

A Study on the Impact Mechanism of Tiktok Social E-commerce on College Students' Consumption: Based on the TAM

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Received: 20 January 2026; **Accepted:** 2 February 2026; **Published:** 1 March 2026

Abstract:

In the context of the digital economy, the cost of acquiring customers for traditional e-commerce is becoming increasingly higher, and developing social e-commerce has become an important direction and strategy to maintain and activate traffic. As one of the most popular social short video APPs, Tiktok is loved by college students. The research takes Tiktok as an example to explore the influencing factors of college students' consumption on social e-commerce platforms. Taking perceived ease of use and perceived usefulness in the Technology Acceptance Model (TAM) as the basic variables, the research model is constructed by integrating two Tiktok platform factors, namely perceived entertainment and influencer marketing. Using a questionnaire survey method to empirically analyze the influencing factors of college students' consumption willingness, it was found that perceived usefulness, entertainment value, and influencer marketing all exert an impact on consumption willingness and thus affect actual consumption behavior, while perceived ease of use does not directly affect consumption willingness, and there is a suppression effect in the mediation model. Suggestions are proposed from the guidance of healthy consumption attitudes, building social e-commerce platforms, and promoting brand marketing. Cultivate healthy and rational consumption concepts among college students based on group characteristics; Social e-commerce platforms should return to product quality itself, meet consumers' needs for useful products and reliable platforms, and provide consumers with a better consumption experience; On this basis, various forms of brand marketing and promotion activities can have a cumulative effect in the overall sense.

Keywords:

Social E-Commerce, Tiktok, Consumer Behavior, TAM, Influencing Factors

1. Introduction

To accelerate the development of the digital economy, promote the integration of the digital economy with the real economy, meet the diverse consumption needs of different consumers, and adapt to the continuous upgrading of China's internet

technology alongside shifts in consumer demands and behavioural patterns, China's e-commerce industry has transitioned from traditional e-commerce to new e-commerce, giving rise to novel models such as social commerce and live-streaming commerce. The core principle of social e-commerce is "goods finding people", centred on interpersonal relationships. It manifests through self-media, short videos, live streaming, and communities, primarily relying on social connections between individuals. Socialization is ubiquitous, and e-commerce is everywhere. Social content e-commerce, as the primary form of social commerce, has become the greatest driving force behind its development. In the race to capture social traffic, seize the sinking market, and satisfy consumption demands, platforms like Tiktok have entered a phase of rapid iteration. Celebrities, influencers, bloggers across various fields, and businesses from all sectors have all entered the social e-commerce arena. As a first-tier player in social e-commerce, Tiktok is a short-video application catering to all age groups, boasting a colossal user base, an enormous Daily Active User (DAU) count, and an average user daily screen time of over 2 hours. Post-90s and post-00s generations have emerged as the mainstay of digital consumption, and social e-commerce has gained their favor primarily by satisfying their demands for personalized and intelligent consumption. The post-00s generation constitutes the majority of current college students; they demonstrate a strong capacity for embracing new things, with approximately 80% of college students being Tiktok users. Meanwhile, they also serve as the core target consumers of social e-commerce. Against the backdrop of the fierce competitive landscape in the social e-commerce market, exploring the consumption influencing mechanism of the college student group can not only guide college students to engage in rational consumption and establish sound consumption concepts, but also assist social e-commerce platforms in understanding the consumption pain points of this group.

2. Research Review

2.1. Social E-commerce

The primary factors in social e-commerce are the medium, dissemination channels, and interaction models [1]. The medium encompasses social networking platforms, e-commerce platform communities, and other media within the social networking context. The commercial mechanism primarily operates through social interaction, user-generated content (UGC), and dissemination and sales via other media. Social e-commerce leverages Web 2.0 technologies to encourage consumers to share and review product and service information. Compared to traditional e-commerce, social e-commerce integrates social elements such as sharing, commenting, interaction, and networking [2] into the process of e-commerce transactions, facilitating the mutual permeation of product information and emotional exchange while accelerating the frequency of both information and sentiment sharing. The social network based on social tools has formed a huge traffic pool, which is also a type of low-cost traffic. This not only promotes the transformation of traditional e-commerce to social e-commerce, but also completes the diffusion process of traffic fission, helping enterprises more effectively boost traffic fission. Social e-commerce not only frees consumers from the constraints of time and space, but also enables consumption influence to reach a wider audience. Relying on social relationships for sharing, it facilitates the occurrence of transactions. Many enterprises have joined the ranks of developing social e-commerce, and Tiktok has also vigorously promoted short-video and live-streaming social e-

commerce. By arousing users' emotional resonance and leveraging social attributes to maintain users' emotional engagement [3], Tiktok has formed stable interactive groups. This not only meets young people's demand for new and exciting experiences, but also caters to college students' entertainment and leisure needs, thereby influencing their consumption decisions.

