

The Influence of Expert Anchor on Consumers' Purchase Intention

-- qualitative comparative analysis based on fuzzy set

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Abstract: Nowadays, the new network marketing mode represented by e-commerce live broadcasting has a profound impact on the way consumers shop. As the core of the live broadcasting marketing mode, the talent anchor has a vital impact on consumers' purchase intention. Therefore, based on the method of comparative analysis of fuzzy sets, this paper takes the three core dimensions of credibility, professionalism and attractiveness of information source theory as the framework, increases interaction and popularity at the same time, carries out conditional configuration analysis on the above five antecedents, and explores the configuration path affecting consumer purchase intention from the perspective of configuration. There are four configuration paths to generate high purchase intention, and there are two types of non-high purchase intention. The conclusion of the study can provide a reference for optimizing the effect of different types of anchors.

Keywords: Live E-commerce; Expert Anchor; Comparative Analysis of Fuzzy Set Stereotypes; Empirical Analysis.

1. Introduction

With the advent of the digital age, the new business model of "live +" has become a trend, which has the characteristics of time fragmentation, instant interaction and bullet screen culture. Live broadcasting has become popular rapidly with the irreplaceable advantages of short video, and the live broadcasting platforms led by Taobao, Tik Tok and Kuaishou have developed rapidly. According to CNNIC, as of June 2023, the number of e-commerce live broadcasting users was 526 million, an increase of 11.94 million compared with December 2022, accounting for 48.8% of the total Internet users. Under the influence of the popularity of live broadcasting and the epidemic, a large number of talented anchors and ordinary anchors have emerged. In the network live broadcast, the talent anchor is the core of the whole live broadcast, and the talent anchor is mainly the net red, and has a certain fan base, generally no brand and no supply chain, relying on cooperation with various brands to sell goods, which is also the initial form of live e-commerce. There are also categories for talent anchors, some of which are vegetarian talent anchors such as Yi Ge, Yue Boss, Big Wolf Dog Couple, and others are star talent anchors such as Lin Yilun, Zeng Zhiwei, Liu Tao, and Li Xiang.

Corresponding to the talent anchor is the non-talent anchor, who may not have a fan base and do not have his own brand and supply chain, but also cooperate with the brand to sell goods. The core of the live broadcast of Daren Anchor is to bring goods by people, which needs to accumulate popularity in the early stage or have a certain number of fans, and then bring goods by live broadcast. Therefore, we should make good use of the advantages of Daren Anchor and the huge "fans" behind it, transform some eye-catching or professional content into purchasing power, and realize the flow through the live broadcast platform. The influence of the anchor is mainly composed of the host's popularity, popularity, charm and other factors, users are easily attracted by the host's

popularity and personal charm, and the live broadcast of the host has a more vivid communication effect, this interactive marketing approach in the live e-commerce platform is the most attractive place for consumers, through the live broadcast room. As well as the purchase links of corresponding commodities, coupons and red envelopes during live broadcasting are within reach, so that consumers can realize the entertainment shopping experience of watching while placing orders, interacting while purchasing, thus stimulating consumption desire. Therefore, this paper takes the Daren anchors in the live e-commerce platform as the research object, selects the representative anchor characteristics, and explores the configuration path affecting consumers' purchase intention through the method of fuzzy set stereotyping comparative analysis.

2. Literature Overview

2.1. Research Status of Talent Anchor

Live e-commerce rose in 2016, and the development time is relatively short. At present, there is no unified and mature standard concept for live e-commerce in the industry. Cai J, Wohn D Y, Mittal A et al. (2018) believe that live e-commerce is an e-commerce platform that integrates real-time video live broadcasting with social attributes, and its main feature is real-time [1]. Guo Xiaoxin (2020) believes that live e-commerce is a marketing model that adds live broadcasting on the basis of traditional e-commerce platform and integrates real-time interaction, visual entertainment and realism in live broadcasting [2].

The existing literature on live e-commerce shows the characteristics of multi-attribute and real-time interaction of live e-commerce. This paper argues that live e-commerce is a new mode of splitting and reorganizing the influential content of talent anchors on the network live broadcasting platform and integrating it into the e-commerce platform. On the basis of text comments and picture display exchanges on traditional e-commerce platforms, live e-commerce reconstructs the

relationship among commodities, anchors and consumers, and strengthens the interaction between anchors and consumers based on the characteristics of real-time interactivity and omni-directional physical commodity display of live video.

The number of foreign literature on live e-commerce is relatively small, mainly on the impact of mobile platform e-commerce marketing strategies and network live broadcasting on consumer behavior and attitudes. Park and Lin (2020) found that in the process of live e-commerce marketing [3], the celebrity effect of the host with goods will significantly affect the purchase tendency of consumers, which may lead to impulsive consumption of users. Lu B and Chen Z (2021) believe that in the era of live e-commerce, bringing in product trial and real-time interactive sharing of product features will help to enhance consumers' purchase intention [4]. Wongkitrungrueng A, Assarut N, Business J O et al. (2020) studied the mechanism between value perception, trust and participation achievement, and analyzed the factors affecting consumers' purchase intention in live e-commerce [5]. Xu Yiting and others (2021) explained that the immersive communication mode in the era of live e-commerce is the key to improve the quality of marketing [6]. Li Qi et al. (2021) analyzed the impact of consumers' information processing on their emotional attitudes in the context of live e-commerce, and found that the professionalism, attractiveness and infectivity of the host have a positive effect on consumers' emotions [7].

