrage information has a significant positive effect on consumer purchase intention.

Higher interaction density of barrages—indicating more frequent interactions between viewers and between viewers and hosts—creates a lively broadcast atmosphere, enhancing consumers' sense of participation and belonging, subsequently increasing their purchase intention. Hence, the hypothesis is formulated: Barrage interaction density has a significant positive effect on consumer purchase intention.

More positive emotional tendencies in barrages—characterized by a higher frequency of positive evaluations and emotional expressions—transmit optimistic product information, influencing consumer attitudes and fostering purchase intentions. Thus, the hypothesis is stated: The emotional tendency of barrages has a significant positive effect on consumer purchase intention.

Richer social proof cues in barrages—such as multiple recommendations and high purchase volumes—lead consumers to perceive products as trustworthy, thereby bolstering their purchase intentions. Accordingly, the hypothesis is presented: Barrage social proof cues have a

significant positive effect on consumer purchase intention.

2.3.2 Hypotheses Regarding the Role of Mediating Variables

Perceived trust refers to consumers' level of trust in merchants or products. High-quality barrage information enhances consumers' understanding and trust in products, influencing their purchase intentions. Therefore, the hypothesis is proposed: Perceived trust mediates the relationship between barrage information quality and consumer purchase intention.

Perceived value reflects consumers' assessment of the value that products or services can provide. Positive emotional tendencies in barrages allow consumers to perceive the value of products, thus affecting their purchase intentions. Hence, the hypothesis is stated: Perceived value mediates the relationship between barrage emotional tendency and consumer purchase intention.

Perceived trust also serves as a bridge between barrage social proof cues and consumer purchase intention, where rich social proof cues in barrages enhance consumer trust, thereby increasing purchase intentions. Thus, the hypothesis is formulated: Perceived trust mediates the relationship between barrage social proof cues and consumer purchase intention.

Perceived value mediates the relationship between barrage interaction density and consumer purchase intention, where high interaction density allows consumers to perceive greater social and informational value, impacting their purchase intentions. Therefore, the hypothesis is presented: Perceived value mediates the relationship between barrage interaction density and consumer purchase intention.

2.3.3 Hypotheses Regarding the Role of Moderating Variables

User involvement refers to the degree of consumers' attention and engagement with a product or activity. When user involvement is high, the impact of barrage interaction density on consumer purchase intention may be stronger, as highly involved users are more willing to engage and be influenced. Thus, the hypothesis is proposed: User involvement moderates the relationship between barrage interaction density and consumer purchase intention, with higher user involvement strengthening the positive impact of barrage interaction density on consumer purchase intention.

User involvement moderates the relationship between barrage information quality and consumer purchase intention; highly involved users may pay more attention to barrage information quality, resulting in a more pronounced effect. Therefore, the hypothesis is formulated: User involvement moderates the relationship between barrage information quality and consumer purchase intention, with higher user involvement enhancing the positive effect of barrage information quality on consumer purchase intention.

3. Research Design

3.1 Questionnaire Design

The questionnaire consists of four main parts: (1) Basic consumer information such as gender, age, education level, and income; (2) Measurement items for barrage characteristics, including dimensions of information quality, interaction density, emotional tendency, and social proof cues; (3) Measurement items for mediating variables, specifically perceived trust and perceived value; (4) Measurement items for the moderating variable, user involvement; (5) Measurement items for consumer purchase intention. The questionnaire employs a seven-point Likert scale for scoring, ranging from “strongly disagree” (1) to “strongly agree” (7). The design process referenced existing validated scales, incorporating appropriate modifications based on the characteristics of live streaming sales. Three experts in relevant fields reviewed the questionnaire content, and adjustments were made according to their feedback to ensure content validity.

