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A Study on the Impact of Information Quality of Influencer-Recommended Products on College Students' Purchase Intention-Based on the SOR Model

Jierui Ding^{1,*}

¹ School of Economics and Management, Anhui Normal University, Wuhu, Anhui, China

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ABSTRACT

Existing research has paid more attention to influencers' personal traits or content styles, while giving less consideration to the quality features of the recommendation information itself and how those features work for the audience. Current studies also fail to clearly explain the complete process through which purchase intention is influenced. Thus, this study focuses on the relationship between the information quality of influencer-recommended products and university students' purchasing intentions. It uses the SOR model as the theoretical framework, sets influencer recommendation information quality as the stimulus variable, sets perceived value and perception of trust as the organism variables, and purchase intention as the response variable. Based on this, the study builds a research model and proposes a set of hypotheses to be tested. The study collected 141 valid responses through a questionnaire survey. The findings are as follows: First, the professionalism of influencers and the timeliness of their recommendations have a significant positive effect on perceived value, while the authenticity of the information has a significant positive effect on perception of trust. Second, both perceived value and perception of trust positively influence purchase intention. Third, perceived value and perception of trust partially mediate the relationship between recommendation information quality and purchase intention. This study not only clarifies the concrete path through which influencer recommendation information quality affects university students' purchase intentions, but also provides practical guidance for influencers and brands to improve their marketing strategies.

1. Introduction

1.1 Research Background

Leveraging the momentum of short video and live-streaming platforms, the influencer economy has experienced explosive growth, with a marked increase in both user scale and content consumption frequency, establishing itself as a critical channel for brand promotion and social commerce. Industry

* Corresponding author.

E-mail address: 15190893188@163.com

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forecasts project that by 2026, the number of live-streaming e-commerce users in China will reach approximately 720–770 million, with a penetration rate of roughly 65%–70% among Internet users.

As digital natives of the mobile Internet era, college students exhibit a high degree of dependence on social media and are exposed to a wide range of information, with their online shopping penetration rate consistently exceeding 90%. Consequently, they have become the core audience for influencer marketing campaigns.

The quality of information conveyed by influencers during product recommendations significantly affects the effectiveness of group-buying models among college students. However, with rapid industry expansion, the issue of highly variable information quality in influencer recommendations has become increasingly prominent. For instance, some influencers have sparked numerous consumer disputes due to false advertising or exaggerated product efficacy, which harms consumer rights and poses challenges to the sustainable development of the influencer economy.

Although existing academic research has extensively examined influencers' personal traits, there is a relative scarcity of empirical studies that systematically investigate the intrinsic mechanisms through which information quality, as a central variable, influences college students' purchase intention within a robust theoretical framework.

1.2 Literature Review

As short videos and live-streaming e-commerce continue to converge, influencer recommendations have gradually become a crucial bridge connecting products and consumers. The quality of information conveyed through these recommendations directly influences consumers' purchasing decisions.

College students represent a core audience segment in influencer marketing, rendering the mechanisms shaping their purchase intentions a topic of considerable academic interest.

1.2.1 Domestic and International Research Status

Synthesizing extant domestic and international research, the academic community has established a relatively systematic framework concerning influencer recommendations, information quality, and consumer purchase intentions. The relevant studies can be consolidated into four primary streams: theoretical model application, influencer recommendation, information quality, and mechanisms influencing young consumers' purchase intention.

In terms of theoretical and model applications, domestic studies frequently employ the SOR model and the Theory of Planned Behavior. For instance, Qin and Wei [1] constructed a theoretical model based on the SOR framework to examine how virtual digital human e-commerce anchors influence consumer purchase intention, confirming that external stimuli operate through organism variables such as perception of trust and perceived value. This provides a reference for the present study's conceptualization of information quality as a stimulus and college students' purchase intention as a response. Similarly, the Serial multiple mediation model study by Thao *et al.*, [2] offers methodological guidance for constructing mediation models.

International research predominantly draws on Source Credibility Theory and the Theory of Planned Behavior. Janssen *et al.*, [3], grounded in Source Credibility Theory, posited that the information quality of influencer recommendations is a core element in enhancing influencer credibility and optimizing advertising effectiveness. Concurrently, Junyu *et al.*, [4] utilized the TPB to refine the intrinsic logic of how influencer recommendations affect consumer willingness, thereby providing theoretical support for analyzing how information quality operates through psychological perception to influence college students' purchase intention.

Concerning influencer recommendation research, scholars both domestically and internationally have explored the topic across three dimensions: influencer traits, recommendation modes and scenarios, and marketing effectiveness. Regarding influencer traits, Fakhreddin [5] noted that influencers, acting as opinion leaders, more readily garner follower trust, whereas Silva [6] listed influencer characteristics. Janssen *et al.*, [3] further posited that influencer-product fit and follower count affect consumer evaluations through credibility and identification.

In terms of recommendation modes and scenarios, domestic research has covered short videos, live streaming, community group buying, and cultural product promotion. Ngo [7] proposed short video platforms have become essential tools for online sales and marketing; Guo [8] confirmed the group communication effects of influencer-led community group buying; Lei [9] expanded the research context to cultural and creative products. Jin [10], and Peng [11] focused on live-streaming commerce, confirmed that the streaming scenario, information interaction frequency, and quality all influence purchase intention. Internationally, Aziz *et al.*, [12] confirmed that social media influencer recommendations can alter consumer shopping strategies; Junyu *et al.* [4] refined the influence mechanism of live-streaming anchors on consumer willingness; and Noorlitaria *et al.*, [13] and Župan *et al.*, [14] conducted research on influencer marketing targeting Generation Z.

Regarding marketing effectiveness, Ji [15] systematically synthesized various factors influencing purchase intention in live-streaming commerce and constructed a comprehensive reference framework. Tomar and Pandey [16] argued that influencer recommendation information directly impacts consumers' online decisions, with authenticity and professionalism determining the conversion effectiveness. Similarly, Župan *et al.*, [14] confirmed that high-quality influencer recommendation information can enhance Generation Z's purchase intention.

In research on information quality, scholars both domestically and internationally regard it as a core variable in consumer decision-making, embedding it within influencer recommendation contexts for empirical analyses. Kim, Changsu, *et al.*, [17] proposed that high-quality information can stimulate purchase intention, offering a reference for delineating the dimensions of influencer recommendation information quality. Nwobodo, Stanley [18] pointed out that high-quality information can alter consumer behavior. Liu [19], focusing on online sports information, confirmed that information quality can affect college students' consumption willingness through specific pathways. Qin and Wei [1] further validated that the information quality delivered by anchors can impact consumers' perception of trust and perceived value.

Janssen *et al.*, [3] explicitly identified information quality as a critical pillar of influencer credibility. Tomar and Pandey [16] proposed that the authenticity and professionalism of information determine the effectiveness of influencer recommendations. Noorlitaria *et al.*, [13] indicated that information quality is a prerequisite for influencer endorsements to exert their marketing function.

Regarding the mechanisms influencing young consumers' purchase intentions, domestic studies predominantly use college students as the core sample, while international research focuses on Generation Z. The research content can be divided into two parts: group consumption characteristics and mediation mechanisms. At the group consumption characteristics level, empirical studies by Jin [10], Lei [9], and Liu [19] indicate that college students are highly sensitive to online information and susceptible to influencer guidance, prioritize value for money, and that the quality of information directly affects their consumption decisions. Noorlitaria *et al.*, [13] and Župan *et al.*, [14] confirmed that influencer recommendations significantly influence Generation Z's online shopping behavior, aligning with the findings from domestic college student samples.