Wang Xiaoyu, Huang Ming and Qiu Shaohua (2022) took the live e-commerce platform anchor as the research object to explore the mechanism of its product involvement, credibility, personalization, interactivity, innovation and other characteristics on the fan product involvement, perceived value and purchase intention, and to verify the relationship between the anchor characteristics and the fan purchase intention [8]. Based on the most detailed possibility model, Zhao Xiaogang et al. (2021) found that the attractive attributes of e-commerce bloggers, such as voice, appearance and role status, played a significant role in the process of influencing their attitude, and ultimately promoted their purchase intention [9]. Based on SOR theory and perceived value theory, Zhao Baoguo (2021) summarized the characteristics of e-commerce anchors as interaction, authenticity, professionalism and popularity, and constructed a research model of the impact of e-commerce anchors' characteristics on consumers' purchase intention by questionnaire survey and structural equation model. Perceived value further positively affects consumer trust, thereby promoting their purchase intention [10]. Hu Chuan (2020) and others believe that in e-commerce live broadcasting, the professionalism of Internet celebrities when recommending to consumers is the key factor affecting consumers' purchase intention [11].

The above literature is mainly about the impact of anchor characteristics on consumers, while the research on the influence of anchors is rarely involved, but the characteristics of anchors are also an important source of the influence of anchors, so based on the existing research on the characteristics of anchors, this paper summarizes these characteristics of anchors, and then forms the research on the influence of anchors.

2.2. Research Status of the Influence of Live E-commerce Platform Talent Anchors

Chen Haiquan et al. (2020) took the net red anchor in the live e-commerce platform as the research object, empirically analyzed the mechanism of the net red anchor's personal characteristics on the fans' purchase intention in the live e-commerce platform, and found that the more obvious the net red anchor's personal characteristics were, the more functional and emotional the fans' recommended products were. The more favorable it is for fans to generate purchase intention [12]. Hu Jiao, Li Li et al. (2022) considered the influence of reference effect and anchor influence on the pricing strategy of live broadcasting platform based on differential game theory and method, and found that the correlation coefficient of reference effect and anchor influence has a certain impact on the pricing strategy, and with the improvement of the influence level of anchor efforts, the pricing level of live broadcasting platform is also improving [13]. Shao Peng and Yi Wei (2022) took the influencing factors of clothing live broadcasting as the research object, and the empirical analysis revealed that the number of anchor fans, the number of viewers, and the word-of-mouth of selling goods had a significant positive impact on the sales volume and efficiency of live broadcasting [14]. Zhao Dawei and Feng Jiaxin (2022) took the key opinion leader characteristics of e-commerce anchors as the research object, and found that the characteristics of e-commerce anchors had a significant positive impact on consumers' purchase intention [15]. Dong Chao (2021) explored the influence of marketing ability, self-expression and reputation on consumer purchase satisfaction and brand loyalty through empirical methods. Through the construction of AMOS structural model, the results show that the marketing ability, self-expression and reputation characteristics of Internet celebrities have a positive impact on consumers' purchase satisfaction, so that consumers have brand loyalty to repeated brand purchases [16].

3. Theoretical Basis and Model

3.1. Information Source Theory

In the study of marketing, the source of information refers to the sender of information, which can transmit information to the individuals who need it. The basic elements needed in the process of information transmission are mainly: information sender, information content, media and information receiver. In the live e-commerce mode, the merchant transmits the product information to the consumer in the form of live broadcasting. The content of the information is the product information, the medium is the live broadcasting platform, and the receiver is the consumer. The sender of the information is the host of the live broadcasting room and the store that publishes the product. The host explains the product information, and the store decides the source of the product and publishes the detailed information of the product. The theory of information source characteristics studies the impact of information source on consumer behavior from three dimensions of credibility, professionalism and attractiveness. Credibility refers to the degree of being trusted, which reflects the credibility of the information source and reflects the personal integrity and morality. Individuals are more vulnerable when they think that the information source is in line with their own value system, which belongs to the psychological internalization.

Professionalism refers to the correctness and effectiveness of professional knowledge or experience obtained from information sources. Individuals are relatively more confident that information is rigorous and correct, resulting in psychological compliance. Attraction refers to the degree of being known and liked. Individuals will maintain a good relationship with the people they know or like, which belongs to the aspect of psychological identity.

3.2. Purchase Intention of Consumers

Table 1. Summary of purchase intention based on SOR theory

Scholar	Stimulation (S)	Body (O)	Reaction (R)
Peng Zhen et al. (2019) [17]	Price preference, product information, website service quality, online review	Perceived value, perceived risk	Consumer purchase intention
Liu Junyue et al. (2020) [18]	Network opinion leaders	Trust, Perceived Risk and Perceived Value	Consumer purchase intention
Li Yuxi et al. (2020) [19]	Interaction, Preferential and Authenticity of E-commerce Live Broadcasting	Trust and demand release	Consumer purchase intention
Ye Jing et al. (2021) [20]	Live broadcast trust, live broadcast promotion price	Perceived value	Consumer purchase behavior
Liu Ying et al. (2022) [21]	Host charm attribute, recommendation attribute, display attribute and interaction attribute	Cognitive attitude and affective attitude	Consumer purchase intention
Zhao Baoguo et al. (2021) [10]	Interaction, authenticity, professionalism and popularity of e-commerce anchors	Perceived value,	Consumer trust and consumer purchase intention

At present, most of the studies on consumer purchase intention are based on S-O-R (stimulus-organic-response)

theory model, technology acceptance model (TAM) and grounded theory to examine the impact of a single characteristic of the anchor on consumer purchase intention. Many scholars have studied the purchase intention of consumers based on the S-O-R (Stimulus-Organism-Response) theoretical model.