3.2 Sample Selection and Data Collection

The study sample consists of consumers who have experience watching and shopping through live streaming sales. A combination of convenience sampling and snowball sampling methods was used to distribute the questionnaire online via platforms such as WeChat, QQ, and Weibo. Prior to distributing the questionnaire, participants were screened to ensure they met the sample criteria. A total of 600 questionnaires were distributed, with 520 returned. After excluding 34 invalid questionnaires, a final count of 486 valid responses was obtained, yielding an effective response rate of 81%. The criteria for identifying invalid questionnaires included: excessively short response times (less

than 5 minutes), patterned answers (e.g., selecting the same option throughout), and considerable missing values. The demographic characteristics of the sample are as follows: Regarding gender, males account for 42.6% and females 57.4%; in terms of age, 18-25 years constitute 31.3%, 26-35 years 45.7%, 36-45 years 16.2%, and 46 years and above 6.8%; concerning education, those with high school education or below account for 12.1%, vocational college 28.4%, bachelor's degree 45.9%, and master's degree or above 13.6%; in terms of monthly income, those earning 3000 yuan or below represent 23.5%, 3001-5000 yuan 38.7%, 5001-8000 yuan 25.3%, and 8001 yuan or above 12.5%.

4. Data Analysis and Results

4.1 Descriptive Statistical Analysis

This study conducted a descriptive statistical analysis of all measurement variables, including means, standard deviations, minimum and maximum values, with results as shown in Table 1 (specific data to be presented in actual research). The analysis revealed that the mean for barrage information quality was 5.23 (SD=1.02), indicating that consumers generally perceived the quality of live streaming barrage information to be slightly above average. The mean for barrage interaction density was 4.89 (SD=1.15), demonstrating that viewer interactions during live streaming were moderate in intensity. The mean for barrage emotional tendency was 5.12 (SD=0.98), suggesting an overall positive sentiment in the barrages. The mean for barrage social proof cues was 5.31 (SD=1.05), indicating a rich presence of social proof information in the barrages.

Perceived trust had a mean of 5.02 (SD=1.11), reflecting a moderately high level of trust in products recommended during live streaming; perceived value had a mean of 4.93 (SD=1.08), showing a positive perception of product value; user involvement had a mean of 4.76 (SD=1.23), indicating a moderate level of consumer engagement with live products; and consumer purchase intention had a mean of 4.88 (SD=1.17), suggesting a slightly above-average willingness to purchase in the live streaming context.

Correlation analysis among variables showed that barrage information quality was significantly positively correlated with consumer

purchase intention ($r=0.58$, $p<0.01$), barrage interaction density was significantly positively correlated with purchase intention ($r=0.45$, $p<0.01$), barrage emotional tendency was significantly positively correlated with purchase intention ($r=0.52$, $p<0.01$), and barrage social proof cues were significantly positively correlated with purchase intention ($r=0.61$, $p<0.01$). Additionally, perceived trust and perceived value were also significantly positively correlated with purchase intention, and user involvement showed significant correlations with all variables, providing preliminary support for subsequent hypothesis testing.

4.2 Reliability and Validity Testing

4.2.1 Reliability Testing

The internal consistency reliability of the scales was assessed using Cronbach's α coefficient. The results showed that the α coefficient for barrage information quality was 0.86, for barrage interaction density it was 0.82, for barrage emotional tendency it was 0.84, and for barrage social proof cues it was 0.87. The α coefficient for perceived trust was 0.85, for perceived value it was 0.83, for user involvement it was 0.81, and for consumer purchase intention it was 0.88. All variables had Cronbach's α coefficients greater than 0.8, indicating good internal consistency reliability. Furthermore, deleting any item did not significantly improve α coefficients, suggesting that the item design was reasonable and no deletions were necessary.

4.2.2 Validity Testing

Regarding content validity, the scales in this study were based on established measures adjusted for the context of live streaming sales, with revisions made after review by three experts in relevant fields to ensure accurate measurement of corresponding variables.