At the mediation mechanism level, Xue *et al.*, [20], Chen [21] and Peng [11] verified the mediating roles of perception of trust and perceived value between influencer recommendations and purchase intention, consistent with the organism variables of the SOR model. Ratnawati *et al.*, [22] identified

a moderated mediation effect of social presence. Junyu L. *et al.*, [4], leveraging the TPB, refined the mediational logic of influencer recommendation effects on consumer willingness, thereby theoretically corroborating domestic findings.

1.2.2 Research Gaps

A comprehensive review of existing domestic and international studies indicates that considerable research has been conducted on influencer recommendations, information quality, college students' purchase intentions, and related theoretical models, yielding a rich body of findings. These studies provide a solid foundation for the present study, offering both theoretical support and empirical references.

Four salient themes emerge from the literature. First, both domestic and international scholars have confirmed that influencer recommendation behavior significantly affects consumer purchase intention. However, domestic researchers tend to focus more on the contextual manifestations of influencer traits and recommendation modes, while international researchers often analyze social media influencers' roles from cross-cultural and empirical perspectives. Regardless, both streams have identified influencer traits, information interaction styles, and follower counts as key factors. Second, information quality is universally recognized as a core variable influencing consumer decisions, with its critical dimensions (notably professionalism and authenticity) defined and acknowledged as pivotal in enhancing purchase intention. Third, existing studies have validated the applicability of the SOR model, TPB, and Source Credibility Theory in influencer recommendation contexts, establishing the mediating roles of perception of trust and perceived value between information stimuli and purchase intention. Fourth, several studies have specifically addressed the consumption characteristics of Generation Z and college students, providing a clear rationale for this study's focus on the college student population.

Nevertheless, several notable gaps persist, offering opportunities for further research, which can be summarized in three aspects: First, there is a research perspective limitation. Most existing studies tend to analyze the impact of influencers' personal traits on purchase intention, while few have systematically investigated how the information quality of the recommended products themselves influences college students' purchase intentions. However, the specific pathways through which professionalism, authenticity, and timeliness exert their effects remain unexplored. Second, there is a gap in model application. Although some studies have employed the SOR model, they commonly treat influencer traits or anchor images as stimulus variables. Research that positions recommendation information quality as the core stimulus within the SOR framework to examine its effect on college students' purchase intention is comparatively scarce, thus failing to fully leverage the model's explanatory power. Third, there is a group-specific issue. Although some studies have used college students or Generation Z as samples, they have not systematically analyzed how information quality, through perception of trust and perceived value, influences purchase intentions in light of college students' unique consumption characteristics. Consequently, the specificity and generalizability of the existing conclusions can be enhanced.

Addressing these gaps, the present study adopts the SOR model as its foundational theoretical framework, conceptualizing the information professionalism, authenticity, and timeliness of influencer-recommended products as stimulus variables, perception of trust and perceived value as organism variables, and college students' purchase intention as the response variable to investigate the mechanisms among these variables.

This approach aims to fill the identified research gaps, enrich the literature on influencer recommendations, information quality, and college students' purchase intentions, and offer targeted

practical suggestions for optimizing information quality and enhancing the rationality of college students' consumption decisions.

1.3 Research Framework and Methods

This study follows a "Theory-Model-Empirical" technical route, progressing through four stages as follows. The first stage involves theoretical synthesis and model construction, identifying the variable framework through a literature review, and proposing corresponding hypotheses. The second stage entails scale development and a pilot survey, adapting items from established mature scales to construct a formal questionnaire. The third stage involves large-scale survey administration and data processing, distributing questionnaires across several universities and collecting 141 valid responses, followed by data cleaning, coding, and descriptive statistical analysis. The fourth stage consists of econometric analysis and conclusion synthesis, employing SPSS 27.0 for reliability testing, correlation analysis, regression analysis, and mediation effect testing, ultimately summarizing theoretical contributions and providing practical recommendations.

This study integrates four research methods: literature analysis, questionnaire survey, in-depth interviews, and empirical analysis. Specifically, a systematic literature analysis was first conducted to map the research landscape and establish a theoretical framework and measurement dimensions. Second, an online questionnaire was administered to university students, yielding 141 valid responses, which were then subjected to descriptive statistics and reliability and validity testing. Third, semi-structured interviews were conducted with selected representative student respondents and some influencers or e-commerce practitioners to supplement quantitative data with qualitative explanations. Fourth, SPSS 27.0 was used for correlation analysis, regression analysis, and mediation effect tests to thoroughly elucidate the underlying mechanism.

1.4 Thesis Structure

The core research question of this study is "How does the information quality of influencer-recommended products affect college students' purchase intention?" Methodologically, the SOR model is adopted as the primary theoretical framework, around which a comprehensive research design encompassing variable measurement, data collection, and empirical testing is constructed.

The research process is structured as follows: Section one introduces the research background, literature review, research framework, and methods, summarizing domestic and international research progress on influencer recommendations, information quality, and college students' purchase intention, and clarifying the technical route and methodological system employed. Section two focuses on the research hypotheses and conceptual model. Multiple hypotheses have been proposed concerning the relationships among information quality dimensions, perceived value, perception of trust, and purchase intention, culminating in a complete theoretical model based on SOR theory. Section three details the overall research design and scale system. It describes the process of adapting items from established domestic and international scales to formulate the questionnaire, setting measurement items for the three latent variables, and thoroughly elaborating on the data preprocessing procedures, including questionnaire distribution and sample collection. Section four presents a comprehensive empirical analysis and discussion. It first displays the descriptive statistics of the valid sample and then conducts reliability and validity tests using Cronbach's α , KMO test, Exploratory Factor Analysis (EFA), and Confirmatory Factor Analysis (CFA). Subsequently, correlation analysis, multiple linear regression, and bootstrap mediation tests are performed to verify all research hypotheses. Finally, based on the empirical results, targeted managerial implications are proposed for influencers, brand operators and regulatory authorities. Section five summarizes the core research conclusions,

objectively points out the limitations concerning sample selection and variable settings, and proposes feasible directions for future research.

2. Research Hypotheses and Conceptual Model

2.1 Research Hypotheses

2.1.1 Impact of Each Dimension of Influencer Recommendation Information Quality on Perceived Value

Information quality constitutes a critical external stimulus influencing consumers' value perception, with professionalism, authenticity, and timeliness directly shaping consumers' overall assessment of product utility and cost. Liu [19], in a study on online sports information, confirmed that high-quality information content facilitates the formation of more positive value evaluations among college students. In the context of influencer recommendations, professional product interpretation, authentic experience sharing, and timely information updates can mitigate information asymmetry, enabling college students to thoroughly understand the advantages of a product, consequently enhancing its perceived value. Based on this, the following hypotheses are proposed.

H1a: The professionalism of influencer recommendation information has a significantly positive impact on college students' perceived value.

H1b: The authenticity of influencer recommendation information has a significant positive impact on college students' perceived value.

H1c: The timeliness of influencer recommendation information has a significant positive impact on college students' perceived value.

2.1.2 Impact of Each Dimension of Influencer Recommendation Information Quality on Perception of trust

Ji [15] noted that influencers' professional understanding and objective presentation of products can effectively enhance consumers' perception of trust. In this study, professionalism reflects the influencer's competence, authenticity indicates the objectivity and reliability of the information itself, and timeliness pertains to the influencer's ability to update product information promptly and attend to consumer needs (e.g., proactively communicating stock status, price changes or recent user feedback). Even for products with low inherent timeliness, this dynamic information maintenance behavior conveys the influencer's sense of responsibility and goodwill, fostering consumer confidence in their recommendation. Collectively, professionalism, authenticity, and timeliness interact to enhance college students' trust in the recommendations of influencers. Based on this analysis, the following hypotheses are proposed:

H2a: The professionalism of influencer recommendation information has a significantly positive impact on college students' trust.