TAM is a model of users' acceptance of information systems established by Davis based on reasonable consumption behavior and planning, which has been widely used in online shopping [22]. Han Xiaoyi and Xu Zhengliang (2020) used grounded theory and SOR theory to conclude that anchor attributes have a direct impact on consumers' internal state and purchase behavior, and consumers' internal state plays an intermediary role [23].

To sum up, this paper finds that the characteristics of anchors include not only credibility, professionalism and attractiveness in the theory of information sources, but also interactivity and popularity.

3.3. Construction of Model

At present, most of the studies on the impact of anchor characteristics on consumer purchase intention are based on the view that the antecedent variables are independent of each other and have an impact on the outcome variable of consumer purchase intention alone, and mainly through SOR theory, technology acceptance model (TAM), grounded theory and other methods. There is little research on the method of comparative analysis of fuzzy sets. This paper argues that the impact of anchor characteristics on consumer purchase intention in live e-commerce is not the result of a single factor, but the result of a variety of factors working together. Therefore, this paper adopts the method of comparative analysis of fuzzy set stereotypes, takes the credibility, professionalism and attractiveness of the information source theory as the framework, and adds interaction and popularity as the antecedents. From the perspective of configuration, this paper explores the extent to which various factors and conditions affect consumers' purchase intention through what kind of linkage matching mode, explores the configuration path affecting consumers' purchase intention, and constructs the research model as shown in the figure below.

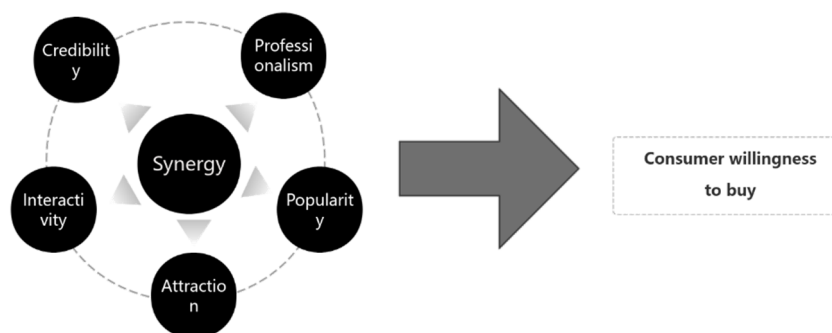


Figure 1. Study model

4. Study Design and Data Collection

4.1. Research Methods

The fuzzy set qualitative comparative analysis (fsQCA) method is dominated by sets and Boolean operations, and was formally proposed by American sociologist Ragin [31]. Compared with the traditional analysis method, fsQCA combines the dual advantages of qualitative and quantitative

analysis to study the complex causal relationship between variables, and retains the diverse characteristics of the original data. The fuzzy set qualitative comparative analysis tool can produce a variety of configurations of different paths under the same result to explore the optimal path. This paper chooses fuzzy set qualitative comparative analysis (fsQCA) to explore the factors affecting the development of rural e-commerce in China. This method is a combination of

qualitative and quantitative research methods, based on Boolean algebra theory, to study the complex causal relationship between conditional configuration and results [32], and is a new paradigm of social science research beyond qualitative and quantitative [34].

The qualitative comparative analysis method of fuzzy sets has obvious advantages in studying the factors affecting consumers' purchase intention. This method can effectively deal with the complex characteristics of the common influence of multiple causal variables, and more accurately measure the contribution and importance of various factors to consumers' purchase intention. Therefore, this method greatly improves the accuracy and credibility of the study. In addition, for the requirements of data, the fuzzy set qualitative comparative analysis method has strong adaptability and flexibility. Even in the case of small sample data, this method can still play a better role. This also provides favorable conditions for this study, which enables us to find out the key factors affecting consumers' purchase intention through fine data analysis. Therefore, we use the fuzzy set qualitative comparative analysis method to explore the configuration structure of the factors that promote consumer purchase intention.

4.2. Study Variables

This paper studies the influence factors of anchor influence on consumer purchase intention. The content of the questionnaire consists of two parts: the basic personal

information and the scale for measuring the research variables. The first part is the basic personal information of consumers and the basic situation of the use of e-commerce live broadcasting. The second part studies the measurement items of the variables. The measurement scale uses the Likert five-level scale, which corresponds to 1 = strongly disagree, 2 = disagree, 3 = generally agree, 4 = agree, 5 = strongly agree.

