

Article

The Influence of Educational Content and Perceived Credibility of Knowledge-Oriented Streamers on Consumers' Purchase Intentions in Live-Streaming E-Commerce---An Empirical Study of East Buy

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Abstract: This research explores the influence mechanism of educational content and the perceived credibility of knowledge-oriented streamers on consumers' purchase intentions in live-streaming e-commerce, focusing on East Buy. As live-streaming marketing shifts from entertainment and low-price promotions to knowledge-based value delivery, the psychological impact of educational content remains under-explored. Grounded in the Stimulus-Organism-Response (SOR) framework, this study conceptualizes educational content as the external stimulus, perceived credibility as the internal organism state, and purchase intention as the behavioral response. A theoretical model was developed to examine direct and indirect relationships, emphasizing the mediating role of perceived credibility. Using a quantitative approach, data were collected via structured questionnaires from consumers with East Buy viewing and purchasing experience. Subsequent empirical analysis using SPSS, including reliability, validity, correlation, and regression tests, confirmed the research hypotheses. The findings demonstrate that educational content significantly and positively predicts purchase intention, highlighting the core role of knowledge value in consumer decision-making. Furthermore, high-quality educational content enhances streamers' perceived credibility, which positively regulates purchase behavior. Perceived credibility thus serves as a crucial partial mediator and psychological bridge connecting content attributes to consumer actions. Theoretically, this study expands the live-streaming e-commerce literature through a content-centric perspective. Practically, it offers actionable strategies for platforms and streamers to optimize content, build long-term user trust, and maximize conversion efficiency in knowledge-oriented live broadcasts.

Keywords: live-streaming commerce; educational content; perceived credibility; purchase intention; sor framework

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1. Introduction

With the iterative upgrading of Internet technology and the popularization of mobile payment, live e-commerce has emerged as an important and dynamic development model in the field of e-commerce [1]. With the advantages of real-time interactive scenes, intuitive and vivid product display, and the professional recommendation of the streamer, live e-commerce has created a more immersive shopping experience for consumers and has gradually become one of the core channels that cannot be ignored in the online retail field. Compared with the traditional e-commerce model, live e-commerce has distinctive features such as efficient information transmission, prominent interactivity, and strong immersion, which has also enabled it to achieve explosive development in recent years and quickly occupy an important share of the e-commerce market.

However, it cannot be ignored that in the scene of live e-commerce, consumers often cannot directly contact physical goods, and the problem of information asymmetry is

particularly prominent. It is precisely because of this that consumers often rely more on the information transmitted by the streamer and the recommendations given when making purchase decisions [1]. From this point of view, the content quality of streamer output has become one of the key factors affecting consumers' buying behavior, and its importance is self-evident.

One of the core reasons why the live broadcast e-commerce platform represented by East Buy can quickly become popular and become a phenomenal case in a short time is the content innovation model created by knowledge-oriented streamers. East Buy relies on the high-quality teacher resources of New Oriental educational institutions, and most of its streamers have good educational backgrounds and excellent language skills. In the live broadcast process, they not only sell products but also convey all kinds of knowledge and information to the audience through systematic and professional explanations, forming a unique content style that is completely different from the traditional entertainment live broadcast with goods, and also gaining the recognition of a large number of consumers.

This paper takes live e-commerce as the research background, takes East Buy as a typical case, and relies on the SOR theoretical framework to focus on the internal relationship among educational content, perceived credibility, and consumers' purchase intention, in order to provide practical theoretical basis and practical reference for content optimization and marketing strategy formulation of the live e-commerce industry, and fill the shortcomings of existing research [1].

2. Methodology

2.1. Introduction

Based on this, the entire research process will be meticulously dissected and analyzed, as demonstrated in Figure 1. From the first design of the questionnaire, several rounds of polishing and improvement were conducted; after this, sample screening standards were established and refined. At every stage of data collection, as well as the entire conception and incremental modification of subsequent data processing and analysis ideas, all links in the research process will be clearly and concretely demonstrated to ensure the traceability and rigor of the research [1].