2.2. Research on Factors Influencing Consumer Behaviour

Research on the influencing factors of consumption has yielded abundant results. Product quality, consumers' own factors, and satisfaction with social e-commerce platforms all affect consumers' purchase motivation [4]. From the perspectives of the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB), perceived usefulness, trust, and subjective norms all significantly influence consumers' purchase behavior [5]. From the perspective of the Affect-Behavior-Cognition (ABC) Attitude Model, social relationships, characteristics of e-commerce hosts, product information, and live-streaming atmosphere positively affect consumers' purchase willingness, thereby promoting the generation of consumption behavior [6]. Numerous studies based on the Stimulus-Organism-Response (SOR) Model have found that celebrity effects, social networks, and online platforms in live-streaming e-commerce significantly influence consumers' purchase behavior [7]. From the perspectives of intrinsic consumer factors and extrinsic factors, the former include consumers' gender, experience, age, and preferences, while the latter mainly consist of product information, product quality, product functions, product style, transaction modes, and after-sales services [8]. When consumers participate in short-video advertising marketing, expectancy confirmation, entertainment effects, congruence level, and sales methods exert a significantly positive impact on likes, comments, and shares [9], thereby facilitating consumption behavior. Surveys indicate that when college students engage in live-streaming e-commerce consumption activities, their spending tends to be low-value [10]. This phenomenon is influenced by factors such as commodity prices, product quality, and discounts, and is constrained by their material conditions. Meanwhile, the pursuit of spiritual satisfaction is a crucial motivation for college students to watch e-commerce live streams. However, driven by various marketing and promotion methods including internet popularity marketing, celebrity effects, and word-of-mouth marketing, some college students tend to exhibit impulsive consumption and emotional consumption behaviors.

It can be seen that in the era of the digital economy, the consumption willingness of college students is not only affected by their own intrinsic factors, but also influenced by external factors. Product quality and cost-effectiveness are the primary influencing factors, while the entertainment value of platforms such as short-video applications also serves as an important determinant. In addition, intensive promotional marketing and word-of-mouth effects are likely to induce impulsive consumption among consumers.

2.3. Research Review

Social e-commerce attracts and aggregates traffic through a fission diffusion model centered on social interaction attributes, making it an inevitable choice for the development of traditional e-commerce. As one of the representative platforms of social e-commerce, Tiktok has vigorously built the Tiktok Mall. Currently, the models for studying the influencing factors of consumers' purchase willingness include the

TAM, the SOR Model, and the ABC Attitude Model. From the perspective of college students' consumption behavior, this study constructs a model of the influencing factors of college students' consumption willingness based on the relatively mature TAM. In addition to perceived ease of use and perceived usefulness in the original model, two factors of perceived entertainment and influencer marketing are added considering the entertainment nature of the Tiktok social e-commerce platform and the characteristics of short-video marketing.

3. Research Hypotheses and Models

3.1. Research Hypothesis

3.1.1. Perceived ease of use and willingness to purchase

Perceived ease of use is one of the two core determinants of the TAM. When Davis (1989) [11] proposed the Technology Acceptance Theory, he defined perceived ease of use as the degree to which individuals perceive the difficulty or ease of using a specific technological system. In the context of this study, it refers to users' perception of the ease of using Tiktok and whether shopping on Tiktok is simple and convenient. Perceived ease of use includes the level of ease of operation, ease of search, variety of consumption methods, and the smoothness of the process with a neat interface. When choosing a consumption platform for shopping, consumers prefer shopping methods that involve fewer operational steps, are secure and trustworthy. If college students perceive learning and operating Tiktok, as well as purchasing goods on the Tiktok platform, to be simple and convenient, they will tend to use the Tiktok platform in subsequent activities. Based on the above analysis, Hypothesis 1 is proposed.

H1: Perceived ease of use has a significant impact on college students' consumption intention.

3.1.2. Perceived usefulness and willingness to purchase

Perceived usefulness, as another key determinant of TAM, is defined by Lou et al. [12] as the consumer's assessment of a product's utility in meeting their usage needs. Within this study's context, perceived usefulness refers to the assessment of whether items sold on Tiktok satisfy college students' consumption demands and whether the service meets their satisfaction. It is primarily explained through five dimensions: meeting needs, enhancing efficiency, information reception, interactive commenting, and promotional effectiveness. E-commerce platforms must offer sufficient channels for products and services to meet diverse consumer demands. Upon receiving goods, consumers evaluate whether items meet their expectations; high-quality and cost-effective products inevitably foster repeat purchase intent. Concurrently, Tiktok's pervasive marketing promotions exert a certain degree of influence on c students. Effective product promotion captivates and persuades potential consumers, stimulating purchasing intent while enhancing students' perception of Tiktok's usefulness. In summary, Hypothesis 2 is proposed.

