The Influence of Anchor Characteristics on Consumers' Purchase Intention by TikTok E-commerce Live Broadcast in China

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Abstract

The Stimulus-Organism-Response(S-O-R) theoretical model was developed to understand the factors affecting consumer purchase intention by TikTok E-commerce live broadcast in China. This study examines professionalism, interactivity, popularity, and product involvement as independent variables, and perceived trust and playfulness serving as mediators. Data collected from 402 Chinese TikTok users were analyzed using PLS-SEM. The empirical results revealed that all independent variables have significant positive impacts on both consumer-perceived trust and perceived playfulness. Both perceived trust and perceived playfulness are positively associated with purchase intention. These results contribute valuable knowledge on the antecedences of purchase in online marketing literature. They also to use of the Stimulus-Organism-Response(S-O-R) theoretical model in a particular context of live E-commerce, taking TikTok application as a study case. In addition, the provides additional evidence on the mediating roles of perceived trust and perceived playfulness as a mechanism to drive purchase intention. E-commerce live businesses can apply the findings as useful guidelines in their marketing strategy development.

Keywords: E-commerce Live Broadcast, Anchor Characteristic, Purchase Intention, TikTok, S-O-R Model

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Introduction

Traditional E-commerce is a one-way output model with text, pictures or videos, and E-commerce live is the promotion of online product sales through real-time social interaction (Cai & Wohn, 2019), anchors present details and demonstrations of products to consumers and offering special discounts to consumers during the live broadcast. Consumers can interact with the anchor and other viewers while watching, express their opinions on the products or ask the anchor to recommend suitable products according to their needs and click directly on the links displayed on the live stream to make a purchase (Sun et al., 2019). Most of the E-commerce platforms that use this model use weblebrities and celebrities to promote products whose prices are acceptable to most consumers, thus achieving the purpose of promotion within a short period. This E-commerce live model is easily accepted by most people, who subconsciously accept the products and generate the idea of buying them while watching the live broadcast.

The E-commerce live broadcast industry is growing rapidly. According to the "49th Statistical Report on the Development of the Internet in China" provided by China Internet Network Information Center, as of December 2021, the size of China's Internet users was 1.032 billion, the Internet penetration rate reached 73%, the number of online shopping consumers in China reached 842 million, up 59.68 million from December 2020, accounting for 81.6% of Internet users as a whole, or 78.6% of Internet users with online shopping experience (CNNIC, 2022).

TikTok - a leader in the short video industry in China - is a social networking software based on the idea of music and the ability to shoot short videos, which was successfully launched in September 2016 and has grown rapidly since its inception and is well-liked by its users. According to the Online Survey Report on Consumer Satisfaction in Live E-commerce Shopping released by the China Consumers Association, the data shows that the percentage of consumers using Taobao Live is 68.5%, which is in the absolute lead, second is TikTok Live with 57.8% of consumers and third is Kwai Live with 41% of consumers (China Consumers' Association, 2020). The difference with Taobao is that TikTok Live is a platform mainly for entertainment with live streaming of goods, while Taobao is a live platform mainly for shopping, the nature of the two platforms are different, and this article takes TikTok as the object of study to make it better adapted to the development of live e-commerce and to provide a case study for other live platforms.

Since the rapid development of E-commerce live broadcast, countless scholars at home and abroad have conducted studies. Although similar studies have been conducted to do the behavioral intention of E-commerce live purchases, few have explored the comprehensive model in the context of TikTok Live in China. In addition, Research on the willingness of consumers to e-commerce live-stream is still in its infancy, and studies on E-commerce live-streaming mainly analyses its impact on consumers' purchase intentions and behaviour from the perspectives of product information, discount promotions, and online interaction. Through collation, it is found that there is a relative lack of research on anchor characteristics, especially research on perceived trust, and perceived playfulness as mediating variables.

So this paper takes the S-O-R theoretical model as the basis, takes TikTok as the research object, according to the current development of E-commerce live broadcast, takes professionalism, interactivity, popularity, and product involvement degree as the measurement dimensions of multicast characteristics, integrates anchor characteristics, perceived trust, perceived playfulness,

and consumer purchase intention, proposes the influence of anchor characteristics on consumer purchase intention of E-commerce live, and provides some directions and suggestions for the future development of E-commerce live.