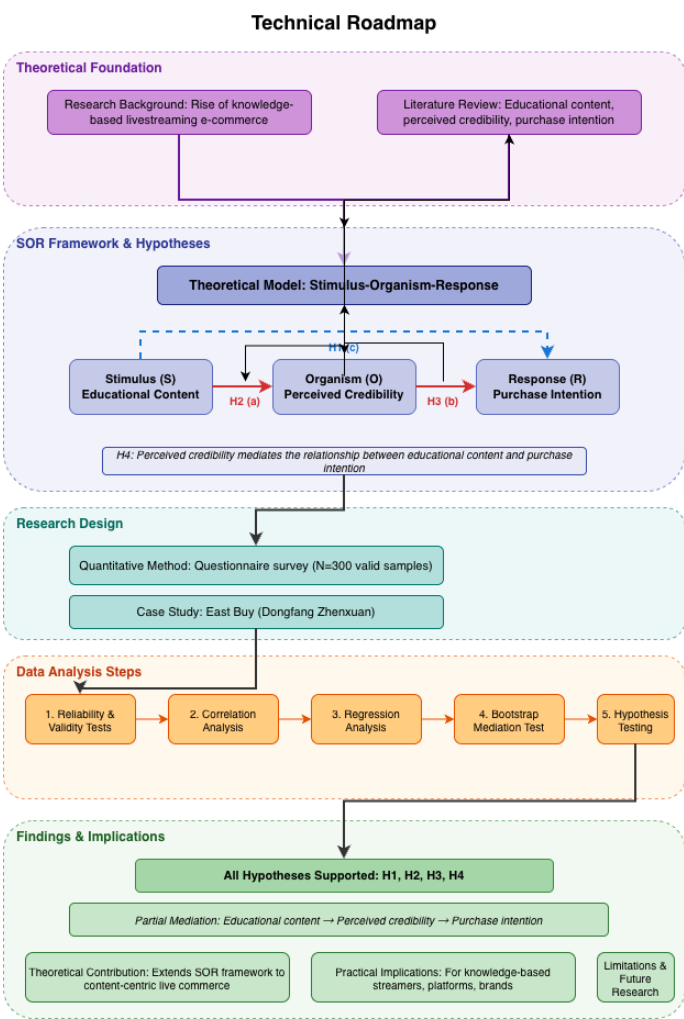


Figure 1. Technical Roadmap.

Finally, it will also focus on the ethical considerations in the research process, which is not only the basic requirement of academic research but also the key to protect the legitimate rights and interests of subjects and ensure the compliance of research. It can be said that the content of this chapter is the methodological support for the reliability and effectiveness of the whole research results [2].

Combined with the research objectives and problems of this study, we finally adopt the quantitative research paradigm and take the questionnaire survey as the core research tool. The core is to explore and test the internal relationship among the educational content of knowledge-oriented streamers, the credibility of consumers' perception, and consumers' purchase intention. Considering the pertinence and typicality of the research, we choose the "East Buy" live broadcast room as a specific research case and verify the preset research hypothesis by systematically analyzing the collected empirical data, so as to provide reference theoretical basis and practical guidance for the content transformation of the current live broadcast e-commerce industry [1].

The theoretical framework of this study, illustrated in Figure 2, is grounded in the stimulus-organism-response theory. Educational contents presented by knowledge-oriented communicators in the model are considered external stimuli. The above external factors are expected to alter people's internal feelings about the credibility of the product and thus change their behavior, which may lead to a desire to purchase. The framework shows that education affects purchasing intention directly, and through a reduced credibility effect, education indirectly influences purchasing intention. This conceptual system will provide the foundation for testing the four research hypotheses empirically [3].

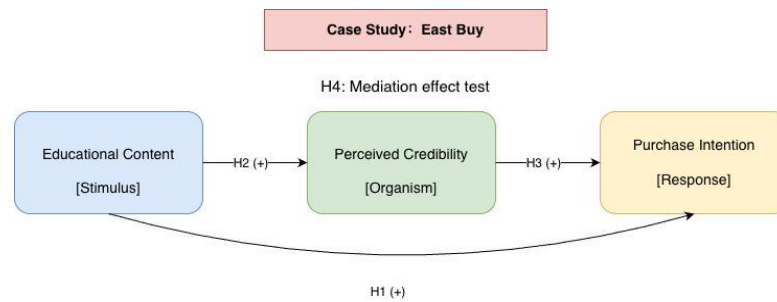


Figure 2. Conceptual Map.

The PRISMA flow diagram is displayed in Figure 3. The first purpose of the above selections is to collect relevant research materials for the second chapter, thus laying a foundation of theory and clarifying deficiencies in prior studies [2]. For better openness and more rigorous methods, all the selection work in the systematic review and meta-analysis strictly followed the predetermined rules.

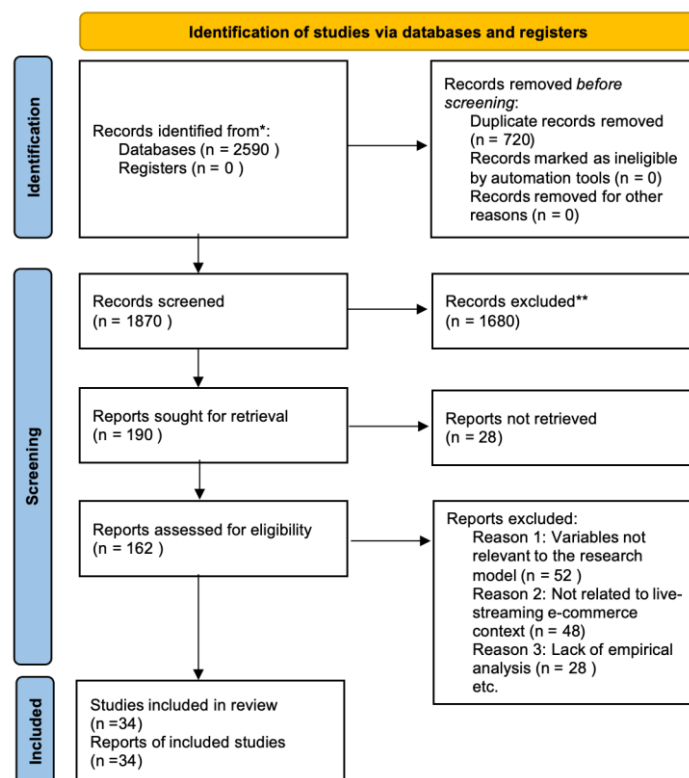


Figure 3. Prisma Flow Diagram.

The first stage is the identification stage. Initially, 2590 records were obtained from the database, and no other registers were required for the retrieval process. After removing the 720 duplicate records, 1870 unique records were passed to the next stage [4].

The second stage is the screening stage [5]. The researchers first screened 1870 records based on their titles and abstracts. 1680 records were excluded because they had no obvious connection with live e-commerce, knowledge-oriented communicators, and consumer behavior, and the remaining 190 records entered the full-text retrieval stage.