H2b: The authenticity of influencer recommendation information has a significant positive impact on college students' perception of trust.

H2c: The timeliness of influencer recommendation information has a significant positive impact on college students' trust perceptions.

2.1.3 Impact of Perceived Value and Perception of trust on College Students' Purchase Intention

Perceived value and trust are important internal factors that drive consumer purchase intentions. Lei [9] found in a study on cultural and creative products that higher perceived value correlates with stronger purchase intention. Jin [10] pointed out that consumers' perception of trust in influencer recommendations significantly and positively influences their purchase behavior. In influencer recommendation contexts, college students' heightened value perception and trust in the

recommendation reduce perceived risk in purchasing decisions and enhance their buying propensity. Based on this, the following hypotheses are proposed:

H3: College students' perceived value has a significant positive impact on their purchase intentions.

H4: College students' perception of trust has a significant positive impact on their purchase intentions.

2.1.4 Mediating Roles of Perceived Value and Perception of trust

According to SOR theory, external stimuli (information quality) influence behavioral responses (purchase intention) by affecting individuals' internal psychological states (perceived value and trust). Xue *et al.*, [20] confirmed that perception of trust mediate the relationship between influencer recommendations and consumer purchase intention. Qin and Wei's [1] SOR-based study also indicated that anchor information quality indirectly affects purchase intention by influencing consumers' psychological perceptions. In line with our model, the three dimensions of influencer recommendation information quality are posited to enhance purchase intention by increasing college students' perceptions of value and trust. Based on this, the following hypotheses are proposed:

H5: Perceived value mediates the relationship between influencer recommendation information quality and purchase intention.

H6: Perception of trust mediates the relationship between influencer recommendation information quality and purchase intention.

2.2 Model Construction Based on SOR Theory

Based on the SOR theoretical framework and by integrating the preceding theoretical analysis and identified research variables, this study constructs a conceptual model.

In this model, the external stimulus variable (S) is defined as the information quality of influencer recommendations, which is a core environmental factor influencing college students' consumption decisions. Information quality is operationalized across three dimensions: professionalism, authenticity, and timeliness. Information quality refers to the overall quality of product-related information (e.g., features, price, user experience, advantages, and disadvantages) actively disseminated by influencers through channels such as short videos and live streams. The caliber of this information directly influences audience members' perceptions and trust in the recommended products.

Information professionalism denotes whether the product information conveyed by the influencer is supported by professional knowledge, such as accurate explanations of product functions, technical specifications, and suitable application scenarios, reflecting the influencer's expertise in their relevant field. Authenticity refers to the objectivity and truthfulness of product information, free from exaggeration or false claims, such as honestly presenting product advantages and disadvantages and sharing genuine usage experiences. Regarding timeliness, while products can be categorized as time-sensitive or non-time-sensitive based on their renewal rate, college students — a key audience for influencer recommendations — predominantly consume time-sensitive items such as cosmetics, apparel, and digital accessories. In these contexts, the timeliness of information (e.g., recent performance, current prices, and consumption trends) significantly influences college students' assessments of information quality. Therefore, timeliness is adopted as a crucial dimension, referring to the promptness and effectiveness of the information (e.g., latest prices, stock levels, promotional offers) in facilitating audience decisions that are aligned with current conditions.

Organism variables (O) refer to the internal psychological states formed by college students after receiving information, encompassing two core mediating constructs: perception of trust and perceived value.

Perception of trust is defined as the degree of trust consumers place in the influencer, the recommended content, and the recommended product after receiving the influencer's information, which is a subjective psychological state formed based on information quality. In this study, as a core organism variable within the SOR model, perception of trust specifically denotes the psychological propensity of college students to perceive the influencer as reliable, the information as truthful, and the product as trustworthy after exposure to influencer recommendation information. It serves as a critical mediator that links information quality and purchase intention.

Perceived value refers to consumers' subjective value judgment formed after a comprehensive trade-off between product utility, price, and other product attributes. In this study, perceived value specifically denotes college students' value perception of a recommended product following exposure to influencer information. As another organism variable in the SOR model, it reflects the influence of information quality on purchase intention.

The response variable (R) is designated as college students' purchase intention, which is a behavioral tendency ultimately formed under the influence of psychological perception. Purchase intention is a core concept in consumer behavior, referring to the likelihood and tendency of a consumer to purchase a specific product or service in the future, and it serves as a key predictor of actual purchase behavior. In this study, "college students' purchase intention" specifically denotes the subjective inclination and likelihood of college students to purchase a product after receiving influencer-recommendation information. Considering college students' consumption characteristics, purchase intention in this study encompasses not only direct purchase inclinations but also potential behaviors, such as further information seeking and product recommendation to others. As the ultimate behavioral response variable in the SOR model, it reflects the combined effect of information stimuli and cognitive evaluation on consumption decisions.

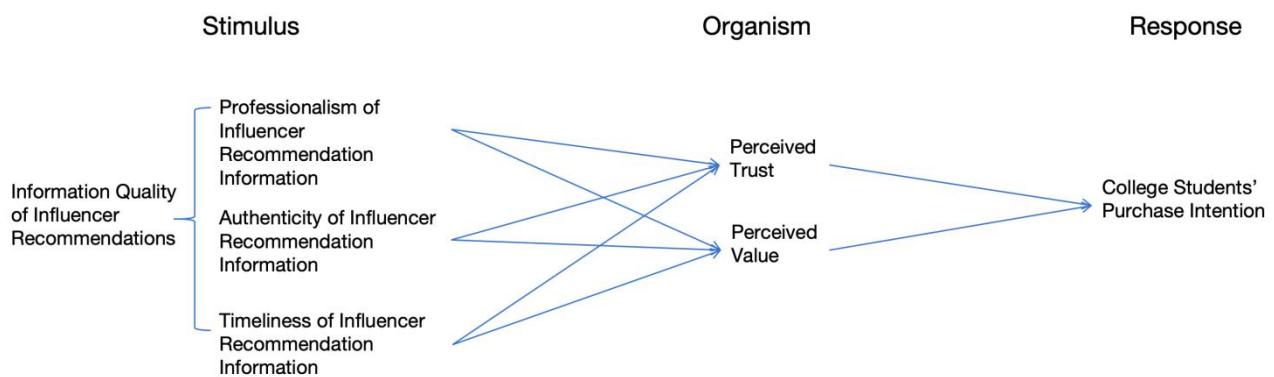


Fig. 1 Model Constructed Based on SOR Theory

The model depicted in Figure 1 clearly illustrates the two pathways — direct and indirect — through which influencer recommendation information quality influences college students' purchase intention and specifies the mediating roles of trust and value perception. This provides a clear and logical framework for subsequent empirical testing.

3. Research Design and Scale Development

3.1 Research Design

This study employs a questionnaire survey as the primary data collection method. Drawing upon established domestic and international scales, the measurement items for each variable were appropriately revised and supplemented to align with the research context of influencer-recommended products and the consumption of college students. A formal questionnaire was developed and

distributed online to current college students to collect primary data on their exposure to influencer recommendation information, subsequent psychological perceptions, and resulting purchase intentions, thereby providing empirical support for subsequent analyses.