Research Objectives

This study investigates the influence of anchor characteristics on consumers' purchase intention in E-commerce in China. There are two key objectives of this study:

1) To determine how anchor characteristics affect perceived playfulness and perceived trust in the TikTok E-commerce live broadcast in China.

2) To investigate the relationship between perceived playfulness, perceived trust, and consumer purchase intention in the TikTok E-commerce live broadcast in China.

Literature Review

Mehrabian and Russell (1974) proposed the model of Stimulus-Organism-Response (SOR) in 1974. It has been widely used in the field of marketing behaviour and has become an effective theoretical basis for supporting consumer buying behavior (Mehrabian & Russell, 1974).

S-O-R (Stimulus-Organism-Response) refers to the cognitive-emotional response of an individual to an external stimulus that ultimately influences consumer behavior where the stimulus is the external environment (both positive and negative), the organism is the cognition and emotion, and the response is the behaviour of convergence or avoidance. This study applies this extension to Chinese consumers' purchase intention in the TikTok E-commerce live broadcast.

Anchor Professionalism

The anchor has the relevant knowledge, expertise, and practical experience and can provide professional answers to consumers (Yan, 2021). During the live broadcast, the anchor will use professional knowledge and rich experience to explain the products professionally evaluate them effectively, and make buying suggestions for consumers, increasing the consumers' interest in the products and generating a sense of playfulness (Li et al., 2021). When the anchor has a high level of expertise, consumers tend to perceive the information as having a high level of credibility and are therefore willing to listen to the anchor (Fang, 2014). People are more likely to trust the opinions of experts than those of non-experts and to adjust their behaviour and attitudes (Park & Lin, 2020).

Anchor Interactivity

A direct form of communication between anchors and consumers that relies on the visual and real-time nature of live streaming (Zhao & Wang, 2021). During the live broadcast, consumers can ask the anchor for information about the product by sending a pop-up or link, and the anchor can reply in time so that consumers can fully understand the product and feel valued at the same time (Li & Li, 2022). The more often the anchor interacts with the consumer, the more the consumer trusts the anchor, consumers enjoyed the interaction with the anchors and could not help but have their mouths turned up while watching the live stream. Tong found through his research that the interactive nature of webcasting has a positive effect on consumer trust (Tong, 2017).

Anchor Popularity

It means fame status of anchors, and influence (Lin, 2021). In general, people are more likely to trust celebrities and have a strong sense of trust and admiration for celebrities with a good public image. In E-commerce live streaming, consumers' trust in information disseminated by people with high visibility gradually strengthens, because when the anchor is well known, it helps to reduce the time and cost of collecting information for consumers, increase their certainty and reassurance about the product, and delight their mood (Liu, 2017).

Product Involvement Degree

It refers to the extent to which the anchor knows the product and the extent to which the anchor is able to trigger the consumer's desire to buy (Chen et al., 2020). A good anchor spends more time and effort trying out and digging up products before each broadcast, being well prepared, and striving to offer the best value for money to consumers.

Perceived Trust

Perceived trust is the level of honesty and trustworthiness of the anchor, the anchor does not take advantage of the consumer (Wongkitrungrueng & Assarut, 2020). In TikTok Live, the anchor does not take advantage of the consumer, but actively serves the consumer to the best of their ability and to make them satisfied. The more trust consumers have in the anchor, the more likely they are to be willing to buy when watching a live broadcast. Liu et al. found that based on perceived trust, consumers tend to make purchase decisions in a relatively short period of time (Liu & Shi, 2020). Xu Xia found that trust plays a crucial role in consumers' willingness to buy in a live e-commerce context (Xu, 2021).