The third stage is the report retrieval stage. For the remaining 190 records after screening, the study tried to obtain their full-text reports, and finally 28 reports failed to be retrieved. The reasons are a lack of access rights, no full-text version, and only abstracts of the papers are available.

It will be added to the list. Among the 162 collected reports, all of them met the inclusion criteria for the study and were included. Some reports were excluded for specific reasons, including 52 reports whose core variables were inconsistent with the educational content, perceived credibility, and purchase intention in this research model, 48 reports whose research scenarios did not belong to the category of live e-commerce, and 28 reports were mostly conceptual or critical papers without empirical analysis support. In the end, 34 studies met all the inclusion criteria and were included in this literature review [4]. These 34 studies have been included in the references and become the core basis of theoretical discussion in Chapter 2.

The PRISMA flow diagram used in this literature screening effectively ensures the transparency, repeatability, and rigor of the whole process, which is of great significance for clarifying the existing research gaps and demonstrating the assumptions put forward in this study [2].

2.2. Research Hypotheses and Theoretical Model

This study has defined three core research concepts---the educational content of knowledge-oriented streamers, the credibility of consumers' perception, and consumers' purchase intention. Judging from existing research results, educational content can often influence consumers' purchase intention through two ways: one is direct action, and the other is indirect conduction with the help of perceived credibility. However, in the specific situation of knowledge-oriented live broadcasts, the empirical exploration of the intermediary role of perceived credibility remains insufficient, especially quantitative research focusing on East Buy as the specific research object, which is still scarce [6].

The core view of SOR theory (stimulus-organism-response theory) is that external stimulus (S) affects the internal organism state (O) of individuals, and then influences their final behavioral response (R). In the scenario of this study, the educational content output by the knowledge-oriented streamer can be regarded as an external stimulus affecting consumers (S); consumers' perceived credibility of the streamer corresponds to their internal psychological organism state (O); and the willingness to buy is the behavioral response (R) that consumers ultimately exhibit. Theoretically, this framework provides support for studying the reasons behind consumer decisions based on knowledge-oriented streamers [7].

Based on the above analysis, this study adopts the core perspectives of SOR theory and source credibility theory, builds a theoretical model of educational content, perceived credibility, and purchase intention, and proposes the following four research hypotheses:

1. H1: The educational content of knowledge-oriented streamers has a significant positive impact on consumers' purchase intention.
2. H2: Consumers' perception of the educational content of knowledge-oriented streamers has a significant positive impact on their perceived credibility.
3. H3: Consumers' perceived credibility of knowledge-oriented streamers has a significant positive impact on purchase intention.
4. H4: Perceived credibility plays an intermediary role between the educational content of knowledge-oriented streamers and consumers' purchase intention.

2.3. Research Procedures

2.3.1. Questionnaire Design

The design of the questionnaire in this study strictly follows the general principles for preparing questionnaires in social science research: the items are clearly stated and easy to understand, no double-barreled questions have been used, guiding words have been omitted, all dimensions of the scale are consistent, and measurement error has been minimized.

The whole questionnaire is divided into three parts, each with clear functions and distinct emphases:

The first part is the basic information section [8]. The core purpose of this section is to collect the demographic characteristics and basic behavioral information of the respondents, including gender, age, education, occupation, frequency of watching the live

broadcast of East Buy, and whether they have purchased products in the live broadcast room. This information is primarily used to describe the overall structure of the sample and lay the foundation for subsequent data analysis.

The second part focuses on behavior and cognition [9]. This section includes seven items aimed at understanding the behavioral characteristics and cognition of the interviewees when they watch the live broadcast of East Buy, such as the core reason for watching the live broadcast, the type of content they are concerned about, their perception of the differences between East Buy and other streamers, the specific situations that lead to purchase intentions, the importance attached to streamer characteristics, and the influence of the streamer's knowledge explanation on their trust.

The third part consists of the scale-based questions. In this study, a Likert scale was used for measurement, where 1 represents "very different" and 5 represents "very agree." This section includes 30 measurement items, with the main three factors quantitatively analyzed being Educational Content, Perceived Credibility, and Purchase Intention. These questions are designed to capture respondents' actual perceptions and attitudes toward knowledge-oriented streamers in live e-commerce, serving as the foundational data for subsequent empirical research [10].

2.3.2. Sample Selection and Data Collection

In this study, the target group is limited to consumers who have watched the live broadcast of East Buy. The core reason is that the research focuses on two core variables: educational content and credibility perception. Only consumers who have actually watched the live broadcast of the platform can effectively evaluate the relevant research content with first-hand experience, which ensures the pertinence and effectiveness of the research data.

In the process of data collection, the research adopts a combination of multi-channel and multi-strategy to improve the breadth and representativeness of the sample. First of all, with the help of the WJX platform, a detailed online questionnaire is designed, and the questionnaire link and QR code can be directly accessed, which is convenient for respondents to complete the survey without time and space constraints. To extend the reach of the questionnaire, various platforms such as WeChat Moments, WeChat Groups, Weibo, and TikTok were used to distribute it widely. Given the large number of users and a strong sense of community on these platforms, many high-quality participants joined [7]. At the same time, in order to further improve the response rate and data quality of the questionnaire, the research actively guided the respondents who had completed the questionnaire to forward it to consumers who had also watched the live broadcast of East Buy.