The variables involved in this study include the interactivity, attractiveness, professionalism, credibility, popularity and consumer purchase intention of talent anchors. In order to ensure the reliability and validity of the questionnaire design, the design of the relevant measurement items of the variables involved in this paper refers to the relevant academic research on live e-commerce at home and abroad. Among them, the measurement items of the host interaction come from the research of Zhao Baoguo and Wang Yunfeng (2021), with a total of three questions. The measurement items of anchor attractiveness are from the research of Liu Fengjun (2020), with a total of 3 questions; the measurement items of anchor professionalism are from the research of Zhou et al. (2022), with a total of 3 questions; the measurement items of anchor credibility are from the research of Xin min Wang (2020), with a total of 3 questions; The measurement items of popularity are from the research of Meng Fei (2012), with 3 questions in total; the measurement items of purchase intention are from the research of Liu Fengjun (2020), with 3 questions in total.

Table 2. Core Items of the Questionnaire

Variable name	Measure the project	Reference source
Interactivity	I think e-commerce hosts will respond very positively to questions or topics in the live broadcast room.	Zhao Baoguo and Wang Yun Feng (2021) [10]
	I will actively participate in the topics or questions initiated by the anchor.	
	The host can often communicate with the fans in the live broadcast room about the product.	
Attraction	The higher the personal prestige of the anchor, the more trustworthy I think the quality of the products he recommends.	Liu Fengjun (2020) [24]
	I will watch the live broadcast of the anchor because I like his personal style.	
	I will buy and use the same product as the anchor because of the anchor.	
Professionalism	I think the anchor has relevant professional knowledge and experience in using the products recommended by him.	Chen Jing (2018) [25], Netemeyer et al (2012) [26]
	I think during the live broadcast, the host can introduce the products from a professional perspective.	
	I think the anchor has the ability of professional product promotion and puzzle solving.	
Credibility	I think the anchor's information about the product is objective and true.	Davis (1989) [28], Koufaris (2002) [27]
	I think the products recommended by the anchor have been tried and are reliable.	
	I am willing to buy products recommended by my trusted host.	
Popularity	I think the anchor has a dominant and influential position in the field.	Meng Fei (2012) [29]
	I think the anchor has a certain reputation and prestige.	
	I think the anchor is in the network media (such as WeChat, Weibo and Tik Tok). High frequency of occurrence	
Intention to buy	I am willing to buy goods while watching the live broadcast.	Liu Fengjun (2020) [24]
	I'm willing to watch it live multiple times and buy it consistently.	
	I would like to recommend a live studio that I think is good to my friends.	

4.3. Distribution and Collection of Questionnaires

The formal questionnaire of this study is collected through

the questionnaire star network questionnaire, through the WeChat, QQ and other users who have watched the live broadcast of e-commerce, the questionnaire survey of the users of the live broadcast of e-commerce, and ultimately 283

valid questionnaires are recovered. According to the number of research samples required by the fsQCA research method, the amount of sample data collected should be able to cover all combinations of antecedent variables that may lead to specific results. This paper studies the influence of the combination of five antecedents on consumers' purchase intention. Theoretically, the number of data is at least 2⁶, and 283 valid questionnaires can theoretically contain all possible combinations of antecedents, while ensuring the internal reliability and validity of the results.

5. Empirical Analysis

5.1. Descriptive Statistics

Descriptive statistics is to analyze the characteristics of data to describe some characteristics of samples and populations. It mainly makes descriptive statistics on the basic personal information of the respondents, including gender, education, age, occupation, monthly consumption level, whether they have watched or purchased the products sold by the head anchors of various platforms, and which live e-commerce platforms they generally shop on, as shown in the following table.

Table 3. Basic Information of Interviewees

Basic information	Options	Quantity	Percentage (%)	Cumulative percentage (%)
Gender	Male	148	52.3	52.3
	Female	135	47.7	100.0
Age	Under 18 years old	17	6.0	6.0
	18-25 years	59	20.8	26.9
	26-35 years	108	38.2	65.0
	36-45 years	69	24.4	89.4
	Over 45 years old	30	10.6	100.0
Academic qualifications	High school and below	45	15.9	15.9
	Specialist	83	29.3	45.2
	Undergraduate	125	44.2	89.4
	Master	16	5.7	95.1
	Doctor	14	4.9	100.0
Occupation	Student	36	12.7	12.7
	Personnel of public institutions	63	22.3	35.0
	Self-employed	35	12.4	47.3
	Personnel of enterprise units	108	38.2	85.5
	Freelancer	39	13.8	99.3
	Other	2	.7	100.0
Monthly consumption level	Less than 1000 yuan	12	4.2	4.2
	1001-3000 yuan	63	22.3	26.5
	3001-5000 yuan	100	35.3	61.8
	More than 5000 yuan	108	38.2	100.0

Among the 283 valid samples collected, it can be seen that 52.3% of men are slightly higher than 47.7% of women, and most of them are between 18 and 45 years old, accounting for 83.4%. Academic qualifications are mainly concentrated in undergraduate and junior college, accounting for about 73.5%. Students accounted for 12.7%, and the remaining 87.3% were working people. The proportion of monthly consumption level above 3000 yuan is about 73.5%, and that below 3000 yuan is about 26.5%.

5.2. Reliability and Validity Test

In this paper, Cronbach's alpha coefficient is used to test the internal consistency reliability of the whole questionnaire and each item. Values of Cronbach alpha greater than 0.8 indicate very good reliability, values between 0.7 and 0.8 indicate good reliability, and values less than 0.7 indicate fair or inadequate reliability.