For statistical analysis, this study utilized SPSS 27.0 and its PROCESS macro to systematically process and analyze the collected valid data. The analytical procedures encompassed reliability and validity tests, descriptive statistical analysis, correlation analysis, and regression analysis to examine the direct relationships between variables. Furthermore, the Bootstrap method within the PROCESS macro was employed to test the mediating effects of perceived value and trust. This systematic approach enabled the rigorous verification of all proposed research hypotheses, culminating in the synthesis of conclusions and the formulation of recommendations.

3.2 Scale Development

This study collected data through a questionnaire survey. The measurement items in the main body of the questionnaire were adapted from established domestic and international scales and appropriately modified to fit the research context of influencer-recommended products and college student consumption patterns. All items were measured using a 5-point Likert scale, with “1” denoting “Strongly Disagree,” “2” “Disagree,” “3” “Neutral,” “4” “Agree,” and “5” “Strongly Agree.” The specific item designs for each variable are outlined in following section.

3.2.1 Measurement Scale for Influencer Recommendation Information Quality

To measure the three dimensions of influencer recommendation information quality, the following scale was designed (Table 1).

Table 1

Measurement Scale for Influencer Recommendation Information Quality

Variable	Item	Source
Professionalism	I believe the influencer has a thorough understanding of the recommended product.	Ji [15]
	I believe the influencer can provide professional product information during the recommendation.	Liu [19]
Authenticity	I believe the information provided by the influencer is truthful.	Xue <i>et al.</i> [20]
	I believe the content introduced by the influencer is objective and free from excessive hype.	Lei [9]
	I believe the influencer's presentation of the product's pros and cons is realistic.	Chen [21]
Timeliness	I believe the information recommended by the influencer reflects the current actual situation of the product.	Chen [21]
	I believe the information recommended by the influencer allows me to understand recent user feedback or the latest promotional offers.	Liu [19]

3.2.2 Measurement Scale for Perceived Value and Perception of trust

To measure perceived value and perception of trust, the following scale was designed (Table 2).

Table 2

Measurement Scale for Perceived Value and Perception of trust

Variable	Item	Source
Perceived Value	I believe the products recommended by influencers have reasonable prices and offer good value for money.	Lei [9]
	I believe the products recommended by influencers can meet my needs.	Lei [9]
	I believe the products recommended by influencers can provide a good usage or consumption experience.	Ji [15]
Perception of trust	I believe that influencers prioritize consumers' actual interests when recommending products.	Jin [10]
	I trust that the products recommended by influencers can achieve the quality level they describe.	Xue <i>et al.</i> [20]

3.2.3 Measurement Scale for College Students' Purchase Intention

To measure college students' purchase intentions, the following scale was designed (Table 3).

Table 3

Measurement Scale for College Students' Purchase Intention

Variable	Item	Source
Purchase Intention	I am willing to purchase products that influencers recommend.	Lei [9]
	I would recommend influencer-recommended products to others.	Lei [9]
	I am willing to purchase other products from brands recommended by influencers.	Jin [10], Qiu and Zhang [23]

3.3 Questionnaire Distribution and Collection

3.3.1 Measurement Scale for Influencer Recommendation Information Quality

To ensure broad coverage and representativeness, this study employed a combined online stratified and convenience sampling approach to recruit participants. Questionnaires were distributed simultaneously via multiple channels, including campus QQ groups, WeChat Moments, university interest communities and professional online survey platforms. A total of 143 questionnaires were returned. After excluding invalid or logically inconsistent responses, 141 valid samples were retained for analysis. The online survey platform yielded the highest response rate, while social channels, despite a larger distribution volume, exhibited a slightly lower efficiency, suggesting the need for enhanced quality control in community-based research dissemination. Adhering to the widely recommended criterion that the ratio of sample size to the number of items should exceed 5, with 10 being optimal, the target sample size was set to approximately 140. Accordingly, 141 questionnaires were distributed.

3.3.2 Data Cleaning and Outlier Treatment

During the data cleaning phase, the 141 valid questionnaires are subjected to missing value analysis and logical consistency checks. For questionnaires with less than 5% item-level missing data, mean imputation was applied; those with over 30% missing data on key variables were excluded. Invalid response patterns, such as extremely repetitive selections, unusually short completion times, or clear contradictions, were identified, flagged, and manually reviewed. For continuous variables, distributions were examined to detect outliers; extreme values significantly deviating from the overall distribution and deemed implausible were removed or minorized, whereas reasonable marginal values were retained to reflect the sample diversity. Frequency tables were used to verify the absence of

irregular categories for categorical variables. This comprehensive process resulted in a clean final dataset ready for subsequent analysis.

4. Empirical Analysis and Discussion

4.1 Descriptive Statistical Analysis of the Sample

The demographic characteristics of the sample are presented in Table 4.

Table 4

Sample Distribution Table

Sample Characteristic	Category	Frequency	Percentage (%)
Gender	Male	40	28.37
	Female	101	71.63
Grade	Freshman	2	1.42
	Sophomore	18	12.77
	Junior	6	4.26
	Senior	99	70.21
	Postgraduate	16	11.35

The table shows that the sample comprised 40 men (28.37%) and 101 women (71.63%). The significantly higher proportion of females aligns with the general observation that female college students tend to exhibit higher attention to and engagement with influencer-recommended content, suggesting a reasonable gender distribution for this sample.

Regarding grade distribution, seniors constituted the largest group, with 99 participants (70.21%), followed by postgraduates (16, 11.35%), sophomores (18, 12.77%), juniors (6, 4.26%), and freshmen (2, 1.42%). Overall, upper-level students (seniors and postgraduates) comprised 81.56% of the sample, forming the primary respondent group in the study. This cohort generally possesses more mature cognitive processing of influencer marketing and consumption decisions, enhancing the data's value.

In summary, the sample, which predominantly comprised upper-level and female students, aligns with the typical profile of research subjects in the context of influencer live-streaming e-commerce and consumer purchase intention. This sample profile is conducive to further investigation, although the conclusions are primarily applicable to this demographic.

4.2 Reliability and Validity Test Results

4.2.1 Reliability Test

This study employed Cronbach's α coefficient to assess the reliability of all variables. The reliability results are shown in Table 5.

Table 5

Reliability Test Results

Variable	Number of Items	Cronbach's α Coefficient
Professionalism	2	0.812
Authenticity	3	0.864
Timeliness	2	0.802
Perceived Value	3	0.893
Perception of trust	2	0.795
Purchase Intention	3	0.904

As shown in the table, the Cronbach's α coefficients for all variables exceed the threshold of 0.70. The α coefficients for professionalism, authenticity, and timeliness dimensions of influencer

recommendation information quality were 0.812, 0.864, and 0.802, respectively. The α coefficients for perceived value and perception of trust were 0.893 and 0.795, respectively, while purchase intention exhibited an α coefficient of 0.904. Notably, the α coefficients for authenticity, perceived value, and purchase intention all exceeded 0.85, with purchase intention exceeding 0.90, indicating excellent internal consistency. The α coefficients for professionalism, timeliness, and perception of trust, all above 0.79, reflect good reliability. Overall, the scale reliability for all variables meets academic research standards, with strong inter-item correlations, enabling stable and reliable measurement of the target constructs and providing a solid data foundation for subsequent empirical analysis.

4.2.2 Validity Test

4.2.2.1 Exploratory Factor Analysis

This study employed the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity to assess the suitability of the data for factor analysis. The results are presented in Table 6. The KMO measure was 0.937, significantly exceeding the recommended threshold of 0.70. Bartlett's test of sphericity yielded an approximate chi-square value of 1707.138 with 105 degrees of freedom and a significance level of $p < 0.001$, indicating that the data are highly suitable for factor analysis.