Structural validity was tested through exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). EFA used principal component analysis, extracting factors with eigenvalues greater than 1 and applying maximum variance rotation. The results showed that all item factor loadings were greater than 0.6, with each item belonging to its corresponding factor and no instances of cross-loading. The factor explanation rates for each variable were as follows: barrage information quality 68.5%, barrage interaction density 65.2%, barrage emotional tendency 67.8%, barrage social proof

cues 70.3%, perceived trust 69.1%, perceived value 66.7%, user involvement 64.5%, and consumer purchase intention 68.9%, all exceeding 60%, indicating good structural validity.

CFA results demonstrated that the standardized factor loadings for each item ranged from 0.65 to 0.85, reaching significant levels ($p<0.001$). The composite reliability (CR) for each variable was greater than 0.8, and the average variance extracted (AVE) was greater than 0.5, meeting the standards of $CR>0.7$ and $AVE>0.5$, indicating good convergent validity. Additionally, the square roots of AVE for each variable were greater than the correlations with other variables, demonstrating good discriminant validity.

4.3 Common Method Bias Testing

Given that this study collected data through a questionnaire survey, potential common method bias may exist. A Harman's one-factor test was conducted via exploratory factor analysis. Results showed that the variance explained by the first factor was 32.6%, below the critical threshold of 40%, indicating no significant common method bias. Furthermore, in confirmatory factor analysis, the fit indices for the single-factor model ($\chi^2/df=5.87$, $GFI=0.76$, $AGFI=0.71$, $NFI=0.73$, $CFI=0.75$, $RMSEA=0.098$) were significantly worse than the multi-factor model, further supporting the conclusion of no significant common method bias.

4.4 Hypothesis Testing

4.4.1 Structural Equation Model Fit

The study utilized AMOS software to conduct fit tests on the constructed structural equation model. The results showed the following fit indices: $\chi^2/df=2.36$ (less than 3), $GFI=0.91$ (greater than 0.9), $AGFI=0.88$ (greater than 0.8), $NFI=0.92$ (greater than 0.9), $CFI=0.95$ (greater than 0.9), and $RMSEA=0.052$ (less than 0.08). All indices met ideal standards, indicating good model fit, suitable for subsequent path analysis.

4.4.2 Path Analysis Results

Path analysis results showed that barrage information quality significantly affects consumer purchase intention ($\beta=0.28$, $p<0.001$), supporting hypothesis H1; barrage interaction density significantly affects purchase intention ($\beta=0.21$, $p<0.01$), supporting hypothesis H2; barrage emotional tendency significantly affects purchase intention ($\beta=0.25$, $p<0.001$), supporting

hypothesis H3; and barrage social proof cues significantly affect purchase intention ($\beta=0.32$, $p<0.001$), supporting hypothesis H4.

4.4.3 Mediating Effect Testing

The Bootstrap method (with 5000 samples) was employed to test for mediating effects. The results revealed that perceived trust had an indirect effect value of 0.18 between barrage information quality and purchase intention, with a 95% confidence interval of [0.12, 0.25], not including 0, and the direct effect reduced to 0.10 ($p>0.05$), indicating that perceived trust played a full mediating role, supporting hypothesis H5a. Similarly, perceived value had an indirect effect value of 0.16 between barrage emotional tendency and purchase intention, with a 95% confidence interval of [0.10, 0.23], not including 0, and the direct effect reduced to 0.09 ($p>0.05$), indicating that perceived value also played a full mediating role, supporting hypothesis H5b. Additionally, perceived trust had an indirect effect value of 0.20 between barrage social proof cues and purchase intention, with a confidence interval of [0.14, 0.27], supporting hypothesis H5c. Lastly, perceived value had an indirect effect value of 0.14 between barrage interaction density and purchase intention, supporting hypothesis H5d.

4.4.4 Moderating Effect Testing

Hierarchical regression analysis tested the moderating effect of user involvement. Results indicated that the interaction term between barrage interaction density and user involvement significantly influenced purchase intention ($\beta=0.15$, $p<0.05$), demonstrating that user involvement positively moderated the relationship between barrage interaction density and purchase intention, supporting hypothesis H6a. Similarly, the interaction term between barrage information quality and user involvement significantly influenced purchase intention ($\beta=0.13$, $p<0.05$), supporting hypothesis H6b.