Table 4. Reliability test

Variables	Cronbach α	Number of items	Overall reliability
Interactivity	.797	3	.908
Attraction	.800	3	
Professionalism	.839	3	
Credibility	.813	3	
Popularity	.833	3	
Intention to buy	.837	3	

Validity refers to the degree to which the measured result reflects the content to be examined. The more consistent the measured result is with the content to be examined, the higher

the validity is. And vice versa. The data were first tested using the KMO and Bartlett tests, where the KMO test criteria are shown in the table below.

Table 5. KMO and Bartlett test

KMO sampling appropriateness measure		.893
Bartlett sphericity test	Approximate chi-square	2387.767
	Degrees of freedom	153
	Significance	.000

5.3. Data Calibration

After obtaining the relevant data, the antecedent variables and the outcome variables should be calibrated before the data analysis operation. In this paper, the interaction, professionalism, attractiveness, credibility and popularity of talent anchors are taken as the antecedent variables, and the purchase intention of consumers is taken as the outcome variable. The fsQCA method is used. According to Ortiz de Guinea, A. & Raymond, L et al. [30], when using the Likert scale for quantitative data collection, it is recommended that three membership points be determined from the scale values using a direct calibration procedure, where, for the seven-level Likert scale, some studies use 6 as the full membership point, 4 as the crossover point, and 2 as the full non-membership point. In this paper, a five-level Likert scale is used, so 5 is selected as the standard of complete membership point, 3 as the intersection point, and 1 as the standard of complete non-membership point, and the data are directly calibrated in fsQCA3.0 software.

5.4. Necessity Analysis of Single Condition

After the data is calibrated, the calibrated data is imported

into the fsQCA3.0 software. Before the configuration analysis, it is necessary to analyze the necessity of a single condition to determine whether a single antecedent variable is a necessary condition for the result variable. According to the summary of relevant literature, when the consistency of a single antecedent variable is greater than 0.9, we can conclude that the single antecedent variable is a necessary condition for the outcome variable [31]. When analyzing the necessity of consumer purchase intention, the results show that the consistency of each single variable is less than 0.9. This means that all antecedent variables are not necessary to influence high consumer purchase intention. The results of the necessity analysis show that a single antecedent variable alone cannot explain the change in the degree of consumer purchase intention. Therefore, a conditional configuration analysis must be conducted to explore the relationship between these conditional variables and their combined effects on consumer purchase intention. Through further condition configuration analysis, we will be able to reveal the association pattern between the various condition variables, and determine the comprehensive effect of them on the degree of consumer purchase intention.

Table 6. Necessity Analysis Results of Single Conditional Variable

Condition variable	Consistency		Coverage	
	High purchase intention	Non-high purchase intention	High purchase intention	Non-high purchase intention
Interactivity	0.635652	0.334106	0.710130	0.409288
~ Interactivity	0.471241	0.763377	0.392236	0.696738
Attraction	0.613598	0.326168	0.710501	0.414141
~ Attraction	0.494044	0.771998	0.400707	0.686600
Professionalism	0.696823	0.398201	0.674023	0.422358
~Professionalism	0.402818	0.692668	0.379045	0.714716
Credibility	0.690925	0.347591	0.711043	0.392247
~ Credibility	0.409441	0.743940	0.364001	0.725228
Popularity	0.676161	0.368778	0.688131	0.411540
~ Popularity	0.421776	0.720537	0.378635	0.709285

5.5. Condition Configuration Analysis

In the configuration analysis, this paper refers to the research of Fiss, and sets the consistency threshold to 0.8, the case threshold to 1, and the PRI consistency threshold to 0.75, that is, the case that meets the above conditions, the result variable assignment is 1, otherwise it is 0. Then the data will be imported into the fsQCA3.0 software, and we will obtain three types of solutions, namely, complex solution, simplified solution and intermediate solution [34], through the operation and analysis of the truth table. According to the research of Fiss (2007) [35], the antecedent condition that exists in both the reduced solution and the intermediate solution is regarded as the core condition, and if the antecedent condition only exists in the intermediate solution but does not appear in the reduced solution, it is regarded as the edge condition.

5.5.1. Configuration Analysis of High Purchase Intention

According to the above table, it can be found that there are

four configurations that produce high purchase intention results: ~ attractiveness * professionalism * credibility * popularity, interactivity * attractiveness * professionalism * credibility, interactivity * attractiveness * professionalism * popularity, and interactivity * attractiveness * credibility * popularity. The consistency of these four configurations is 0.8504, 0.9310, 0.9133 and 0.9170 respectively, and their consistency is higher than 0.85, which indicates that these four configurations are sufficient conditions for generating high purchase intention. At the same time, the coverage of the solution is 0.5134, indicating that the four configurations explain about 51.34% of the reasons for the high purchase intention. The overall consistency of the solution is 0.8817, which indicates that 88.17% of the samples that meet the four configurations will produce high purchase intention. Next, the configuration results that produce high purchase intention are analyzed in detail.