H2: Perceived usefulness has a significant impact on college students' consumption intention.

3.1.3. Perceived Entertainment and Consumption Intention

As a popular short-video social application, Tiktok's prominent feature compared with other e-commerce platforms lies in its strong entertainment attribute. Studies

have shown that perceived entertainment is a crucial factor driving college students' continuous usage of Tiktok [13]. This entertainment experience is reflected in various aspects during usage, such as the pleasure derived from creating short videos, the sense of joy when watching short videos, and the strong appeal of Tiktok's short-video content that captivates users. According to Maslow's Hierarchy of Needs, affection and a sense of belonging are classified as human social needs, which can be fulfilled when college students use Tiktok. With the continuous improvement of social living standards, there is a growing demand for intrinsic spiritual satisfaction and emotional needs, leading to an increasing impact of perceived entertainment on consumption intention. When using Tiktok, college students may initially have no consumption plans; however, after engaging in immersive viewing of short-video recommendations or live streams, they are likely to skip the comparison stage and make impulsive purchases directly. Based on the above analysis, Hypothesis 3 is proposed.

H3: Perceived entertainment has a significant impact on college students' consumption intention.

3.1.4. Influencer Marketing and Consumer Intent

As a prevalent marketing method on current social media platforms, influencer marketing attracts followers through celebrities, internet influencers, and opinion leaders, thereby forming a fan economy. In the current social e-commerce environment, the business model of influencer marketing is mainly implemented through short videos and live streams. In the process of interacting with users, influencers promote products through plot-driven stories in short-video content to build personal IPs. Once influencers establish their influence, they can guide followers to make purchases, making live commerce feasible. Usually, corporate brands collaborate with various video creators to intersperse and promote products in the narrative content of short videos. After watching such content, users tend to generate emotional identification, which easily triggers impulsive consumption. Moreover, a "shopping cart" button can be attached to video pages, allowing users to directly click and jump to the purchase interface in a highly convenient and efficient manner. Live streaming, in particular, focuses its efforts on launching dedicated sales sessions, introducing a variety of products, and creating a lively atmosphere with discounts and lucky draws. Users only need to click the "buy" button to complete the payment process directly. Based on the above analysis, Hypothesis 4 is proposed.

H4: Influencer marketing has a significant impact on college students' consumption intention.

3.1.5. Consumption Intention and Actual Consumption Behavior

Consumption intention is defined as the willingness of college students to purchase products on Tiktok while using or after using the application. Such willingness serves as the prerequisite for actual consumption behavior. The stronger the consumption intention, the higher the probability of actual consumption behavior is. Based on this, Hypothesis 5 is proposed.

H5: College students' consumption intention has a significant impact on their actual consumption behavior.

3.1.6. The Mediating Role of Consumption Intention

Mediating effect is an indirect effect, which means that one variable cannot directly affect another variable on its own but exerts influence through an intermediate value, which is referred to as a mediating variable. In this study, perceived ease of use, perceived usefulness, perceived entertainment, and influencer marketing may affect actual consumption behavior through consumption intention. Based on the above analysis, the following four research hypotheses are proposed.

H6: College students' consumption intention plays a mediating role in the impact of perceived ease of use on actual consumption behavior.

H7: College students' consumption intention plays a mediating role in the impact of perceived usefulness on actual consumption behavior.

H8: College students' consumption intention plays a mediating role in the impact of perceived entertainment on actual consumption behavior.

H9: College students' consumption intention plays a mediating role in the impact of influencer marketing on actual consumption behavior.

3.2. Research Model

Although there is an extensive body of research related to online consumption behavior, studies focusing on the influencing factors of college students' consumption within the specific context of social e-commerce platforms remain relatively scarce. Drawing on relevant research [12,14], and considering the heterogeneity of social e-commerce platforms, this study selects two variables, namely perceived entertainment and influencer marketing. Based on the TAM, four dimensional variables: perceived ease of use, perceived usefulness, consumption intention, and actual consumption behavior are incorporated into the research framework. Starting from the context of social e-commerce and taking college students as the research object, this study constructs a model of factors influencing consumption. The specific research model is shown in Figure 1.