Perceived Playfulness

Perceived playfulness refers to the degree of mental playfulness that consumers derive from the shopping (Moon & Kim, 2001). In E-commerce live streaming, a pleasant live-streaming atmosphere will create a sense of playfulness among consumers. This sense of playfulness includes the feeling that consumers are happy in the live streaming room and that consumers enjoy the interaction with the anchor or other consumers, thus guiding their shopping behaviour and increasing their willingness to buy. Wright and bower noted that consumers are more likely to make purchases when they are in a happy state while shopping online (Adaval, 2003). Shi Mengnan's research found that playfulness has a significant positive effect on purchase intention in live e-commerce (Shi, 2021).

Purchase Intention

The subjective likelihood that consumers will make a purchase while watching a live E-commerce broadcast (Yan, 2021). Wang et al. (2022) found that trust significantly influences consumer attitudes and further influences consuers' willingness to buy. Chen (2022) also found that perceived playfulness positively influences consumers' willingness to buy on E-commerce live platforms. It can be found that the playfulness generated by the consumer will, to a certain extent, contribute to the consumer's willingness to buy.

Hypotheses in this Study

H1a: In TikTok live broadcast, Anchor professionalism has a positive impact on perceived trust.

H1b: In TikTok live broadcast, Anchor professionalism has a positive impact on perceived playfulness.

H2a: In TikTok live broadcast, anchor interactivity has a positive impact on perceived trust.

H2b: In TikTok live broadcast, anchor interactivity has a positive impact on perceived playfulness.

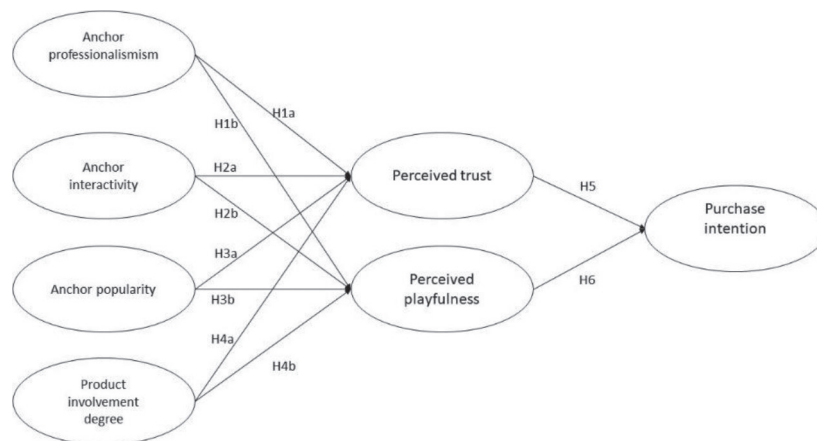H3a: In TikTok live broadcast, anchor popularity has a positive impact on perceived trust.

H3b: In TikTok live broadcast, anchor popularity has a positive impact on perceived playfulness.

H4a: In TikTok live broadcast, product involvement degree has a positive impact on perceived trust.

H4b: In TikTok live broadcast, product involvement degree has a positive impact on perceived playfulness.

H5:	In TikTok live broadcast, perceived trust has a positive impact on purchase intention.

H6:	In TikTok live broadcast, perceived playfulness has a positive impact on purchase intention.

Figure 1 Proposed Conceptual Framework

Source: Adapted from Guo, 2021

Methodology

In this section, the study covers the population and samples, research instrument, data collection and analysis, and pilot testing.

Population and Sample Size

The primary object of this research is to explore the impact of anchor characteristics on consumer purchase intentions in TikTok live broadcast. Therefore, the target population for this study is the males and females in China. The sample of the population is TikTok Live streaming users in China. According to the TikTok Data Report 2021, the average daily active volume of TikTok Live is roughly 600 million (The TikTok Data Report 2021, 2021).

The term sample in research terms is a group of people, objects, or items that are taken from a larger population for measurement. The sample ought to be the representation of the population in order to specify the characteristics of a population (The Hillingdon Hospital, 2020). The proposed research model was initiated based on a quantitative study conducted

among TikTok Live streaming users in China. As such, an online survey was distributed to the participant population through a shared link and convenience sampling. In order to minimize the error probability and maximize the accuracy, the sample of this research will be collected by using a web survey according to Tara Yamane in 1967,

n=N/[1+N*(e)^2]

Where n is the sample size.