Table 7. Configurations Generating High Purchase Intention/Not High Purchase Intention

Condition variable	High purchase intention				Non-high purchase intention			
	H1	H2	H3	H4	N1	N2	N3	N4
Interactivity		●	●	●	⊗	⊗	⊗	
Attraction	⊗	●	●	●		⊗	⊗	●
Professionalism	●	●	●			⊗	⊗	⊗
Credibility	●	●		●	⊗		⊗	⊗
Popularity	●		●	●	⊗	⊗		⊗
Consistency	0.8504	0.9310	0.9133	0.9170	0.8575	0.8678	0.8513	0.8859
Original coverage	0.1802	0.3652	0.3582	0.3650	0.4619	0.3971	0.4070	0.1651
Unique coverage	0.0896	0.0329	0.0259	0.0328	0.1117	0.0692	0.0791	0.0218
Overall coverage	0.5134				0.6320			
Overall consistency	0.8817				0.8284			

Note: ● and ⊗ indicate the existence and non-existence of the core condition, while the blank indicates the existence and non-existence of the condition;

The size of the symbol reflects the importance of the condition, and the big circle and the small circle represent the core condition and the edge condition respectively.

Configuration H1: ~ Attractiveness * Professionalism * Credibility * Awareness. It can be explained that without considering whether the anchor has high interaction, the professionalism, credibility and popularity of the anchor exist as the core conditions in the configuration, while the attractiveness does not exist as the core conditions, which plays a vital role in improving consumers' purchase intention. According to the results of the study, even if the personal charm and external image of well-known anchors are not enough to attract the audience, consumers are more likely to buy the product as long as they can introduce and explain the product professionally and gain the trust of consumers. If the well-known anchor cannot give a detailed and professional explanation of the product, even if the anchor has a high personal charm to attract the audience to watch the live broadcast, it is difficult for consumers to have the willingness to place orders.

Configuration H2: Interactivity * Attraction * Professionalism * Credibility. It can be explained that no matter whether the anchor has a high reputation or not, the interaction, attractiveness, professionalism and credibility of the anchor are the core conditions and exist in the configuration, which can promote the improvement of consumers' purchase intention. According to the results of this path, we can know that no matter whether the anchor is well-known on the network or not, as long as the anchor makes a professional explanation or test of the products he brings with him during the live broadcast, the personal charm and external image of the anchor will continue to attract the audience, and in the process of live broadcasting, the anchor will actively interact with the audience through the bullet screen. In this process, consumers are more likely to buy in the live broadcasting room. The consistency of configuration H2 is 0.9310, which is the highest among the four configurations, indicating that this configuration is the sufficient condition for generating high purchase intention and is the strongest in sufficiency. At the same time, three of the four core conditions in this configuration are credibility, attractiveness and professionalism in the information source model. Explain that this path is the path that is most in line with the selected model and most likely to generate consumer purchase intention.

Configuration H3: interactivity * attractiveness * professionalism * popularity. It can be explained that no matter whether the anchor has high credibility or not, the interaction, attraction, professionalism and popularity of the anchor are the core conditions and exist in the configuration, which play a key role in improving consumers' purchase intention. According to the results of the study, no matter whether the anchor is credible or not on the network, as long as the anchor has a certain number of fans on the network, and the personal charm and external image of the anchor are liked by the audience, and in the process of live broadcasting, the product content is introduced professionally, interacted with consumers, and the questions raised by consumers are answered, so that consumers can be more targeted. In this process, it is easier to promote consumers' purchasing behavior and enhance consumers' purchasing intention. In practice, this configuration path may correspond to the head anchor of the net red, which is generally the head anchor in the live broadcast of e-commerce, and the live anchor with goods from individuals or professional training institutions, such as Li Jiaqi, Weiya, Crazy Little Yang, etc. This kind of anchor has a large fan base on the network and has a strong personal charm, which makes it easy for consumers to have emotional sustenance. Therefore, the result of this path has the best applicability to the head anchors of online celebrities.

Configuration H4: interactivity * attractiveness * credibility * popularity. It can be explained that no matter whether the anchor is highly professional or not, the interaction, attractiveness, credibility and popularity of the anchor are the core conditions and exist in the configuration, which play an important role in improving consumers' purchase intention. According to the analysis results of the table, no matter whether the host is professional or not, as long as the host is well-known and has a certain number of fans, they are likely to influence consumers' decision-making through celebrity effect in the process of recommending commodities, and at the same time, they introduce the product content professionally and interact with consumers in the process of live broadcasting. Consumers can understand the product information more pertinently, and the personal charm of the anchor can enhance

consumers' preference for the anchor, and then enhance their trust in the anchor and its products, promote consumers' purchasing behavior, and enhance consumers' purchasing intention. In practice, the configuration path corresponds to stars and Internet celebrity anchors with their own fans, such as Jia Nailiang, Liu Tao, Zeng Zhiwei and other anchors. This kind of anchor with its own traffic topics generally has a high reputation on the network, and has a certain fan base, rich experience in hosting, strong ability to control the scene, but lack of professionalism, and the product awareness is not as good as other types of anchors. Therefore, the results of the configuration path can be targeted to provide a corresponding reference for the live broadcast of Internet celebrity anchors.