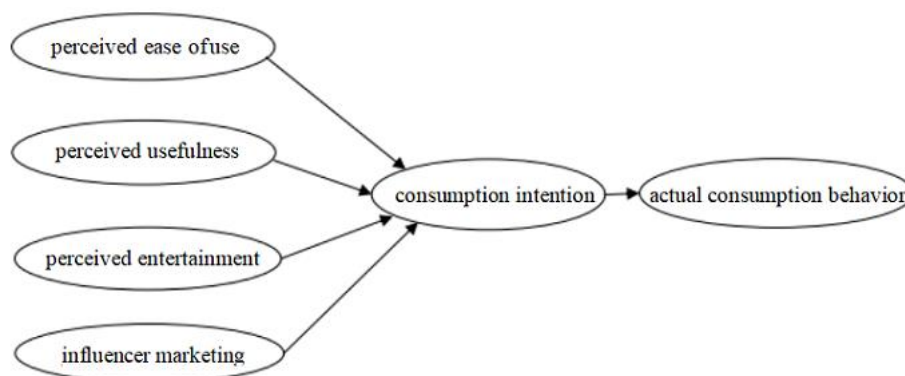


Figure 1. Model of Influencing Factors of College Students' Consumption Intention in Social E-commerce.

4. Scale Design and Survey Research

To ensure the scientificity of the research survey, the questionnaire is divided into two parts. The first part is the survey on respondents' basic information, including gender, grade, monthly income and expenditure, and preferences for social e-commerce platforms. The second part mainly consists of scale items, focusing on the survey of factors influencing college students' consumption, which involves six variables.

4.1. Scale Design

Combined with the specific research context and with reference to mature scales, the observation items for the influencing factors of college students' consumption intention in social e-commerce were designed. A 5-point Likert scale was adopted, which is divided into five levels from 1 to 5, representing "strongly disagree", "disagree", "neutral", "agree", and "strongly agree" respectively. To ensure the validity of the questionnaire, experts and college students were invited to discuss the structure of the scale and the expression of items. A pre-survey was conducted on a small scale, and unreasonable parts were revised. Finally, the formal scale was formed as shown in Table 1.

Table 1. Evaluation Scale for Influencing Factors of College Students' Consumption Intention in Social E-commerce.

Observation Dimensions	Observation Items	References
perceived ease of use	I find it easy to use Tiktok. I can easily find the products I want to buy. There are various consumption methods available on Tiktok. Tiktok has a clear interface and a smooth consumption process. Using Tiktok can meet my consumption needs. Shopping via Tiktok saves time and improves efficiency.	Davis, F. D. & Wang, Y. H., et al.[15]
perceived usefulness	I can obtain information and news via Tiktok. I can interact with others and express my own opinions on Tiktok. I am satisfied with the products promoted on Tiktok.	Davis, F. D. & Liang, Y.[16]
perceived entertainment	Using Tiktok makes me feel happy. The content recommended by Tiktok is appealing to me. I can get interesting information via Tiktok. I browse Tiktok every day. I have purchased certain products because of celebrities I like. I have been interested in certain products recommended by	Huang, S. H., et al.[17]
influencer marketing	internet influencers. I would want to try a product if it appears in different short videos. I would want to buy a product if I hear it has a good online reputation.	Wang, J. Z.[14]
consumption intention	I am willing to make purchases on Tiktok. I am willing to share the product information I see with relatives and friends around me. I am willing to continue purchasing products via Tiktok in the future.	Koo D M, Ju S H.[18]
actual consumption behavior	Tiktok has diversified my consumption choices. The activities on Tiktok have increased my spending. I have increased the frequency of shopping on Douyin compared with before.	Lou, Y., et al.[12]

4.2. Questionnaire Collection

Prior to the formal survey, a pre-survey was conducted among the college student group. The reliability coefficients of the sample data were all higher than 0.6, indicating that the reliability quality of the data was acceptable. Meanwhile, the KMO

value exceeded 0.7, which verified that the research data had good validity. On the basis of the pilot study, the formal questionnaire distribution was then carried out. Considering that some college students only use Tiktok for entertainment purposes without engaging in any actual consumption behavior, skip logic was embedded in the questionnaire items to filter out such invalid samples. A total of 326 questionnaires were collected, among which 305 were valid, resulting in an effective response rate of approximately 93.6%.

5. Data Analysis

5.1. Descriptive Statistical Analysis of Samples

As can be seen from Table 2, the ratio of male to female respondents in the survey sample was relatively balanced, and the number of participating students was roughly equal across different grades. The majority of the students had a monthly living expense of less than 3,000 yuan, with the largest proportion falling into the range of 1,000 to 1,500 yuan in monthly expenditure. Among the social e-commerce platforms most frequently used by the college student group, the vast majority were concentrated on Tiktok and Weibo. The daily time spent on social e-commerce software was 30 to 60 minutes for most respondents, while a considerable number of students spent more than 2 hours on these platforms, showing a tendency to indulge in the social space. On the whole, the college student sample in this study had a certain degree of representativeness.

Table 2. Frequency Analysis Results of Personal Basic Information.