Table 6

KMO and Bartlett's Test

KMO Measure of Sampling Adequacy	0.937	
Bartlett's Test of Sphericity	Approximate Chi-Square	1707.138
	df	105
	significance	<0.001

Subsequently, principal component analysis (PCA) was conducted with the fixed extraction of six common factors. Given the theoretically expected correlations among the dimensions, the Direct Oblimin rotation method was applied. The results are shown in Table 7. The six extracted factors accounted for a cumulative variance explanation rate of 85.361%, exceeding the 60% criterion, indicating that the extracted factors effectively capture most of the information from the original items and demonstrate good dimensionality reduction.

Finally, the rotated pattern matrix, derived using Principal Component Analysis with Kaiser Normalization and Oblimin rotation, is shown in Table 8.

The rotated pattern matrix indicates that most measurement items exhibit factor loadings exceeding 0.5 on their respective factors, and the overall communalities are relatively high, suggesting that the items possess reasonable structural explanatory power. Items for constructs such as perceived value and purchase intention demonstrate clear convergence. However, some items show cross-loadings, particularly among the information quality dimensions of authenticity and timeliness. This may be attributed to the inherent cognitive overlap among these characteristics (truthfulness, timeliness, and objectivity) in the context of influencer recommendations from respondents' perspectives. Considering that the items were primarily adapted from established scales and revised for the research context, and given that reliability tests for all variables met acceptable standards, subsequent variable aggregation and hypothesis testing proceeded based on the theoretical model.

Table 7
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	Percentage of Variance	Cumulative %	Total	Percentage of Variance	Cumulative %	Total
1	9.157	61.044	61.044	9.157	61.044	61.044	5.422
2	1.118	7.452	68.496	1.118	7.452	68.496	5.362
3	0.824	5.494	73.990	0.824	5.494	73.990	4.379
4	0.729	4.861	78.851	0.729	4.861	78.851	1.953
5	0.563	3.754	82.605	0.563	3.754	82.605	6.383
6	0.413	2.756	85.361	0.413	2.756	85.361	6.516
7	0.330	2.200	87.561				
8	0.319	2.124	89.686				
9	0.288	1.918	91.604				
10	0.278	1.856	93.460				
11	0.261	1.740	95.200				
12	0.236	1.571	96.771				
13	0.201	1.337	98.108				
14	0.153	1.018	99.126				
15	0.131	0.874	100.000				

Note: Extraction Method: Principal Component Analysis. a. When components are correlated, the sums of squared loadings cannot be added to obtain the total variance.

Table 8
Pattern Matrix^a

	Component					
	1	2	3	4	5	6
Professionalism (1)	0.017	0.054	0.915	0.107	0.009	-0.007
Professionalism (2)	0.040	0.596	0.432	-0.130	0.073	-0.001
Authenticity (1)	0.058	0.833	0.008	-0.010	0.007	0.114
Authenticity (2)	-0.198	0.404	0.079	0.218	0.107	0.474
Authenticity (3)	-0.040	0.048	-0.036	0.097	0.110	0.831
Timeliness (1)	0.146	0.067	0.021	0.002	-0.046	0.822
Timeliness (2)	0.250	-0.048	0.345	-0.316	0.149	0.483
Perceived Value (1)	0.795	0.024	0.086	0.091	0.041	0.041
Perceived Value (2)	0.751	0.109	0.021	0.085	0.055	0.128
Perceived Value (3)	0.461	0.058	0.144	0.063	0.235	0.161
Perception of trust (1)	0.219	-0.043	0.176	0.747	0.073	0.137
Perception of trust (2)	0.319	0.403	-0.059	0.323	0.218	0.031
Purchase Intention (1)	0.350	0.067	-0.002	-0.055	0.688	-0.050
Purchase Intention (2)	-0.155	-0.022	0.060	0.105	0.975	0.012
Purchase Intention (3)	0.121	0.051	-0.043	-0.088	0.804	0.109

Note: Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization. a. The rotation converged in 15 iterations.

4.2.2.2 Confirmatory Factor Analysis

To assess the construct validity of the scales, Confirmatory Factor Analysis (CFA) was conducted on the four latent variables: influencer recommendation information quality, perceived value, perception of trust, and purchase intention. The model fit indices are listed in Table 9.

Table 9
Model Fit Indices for Confirmatory Factor Analysis

Fit Index Category	Index Name	Criterion	Result	Acceptable
Absolute Fit Indices	GFI	>0.8	0.887	Yes
	AGFI	>0.8	0.819	Yes
	RMSEA	<0.08	0.078	Yes
	SRMR	<0.10	0.039	Yes
Incremental Fit Indices	NFI	>0.8	0.922	Yes
	IFI	>0.8	0.962	Yes
	CFI	>0.8	0.962	Yes
	TLI	>0.8	0.946	Yes
Parsimonious Fit Indices	χ^2/df	<3	1.863	Yes
	PGFI	>0.5	0.554	Yes

As shown in the table, the absolute fit indices (GFI=0.887, AGFI=0.819, RMSEA=0.078), incremental fit indices (SRMR=0.039, NFI=0.922, IFI=0.962, CFI=0.962, TLI=0.946), and parsimonious fit indices (χ^2/df =1.863, PGFI=0.554) all meet the generally accepted criteria. This indicates a good fit between the hypothesized factor structure and the observed data, suggesting an overall ideal model fit and acceptable construct validity of the scale. The results of the convergent validity test from the CFA are presented in Table 10.

The results demonstrate that the standardized factor loadings for all measurement items range from 0.754 to 0.913, all exceeding the ideal threshold of 0.7, and all p-values are less than 0.001, indicating statistically significant associations with their respective latent constructs. Furthermore, the Average Variance Extracted (AVE) for each latent variable ranged from 0.668 to 0.761, all surpassing the 0.5 threshold, and the Composite Reliabilities (CR) ranged from 0.800 to 0.905, all exceeding 0.7. Overall, the scales exhibit good convergent validity, indicating that the items effectively reflect their respective underlying latent constructs. The results of the discriminant validity test are presented in Table 11.

The diagonal bold values represent the square roots of the AVE for each latent variable, the and off-diagonal values are the correlation coefficients between the latent variables. Table 11 shows generally stable and theoretically consistent correlations between the variables. Considering the model fit indices, standardized loadings, AVE, and CR reported above, the overall scale structure is deemed acceptable and adequate for supporting subsequent empirical analysis.

In summary, the CFA results indicate that the standardized loadings for the measurement items on their respective latent variables are generally high, and the AVE and CR values meet the commonly accepted criteria, demonstrating good convergent validity. Concurrently, the overall model fit indices are within acceptable ranges, suggesting a reasonable alignment between the theoretical model and sample data. Overall, the scales adopted in this study were adequate for subsequent correlation, regression, and mediation analyses.

Table 10
Convergent Validity Test Results from Confirmatory Factor Analysis

Latent Variable	Indicator	Unstandard-ized Loading	Stand-ard Error	z-value	p-value	Standard-ized Loading	SMC	AVE	CR
Info Quality - Professionalism	Professionalism (1)	1	-	-	-	0.771	0.594	0.692	0.817
	Professionalism (1)	0.847	0.068	12.407	0	0.889	0.79		
Info Quality - Authenticity	Authenticity (1)	1	-	-	-	0.808	0.653	0.682	0.865
	Authenticity (2)	0.784	0.066	11.96	0	0.837	0.7		
	Authenticity (3)	0.771	0.065	11.865	0	0.832	0.693		
Info Quality - Timeliness	Timeliness (1)	1	-	-	-	0.844	0.713	0.671	0.803
	Timeliness (2)	0.817	0.075	10.952	0	0.793	0.629		
Perceived value	Perceived value (1)	1	-	-	-	0.832	0.693	0.74	0.895
	Perceived value (2)	0.802	0.058	13.874	0	0.913	0.834		
	Perceived value (3)	0.725	0.061	11.933	0	0.832	0.692		
Perception of trust	Perception of trust (1)	1	-	-	-	0.754	0.568	0.668	0.8
	Perception of trust (2)	0.797	0.064	12.387	0	0.876	0.768		
Purchase Intention	Purchase Intention (1)	1	-	-	-	0.878	0.77	0.761	0.905
	Purchase Intention (2)	0.871	0.073	11.859	0	0.83	0.689		
	Purchase Intention (3)	0.901	0.066	13.672	0	0.907	0.823		

Note: “-” indicates reference item.