N is the whole population that is under study.

e is the acceptable sampling error which is usually 0.10, 0.05, or 0.01.

For this research, with population,

n=600,000,000/(1+600,000,000*0.05*0.05)

n=399.99

As a result, the research will be collecting 402 respondents to develop this survey.

Research Instrument

The measurement instrument in this research is a self-conduct questionnaire that had been prepared for online distribution. The existing scale used in the questionnaire is based on the constructs of the study. To get a precise and accurate result, a pilot study will be conducted on a small group of respondents then the results were being interpreted.

The author divided the surveys into two sections to assess the influence of anchor characteristics on consumers' purchase intention in E-commerce live in China. In the first section, the authors sought to learn more about general information pertaining to respondents' demographics. In the second section, authors frequently asked questions about anchor professionalism, anchor interactivity, anchor popularity, product involvement degree, perceived trust, perceived playfulness, and purchase intention.

Data Collection and Analysis

In this study, the data was obtained through an online questionnaire sent to TikTok Live streaming users in China. This pre-requirement is met by using a set of screening questions in the questionnaire. The distribution of the questionnaire is done through personal and group online chat then ask them if they are willing to spread the questionnaire to their acquaintances.

Validity and Reliability Test

The term pilot test is a pre-test or a rehearsal of the research study with a small number of respondents before conducting the main research study (Wright, 2020). Before the main data collection phase, a pilot test with 30 respondents evaluated the measurement tool's content validity and reliability. Based on the outcomes of the pilot test, adjustments were made to improve content validity, taking into account participant concerns and offering clarification as necessary. The reliability study entailed gathering information from 30 respondents who had purchase experience. By measuring the internal consistency and reliability of survey items assessing the same underlying construct, Cronbach's Alpha coefficient was used to determine the reliability of each variable in this study.

According to the attached table, Cronbach's Alpha values for the seven variables ranged from 0.709 to 0.894 demonstrating the outcome of outstanding data that were approved as a result of *(Cronbach's Alpha: A Tool for Assessing the Reliability of Scales)*

Research Results

Table 1 shows that in terms of gender, more than 50% of the sample was "female". The proportion of the male sample was 41.29%. 41.54% of the sample was "18-25". The proportion of the 26-30 sample was 31.09%. In terms of average monthly disposable income, there were relatively more "1001-4000" in the sample, with 40.55%. In terms of how much time you spend watching live online shopping each week, the majority of the sample (61.44%) spend "0-5 hours". Another 35.32% of the sample spent between 6-10 hours.

Table 1 Descriptive Analysis of Respondent Demographic

Factors	Characteristics	Frequency(f)	Percentage (%)	Cumulative Percentage (%)
Gender	Male	166	41.29	41.29
	Female	236	58.71	100.00
Age	<18	14	3.48	3.48
	18-25	167	41.54	45.02
	26-30	125	31.09	76.12
	31-40	74	18.41	94.53
	>41	22	5.47	100.00
Income per month	<=1000	71	17.66	17.66
	1001-4000	163	40.55	58.21
	4001-7000	144	35.82	94.03
	7001-10000	13	3.23	97.26
	>10001	11	2.74	100.00
How much time do you spend each week watching live online shopping	0-5h	247	61.44	61.44
	6-10h	142	35.32	96.77
	11-15h	11	2.74	99.50
	>15h	2	0.50	100.00
Total		**402**	**100.00**	**100.00**

Measurement Instrument Assessment

In this section, the reliability and validity of the constructs shown in the Table were being analyzed, justified, and discussed.

In order to measure the reliability of an instrument, there are three tests that had to be done such as Cronbach's Alpha Coefficient, Composite Reliability (CR), and Average Value Extracted (AVE). Not only the reliability but also the validity of an instrument had to be measured by Convergent Validity (Factor Loading) and Discriminant Validity.