Item	Category	Frequency	Percentage (%)
Gender	Male	143	46.885
	Female	162	53.115
	Freshman	88	28.852
Grade	Sophomore	76	24.918
	Junior	64	20.984
	Senior	77	25.246
	Below 1,000 Yuan	16	5.246
Monthly Living Expense	1,000–1,500 Yuan	179	58.689
	1,500–3,000 Yuan	102	33.443
	Above 3,000 Yuan	8	2.623
Monthly Expenditure	Below 1,000 Yuan	45	14.754
	1,000–1,500 Yuan	179	58.689
	1,500–3,000 Yuan	76	24.918
	Above 3,000 Yuan	5	1.639
Most Frequently Used Social E-commerce Platforms (Multiple Choices)	Tiktok	218	
	Xiaohongshu	137	
	Weibo	212	
	Pinduoduo	160	
Average Daily Browsing Time on Social	Others	55	
	Below 30 Minutes	48	15.738
	30–60 Minutes	105	34.426
E-commerce Platforms	60–90 Minutes	54	17.705
	90–120 Minutes	30	9.836
	Above 120 Minutes	68	22.295

5.2. Reliability and Validity Analysis

SPSS and AMOS software were employed to conduct the survey data analysis, and the results of reliability test analysis were presented in Table 3. The Cronbach's α coefficients of all six variables were greater than 0.6, indicating that the reliability of the scale was acceptable. The α coefficient of the overall scale reached 0.873, which reflected a good level of internal consistency for the entire measurement tool. In addition, the composite reliability (C.R.) values of all constructs exceeded 0.6, demonstrating favorable internal consistency among the indicator items corresponding to each construct.

Table 3. Results of Reliability Test Analysis.

Research Variable	Number of Items	Cronbach's α Coefficient	C.R.
Perceived Ease of Use	4	0.622	0.625
Perceived Usefulness	5	0.704	0.711
Perceived Entertainment	4	0.729	0.763
Influencer Marketing	4	0.697	0.702
Consumption Intention	3	0.632	0.621
Actual Consumption Behavior	3	0.724	0.660

Validity analysis was performed on the questionnaire data. The results of the Kaiser-Meyer-Olkin (KMO) test showed that the KMO value was 0.884, which was greater than 0.6, indicating that the data had good validity. Meanwhile, the results of Bartlett's Test of Sphericity demonstrated that the KMO value was above 0.5 with a significance level of $p < 0.001$, which verified that there were significant correlations among the variables. The commonality values of all research items exceeded 0.4, suggesting that the information of all items could be effectively extracted. In addition, the cumulative variance explained by the six factors after rotation reached 58.8%, which was higher than the threshold of 50%, implying that the information contained in the research items could be effectively captured. The detailed analysis results are presented in Table 4.

Table 4. Results of Validity Test Analysis.

KMO Test and Bartlett's Test		
KMO Value		0.884
Cumulative Variance Explained after Rotation		58.8%
Bartlett's Test of Sphericity	Approximate Chi-Square	2156.425
	<i>df</i>	253
	<i>p</i> -value	***

For the discriminant validity of the measurement scale, the optimal evaluation criterion is that the square root of the average variance extracted (AVE) of each latent variable should be greater than the absolute value of the correlation coefficient between this variable and other latent variables. Table 5 presents the correlation coefficients among latent variables and the square roots of their AVEs. Except that the correlation coefficient between Perceived Usefulness and Perceived Ease of Use is slightly higher than the square root of the AVE of Perceived Ease of Use, all other indicators meet the criterion. This result demonstrates that the discriminant validity of the measurement model is acceptable. In addition, the measurement scale of this study draws on the connotative concepts of relevant existing research, with appropriate revisions to the expression according to the specific research context. Further revisions to the wording were made after the pre-survey, which ensures that the scale has good content validity.

Table 5. Discriminant Validity Indicators of the Measurement Model.

	Perceived Ease of Use	Perceived Usefulness	Perceived Entertainment	Influencer Marketing	Consumption Intention	Actual Consumption Behavior
Perceived Ease of Use	0.545					
Perceived Usefulness	0.663***	0.590				
Perceived Entertainment	0.352***	0.485***	0.671			
Influencer Marketing	0.192***	0.289***	0.216***	0.614		
Consumption Intention	0.381***	0.497***	0.376***	0.318***	0.608	
Actual Consumption Behavior	0.411***	0.542***	0.401***	0.318***	0.617***	0.632

Note: The bold values on the diagonal are the square roots of AVE, while the off-diagonal values are the correlation coefficients between latent variables. *** indicates $p < 0.001$.

5.3. Regression Analysis

Table 5 indicates significant correlations among the variables. Regression analysis was conducted to further examine the relationships between these variables, with the results summarized in Table 6.

Table 6. Regression Analysis of Consumption Intentions.