Table 11
Discriminant Validity Test Results

	Info Quality - Professionalism	Info Quality - Authenticity	Info Quality - Timeliness	Perceived Value	Perception of trust	Purchase Intention
Info Quality - Professionalism	0.832					
Info Quality - Authenticity	0.845	0.826				
Info Quality - Timeliness	0.857	0.938	0.819			
Perceived Value	0.719	0.732	0.867	0.86		
Perception of trust	0.715	0.856	0.804	0.873	0.817	
Purchase Intention	0.661	0.741	0.796	0.833	0.799	0.872

4.3 Hypothesis Testing and Regression Analysis

4.3.1 Correlation Analysis

To preliminarily verify the relationships among the variables, this study employed Pearson's correlation analysis to examine the associations between influencer recommendation information quality (and its dimensions), perceived value, perception of trust, and purchase intention.

The results reveal several key findings. First, the three dimensions of influencer recommendation information quality exhibit significant positive intercorrelations. Specifically, the correlation between professionalism and authenticity is 0.692 ($p < 0.001$), professionalism and timeliness is 0.642 ($p < 0.001$), and authenticity and timeliness is 0.695 ($p < 0.001$). These moderate-to-strong correlations suggest good convergent validity among the dimensions of the same overarching constructs.

Second, each dimension of influencer recommendation information quality shows significant positive correlations with both perceived value and trust. For instance, the correlations between professionalism and perceived value items ranged from 0.454 to 0.554 ($p < 0.001$), and with perception of trust items from 0.496 to 0.457 ($p < 0.001$). Authenticity correlates with perceived value items between 0.565 and 0.656 ($p < 0.001$) and with perception of trust items between 0.621 and 0.477 ($p < 0.001$). Timeliness correlates with perceived value items between 0.538 and 0.603 ($p < 0.001$), and with perception of trust items between 0.611 and 0.555 ($p < 0.001$). These findings provide preliminary evidence that the quality of influencer recommendation information positively influences perceived value and trust.

Third, perceived value and perception of trust both demonstrate significant positive correlations with purchase intention. The correlations between perceived value items and purchase intention items range from 0.590 to 0.741 ($p < 0.001$), while those between perception of trust items and purchase intention items range from 0.629 to 0.713 ($p < 0.001$). This suggests that higher perceived value and trust are associated with stronger purchase intentions.

Overall, the directions of the correlations among all variables are consistent with theoretical expectations, and all are statistically significant at the 0.01 level (two-tailed). These results provide preliminary empirical support for subsequent regression and mediation analyses.

4.3.2 Direct Effect Testing

This study employed multiple linear regression to test the direct relationships between the variables. First, regression models were established using information quality dimensions as predictors of purchase intention. Second, models were built with information quality dimensions to predict perceived value and perception of trust. Third, a model was constructed with perceived value and perception of trust as predictors of purchase intention.

4.3.2.1 Regression Analysis of Influencer Recommendation Information Quality on Purchase Intention

This study conducted a multiple linear regression analysis with professionalism, authenticity, and timeliness of influencer recommendation information as independent variables and perceived value as the dependent variable. The results are listed in Table 12.

The analysis reveals that the adjusted R^2 of the model is 0.497, with an F -value of 47.128 ($p < 0.001$), indicating good overall model significance and explanatory power. All VIF values are below 3, suggesting no multicollinearity issues. The regression coefficients indicate that both the professionalism of influencer recommendation information ($\beta = 0.189$, $p < 0.05$) and its timeliness ($\beta = 0.505$, $p < 0.001$) have significant positive effects on college students' perceived value, thus supporting H1a and H1c. However, the effect of authenticity on perceived value is not statistically significant ($\beta = 0.130$, $p > 0.05$), so H1b is not supported. This indicates that in the influencer recommendation context,

professionalism and timeliness are the key drivers of enhancing perceived value, with timeliness exerting the most prominent effect, while the role of authenticity is not verified in this study.

Table 12

Regression Coefficients of Influencer Recommendation Information Quality on Purchase Intention^a

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.	Collinearity Statistics		Adjusted R ²	<i>F</i> -value
	B	Std. Error	β			Tolerance	VIF		
(Constant)	0.460	0.190		2.422	0.017				
1 Professionalism	0.073	0.093	0.071	0.785	0.434	0.439	2.278	0.497	47.128
Authenticity	0.336	0.112	0.301	2.993	0.003	0.355	2.817		
Timeliness	0.399	0.101	0.397	3.933	<0.001	0.352	2.841		

Note: a. Dependent Variable: Purchase Intention

4.3.2.2 Regression Analysis of Influencer Recommendation Information Quality on Perceived Value

This study conducted a multiple linear regression analysis with the professionalism, authenticity, and timeliness of influencer recommendation information as independent variables and perceived value as the dependent variable. The results are listed in Table 13.

Table 13

Regression Coefficients of Influencer Recommendation Information Quality on Perceived Value^a

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.	Collinearity Statistics		Adjusted R ²	<i>F</i> -value
	B	Std. Error	β			Tolerance	VIF		
(Constant)	0.805	0.154		5.238	0.000				
2 Professionalism	0.169	0.075	0.189	2.260	0.025	0.439	2.278	0.569	62.596
Authenticity	0.126	0.091	0.130	1.391	0.167	0.355	2.817		
Timeliness	0.443	0.082	0.505	5.401	0.000	0.352	2.841		

Note: a. Dependent Variable: Perceived Value

The results show that the adjusted R² is 0.569 and the *F*-value is 62.596 ($p < 0.001$), indicating a good overall model fit. All VIF values are below 3, indicating no multicollinearity. The regression coefficients reveal that professionalism ($\beta = 0.189$, $p < 0.05$) and timeliness ($\beta = 0.505$, $p < 0.001$) have significant positive impacts on perceived value, thus supporting H1a and H1c, respectively. However, the effect of authenticity on perceived value is not significant ($\beta = 0.130$, $p > 0.05$), so H1b is not supported. This indicates that among the factors influencing college students' perceived value, the timeliness of influencer recommendation information plays the most prominent role, while the influence of authenticity requires further investigation.

4.3.2.3 Regression Analysis of Influencer Recommendation Information Quality on Perception of trust

This study conducted a multiple linear regression analysis with professionalism, authenticity, and timeliness of influencer recommendation information as independent variables and perception of trust as the dependent variable. The results are presented in Table 14.

