Research on Influencing Factors of College Students' Consumption Behavior in E- Commerce Live Broadcast

Tao Fan*

Yunnan Technology and Business University, Songming county Kunming city Yunnan province, China

*1095195952@qq.com

Abstract. From an empirical point of view, this paper puts forward the research model and hypotheses by comprehensively referring to previous scholars' literature research in this field. The perceived value of consumers is used as an intermediary variable to analyze the purchase intention of College Students' consumers, This paper analyzes the influencing factors of College Students' purchase intention in the process of e-commerce live broadcast. The 207 valid questionnaires were collected and analyzed by spss25.00. The corresponding conclusions and suggestions were obtained.

Keywords: Live broadcast of e-commerce；Purchase intention; Perceived value

1   Introduction

1.1   Problem Statement, Research Background and Significance

This article takes college students as the research object (the "college students" in this paper refer to college students in particular who have regular full-time academic status. Through investigation and analysis, this article studies what factors can improve their purchase intention in the process of e-commerce live broadcasting; Whether the perceived value has an impact on the purchase intention of college students, the results can provide suggestions for the sustainable development of the e-commerce live streaming industry.

In the process of e-commerce live broadcasting, anchors use the live broadcasting platform and their own popularity and influence to provide consumers with high-quality goods while using certain methods to grasp consumers' psychology, so that consumers can feel the value, and finally achieve the purpose of sales. Based on this, this paper combs the theories and literature of perceived value and opinion leader, which play a supporting role in the research and enrich the theoretical knowledge in the field of e-commerce live streaming to a certain extent, which has certain theoretical significance.

1.2   Research Objective

This article mainly studies the factors that affect college students' consumption behavior in the process of e-commerce live streaming. By issuing questionnaires and analyzing the data, based on the theory of perceived value and purchase intention, the perceived value is used as a mediating variable to explore the influencing factors of e-commerce live streaming on college students' purchase intention. Secondly, this paper verifies and explores e-commerce through data. The degree of influence of live-streaming influencing factors on perceived value and purchase intention and verify whether the hypothesis is valid.

2   Literature Review

2.1   E-Commerce Live Streaming and Perceived Value

At present, there is no standard definition of the term "e-commerce live broadcast" in the academic circle. Jia[1] (2019) believed that e-commerce live broadcasting not only has the social commerce attribute of e-commerce, but also should have the streaming media attribute of live broadcasting medium. Therefore, he defined e-commerce live broadcasting as a platform with social commerce attribute that integrates real-time social interaction into e-commerce in the form of live broadcasting.

Zaltham[2] proposed the theory of customer perceived value in 1988. She proposed the meaning of customer perceived value from the perspective of customers and built a theoretical model of customer perceived value based on it. She demonstrated the feasibility of the model in many experiments and made great contributions to the development of customer perceived value theory.

2.2   Theoretical Model

Text Model Design

Through the explanation in the process of proposing all variables, the influence relationship model hypothesized in this paper is shown in the figure 1:
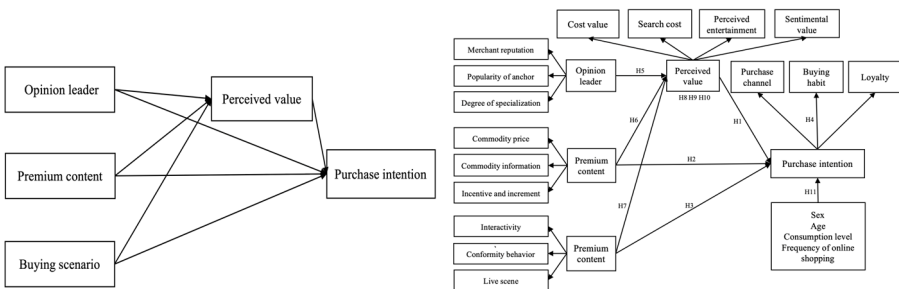

Fig. 1. Theoretical model and Conceptual framework model (Collated by the author)

2.3   Research Hypotheses Shown in Table 1

Table 1. (Collated by the author)

H1	Opinion leaders have a positive impact on college students' purchase intention
H2	High quality content has a positive impact on college students' purchase intention
H3	Purchase situation has a positive influence on the purchase intention of college students
H4	Perceived value has a positive effect on college students' purchase intention
H5	Opinion leaders have a positive impact on perceived value
H6	Quality content has a positive impact on perceived value
H7	Purchase scenario has a positive influence on perceived value
H8	Perceived value plays a mediating role between opinion leaders and college students' purchase intention
H9	Perceived value plays a mediating role between quality content and college students' purchase intention
H10	Perceived value plays a mediating role between purchase situation and intention of college students
H11	Control variables have a significant effect on purchase intention

3   Research Method

3.1   Questionnaire Survey and Statistical analysis method

In this study, a total of 217 questionnaires were distributed with 20 items. A total of 207 valid questionnaires were collected in this study, which was the valid number. And 207 valid questionnaires collected by questionnaire survey were statistically analyzed by SPSS25.