With the help of word-of-mouth communication and the diffusion effect of social networks, the sample coverage was effectively expanded and the sample deviation reduced [11]. The determination of sample size strictly followed the general standard of social science research, which states that the sample size needs to reach 5 to 10 times the number of measured items to ensure the robustness and reliability of data analysis.

The questionnaire of this study contains 37 items, and the minimum sample size was set to not less than 185. Considering that there might be invalid questionnaires during data collation, to improve the accuracy of data analysis, the study planned to collect more than 300 questionnaires to increase the redundancy and representativeness of the samples. Data collection started on March 19th, 2026, and was successfully completed on March 26th, 2026. After strict screening and sorting, 347 questionnaires were collected in this survey, of which 300 were valid, resulting in an effective response rate of 86.46%. The number of valid questionnaires fully meets the requirements of the preset sample size, laying a solid foundation for subsequent data analysis.

2.3.3. Data Analysis Methods

In this study, SPSS 26.0 statistical software is used to analyze the collected effective data, and the specific analysis steps are as follows [12].

2.3.3.1 Descriptive Statistical Analysis

The demographic characteristics of the sample are statistically described, covering core variables such as gender, age, education level and occupation, and the overall structure of the sample is presented in the form of frequency and percentage. The average and standard deviation of each research variable are calculated, and the overall perception level of respondents on educational content, perceived credibility and purchase intention is clear, which provides basic reference for further analysis.

2.3.3.2 Reliability Testing

Reliability analysis tests the consistency of a scale in measuring the same content. Cronbach's α is used in this study to measure the reliability of the questionnaire. A Cronbach's α value of 0.7 or higher is generally regarded as acceptable; if this value is greater than 0.8, it is considered high and indicates good internal consistency among the scale items.

The Cronbach's α coefficient will be calculated in this study for the total scale and for each latent variable, as well as for educational content and the three sub-dimensions of perceived credibility (professionalism, trustworthiness and appeal) and purchase intention. This ensures that the developed scale and the collected data are sufficiently reliable for the following correlation and regression analyses.

2.3.3.3 Validity Testing

The construct validity of the scale is tested by combining the KMO test with the Bartley sphericity test. A KMO value greater than 0.7 indicates that the sample data is suitable for factor analysis. In the Bartley sphericity test, a significance level lower than 0.05 indicates a significant correlation among the variables, demonstrating that the scale has good construct validity [13].

2.3.3.4 Correlation Analysis

Pearson correlation analysis was used to study the relationship between educational content, perceived credibility and purchase intention in this paper. By calculating the correlation coefficient of the variables, it can be determined whether there is a significant correlation among them, thus providing a basis for the following regression analysis and mediation effect test [14].

2.3.3.5 Regression Analysis and Mediation Effect Testing

In order to test the causal relationship between research hypotheses and variables, this study adopts the regression analysis method and strictly follows the three-step intermediary analysis program proposed by Baron and Kenny:

1. Testing the effect of educational content on purchase intention (path c);
2. Testing the effect of educational content on perceived credibility (path a);
3. Simultaneously testing the effects of educational content and perceived credibility on purchase intention (paths b and c).

Furthermore, in order to enhance the robustness of the analysis results of the intermediary effect, this study introduces the self-help method for supplementary testing. Through 5000 self-help repeated sampling, the 95% confidence interval is constructed. If the confidence interval does not contain zero, it can be judged that there is a significant mediating effect.

3. Analysis of Data

3.1. Descriptive Statistics

The gender, age, educational background, occupation, and income level of 300 valid samples were analyzed.

In terms of gender distribution, there are 141 males accounting for 47.00% and 159 females accounting for 53.00%. The structure is relatively balanced, with no significant gender bias. At the age level, the group aged 18-25 accounts for the highest proportion, reaching 43.67%, while the group aged 26-35 accounts for 27.33%, together comprising over 70%. The sample primarily consists of young people who frequently use the Internet and are accustomed to watching live broadcasts, aligning well with the research context.

In terms of educational attainment, those with a bachelor's degree or higher accounted for a significant proportion: 39.33% held a bachelor's degree, and 10.00% held a master's degree or higher, together making up nearly half of the sample. Additionally, 32.67% held a college diploma, while 18.00% had completed secondary school or below. Overall, the sample's educational level was relatively high, indicating a strong capacity for understanding and evaluating information, which is crucial for assessing knowledge-oriented streamers' content and its credibility [4].

Regarding education, it is estimated that undergraduate students account for 39.33%, those with a master's degree or above account for 10.00%, and junior college graduates account for 32.67%. As a whole, the sample demonstrates a high level of education and the basic ability to comprehend and evaluate knowledge-oriented content [10]. In terms of occupational distribution, employees of enterprises account for 38.67%, and students account for 26.33%, with freelancers, public officials, and other groups also represented, indicating diverse sources. Income is concentrated in the range of 2001-5000 yuan, accounting for 38.00%. All income levels are represented, and the hierarchical structure is reasonable.

Overall, the sample distribution is balanced and representative, effectively reflecting the basic characteristics of live e-commerce consumers and providing a reliable data foundation for subsequent analysis.

3.2. Patterns of Data/Results for Each Research Question or Hypothesis

3.2.1. Reliability Test

In this study, the Cronbach's α reliability of the questionnaire was tested, and the specific results are presented in Table 1. The coefficients for each dimension are all higher than 0.8, indicating excellent internal consistency of the data and providing support for the subsequent empirical analysis [6, 8].