The results show that the adjusted R² is 0.511 and the *F*-value is 49.686 ($p < 0.001$), indicating a good model fit. All VIF values are below 3, indicating no multicollinearity. The regression coefficients reveal

that authenticity ($\beta = 0.526, p < 0.001$) has a significant positive effect on the perception of trust, thus supporting H2b. However, the effects of professionalism ($\beta = 0.107, p > 0.05$) and timeliness ($\beta = 0.139, p > 0.05$) on the perception of trust are not statistically significant; therefore, H2a and H2c are not supported. This indicates that among the factors influencing college students' perception of trust, the authenticity of influencer recommendation information plays the most critical role. This may be because, in the eyes of college students, an influencer's "authenticity" is a prerequisite for trust — a "baseline attribute" — rather than a direct value-adding feature. Even a very authentic influencer will not lead to purchase value if the recommended product is functionally unsuitable or overpriced. In other words, authenticity functions more as a "hygiene factor," while professionalism and timeliness act as "motivator factors." The influence of professionalism and timeliness requires further research.

Table 14

Regression Coefficients of Influencer Recommendation Information Quality on Perception of trust^a

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.	Collinearity Statistics		Adjusted R ²	<i>F</i> -value
	B	Std. Error	β			Tolerance	VIF		
(Constant)	0.480	0.172		2.784	0.006				
3 Professionalism	0.101	0.084	0.107	1.198	0.233	0.439	2.278	0.511	49.686
Authenticity	0.541	0.102	0.526	5.304	0.000	0.355	2.817		
Timeliness	0.129	0.092	0.139	1.397	0.165	0.352	2.841		

Note: a. Dependent Variable: Perception of trust

4.3.2.4 Regression Analysis of Perceived Value and Perception of trust on Purchase Intention

This study conducted a multiple linear regression analysis with perceived value and trust perception as independent variables and purchase intention as the dependent variable. The results are shown in Table 15.

Table 15

Regression Coefficients of Perceived Value and Perception of trust on Purchase Intention^a

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.	Collinearity Statistics		Adjusted R ²	<i>F</i> -value
	B	Std. Error	β			Tolerance	VIF		
(Constant)	0.098	0.181		0.540	0.590				
4 Perceived Value	0.624	0.092	0.545	6.817	0.000	0.455	2.196	0.592	102.523
Perception of trust	0.302	0.087	0.277	3.466	0.001	0.455	2.196		

Note: a. Dependent Variable: Purchase Intention

The results indicate an adjusted R² of 0.592 and an *F*-value of 102.523 ($p < 0.001$), indicating an excellent model fit. All VIF values are below 3, indicating no multicollinearity. The regression coefficients show that both perceived value ($\beta = 0.545, p < 0.001$) and perception of trust ($\beta = 0.277, p < 0.001$) have significant positive effects on college students' purchase intentions, supporting H3 and H4. This suggests that a higher perceived value and greater trust in influencer recommendations lead to stronger purchase intentions, with perceived value demonstrating a stronger influence than trust.

4.3.3 Mediation Effect Test

To ensure the efficiency and robustness of the analysis, this study employed the PROCESS macro (Model 4) in SPSS and used the bootstrap method with 5,000 resamples and a 95% confidence level to test the mediating roles of perceived value and perception of trust. Table 16 presents the results of the mediation effect test. Given that influencer recommendation information quality comprises three dimensions (professionalism, authenticity, and timeliness), the items under these dimensions were averaged to create a composite information quality variable for mediation analysis. This allowed us to test whether overall information quality influences purchase intention indirectly through perceived value and trust perception.

The results show that information quality significantly and positively influences purchase intention via both pathways. The indirect effect via perceived value is 0.4455 (95% CI: [0.2611, 0.6099]), and the indirect effect via perception of trust is 0.3015 (95% CI: [0.1471, 0.4530]). As both confidence intervals exclude zero, the mediation effects are significant. The total effect of information quality on purchase intention, before including the mediators, is also significant ($\beta = 0.8097$, $p < 0.001$). After including perceived value and perception of trust as mediators, the direct effect of information quality on purchase intention remains significant but with a reduced coefficient ($\beta = 0.3642$, $p < 0.001$). Simultaneously, both indirect pathways are significant, indicating that perceived value and perception of trust partially mediated the relationship between influencer recommendation information quality and college students' purchase intention. Hypotheses H5 and H6 are supported. The specific pathways and related parameters are listed in Table 16.

Table 16

Bootstrap Mediation Effect Test Results of Perceived Value and Perception of trust

Path	Effect	Bias-corrected 95%CI			Percentile 95%CI		
		Lower	Upper	P	Lower	Upper	P
Info Quality → Perceived Value → Purchase Intention	0.4455	0.2611	0.6099	0	0.2611	0.6099	0
Info Quality → Perception of trust → Purchase Intention	0.3015	0.1471	0.453	0	0.1471	0.453	0
Info Quality → Purchase Intention (Direct Effect)	0.3642	0.1799	0.5485	0.0001	0.1799	0.5485	0.0001

4.3.4 Hypothesis Test Results and Analysis

This study proposed six main hypotheses and eight sub-hypotheses. The results of the empirical testing are summarized in Table 17.

Table 17

Hypothesis Test Results

Hypothesis	Relationship (Path)	Result
H1a	Info Quality Professionalism → Perceived Value	Supported
H1b	Info Quality Authenticity → Perceived Value	Not supported
H1c	Info Quality Timeliness → Perceived Value	Supported
H2a	Info Quality Professionalism → Perception of trust	Not Supported
H2b	Info Quality Authenticity → Perception of trust	Supported
H2c	Info Quality Timeliness → Perception of trust	Not Supported
H3	Perceived Value → Purchase Intention	Supported
H4	Perception of trust → Purchase Intention	Supported
H5	Info Quality → Perceived Value → Purchase Intention	Supported
H6	Info Quality → Perception of trust → Purchase Intention	Supported

Professionalism, representing the influencer's capacity for professional interpretation of product functions, specifications, and suitable scenarios, reduces information asymmetry and helps college

students clearly assess product utility, thus enhancing perceived value. Timeliness, reflecting the influencer's prompt updates on product prices, promotions, and usage feedback, aids college students in seizing consumption opportunities and reinforcing their value-for-money perception, serving as a key driver of perceived value. The non-significant effect of authenticity on perceived value suggests that in influencer recommendation contexts, college students prioritize the practicality and timeliness of information over its mere truthfulness, suggesting that professionalism and timeliness align more closely with their consumption decision-making needs.

Authenticity serves as the core basis for college students to judge the reliability of the recommendations of influencers. Objective and non-exaggerated information reduces perceived consumption risk and serves as the foundation for building trust. The non-significant effects of professionalism and timeliness on the perception of trust indicate that college students possess strong rational awareness of influencer marketing. They do not equate professional competence or information update frequency with recommendation credibility; they may even interpret overly professional explanations as marketing rhetoric and frequent updates as commercial hypes. This confirms that authenticity is a fundamental factor influencing college students' trust perceptions.

Perceived value, which represents a comprehensive assessment of product-need fit, cost-effectiveness, and usage experience, is the core internal driver of purchase intention. The perception of trust also facilitates purchase intention by reducing decision uncertainty and enhancing recommendation reliability. This result indicates that college students follow a value-primary, trust-secondary decision-making logic in influencer recommendation. They first assess product value as the core criterion and then integrate trust levels to finalize their purchase inclination, reflecting their pronounced rational consumption characteristics.

Influencer recommendation information quality not only directly and positively affects purchase intention but also indirectly promotes it through two pathways: enhancing perceived value and strengthening trust perception. The confidence intervals for both mediation pathways exclude zero, confirming significant mediation effects. This result fully validates the SOR model's "Stimulus-Organism-Response" logic, demonstrating that information quality, as an external stimulus, requires internal psychological mediation through perceived value and perception of trust to effectively translate into purchase intention. This clarifies the intrinsic mechanism through which the quality of influencer recommendation information affects college students' consumption decisions.