Cronbach's Alpha Coefficient is an instrument used to measure the reliability of all the variables in this study. The value of Cronbach's Alpha Coefficient has to be 0.70 or higher is considered as reliable. The values of each variable exceed 0.70 as they range from 0.756 to 0.872, which means they are reliable and acceptable. The values are presented in the Table below.

When the Cronbach's Alpha value of the scale is higher than 0.7, it means that the internal consistency of the constructs is good for the scale. Firstly, for the "CITC values", the CITC values of the analyzed items are all greater than 0.4, indicating a good correlation between the analyzed items and a good level of reliability. Secondly, the Cronbach's Alpha results for each dimension, the Cronbach's Alpha values for the seven dimensions designed in this paper are 0.792, 0.762, 0.834, 0.872, 0.816, 0.802, 0.78, and 0.756 respectively, which are all greater than 0.7, indicating that the internal consistency of each dimension of the questionnaire is good, so the reliability of this survey is excellent. The reliability of the results of this survey is excellent.

Table 2 The Measurement Model (n = 402)

Variables	Itwma	Unstandardized Coefficients	z (CR)	p	Standardized Coefficients	AVE	CR
Anchor Professionalisms	AP1	1	-	-	0.795	0.566	0.796
	AP2	0.838	13.369	0	0.727		
	AP3	0.819	13.457	0	0.733		
Anchor Interactivity	AI1	1	-	-	0.721	0.514	0.76
	AI2	0.934	12.188	0	0.737		
	AI3	0.864	11.68	0	0.692		
Anchor Popularity	APY1	1	-	-	0.787	0.559	0.835
	APY2	0.839	14.596	0	0.741		
	APY3	0.795	14.151	0	0.719		
	APY4	0.819	14.64	0	0.743		
Product Involvement Degree	PD1	1	-	-	0.752	0.532	0.872
	PD2	0.864	14.265	0	0.730		
	PD3	0.886	14.404	0	0.736		
	PD4	0.866	14.062	0	0.720		
	PD5	0.833	13.471	0	0.691		
	PD6	0.881	14.626	0	0.747		
Perceived Trust	PT1	1	-	-	0.815	0.6	0.818
	PT2	0.854	15.444	0	0.767		
	PT3	0.813	14.898	0	0.741		
Perceived Playfulness	PP1	1	-	-	0.751	0.544	0.781
	PP2	0.834	12.472	0	0.702		
	PP3	0.891	13.191	0	0.757		
Purchase Intention	PI1	1	-	-	0.726	0.509	0.757
	PI2	0.895	12.197	0	0.708		
	PI3	0.884	12.172	0	0.706		

Summary of the Measurement Model

Construct reliability were also examined by Composite Reliability. According to Hair (1998), the threshold of the CR is 0.70 or higher is considered as reliable. And according to Fornell and Larcker (1981), the Composite Reliability has to be above 0.7 to be considered as acceptable (Shodhganga, 2020). In this study, the values of each variable obtained are higher than 0.7 as they range from 0.757 to 0.872. The values are presented in the Table above.

Average Value Extracted (AVE) has a minimum threshold of 0.5 which indicates that the construct is described as greater than half of the variance of its variables according to Gotz, Liehr-Gobbers, and Krafft (Shodhganga, 2020). In this study, the values of each variable obtained are higher than 0.5 as they range from 0.509 to 0.600. The values are presented in Table 3. So it means that the data of this analysis has good convergent (convergent) validity.

Table 3 Fornell-Larcker Criterion: Correlation Constructs and the Square Root of AVE

Construct	Anchor Professionalism	Anchor Interactivity	Ancho Popularity	Product Involvement Degree	Perceived Trust	Perceived Playfulness	Purchase Intention
Anchor Professionalism	**0.752**	-	-	-	-	-	-
Anchor Interactivity	0.399	**0.717**	-	-	-	-	-
Anchor Popularity	0.440	0.466	**0.748**	-	-	-	-
Product Involvement Degree	0.350	0.415	0.396	**0.730**	-	-	-
Perceived Trust	0.472	0.488	0.522	0.480	**0.775**	-	-
Perceived Playfulness	0.444	0.427	0.432	0.428	0.493	**0.737**	-
Purchase Intention	0.469	0.469	0.489	0.454	0.520	0.485	**0.713**