Table 1. Reliability Analysis

Name	Cronbach's α Coefficient
Educational Content	0.846
Perceived Credibility – Professionalism	0.824
Perceived credibility – reliability	0.875
Perceived credibility – appeal	0.844
Purchase intention	0.897

3.2.2. Validity Analysis

The validity of the scale was assessed using the KMO (Kaiser-Meyer-Olkin) statistic and Bartlett's sphericity test. According to the results in Table 2, the KMO statistic was 0.958, which is greater than 0.8, indicating that the scale possesses good sample adaptability and usability prior to factor analysis. In Bartlett's sphericity test, $p < 0.001$, suggesting that there are correlated factors among the variables [1].

Table 2. Results of KMO and Bartlett's Test

KMO value		0.958
Bartlett's sphericity test	Approximate chi-square	4220.645
	df	231
	p-value	0.000

3.2.3. Correlation Analysis

In order to clearly grasp the internal relationship among educational content, perceived credibility, and consumers' purchase intention, Pearson correlation analysis method is used to test the core variables in this study, and the specific results are shown in Table 3. From the overall results, it can be observed that there is a significant positive correlation among the three variables, all of which are significantly correlated at the statistical level of 0.01. This result preliminarily indicates that there is a relatively stable and close linear correlation between the variables, providing necessary premise support for the subsequent regression analysis and mediation effect test [9].

Table 3. Pearson Correlation Analysis

	Purchase Intention	Educational Content	Perceived Credibility
Purchase Intention	1		
Educational content	0.473**	1	
Perceived credibility	0.580**	0.616**	1

* $p < 0.05$ ** $p < 0.01$

Specifically, the correlation coefficient between educational content and purchase intention is 0.473. Although it has not reached a high correlation level, it still demonstrates a moderate positive correlation [9]. This suggests that in the knowledge-oriented live broadcast scenario, the more systematic the knowledge delivered by the streamer and the more prominent the content value, the more fully consumers understand the product, increasing the likelihood of purchase behavior. This result highlights the important role of content value in live e-commerce to a certain extent, indicating that relying solely on low-price promotion and atmosphere incitement is no longer the only way to attract consumers (Figure 4).

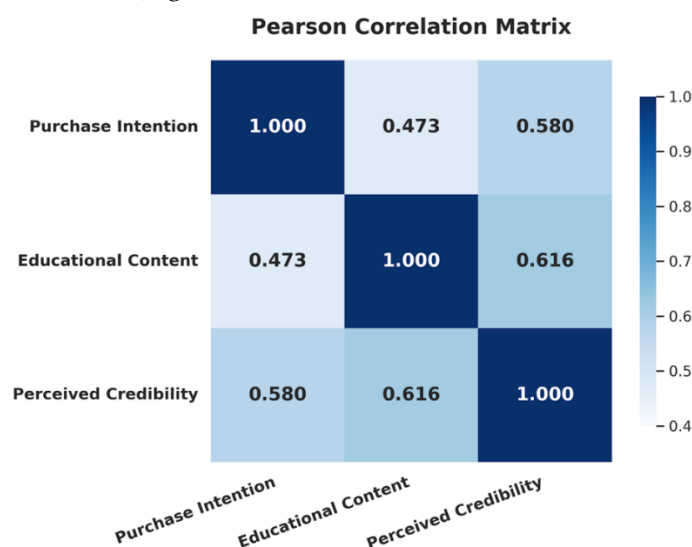


Figure 4. Pearson Correlation Analysis

The correlation coefficient between perceived credibility and purchase intention is 0.580, indicating that trust factors occupy a more central position in the decision-making process of live broadcast consumption. The more consumers recognize the professional judgment, information authenticity, and personal image of the streamer, the easier it

becomes for them to accept recommendations and form purchase intentions [1]. This also reflects that trust has become a key factor in reducing decision-making costs and psychological concerns in a highly information-intensive and content-rich live broadcast environment.

The correlation coefficient between educational content and perceived credibility is 0.616, which shows the strongest correlation among the three [3]. This result intuitively reveals that knowledge-oriented streamers can build trust to a great extent by consistently delivering professional and organized educational content. Logical explanations of product principles, cultural background supplements, and practical skills sharing continuously strengthen consumers' recognition of the streamer's professional ability, gradually forming stable trust.

Based on the above correlation, it can be inferred that educational content may not only directly affect purchase intention but also indirectly influence consumer behavior by enhancing perceived credibility. The closely related structure among these variables provides preliminary data support for the theoretical model of this study, making the subsequent regression analysis and mediation effect test more practical.

3.2.4. Regression Analysis

To further examine the causal relationship between the educational content of knowledge-oriented streamers, perceived credibility and consumer purchase intention, and to analyse the mediating role of perceived credibility, this study employed a stepwise regression method to construct a mediation model; the results are shown in Table 4.

Table 4. Regression Mediation Effect Model

	y	m	y
Constant	1.739** (9.685)	1.551** (10.681)	0.942** (4.895)
x	0.474** (9.255)	0.559** (13.487)	0.187** (3.155)
m			0.514** (7.879)
Sample size	300	300	300
R ²	0.223	0.379	0.358
Adjusted R ²	0.221	0.377	0.353
F-value	F(1,298) = 85.663, p = 0.000	F(1,298) = 181.901, p = 0.000	F(2,297) = 82.652, p = 0.000

*p<0.05 **p<0.01 (t-values are shown in brackets)

In Model 1, a regression analysis was conducted with purchase intention as the dependent variable and educational content as the independent variable. The results indicate that educational content has a significant positive influence on purchase intention, with a regression coefficient of 0.474, which is significant at the 0.01 level. This suggests that the richer the educational content provided by knowledge-oriented streamers, the stronger the consumers' purchase intention, thereby validating the direct promotional effect of educational content on purchase intention.