3.2   Variable Setting and Model Construction Shown as Table 2

Table 2. (Collated by the author)

Variable	Variable name
Control variable	Sex, age, consumption level, frequency of online shopping
Explanatory variable	Opinion leaders[4], quality content[5], buying context[6]
Intermediate variable	Perceived value[3]
Result variable	Purchase intention

4   Result Analysis

4.1   Basic Information

As can be seen from Table 3 the non-probability convenient sampling method was used to collect the questionnaire online in the form of answering questions.

Table 3. Descriptive statistics (Collated by authors)

Index	Category	Number of people	Scale%
Sex	male	102	49.28%
	female	105	50.72%
Age	Under 18	5	2.42%
	Ages 18 -20	83	40.10%
	Ages 20 -22	100	48.31%
	Ages 22+	19	9.18%
Consumption level	600-1000 yuan	86	41.55%
	1000-1500 yuan	67	32.37%
	1500-2000 yuan	34	16.43%
	Over 2000 yuan	20	9.66%
Frequency of online shopping	More than 3 times a week	35	16.91%
	Once a week	40	19.32%
	3 times per month	67	32.37%
	Once a month	33	15.94%
	Less than once a month	32	15.46%

4.2   Scale Reliability Test

It can be seen from the table 4 that the overall reliability of the scale reaches 0.802, and the reliability values of each dimension are all higher than 0.7. The questionnaire results have high stability and meet the requirements of scale reliability analysis.

Table 4. Reliability analysis (Collated by authors)

Variable	The scale average after deleting the item	The scale variance after deleting the item	The corrected terms are correlated with the total	Delete item after Klonbach Alpha	Dimensional reliability	Overall reliability
Merchant reputation	56.69	79.692	0.183	0.805		
Popularity of anchor	56.94	74.263	0.419	0.787	0.748	0.802
Degree of specialization	56.68	75.929	0.368	0.791		
Commodity price	56.26	76.941	0.356	0.791		

Commodity information	56.07	80.704	0.218	0.799	0.751
Incentive and increment	56.63	75.312	0.353	0.793	
Interactivity	56.08	81.130	0.186	0.801	0.733
Conformity behavior	56.74	76.172	0.311	0.796	
Live scene	56.37	76.497	0.389	0.789	
Cost value	56.51	75.387	0.472	0.784	
Search cost	56.41	73.000	0.611	0.774	0.818
Perceived entertainment	56.48	74.843	0.547	0.780	
Sentimental value	56.80	73.189	0.547	0.778	
Purchase channel	56.65	75.229	0.463	0.784	0.778
Buying habit	56.86	72.561	0.534	0.778	
loyalty	56.42	75.428	0.464	0.784	

4.3   Scale Validity Analysis

KMO and Bartlett Test

According to the Table 5 the validity of the measurement items (quantitative data) was verified by factor analysis (exploratory factor analysis).

Table 5. KMO and Bartlett tests (Collated by authors)

KMO sample appropriateness measure		0.746
Bartlett sphericity test	Approximate chi-square	1340.688
	Degree of freedom	120
	Significance	0.000

It can be seen from the table that KMO=0.746>0.5, P is less than 0.01, indicating that the data are valid and suitable for PCA.

4.4   Correlation Analysis

It can be seen from the table 6 that there is a significant correlation between each pair of variables, which can be further tested by regression.

Table 6. Correlation (Collated by authors)

		Opinion leader	Premium content	Purchase scenario	Perceived value	Purchase intention
Opinion leader	Pearson correlation	1	.325**	.445**	.518**	.677**
	Sig. (Double tail)	.000	.000	.000	.000	.000

Premium content	Pearson correlation	.325**	1	.339**	.345**	.431**
	Sig. (Double tail)	.000		.000	.000	.000
Premium content	Pearson correlation	.445**	.339**	1	251**	.565**
	Sig. (Double tail)	.000	.000		.000	.000
Perceived value	Pearson correlation	.518**	.345**	.251**	1	.399**
	Sig. (Double tail)	.000	.000	.000		.000
Purchase intention	Pearson correlation	.677**	.431**	.565**	.399**	1
	Sig. (Double tail)	.000	.000	.000	.000	

**. Significant correlations at the 0.01 level (two-tailed)

4.5   Regression Analysis

Regression Analysis of Purchase Intention Shown in Table 7

Model 1 shows the calculation results of each index of the model when only control variables are added. It can be seen from the table that the four control variables have no significant.