Source: Diagonal figures are AVE square root values

Summary of Fornell-Larcker Criterion

In terms of discriminant validity, the AVE square root value of 0.752 for anchor expertise is greater than the absolute value of the inter-factor correlation coefficient of 0.472, meaning that it has good discriminant validity. For anchor interactivity, the AVE square root value of 0.717 is greater than the absolute value of the inter-factor correlation coefficient of 0.488, meaning that it has good discriminant validity. For anchor awareness, the AVE square root value of 0.748 is greater than the maximum value of the absolute inter-factor correlation coefficient of 0.522, which means it has good discriminant validity. For product involvement, the AVE square root value of 0.730 is greater than the absolute value of the inter-factor correlation coefficient of 0.480, implying that it has good discriminant validity. For perceived trust, the AVE square root value of 0.775 is greater than the maximum value of the absolute inter-factor correlation coefficient of 0.522, which means that it has good discriminant validity. For perceived playfulness, the AVE square root value of 0.737 is greater than the maximum value of the absolute inter-factor correlation coefficient of 0.493, which means that it has good discriminant validity. For purchase

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intention, the AVE square root value of 0.713 is greater than the absolute value of the inter-factor correlation coefficient of 0.520, which means that it has good discriminant validity.

Structural Model

The study investigated a variety of hypotheses addressing the connections between different factors and purchase intentions.

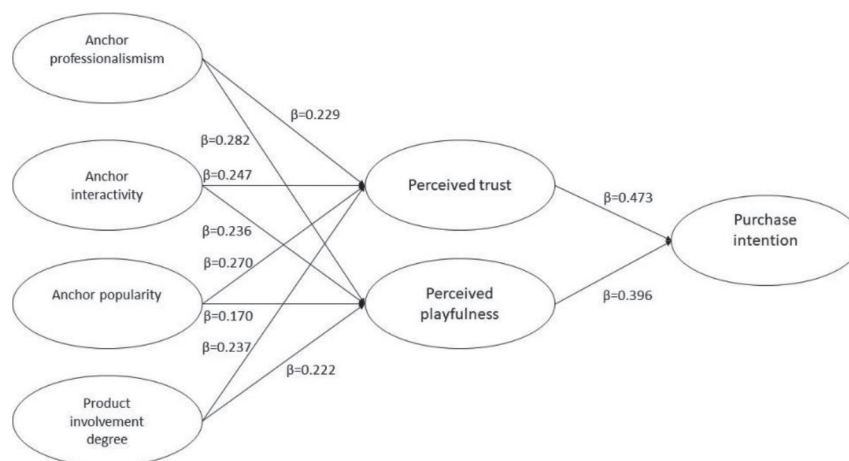**Table 4** The Summary Results of the Structural Model

Hypothesis	Beta	Non-normalized Path Coefficients	S.E.	T-Value	P
Anchor professionalism→Perceived trust	0.229	0.279	0.076	3.689	***
Anchor interactivity→Perceived trust	0.247	0.336	0.098	3.414	***
Anchor popularity→Perceived trust	0.270	0.338	0.084	4.043	***
Product involvement degree→Perceived trust	0.237	0.297	0.072	4.147	***
Anchor professionalism→perceived playfulness	0.282	0.288	0.071	4.066	***
Anchor interactivity→perceived playfulness	0.236	0.269	0.091	2.970	0.003
Anchor popularity→perceived playfulness	0.170	0.178	0.076	2.338	0.019
Product involvement degree→perceived playfulness	0.222	0.233	0.066	3.539	***
Perceived trust→Purchase intention	0.473	0.390	0.059	6.589	***
Perceived playfulness→Purchase intention	0.396	0.390	0.071	5.472	***

Based on the results of the analysis of the path coefficients between the variables shown in the table 4, it is possible to determine the relationships between the potential variables that lie at the heart of this paper.