In Model 2, a regression analysis was conducted with perceived credibility as the dependent variable and educational content as the independent variable [9, 12]. The results indicate that educational content has a significant positive effect on perceived credibility, with a regression coefficient of 0.559, which is significant at the 0.01 level. This suggests that when streamers provide more specialised, logically coherent and practical knowledge content during live streams, consumers are more likely to develop a sense of trust in the streamer, thereby enhancing their perceived credibility.

In Model 3, both educational content and perceived credibility were included in the regression model, with purchase intention as the dependent variable. The results showed that perceived credibility has a significant positive effect on purchase intention, with a regression coefficient of 0.514, which was significant at the 0.01 level; simultaneously, the regression coefficient for educational content on purchase intention decreased from 0.474 in Model 1 to 0.187, but remained significant. This indicates that, following the introduction of the mediating variable, the direct effect of educational content on purchase intention has weakened.

In terms of explanatory power, the coefficient of determination for Model 1 is 0.223, for Model 2 it is 0.379, and for Model 3 it is 0.358, suggesting that the models as a whole possess good explanatory power. Furthermore, the F-values for each model are all significant, indicating that the regression equations are statistically valid. Taking the above analysis into account, it can be seen that educational content not only directly influences consumers' purchase intention but also indirectly influences it by enhancing consumers' perceived credibility. Since the influence of educational content on purchase intention remains significant but the coefficient has decreased markedly after introducing perceived credibility, this indicates that perceived credibility plays a partial mediating role between the two [11].

Figure 5 visually represents the regression mediation effect model, demonstrating the intricate quantitative relationships among educational content, perceived credibility, and purchase intention. Initially, the model highlights a substantial total effect (Total Effect $c = 0.474$) of educational content on purchase intention, confirming that high-quality knowledge delivery significantly stimulates consumer buying behaviour. Furthermore, the diagram illustrates a strong positive impact of educational content on the mediator, perceived credibility (Path A = 0.559), which subsequently exerts a significant positive influence on purchase intention (Path B = 0.514). Crucially, upon introducing the mediator, the direct effect of educational content on purchase intention diminishes to $C' = 0.187$ but remains statistically significant, thereby robustly substantiating that perceived credibility plays a partial mediating role in this dynamic.

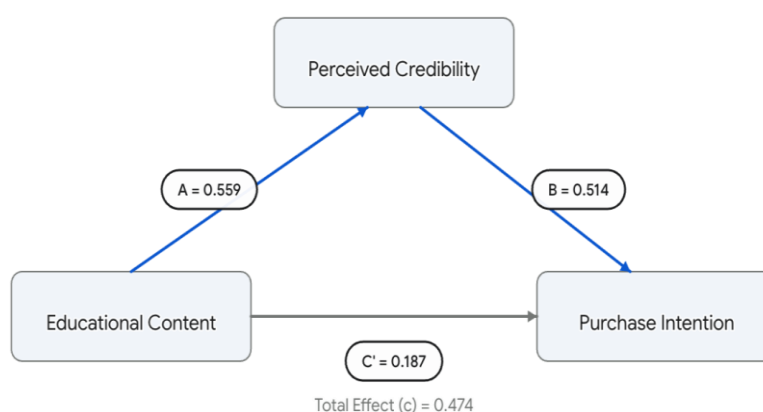


Figure 5. Regression Mediation Effect Model

Based on the above regression analysis, to improve the robustness of the mediation effect test further, this study used the Bootstrap method to test the mediating role of perceived credibility, and the results are presented in Table 5.

Table 5. 95% Confidence Interval of the Effect Value

Item	c Total effect	a	b	a*b Mediation effect	c' Direct effect
$x \rightarrow m \rightarrow y$	0.373– 0.575	0.477– 0.640	0.386– 0.643	0.194– 0.392	0.070– 0.303
a*b represents the 95% bootstrap confidence interval; bootstrap type = percentile bootstrap method					

In terms of the overall effect, the confidence interval for the influence of educational content on purchase intention is [0.373, 0.575]; as this range does not include zero, it can be concluded that there is a statistically significant general impact of educational content on purchase intention [8].

The confidence intervals for the path coefficients are as follows: the range of the effect of educational content on perceived credibility is [0.477, 0.640], and the range of the effect of perceived credibility on purchase intention is [0.386, 0.643]; neither interval contains zero. Therefore, both paths are statistically significant; that is to say, the educational content positively affects the perception of credibility, and this increased perception of credibility subsequently enhances the purchase intention.

For the mediating effect, the confidence interval of the indirect effect is [0.194, 0.392], and since it does not include zero, it is considered to be statistically significant; thus, the mediating effect of perceived credibility has been confirmed [7].

Additionally, the confidence interval of the direct effect is [0.070, 0.303], which does not include zero; thus, even after accounting for perceived credibility, educational content is still positively correlated with purchase intention. This also indicates that it is not a full mediation but a partial mediation.

Based on the whole of the Bootstrap test results, it can be concluded that perceived credibility mediates the effect of educational content on purchase intention significantly, and this mediation is of a partial type [10]. The above results are in line with the conclusions drawn from the regression analysis and thus support the accuracy of this study (Figure 6).