Model 2 compared the influence of the four explanatory variables on the purchase intention, and the opinion leaders had a positive and significant influence on the purchase intention of college students. High-quality content had a positive and significant impact on college student'' purchase intention.

In conclusion, hypotheses H1, H2, H3 and H4 are valid.

Table 7. Regression analysis of purchase intention (Collated by authors)

	Model 1		Model 2	
	Beta	VIF	Beta	VIF
Sex	0.088	1.012	0.068	1.018
Age	-0.054	1.739	-0.062	1.832
Consumption level	0.122	1.795	0.031	1.821
Frequency of online shopping	0.039	1.045	0.048	1.060
Opinion leader			0.226***	1.483
Premium content			0.331***	1.622
Purchase scenario			0.140***	1.165
Perceived value			0.285***	1.577
R^2	0.019		0.511	
ΔR^2	0.019		0.502	
F	1.180		40.331***	

a. Dependent variable: college student'' purchase intention
P-value significance：<0.05(*)，<0.01(**)，<0.001(***)

Mediating Effect Test

Table 8 shows the opinion leaders, quality content and purchase scenario indicators have significant regression effect on purchase intention. This influence is partly indirect through perceived value and partly direct. size of the model.

Table 8. Decomposition calculation and test of each effect size of the model (Collated by authors)

Path	Effect decomposition	Effect size	SE	T	P	95% lower limit	95% ceiling
Opinion Leaders → Perceived value → Purchase intention	Total effect	0.201	0.032	6.245	0.000	0.071	0.205
	Direct effect	0.071	0.030	2.562	0.040	0.005	0.135
	Mediating effect	0.130	0.022	-	-	0.050	0.128
Quality content → Perceived value → Purchase intention	Total effect	0.352	0.038	10.210	0.000	0.301	0.426
	Direct effect	0.166	0.035	4.932	0.000	0.110	0.245
	Mediating effect	0.186	0.025	-	-	0.168	0.269
Purchase scenario → Perceived value → Purchase intention	Total effect	0.298	0.034	8.001	0.000	0.257	0.393
	Direct effect	0.121	0.035	3.201	0.001	0.055	0.187
	Mediating effect	0.177	0.023	-	-	0.135	0.224

4.6   Research Hypothesis Testing Shown as Table 9

Table 9. (Collated by authors)

H1	Opinion leaders have a positive impact on college student'' purchase intention	support
H2	High quality content has a positive impact on college student'' purchase intention	support
H3	The purchase situation has a positive influence on the purchase intention of college students	support
H4	Perceived value has a positive effect on college student'' purchase intention	support

H5	Opinion leaders have a positive impact on perceived value	support
H6	Quality content has a positive impact on perceived value	support
H7	Purchase scenario has a positive influence on perceived value	support
H8	Perceived value plays a mediating role between opinion leaders and college student'' purchase intention	support
H9	Perceived value plays a mediating role between quality content and college student'' purchase intention	support
H10	Perceived value plays a mediating role between purchase situation and purchase intention of college students	support
H11	Control variables have a significant effect on purchase intention	non-significant

5   Conclusion

5.1   Research Summary and Recommendations

After the analysis of the collected data, it has been proven that the reputation of merchants, the popularity and professionalism of the anchor, commodity price and incentive measures, interactivity and scene layout during the live broadcast all have a positive impact on the purchase intention of college students. Perceived value, as a mediating variable, plays a mediating role in the influence of opinion leaders, high-quality content, and purchase context on consumers' purchase intention.

References

1. Xiaofeng J. (2019) Study on consumers' purchase and integration intention of e-commerce live streaming platform. Beijing University of Posts and Telecommunications,08:87. https://kns.cnki.net/
2. Zeithaml. (1988) Consumer Perceptions of Price, quality and value:a means-ends model and synthesis of evidence. Joumnal of Marketing, 52:2-22.
3. He X., Hongjian Q., Jianzhong C. (2020) The influence of network broadcast on the purchasing intention of clothing consumers. Journal of Beijing Institute of Natural Science Edition, 2:88-94. 10.16454/j.cnkiissn.1001-0564.2020.02.013
4. Xuebin H. (2020) Study on the influence of opinion leaders on consumers' purchase intention in e-commerce live broadcast. Marketing Science, 9:152-152. https://xixj.cbpt.cnki.net/
5. Ying X., Lingling X. (2021) Analysis of college students' consumption participation behaviors and driving factors in the context of e-commerce live broadcasting. Journal of Commercial Economics, 3:55-58. http://www.j-ce.com.cn/
6. Zhenzhen L., Wanru X., Xueqin Z. (2021) Study on influencing factors of college students' use of e-commerce live broadcasting platform. Information Research, 1:1. http://www.qbts.org/