Anchor expertise had a significant positive effect on perceived trust ($\beta=0.229$, $p<0.05$); Anchor interactivity had a significant positive effect on perceived trust ($\beta=0.247$, $p<0.05$); Anchor popularity had a significant positive effect on perceived trust ($\beta=0.27$, $p<0.05$); product involvement had a significant positive effect on perceived trust ($\beta=0.237$ ($\beta=0.236$, $p<0.05$); Anchor professionalism had a significant positive effect on perceived playfulness ($\beta=0.282$, $p<0.05$); anchor interactivity had a significant positive effect on perceived playfulness ($\beta=0.236$, $p<0.05$); anchor popularity had a significant positive effect on perceived playfulness ($\beta=0.17$, $p<0.05$); product involvement degree had a significant positive effect on perceived playfulness ($\beta=0.222$, $p<0.05$); perceived trust had a significant positive effect on purchase intention ($\beta=0.473$, $p<0.05$); and perceived playfulness had a significant positive effect on purchase intention ($\beta=0.396$, $p<0.05$).

Hypothesized Paths Results

Table 4 illustrates the structural model that could explain perceived trust and perceived playfulness to purchase intention. There are 6 hypotheses testing was done namely on Anchor professionalism, Anchor interactivity, Anchor popularity, Product involvement degree, perceived trust, perceived playfulness, and purchase intention. Overall, the hypothesized path result reveals that H1, H2, H3, H4, H5, and H6 were supported, which is shown as below.

Figure 2 The Structural Model Result, Smartpls Calculation

Discussion

The proposed structural model aims to study how anchor characteristics influence consumers' purchase intention in E-commerce live broadcasts in China with the sample of TikTok live streaming shopping users, who were asked to complete a questionnaire based on the relevant previous research and theories.

This study explores the influencing factors of consumers' purchase intention of TikTok E-commerce live streaming by means of a questionnaire survey in China, extracts the four major influencing factors of the anchor's professionalism, interactivity, popularity, and product involvement degree by means of factor analysis, and constructs a research model. According to the results, the anchor's professionalism, interactivity, popularity, and product involvement degree all have a significant positive effect on consumer purchase intention, and all have a positive effect on the mediating variable.

Perceived trust plays a mediating role between anchor characteristics and consumers' purchase intention, and the enhancement of the anchor's professionalism, interactivity, popularity, and product involvement degree contributes to the enhancement of perceived trust, which increases consumers' purchase intention. Meng (2012) points out that opinion leader expertise, product involvement and interactivity can play a direct role in consumers' purchase intentions and can also be mediated by trust. For example, the live broadcast in the live band goods to show the goods, and introduce the characteristics of the goods, consumers better understand the goods, and the higher the professionalism of the anchor, the richer the information about the product that the consumer thinks the anchor has, the lower the perceived risk of the product, the more it can produce perceived trust, which positively affects the consumer's willingness to buy; the anchor carries out frequent exchanges and interactions with

the consumer, enhances the familiarity with the consumer. In addition to the frequent exchanges and interactions between the anchor and the consumers, which enhance the familiarity with the consumers and bring them closer to each other, the stronger the interactivity of the anchor and the richer the form of interaction, the more it can enhance the consumer's experience of spiritual exchanges, which makes the consumers willing to buy the products recommended by the anchor; in addition to this, it is easier to get the trust of the consumers for the high-profile anchors; in general, the higher the visibility of the anchors, the bigger the fan base, and the more the sense of responsibility and ability of the anchors, the more the consumers follow the status influence and other influences, the stronger the trust in the anchor and the product, inspire consumers to make a decision to buy, stimulate the consumer's willingness to buy.

Perceived playfulness plays a mediating role. For example, frequent interaction between anchors and consumers during live broadcasts can give consumers a virtual interpersonal interactive experience, stimulate consumers' pleasant emotions, transiently forget the reality of their troubles, and immerse themselves in live broadcasting activities, which will increase their willingness to buy, and interesting anchors will recommend live broadcasting products to consumers in a funny way, which is more likely to give consumers a sense of pleasure and make it easier for them to buy products during live broadcasts. behaviour becomes simpler and easier.