**Figure 6.** 95% Confidence Interval of the Effect Value

3.2.5. Hypothesis Testing

It can be observed that educational content has a significant positive effect on purchase intention; that is to say, the educational content provided by knowledge-oriented streamers can effectively promote consumers' desire to purchase, and therefore Hypothesis H1 is supported. The effect of educational content on perceived trustworthiness is positively correlated; that is to say, the richer the educational materials, the more trust consumers place in streamers, and thus Hypothesis H2 has been confirmed. Further research shows that perceived credibility is positively correlated with the intention to purchase; therefore, the more trust consumers have in a streamer, the higher their desire to buy, thus supporting Hypothesis H3. After adding the perceived credibility term, the coefficient of the effect of educational content on purchase intention decreased significantly but was still positive; thus, perceived credibility partially mediates this relationship, and therefore Hypothesis H4 is supported.

Based on the Bootstrap method, the overall effect of educational content on purchase intention is relatively large [5, 13]. Based on the contents of education, we know the ways in which to understand trust, how to earn trust, and what to buy with trust. Therefore, the families of H1, H2, and H3 have been well-supported. The confidence interval of the mediation effect does not include zero. It can be seen that the indirect impact of knowledge and trust between educational content and purchase intention is relatively large. It will directly affect that. Therefore, such an intermediary is considered to be limited. Therefore, if H4 is supported and the conclusion derived from a stricter Bootstrap test remains valid, it can be considered highly robust evidence of the verification result.

4. Conclusions and Future Work

4.1. Conclusions Regarding Each Research Question or Hypothesis

Based on the above empirical analysis results, all the hypotheses in this study have been verified, and the specific conclusions are as follows:

H1 is confirmed; therefore, the new curriculum will stimulate the demand for online games. In the knowledge-oriented live-streaming area, the host helps consumers learn about the attributes of products in a broad-ranging and in-depth way by explaining the main features, cultural background, and usage methods of a product professionally, thus promoting consumers' desire to purchase. Therefore, the learning content is used to guide the purchase decisions of the consumers. Although perceived credibility does mediate the relationship between them to some extent, the direct effect of educational content on purchase intention is still statistically significant ($c' = 0.187$, $p < 0.01$); thus, it can be inferred that educational content can build consumer trust and motivate a desire for purchase independently of this trust.

The H2 hypothesis holds, and the educational content can significantly positively affect consumers' perception and credibility of the streamer. A professional and clear explanation provided by the streamer in a live broadcast can fully show the audience the streamer's professional competence and trustworthiness, thus increasing the audience's trust in the streamer. It can be seen from the above that high-quality educational materials are required by influencers to create an authoritative image and earn the trust of the public.

H3 holds, and the perceived credibility by consumers has a positive effect on their purchase intention. When consumers are very familiar with and trust their reference persons, they will be more willing to adopt the products that these individuals have introduced and are thus likely to buy them. Therefore, it can be concluded that trust is needed for people to make a purchase decision.

Hypothesis H4 holds, and perceived credibility plays a partial intermediary role between educational content and consumers' purchase intention. The influence path of educational content on purchase intention is dual, which can not only directly affect consumers' purchase intention, but also indirectly promote consumers' purchase intention by enhancing consumers' perceived credibility of the streamer. This discovery helps to

reveal more clearly the internal logic of consumer behavior in the knowledge-oriented real-time e-commerce scenario.

4.2. Conclusions Regarding the Research Problem

Guided by the SOR theoretical framework and based on empirical data from East Buy, this study systematically addressed the four research questions put forward at the outset. The findings provide coherent responses to each question and collectively shed light on the psychological mechanism through which educational content delivered by knowledge-oriented streamers influences consumer behaviour.

Regarding RQ1, the results confirm that educational content provided by knowledge-oriented streamers exerts a significant and positive impact on consumers' purchase intention. This direct pathway demonstrates that professional, informative, and systematically structured content can independently stimulate consumers' willingness to buy, without relying on trust-related psychological mechanisms.

With respect to RQ2, the study finds that consumers' perception of educational content positively enhances their perceived credibility of the streamer. The richer and more professional the shared knowledge, the more consumers recognise the streamer as competent, trustworthy, and appealing—thus confirming that content quality serves as a critical antecedent of perceived credibility.

Addressing RQ3, the results indicate that perceived credibility exerts a significant positive influence on purchase intention. The greater consumers' trust in the streamer's expertise, honesty, and personal charm, the more likely they are to act on the streamer's product recommendations. This finding reaffirms the pivotal role of trust in live-streaming commerce contexts.

Finally, RQ4 explores the mediating mechanism, and the findings support a partial mediation model. Perceived credibility acts as a meaningful psychological bridge between educational content and purchase intention: after controlling for perceived credibility, the direct effect of educational content weakens but remains statistically significant. Thus, educational content drives purchase intention through two distinct pathways: directly, by virtue of its intrinsic informational value, and indirectly, by fostering consumer trust—an indirect route that is central to the knowledge-oriented live-streaming model adopted by East Buy.

In summary, the research problem has been effectively addressed by demonstrating that educational content functions as a dual-path driver of purchase intention within the SOR framework. This mechanism aligns closely with East Buy's distinctive characteristics, including its classroom-style narration, in-depth product explanations, and cultural storytelling, confirming that such content is not merely an atmospheric supplement but a core force shaping consumer decision-making in knowledge-intensive live-streaming environments.

4.3. Implications for Policy and Practice

Based on the empirical results of this study, several practical recommendations can be provided for stakeholders involved in knowledge-oriented live-streaming e-commerce. These insights are particularly relevant for live broadcast scenarios emphasizing educational content as a core competitive advantage, such as East Buy. However, their applicability may not extend directly to live broadcast models driven primarily by entertainment or heavy reliance on price discounts.