Linear regression analysis results n=305								
	Non-standardized coefficient		Standardized coefficient	P	VIF	R ²	Adjusted R ²	F
	B	Standard error	Beta					
Constant	0.73	0.261	-	0.006***	-	0.303	0.293	F=32.56 P=0.000***
Perceived Ease of Use	0.092	0.072	0.083	0.200	1.789			
Perceived Usefulness	0.352	0.078	0.315	***	2.116			
Perceived Entertainment	0.148	0.053	0.155	0.005***	1.321			
Influencer Marketing	0.165	0.047	0.177	0.001***	1.1			
Dependent variable: Consumption intention								

As shown in Table 6, all VIF values are less than 5, indicating no multicollinearity in the model. The regression coefficient is significant with $F=32.56$ and $P<0.001$, meaning that at least one of the four variables: Perceived Ease of Use, perceived usefulness, perceived entertainment, and influencer marketing—significantly influences purchase intention. However, the regression coefficient for Perceived Ease of Use is 0.092, which is not statistically significant. Perceived Ease of Use does not significantly influence consumption intention, thus rejecting H1. This may be because prior research overlooked the indirect effect where Perceived Ease of Use acts upon perceived usefulness, which then influences consumption intention. Subsequent mediation model tests confirmed that Perceived Ease of Use significantly influenced perceived usefulness, and perceived usefulness significantly influenced consumption intention. However, the direct effect of Perceived Ease of Use on consumption intention was insignificant, indicating the presence of a suppression effect.

The regression coefficient of perceived usefulness stood at 0.352, which was statistically significant, indicating that perceived usefulness exerts a positive impact on consumption intention.

The measurement of perceived usefulness was conducted from multiple dimensions, including whether goods and services can meet consumer demands, improve time efficiency, facilitate information reception, support interactive commenting, and enhance promotion effectiveness. All these aspects demonstrate that perceived usefulness has a significant influence on consumption intention. As a short-video platform, Tiktok has vigorously developed its social e-commerce business, allowing users to conveniently purchase products while browsing short videos. Thus, Hypothesis H2 is supported.

The regression coefficient of perceived entertainment was 0.148, reaching a statistically significant level, which suggests that perceived entertainment exerts a notable effect on the consumption intention of college students. On Tiktok, consumers have access to a wide range of short-video content, such as plot-driven videos, comedy clips, science popularization content, and beauty tutorials. Supported by big data analytics, Tiktok continuously pushes video content that matches the types users spend more time watching, thereby immersing users in the platform. In addition, Tiktok's primary user base consists of young people, and college students, who are eager to pursue novel things, can precisely satisfy their needs through Tiktok. Therefore, Hypothesis H3 is supported.

The regression coefficient of influencer marketing was 0.165, which was statistically significant, indicating that influencer marketing has a significant impact on the consumption intention of college students. Influencer marketing mainly relies on the introduction and promotion of products by short-video creators, enabling viewers to empathize with video plots and further triggering impulse purchases. Especially when celebrities or bloggers recommend certain products, viewers tend to make purchase decisions due to the celebrity endorsement effect. In conclusion, influencer marketing also exerts a significant influence on the consumption intention of college students, and Hypothesis H4 is supported.

Finally, the regression equation derived from the above variables is presented as follows:

$$\text{Consumption Intention} = 0.73 + 0.352 * \text{Perceived usefulness} + 0.148 * \text{Perceived Entertainment} + 0.165 * \text{Influencer Marketing}$$

Table 7. Regression Analysis of the Impact of Actual Consumption Behavior on Consumption Intention.

Linear regression analysis results n=305									
	Non-standardized coefficient		Standardized coefficient	t	P	VIF	R²	Adjusted R²	F
	B	Standard error	Beta						
Constant	0.945	0.191	-	4.935	***	-	0.381	0.379	F=186.356 P=0.000** *
Consumption Intention	0.725	0.053	0.617	13.651	***	1			
Dependent variable: Actual Consumption Behavior									

The regression coefficient of Consumption Intention was 0.725, which was statistically significant. Consistent with the initial hypothesis, this result indicates that college students' consumption intention exerts a significant positive impact on their actual consumption behavior. Thus, Hypothesis H5 is supported.

5.4. Mediation Effect Analysis

The size of the research sample was 305, which falls into the category of small-to-medium sample. The Process plug-in in SPSS software was adopted to conduct the mediation effect analysis, with the Bootstrap method applied to test the mediation effect. The judgment criterion is as follows: if the 95% confidence interval (CI) of the product term of regression coefficients a and b ($a*b$) contains 0, there is no mediation effect; if the 95% confidence interval of $a*b$ does not contain 0, the mediation effect exists.