Theoretical Contributions

This study's outcomes support the Stimulus-Organism-Response model (SOR) that leads to the consumers' purchase intention in TikTok. The results of the study have empirically validated the SOR models in the adoption literature.

First, this paper analyses and investigates consumers' states and reactions when watching E-commerce live streams on TikTok in terms of the anchor's professionalism, interactivity, popularity, and product involvement. Although similar studies have been conducted to do the behavioral intention of live E-commerce purchases, few have explored the comprehensive model in the context of TikTok in China, which provides a different perspective to further understand and study the impact of the anchor characteristics of E-commerce anchors on consumers' purchasing behaviors.

Second, most of the existing research on E-commerce live broadcasting focuses on the development process of E-commerce live broadcasting, the mechanism of online interaction and sense of presence on consumers' purchase intention, etc., and there are fewer studies on the influence of E-commerce anchors' characteristics on consumers' purchase intention. As a key figure connecting enterprises, live platforms, and consumers, anchors play a crucial role in corporate profitability and consumer purchase decisions. Therefore, this paper analyses the influence mechanism of anchor characteristics on consumers' purchase intention and extends the research on anchor characteristics in E-commerce live broadcasting.

Third, based on perceived trust and perceived playfulness on consumer purchase intention in E-commerce live broadcasting in China, it was found that perceived trust and perceived pleasure had a significant positive effect on consumer purchase intention, revealing the mediating utility of perceived trust and perceived playfulness between anchor characteristics and consumer purchase intention.

Research Limitation

First, the content of the relevant questionnaire was filled out by the questionnaire participants based on their recent live broadcast viewing experience, not immediately after watching the live

broadcast video, thus, there is a deviation from the selection in real scenarios.

The proposed study conducted the convenience sampling method by distributing it to groups of participants through shared link and only trusted that results. In this manner, by conducting different data collection such as personal interviews, focus groups, etc. might enhance the understanding into the intentions and perceptions of Tiktok live streaming shopping users.

Second, the proposed study focused on only TikTok and the China region and would not research on other platforms.

Recommendation for Future Research

Future research can try to use the scenario experiment method to conduct the questionnaire survey, such as providing the test subjects with a description of the live broadcast scenario or a live broadcast replay video to help them retrieve their real feelings when watching E-commerce live videos before filling out the questionnaire, better predict the feelings of the consumers when watching live broadcasts as well as the purchasing decisions they make.

Future research should expand comparative studies of consumer purchase intentions, for example, between TIktok and all other platforms in China, and, if possible, between China and other countries. Exploring new areas may help researchers gain a more thorough understanding of consumer behaviour. Last but not least, it is important for academics to keep up with technological developments, especially in the area of social media and digital marketing, as these developments can be useful tools for informing and improving marketing strategies.

Conclusions

The structural model presented in the study was designed to predict the behavioral intentions of these factors influencing TikTok consumers' purchases in E-commerce live in China. The overall results measured by the model were acceptable in terms of reliability and validity. Based on the results, which support the six hypotheses, the analyses show that anchor characteristics play a positive role in influencing consumers' purchase intention in E-commerce live broadcasts on TikTok in China; therefore, if anchors want consumers to purchase willingly, anchors need to strengthen their training in all aspects, collect product information extensively, experience the products in person, familiarize themselves with product-related content, especially master high-level presentation skills, and cultivate, through continuous attention and learning, a Professionalism in the field, so that the quality and quantity can be guaranteed, so that the consumers watching the live broadcast are impressed and thus make a purchase decision.

According to the study, Anchor professionalism, interactivity and popularity affect consumers' purchase intention through perceived trust and perceived playfulness, which shows that perceived trust and perceived playfulness will prompt consumers' purchase intention under different external environmental stimuli. Anchors can focus on E-commerce live according to their own conditions and product involvement, if the anchor's professional ability is insufficient and visibility is not high, it can be used to improve consumer pleasure through interaction, so that they can purchase products. At the same time, the anchor can also improve their own internal to improve the professional ability and visibility, to obtain the consumer's perceived trust and perceived pleasure, so as to bring the sales of E-commerce live with goods!

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