4.3.1. For Knowledge-Oriented Streamers

Therefore, it can be seen from the above that the new teaching materials have enhanced the trust of customers. If the purpose of the streamer is to spread knowledge rather than merely promoting products, a deep-dive research plan and a high-quality control system need to be established. Specifically, the streamer should introduce the background of the product, detail its main features and application cases, and present this information within the context of broader culture and history. This approach allows the streamer to stand out through price promotions while simultaneously building long-term,

stable trust with the audience. Additionally, the streamer must ensure the authenticity and accuracy of the information being broadcast. Any exaggeration or distortion of content will undermine the trust built through educational materials, thereby reducing their overall effectiveness.

4.3.2. Suitable for Live Broadcast Platform

As both the direct and indirect effects of educational content on consumers' intention to buy have been studied, the design and operation mechanisms of algorithms can be optimized to promote the creation and distribution of high-information-density content across all sectors on live-streaming platforms. Knowledge-oriented live-streaming is preferred by consumers with higher education and a demand for rationality. Therefore, platforms such as TikTok can leverage this preference to spread content widely and reach more users interested in cognitive stimulation alongside entertainment. For instance, consistent education on agricultural products, cultural products, and health products can be provided through live streaming, with enhanced promotional support in these fields. Additionally, the platform can improve the overall quality of content and foster a more credible and healthy e-commerce ecosystem by launching official certification projects and offering professional training for knowledge-oriented streamers.

4.3.3. Brands and Merchants

For brands and merchants (such as nutritional supplements, special food products, high-end household appliances, etc.) that need to promote complex products and products with high reliability requirements, selecting cooperative streamers should prioritize the domain expertise and credibility of the streamers rather than focusing solely on fan numbers or entertainment value. Trust in an enterprise significantly influences consumers' purchasing decisions. To achieve marketing objectives more effectively, brands should collaborate with streamers who deliver accurate, professional, and organized educational content rather than relying on spontaneous entertainment exchanges. Additionally, brands and merchants must ensure the streamer's content style aligns with their own brand positioning, as inconsistency in style can significantly diminish the marketing impact.

4.3.4. General Considerations

Although this study fully demonstrates the value of educational content, the relevant practical implications need to be interpreted in combination with specific scenarios. Some intermediary models show that educational content can directly promote consumers' willingness to buy, indicating that the appeal of knowledge-oriented live broadcasts is not only reflected in trust-building. This dual influence path suggests that investing in content quality can enhance consumer trust while directly driving purchase conversions through the intrinsic value of information. However, practitioners must carefully consider the composition and varying demands of their target audience. The positive effects observed in this study are based on samples of consumers with high education levels and a strong emphasis on knowledge acquisition. If this strategy is applied to audiences prioritizing entertainment or price sensitivity, it should be adjusted accordingly, with its effectiveness verified through further empirical research.

4.4. Limitations

Although this study has successfully achieved the preset research objectives and drawn practical conclusions, there are still some limitations, as follows:

First, the sample is not representative enough. The samples of this study mainly focus on young people, groups with higher education backgrounds, and groups with fixed online consumption habits, which limits the external validity and wide applicability of the research results across different demographic groups.

Second, the empirical scenario is relatively simple. The empirical background of this study is limited to the East Buy live broadcast platform, which focuses on cultural and educational attributes. Its audience characteristics and operation mode are noticeably different from those of traditional entertainment and discount live broadcast platforms.

Therefore, the generalization of the research conclusions to other live broadcast platforms or modes requires further empirical research.

Third, the coverage of the research model is not comprehensive enough. The conceptual model of this study only focuses on the relationship among educational content, perceived credibility, and purchase intention. However, the live broadcast environment is a multi-dimensional complex scene. Real-time interactive experiences, emotional stimulation, streamer attraction, promotional activities, and other factors also significantly impact consumer behavior, but these factors were not included in the scope of this study.

Fourth, there are limitations in research design. This study uses a cross-sectional survey method to collect data, which only captures the consumer's cognitive state at a specific point in time. Since the formation of consumer trust and the making of purchase decisions are dynamic processes, it is challenging to clearly define the causal relationships between variables within this research design.

4.5. Further Research

Based on the limitations of this study, future related research can be carried out in the following directions to further improve the research results:

First, optimize the sample selection strategy. Future studies could adopt more rigorous and multivariate sampling methods, expand the sample size, and broaden the demographic coverage of the samples to enhance the universal applicability of the research results.

Second, improve the theoretical model construction. Further research could introduce more intermediary variables and regulatory variables to enrich the existing theoretical framework. For instance, intermediary factors such as perceived value, emotional participation, and social presence, as well as regulatory factors like product category (search-oriented goods and experience-oriented goods) and consumer personality traits, could be explored to more comprehensively reveal the inherent patterns of consumer behavior in live broadcast scenarios.

Third, carry out comparative research on cross-type live broadcasts. Future studies could compare and analyze the influence of different types of streamers (e.g., entertainment-oriented streamers, celebrity streamers, virtual streamers) across various platforms, providing more targeted references for formulating diversified content strategies.

Fourth, improve the research design method. It is recommended that future research adopt longitudinal research designs or experimental methods to overcome the limitations of cross-sectional surveys. This approach could more rigorously verify the causal relationships among educational content, trust formation, and continuous purchase behavior, thereby enhancing the reliability and persuasiveness of research conclusions.

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