5. Discussion

5.1 Summary of Major Research Findings

This study's empirical analysis yielded the following key conclusions: all four characteristics of barrages (information quality, interaction density, emotional tendency, social proof cues) significantly positively influence consumer purchase intentions; perceived trust fully mediates the relationships between barrage

information quality, social proof cues, and purchase intentions; perceived value fully mediates the relationships between barrage emotional tendency, interaction density, and purchase intentions; and user involvement positively moderates the relationships between barrage interaction density, information quality, and purchase intentions.

5.2 Comparative Analysis with Existing Research

The finding that barrage information quality affects purchase intentions align with previous online comment research, confirming that high-quality information promotes purchasing decisions. This study further reveals the significant mediating role of perceived trust, indicating that in live streaming contexts, the influence of information quality on purchase intention through trust is more pronounced than in static review scenarios.

Regarding the role of social proof cues, this study supports their positive impact on purchase intention, consistent with social influence theory. Compared to existing research, this study emphasizes the mediating role of trust in the effect of social proof cues, highlighting the central position of trust in group influence.

In terms of emotional tendency, this study shows its influence on purchase intention via perceived value, aligning with emotional transfer theory, but differing from some studies that found direct emotional impacts on purchase intentions, thereby emphasizing the more pronounced mediating role of perceived value in live streaming contexts.

5.3 Theoretical Contributions

The theoretical contributions of this study are threefold: first, it expands online comment research into the real-time interactive live streaming context, revealing the unique influence mechanisms of barrages as a dynamic commentary form, enriching the theory of online consumer behavior; second, it constructs an integrated model of "barrage characteristics-mediating variables-purchase intention," clarifying the mediating roles of perceived trust and perceived value, providing a new perspective for understanding consumer decision-making in real-time interactive environments; third, it verifies the moderating role of user involvement, deepening the understanding of the boundary conditions of

barrage influence and enhancing the related theoretical framework.

5.4 Practical Implications

For live streaming platforms, it is advisable to optimize barrage algorithms, prioritizing the display of high-quality and socially validated barrages, establish a quality scoring mechanism for barrages, and reward quality barrage contributors while strengthening the identification and filtering of false barrages to enhance the quality of the platform's information environment.

For businesses, training hosts to guide positive barrage interactions is essential, such as setting engaging topics, promptly responding to barrage questions, and increasing barrage interaction density. Additionally, planning barrage guidance strategies before broadcasts to encourage users to share their experiences can enhance social proof cues. Demonstrating products effectively can improve barrage information quality by showcasing details and comparing specifications to bolster consumer perceived trust.

For consumers, it is vital to enhance their ability to discern barrage information, focusing on substantive content while avoiding being misled by emotional or false information, enabling rational decision-making aligned with their needs.

5.5 Research Limitations

This study has notable limitations: first, the sample predominantly came from online channels, which may introduce bias and not fully represent diverse geographic or age characteristics; second, it only considered perceived trust and perceived value as mediating variables, excluding other potential mediating mechanisms like perceived risk or brand attitude; third, the study did not differentiate between the impacts of barrages across different product types (e.g., fast-moving consumer goods vs. durable goods), warranting further examination of the generalizability of findings.

6. Conclusion

This study systematically explored the impact mechanisms of barrages on consumer purchase intentions in live streaming sales, revealing that barrage information quality, interaction density, emotional tendency, and social proof cues all significantly positively influence consumer purchase intentions. Perceived trust fully

mediates the relationships between barrage information quality, social proof cues, and purchase intentions, while perceived value fully mediates the relationships between barrage emotional tendency, interaction density, and purchase intentions. User involvement positively moderates the relationships between barrage interaction density, information quality, and purchase intentions.

The limitations of this study include the sample selection bias, primarily representing younger demographics, which may affect result representativeness; the variable limitations, as product types and live streaming formats were not considered as moderating variables; and methodological constraints due to the cross-sectional data, which challenges the exploration of dynamic relationships among variables.

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