On this basis, the mediation effect of Consumption Intention was tested in the impact paths between four independent variables (Perceived Ease of Use, Perceived Usefulness, Perceived Entertainment, and Influencer Marketing) and the dependent variable (Actual Consumption Behavior). The detailed results are presented in Table 8.

Table 8. Mediation Effect Analysis of Consumption Intention.

Path	Effect Value	Standard Error (S.E.)	95% Bootstrap Confidence Interval		
			Lower Bound	Upper Bound	p -value
Perceived Ease of Use → Consumption Intention → Actual Consumption Behavior	0.268	0.052	0.168	0.377	***
Perceived Usefulness → Consumption Intention → Actual Consumption Behavior	0.301	0.052	0.209	0.42	***
Perceived Entertainment → Consumption Intention → Actual Consumption Behavior	0.228	0.041	0.156	0.32	***
Influencer Marketing → Consumption Intention → Actual Consumption Behavior	0.2	0.043	0.126	0.293	***

As can be seen from Table 8, the 95% confidence intervals of the product terms of regression coefficients a and b ($a*b$) did not contain 0, indicating that all mediation effects were statistically significant.

In the impact path of Perceived Ease of Use → Consumption Intention → Actual Consumption Behavior, the indirect effect value was 0.268. The indirect impact through the mediating variable (Consumption Intention) was significant, while the direct impact of the independent variable on the dependent variable was not significant. This result demonstrates that Consumption Intention exerted a full mediation effect in the relationship between Perceived Ease of Use and Actual Consumption Behavior.

In the path of Perceived Usefulness → Consumption Intention → Actual Consumption Behavior, the indirect effect value was 0.301. Both the indirect impact through Consumption Intention and the direct impact of Perceived Usefulness on Actual Consumption Behavior were significant. Thus, Consumption Intention played a partial mediation role in the relationship between Perceived Usefulness and Actual Consumption Behavior.

In the path of Perceived Entertainment → Consumption Intention → Actual Consumption Behavior, the indirect effect value was 0.228. The indirect impact mediated by Consumption Intention and the direct impact of Perceived Entertainment on Actual Consumption Behavior were both statistically significant. This suggests that Consumption Intention exerted a partial mediation effect in the relationship between Perceived Entertainment and Actual Consumption Behavior.

In the path of Influencer Marketing → Consumption Intention → Actual Consumption Behavior, the indirect effect value was 0.2. Both the indirect impact through the mediating variable and the direct impact of Influencer Marketing on Actual Consumption Behavior were significant. Therefore, Consumption Intention also played a partial mediation role in the relationship between Influencer Marketing and Actual Consumption Behavior.

5.5. Hypothesis Testing

Based on the analyses above, the research hypotheses proposed in this study were verified, and the verification results are presented in Table 9 below.

Table 9. Hypothesis Verification Results

Hypothesis	Verification Outcome
H1: Perceived ease of use has a significant impact on college students' consumption intention.	Not Supported
H2: Perceived usefulness has a significant impact on college students' consumption intention.	Supported
H3: Perceived entertainment has a significant impact on college students' consumption intention.	Supported
H4: Influencer marketing has a significant impact on college students' consumption intention.	Supported
H5: College students' consumption intention has a significant impact on their actual consumption behavior.	Supported
H6: College students' consumption intention plays a mediating role in the impact of perceived ease of use on actual consumption behavior.	Full Mediation
H7: College students' consumption intention plays a mediating role in the impact of perceived usefulness on actual consumption behavior.	Partial Mediation
H8: College students' consumption intention plays a mediating role in the impact of perceived entertainment on actual consumption behavior.	Partial Mediation
H9: College students' consumption intention plays a mediating role in the impact of influencer marketing on actual consumption behavior.	Partial Mediation

As can be seen from Table 9, all hypotheses except H1 are supported. In particular, Hypothesis H6 verifies the existence of a full mediation effect of college students' consumption intention, indicating that perceived ease of use affects actual consumption behavior through the mediating variable of consumption intention. Meanwhile, this study neglects the effect of perceived ease of use on perceived usefulness, suggesting that there may be a chain mediation effect in which perceived ease of use influences actual consumption behavior through perceived usefulness and consumption intention in sequence. Previous studies have also confirmed that the latent variable of perceived ease of use exerts an impact on perceived usefulness. From a practical perspective, the convenience and user-friendliness of the Tiktok platform will naturally lead college student consumers to form the perception that such a social e-commerce platform is useful.