These hypothesis testing results systematically reveal the differentiated influence mechanism of influencer recommendation information quality on college students' purchase intention, offering both theoretical and practical significance. First, the dimensions of information quality exhibit functional differentiation: professionalism and timeliness drive perceived value, whereas authenticity dominates the perception of trust. This finding overcomes the limitation of treating information quality as a monolithic variable in traditional research and provides a precise direction for influencers to optimize their recommendation content. Second, college students display rational and pragmatic consumption characteristics, demonstrating strong discernment in influencer marketing and prioritizing product value over blind following, aligning with the behavioral traits of Generation Z consumers. Third, the SOR model demonstrates good applicability in influencer recommendation contexts, with the "Information Quality → Perceived Value/Perception of trust → Purchase Intention" pathway robustly established, extending the application boundaries of the SOR model in the field of new media marketing. Fourth, the confirmation of mediation effects underscores the critical role of internal psychological perception, suggesting that influencers and brands should holistically optimize marketing strategies by improving information quality, awakening users' psychological perception, and facilitating purchase intention conversion.

4.4 Managerial Implications

Based on the findings of this study, the following managerial implications are proposed for influencers, brands, and regulatory entities.

First, influencers should strengthen their professional competence, strive to enhance the professionalism and timeliness of their recommendation information, and uphold the baseline of authenticity to avoid false advertising, thereby building a robust trust barrier. Specifically, recommendation strategies should be optimized for different gender groups to increase their specificity and effectiveness. Additionally, influencers should focus on accumulating a positive reputation by consistently delivering high-quality information and enhancing interaction stickiness with college students, thereby boosting their influence.

Second, brands should establish a comprehensive influencer selection mechanism that prioritizes the assessment of the quality of influencers' recommendation information. Based on product positioning, brands should choose influencers who align with their target audience. Brands must strengthen their review of influencer content to ensure information authenticity and compliance, preventing damage to their brand image from false recommendations. Furthermore, brands should adjust their promotional emphasis based on gender-specific needs to enhance perceived product value and trust.

Third, relevant regulatory authorities should strengthen supervision over influencer recommendation practices, further regulate market order, and severely crack down on false recommendations and exaggerated advertising to protect consumers' legitimate rights. Simultaneously, efforts should be made to guide the healthy development of the influencer industry and promote professionalism and standardization in influencer recommendations.

5. Conclusion and Future Directions

5.1 Research Conclusions

This empirical study targeted college students and focused on the relationships among influencer recommendation information quality, perceived value, perception of trust, and purchase intention. Reliability/validity tests, correlation analysis, multiple linear regression, PROCESS mediation analysis, and gender-based subgroup heterogeneity analysis was employed to test the hypotheses. Although some sub-hypotheses were not supported, the key conclusions are as follows:

First, the dimensions of influencer recommendation information quality differentially affect perceived value. Professionalism and timeliness exhibit significant positive effects on perceived value, supporting H1a and H1c. However, the effect of authenticity on perceived value is not significant, failing to support H1b. This indicates that among college students, timeliness exerts the strongest driving force on perceived value, followed by professionalism, while the role of authenticity remains to be verified.

Second, the dimensions of influencer recommendation information quality exert distinct effects on the perception of trust. Authenticity demonstrates a significant positive effect on perception of trust, supporting H2b. However, the effects of professionalism and timeliness are not significant, failing to support H2a and H2c. This suggests that authenticity is the core factor influencing college students' trust in influencer recommendations, whereas professionalism and timeliness do not play significant roles. This may reveal a unique trust-building model among college students: they prioritize the influencer's "honesty" over "professional capability" or "information speed." In an environment saturated with filters, scripts, and commercial promotions, college student consumers have developed "immunity," instinctively suspecting that "professionalism" might be marketing rhetoric and "frequent updates" might be commercial hype. For them, authenticity is the foundation of that trust.

Third, both perceived value and perception of trust significantly and positively influence college students' purchase intentions. The regression coefficients for both are significant, supporting H3 and H4. Moreover, perceived value exerts a stronger influence on purchase intention than perception of trust, suggesting that college students prioritize the practical value of the product over their trust in the influencer or the product itself in influencer recommendation contexts.

Fourth, perceived value and perception of trust both act as partial mediators in the relationship between influencer recommendation information quality and college students' purchase intention, with significant direct effects also present. Supporting H5 and H6, this indicates that influencer recommendation information quality not only directly affects college students' purchase intention but also indirectly influences it by enhancing perceived value and trust perception.

5.2 Limitations

Considering the research process and empirical findings, this study acknowledges the following limitations, which warrant improvement and refinement in future studies.

First, regarding sample selection, the sample exclusively comprised college students, which is relatively homogeneous and fails to cover consumers from other age groups. Additionally, with only 141 valid samples, while meeting the minimum requirements for basic empirical analysis, the sample size is relatively small and may affect the generalizability of the findings, meaning they may not fully reflect the behavioral characteristics of all consumers in influencer recommendation scenarios.

Second, regarding the research perspective, this study only incorporated gender as a heterogeneity variable, without considering other potentially influential factors such as age, major, spending power, or influencer preference. This relatively narrow perspective fails to fully capture the differentiated characteristics across various groups. The subgroup regression results suggest potential differences in the influence of perceived value and trust perception between genders. Specifically, for males, perception of trust ($\beta = 0.439$, $p < 0.01$) exhibited a higher coefficient than perceived value ($\beta = 0.392$, $p < 0.05$); for females, perceived value ($\beta = 0.574$, $p < 0.001$) showed a higher coefficient than perception of trust ($\beta = 0.232$, $p < 0.05$). However, owing to the imbalanced sample structure, these results primarily indicate preliminary differential tendencies and require further verification with larger samples.

5.3 Future Research Directions

In view of the limitations identified and current trends in the influencer marketing industry, the following future research directions are proposed, aiming to offer references for subsequent studies.

First, the sample scope should be expanded to enhance the generalizability of the findings. Future studies should broaden the sample selection beyond college students to include consumers from other age groups while also increasing the total sample size to reduce sampling bias and improve representativeness. Cross-regional sample collection could also be considered to compare the behavioral differences among consumers from different areas.

Second, the variable measurement system should be refined and the research content enriched. Future studies could incorporate additional dimensions of influencer recommendation information quality, such as entertainment value and interactivity, to provide a more comprehensive understanding of its influence. Furthermore, more moderating variables could be introduced to enrich the research model and examine the interactive effects among the variables in greater depth.

Third, broadening the research perspective and conducting more in-depth heterogeneity analyses is recommended. Future studies should incorporate a wider range of heterogeneity variables, such as age, academic major, consumption habits, and influencer preference, to more fully analyze the differentiated characteristics across diverse consumer groups. Additionally, the role of different types

of influencers or streamers could be explored to investigate whether the impact of information quality on purchase intention varies across different recommendation scenarios.

Fourth, diversifying research methods can enhance the scientific rigor of the findings. Future studies could employ longitudinal designs to track changes in consumer purchase intentions over time, thereby clarifying the dynamic relationships among variables. Furthermore, integrating methods such as case studies and experimental research could supplement the potential limitations of questionnaire-based empirical studies, making the conclusions more scientifically robust and persuasive.

Fifth, the research domain should be expanded in line with industry development trends. As the influencer marketing industry evolves, future studies should incorporate emerging formats, such as live-streaming commerce and short video recommendations, to investigate the mechanisms through which recommendation information quality influences consumer purchase intention in these new contexts. This would provide more targeted guidance for the practical development of the industry in the future.

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Conflicts of Interest

Authors declare no conflicts of interest.

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