5.5.2. Configuration Analysis of Non-High Purchase Intention

According to the above table, it can be found that there are four configurations that produce non-high purchase intention results: \sim interactivity * \sim credibility * \sim popularity, \sim interactivity * \sim attractiveness * \sim professionalism * \sim popularity, \sim interactivity * \sim attractiveness * \sim professionalism * \sim credibility, attractiveness * \sim professionalism * \sim credibility * \sim popularity. The consistency of these four configurations is 0.8575, 0.8678, 0.8513 and 0.8859 respectively, and their consistency is higher than 0.85, which indicates that these four configurations are sufficient conditions for generating non-high purchase intention. At the same time, the coverage of the solution is 0.6320, indicating that the four configurations explain about 63.2% of the reasons for the non-high purchase intention. The overall consistency of the solution is 0.8284, which indicates that 82.84% of the samples that meet the four configurations will produce the performance of non-high purchase intention. Next, the configuration results that generate non-high purchase intention are specifically analyzed, and can be divided into two cases for explanation. The configuration N1 is analyzed separately, and the configurations N2, N3, and N4 correspond to the three configurations with high purchase intention and can be combined with each other for explanation.

Configuration N1: \sim Interactivity * \sim Credibility * \sim Popularity. It can be explained that no matter whether the anchor is highly attractive and professional or not, the interaction, credibility and popularity of the anchor, as the core conditions of the configuration, play a vital role in generating non-high purchase intention.

Configuration N4: Attraction * \sim Professionalism * \sim Credibility * \sim Popularity. The anchor's attractiveness exists as the core condition, while professionalism, credibility and popularity do not exist as the core condition. The result of configuration N4 is opposite to that of configuration H1; configuration N2: \sim interactivity * \sim attractiveness * \sim professionalism * \sim popularity. The interactivity, attraction, professionalism and popularity of the host do not exist as the core conditions in the configuration, and the result of the configuration N2 is opposite to that of the configuration H3; Configuration N3: \sim Interactivity * \sim Attraction * \sim Professionalism * \sim Credibility. The interactivity, attractiveness, professionalism and credibility of the host do not exist as the core conditions in this configuration, and the result of configuration N3 is opposite to that of configuration H2. According to the above analysis, configurations N4, N2 and N3 prove that configurations H1, H3 and H2 are the configuration paths that generate high purchase intention.

5.6. Robustness Test

In order to verify the robustness of the research results, referring to the suggestions of previous studies [33], the consistency threshold is adjusted from 0.8 to 0.85 in this paper, and the configuration analysis is carried out again on the adjusted data. According to the research results after adjustment, the consistency of the solution and the coverage of the solution are only slightly different from the results before adjustment, and there is no practical change, in which the configuration path has not changed, which is consistent with the configuration path obtained in this paper, which verifies the research results of this paper, so it shows that the research conclusions of this paper are robust.

6. Research Conclusion and Prospect

6.1. Research Conclusion

This paper takes the credibility, professionalism and attractiveness of the information source theory as the framework, and adds interactivity and popularity as the antecedents, and uses the method of fuzzy set comparative analysis to explore the extent to which the antecedents affect consumers' purchase intention through what kind of linkage matching mode, and to explore the configuration path to produce high purchase intention.

Based on the above analysis results, it can be seen that the impact of the characteristics of talent anchors on the outcome variable of consumer purchase intention is not the result of the independent action of a single antecedent variable, but the result of the synergistic interaction of multiple factors. That is to say, the conditional variables of the five anchor characteristics, namely, interactivity, attractiveness, professionalism, credibility and popularity, can not constitute the necessary and sufficient conditions to affect consumers' purchase intention alone, and the explanatory power of a single condition is weak. In the results of the study, it is found that the configuration of the above five antecedents can significantly improve consumer purchase intention. In order to improve consumers' purchase intention, the antecedent variables need to be combined, and finally four configuration paths with high purchase intention and four configuration paths with low purchase intention are obtained.

Configuration H1 is Attraction * Professionalism * Credibility * Popularity, that is, when the anchor has a certain popularity on the network and can introduce the product professionally and gain the trust of consumers, consumers are more likely to have a purchase tendency. Configuration H2 is interactive * attractive * professional * credible, that is, as long as the host makes a professional explanation of the product during the live broadcast, at the same time, the host's personal charm and external image will continue to attract the audience, and in the process of live broadcast, the host actively interacts with the audience through the bullet screen and other means, which shortens the distance between the two sides, and then generates mutual trust. In this process, consumers are more likely to buy in the live broadcasting room. Configuration H3 is interactive * attractive * professional * popularity, that is, as long as the host has a certain amount of fans on the network, and the host's personal charm and external image are liked by the audience, and in the process of live broadcasting, the product content is introduced professionally and interacted with consumers, so that consumers can understand the product information more pertinently. In this process, it is easier to promote consumer

purchasing behavior. Configuration H4 is Interactivity * Attraction * Credibility * Awareness. That is to say, as long as the host has a high popularity and a certain number of fans, at the same time, the professional introduction of product content and interaction with consumers in the process of live broadcasting can make consumers understand product information more pertinently, and the personal charm of the host can enhance consumers' preference for the host, and then enhance the trust of the host and its products. Enhance consumers' willingness to buy.

6.2. Theoretical Significance

As an emerging new retail mode, e-commerce live broadcasting anchors have obvious effects in promoting consumer purchasing behavior and social and economic development. This paper takes the credibility, professionalism and attractiveness of information source theory as the framework, and adds interactivity and popularity as the antecedents to explore the extent to which the antecedents affect consumers' purchase intention through what kind of linkage matching mode, and to explore the configuration path to generate high purchase intention. The conclusion of the study enriches the relevant theories of e-commerce anchors' live broadcasting. This paper explores the configuration path of the influence of e-commerce anchors on consumers' purchase intention from the perspective of causality, and finally obtains the configuration conditions of high and low purchase intention, which provides a new research perspective for the influence of e-commerce anchors on consumers' purchase intention.