6. Conclusions and Recommendations

College students' consumption concept is still in the shaping stage, yet they find themselves immersed in a social e-commerce environment saturated with material desires. This often leads them to succumb to temptation and engage in irrational spending. Particularly as platforms vigorously cultivate the influencer economy and amplify the influence of live-streaming hosts, consumers frequently stray onto the wrong path. Even when purchasing counterfeit or shoddy products, college students tend to let it go for fear of trouble and show a certain degree of tolerance. This forms a vicious circle of "bad money driving out good money", which further deviates the overall platform ecosystem from the healthy development track. The usefulness, entertainment attributes, and influencer marketing strategies of social e-commerce platforms all exert a profound impact on consumers' consumption decisions. Therefore, joint efforts from the perspectives of consumers, platforms, and merchants are required to eliminate the adverse effects in the social e-commerce market.

6.1. Strengthen online consumption education and cultivate rational consumption values

In the survey data, a small number of college students have the behavior of excessive consumption. College students are in a stage where they have not yet formed a complete set of consumption values. In an era dominated by short videos, college students pursue individuality and fashion, so they are highly vulnerable to the influencer marketing of products and platforms, thus developing irrational consumption tendencies such as impulsive consumption and herd consumption. Both families and schools should strengthen the education of college students on online consumption. Parents should exercise appropriate control over their children's living expenses, maintain timely communication, and directly refuse their unreasonable consumption behaviors. This can prevent students from developing the bad habits of asking for money at will and being extravagant and wasteful, especially since they lack a tangible perception of digital consumption. Schools should also offer relevant courses or lectures to guide students to consume rationally, help them identify their genuine needs, improve their understanding of online marketing tactics, and enhance their awareness of risk prevention.

6.2. Platforms should strengthen information supervision and ensure product quality

Among the factors influencing consumption intention, Perceived Usefulness exerts the most significant impact. The key to stimulating consumers' willingness to make purchases lies in satisfying their actual demands and refocusing on the products themselves. In online consumption scenarios, issues such as "discrepancies between product images and actual items" and exaggerated promotion are prevalent. Although Tiktok launched its Tiktok Mall section in 2021, the platform has not yet established a complete and effective supervision system, which poses potential risks to consumers. Substandard product quality will inevitably severely undermine consumer satisfaction and loyalty. Therefore, while improving the supervision system, it is essential to strengthen the review mechanism for Tiktok merchants. This measure not only effectively guarantees the quality of consumers' shopping experience but also serves as a crucial driver to attract more consumers. Improving the regulatory system also helps eliminate false

and misleading information. Some merchants resort to fraudulent practices such as fake orders to boost sales volume. When consumers receive products that fail to meet their expectations, they will be disappointed, forming negative impressions of the platform and ultimately leading to customer churn. Regulating the information ecosystem of the platform and guiding it back to rationality are conducive to fostering a virtuous cycle. This can encourage consumers to exchange product information and shopping experiences with others, increase the platform's popularity, and further promote the development of digital consumption.

6.3. Formulate rational marketing strategies and strengthen brand building

As an application targeting users of all age groups, it is almost impossible for Tiktok to cater to the tastes of every single individual, just as the proverb goes, "There are a thousand Hamlets in a thousand readers' eyes". Product marketing cannot satisfy everyone, but it can meet the needs of the majority. In particular, current commodity marketing adopts big data-driven intelligent marketing approaches, implementing differentiated, targeted, and scenario-adaptive product marketing strategies. It is advisable to develop customized social promotion content based on the characteristics of different user groups and scenarios, integrate products with short videos, create engaging scripts to showcase product advantages, and match corresponding scenarios to convey the core value propositions of products. When formulating marketing strategies, enterprises should strengthen brand building and prioritize the word-of-mouth effect. A single positive review from a consumer may attract multiple potential customers for the product. Undoubtedly, when problems arise, merchants and platforms should promptly understand consumers' demands, make targeted improvements, and take concrete actions to address negative word-of-mouth, which is of the utmost importance. On the premise of possessing certain economic strength, enterprises can collaborate with suitable celebrity endorsers for product promotion. The fan effect can rapidly enhance brand awareness, enabling more people to know and understand the products and brands in question.

This study explores the influence mechanism of Tiktok social e-commerce on college students' consumption behavior. The findings indicate that platform usefulness, entertainment attributes, and influencer marketing all exert significant impacts on college students' consumption decisions. Perceived ease of use does not have a direct effect on consumption intention; instead, it exerts a suppression effect. It is likely that perceived ease of use influences consumption intention by acting on perceived usefulness, thereby forming a chain mediation effect. In the future, social e-commerce will continue to apply technological innovations, deeply upgrade user experience, and promote the normalization of digital consumption. In the era of digital economy, college students, as active users of social e-commerce platforms, pursue trends and cutting-edge technologies, yet they sometimes fall into the traps of irrational consumption. Families, schools, platforms, and enterprises shoulder corresponding responsibilities and should fulfill their roles in providing effective guidance.

Conflicts of Interest

The author declare that there is no conflict of interest regarding the publication of this article.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

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