The research paradigm is different from the previous studies on the impact of e-commerce anchors on consumer purchase intention. At present, most of the studies on the impact of e-commerce anchors on consumer purchase intention are based on S-O-R (stimulus-organic-response) theory model, technology acceptance model and grounded theory. In this paper, fuzzy set qualitative comparative analysis (fsQCA) is used to study the impact of e-commerce anchors on consumers' purchase intention from the perspective of configuration, which is different from the limitation of traditional research on the impact of a single characteristic of anchors on consumers' purchase intention. From the perspective of configuration, this paper explores the relationship between the five antecedents of anchors, namely, credibility, professionalism, attractiveness, interactivity and popularity, and the level of consumer purchase intention, which enriches the research results and methods of e-commerce anchors on consumer purchase intention.

6.3. Practical Inspiration

The conclusion of this paper can provide a reference for e-commerce anchors, live e-commerce platforms and e-commerce enterprises to optimize the effect of live broadcasting with goods, improve consumers' willingness to buy, and establish an efficient mechanism for e-commerce anchors to broadcast with goods.

At the level of e-commerce anchors, this paper verifies the impact of the five characteristics of anchors, namely, credibility, professionalism, attractiveness, interactivity and popularity, on consumer purchase intention and their configuration paths, and finds that different combinations of characteristics have different impact paths on consumer purchase intention. Therefore, e-commerce anchors can form their own style of live broadcasting according to the

characteristics of products with goods and their own characteristics, enhance the effect of live broadcasting programs, and promote the purchasing behavior of consumers in live broadcasting rooms. Such as Jia Nailiang and other star anchors with their own fans, they generally have a high reputation on the network with their own traffic topics, and have a certain fan base, rich experience in hosting, strong interactive ability to control the scene; Compared with the star anchor, Li Jiaqi, crazy little Yang Ge, Xin Youzhi and other net red head anchors have a large fan base on the network, with strong personal charm, and as a professional anchor with goods compared to the star anchor, they can introduce the product content professionally, so it is easy for consumers to have emotional sustenance. In addition, anchors should be credible and interactive, attach importance to consumers' trust in anchors, and recommend products with high quality and cost performance to consumers. During the live broadcast, the frequency of interaction with users is increased, and the distance between the host and consumers is shortened. At the same time, the host can increase the length of stay and viewing time of users in the live broadcast room through interactive modes such as lucky bag lottery and gift red envelope, so as to promote consumers' purchasing behavior and increase consumers' purchasing intention.

At the level of live e-commerce platform, as a public figure, e-commerce anchors should improve their professional quality and abandon bad habits of live broadcasting. At the same time, as a regulatory body, live e-commerce platform should strictly control the legitimacy of the content of live broadcasting, resist the output of bad content, and establish and improve relevant binding principles and policies on live broadcasting of e-commerce. At the same time, the platform should also establish a sound anchor training and selection mechanism, classified training for different types of anchors, so as to obtain a more comprehensive audience, enhance the experience of users in the live broadcasting room, and improve the purchase efficiency of products in the live broadcasting room.

At the business level, live e-commerce has become an irreversible trend, many enterprises and businesses have begun to broadcast live in the major live e-commerce platform with goods, but most of the live effect is far from expected, the main reason is the matching problem of businesses and e-commerce anchors, the vast majority of businesses in the choice of anchors with goods. Businessmen believe that such anchors can bring more traffic and higher product purchase rate during live broadcasting, but they ignore whether the products match the anchors. Therefore, businesses should start from their own product characteristics and brand image, and choose e-commerce anchors that are highly consistent with the product or brand to carry out live promotion and bring goods. When the product users and the fans of e-commerce anchors are the same, the effect of live broadcasting will be more in line with expectations, and the purchase rate of products in the live broadcasting room will be higher. In addition, businesses should also consider choosing professional anchors for live broadcasting. In the process of live broadcasting, professional anchors who understand the products with goods can output high-quality and professional content and information about the products for consumers, so that consumers can have a higher degree of recognition of the products recommended by the anchors, thereby enhancing consumers' willingness to buy. Based on the previous study, the combination of the five characteristics

of the anchor, namely, credibility, professionalism, attractiveness, interactivity and popularity, will have different degrees of impact on consumers' purchase intention, so businesses can consider the five characteristics of the anchor, namely, credibility, professionalism, attractiveness, interactivity and popularity, when choosing the matching anchor.

6.4. Research Deficiency and Prospect

This paper uses fuzzy set qualitative comparative analysis method to reveal that the impact of e-commerce anchor characteristics on consumer purchase intention is the result of the synergistic combination of multiple characteristics, but there are still the following shortcomings in this paper: First, the selection of anchor characteristics is not comprehensive enough, and the follow-up study can expand the anchor characteristics in a deeper level. For example, consider adding entertainment, responsibility, affinity and other anchor characteristics. Secondly, among the 283 valid samples collected, the sample groups are not rich enough and the levels are not clear enough. Future research can consider a more comprehensive and detailed division of the collected sample groups, so as to enhance the scientificity and universality of the research conclusions.

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