

The Impact of E-commerce Live Streaming Servicescape on Consumers' Impulsive Purchase Intention

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Abstract

This article aimed 1) to study the impact of e-commerce live streaming servicescape and flow experience effect on consumers' impulse purchase intention, 2) to establish a model of the impact of e-commerce live streaming servicescape on consumers' impulsive purchase intention, and 3) to put forward more targeted and effective e-commerce live streaming marketing suggestions for e-commerce enterprises, consumers, and live-streamers. This paper adopts quantitative and qualitative research methods. In quantitative research, the sample consisted of 402 users with live e-commerce viewing experience or shopping experiences. They were selected by a straightforward method. In qualitative research, the main interviewees are:

Two college students, two precious mothers, two e-commerce live-streaming company employees, two department directors of e-commerce live-streaming companies, and two ordinary employees in other industries. There were two types of instruments for collecting data: questionnaires for quantitative research and in-depth interviews for qualitative research. Analysis of data by descriptive statistics and content analysis. The research results were found as follows:

1. Social clues include live-streamer credibility, interaction, and professionalism. It will positively and significantly affect consumers' impulsive purchase intentions. Physical clues, including atmosphere and design clues, will positively affect consumers' impulsive purchase intentions.

2. Based on the S-O-R model, the servicescape's social and physical cues are taken as independent variables and flow experience is introduced as the intermediary variable. The model, with consumers' impulsive purchase intention as the dependent variable, is constructed and tested.

3. For marketing countermeasures to enhance consumers' impulsive purchase intention in e-commerce live broadcasting, targeted countermeasures and suggestions are proposed based on e-commerce live broadcasting platforms, e-commerce live broadcasting enterprises, e-commerce live broadcasting live-streamers, and consumers who watch e-commerce live broadcasting.

Keywords: E-commerce Live Streaming; Servicescape; S-O-R model; Flow experience; Impulse purchase intention

Introduction

The era of scene marketing has come; people are living in the scene, and consumer demand is also from past products and services to the scene experience. The so-called scene is a variety of scenes of people's work and lives. Scene marketing refers to the marketing behavior of consumers' psychological state or demand in a specific scene to achieve enterprises' goals effectively. The China Internet Network Information Center (CNNIC) in Beijing released the 51st Statistical Report on China's Internet Development, which stated that as of December 2022, there were 1.067 billion Internet users in China. The number of mobile phone users has reached 1.065 billion, and the proportion of Internet users using mobile phones to access the Internet is 99.8%. The amount of time Chinese internet users spend online per person has increased, according to the report. In recent years, live-streaming e-commerce has become a popular trend, enabling network platforms to find a new track and providing a new stage for developing various enterprises. As a new business form of the digital economy, e-commerce live streaming has been developing rapidly and has become one of the hottest tracks. With the outbreak of COVID-19 in China at the beginning of 2020, e-commerce live streaming has provided a new "cloud shopping" mode for isolated consumers at home, and many offline consumption scenes are in a state of "power failure." The outbreak of online shopping has accelerated the innovation and iteration of the live-streaming industry, and e-commerce live-streaming has become the leading force in online shopping. At the same time, it has become the key for enterprises to resume work and production, opening new opportunities to industries such as clothing, food, housing, transportation, and entertainment severely affected by the epidemic and injecting vitality into the hard-hit Chinese economy.

E-commerce live streaming can break geographical restrictions, achieve deeper social interaction with consumers, and achieve two-way communication between enterprises and customers. Moreover, the scenario-based creation of e-commerce live streaming service providers also provides more targeted live streaming tools for corporate customers' marketing live streaming, making marketing live streaming more diversified and allowing C-end users a more immersive live streaming experience. E-commerce live broadcasting has the characteristics of solid interaction, affinity, and consumption stickiness.

The overall objectives of this study are: taking e-commerce live streaming as the research object; the conceptual servicescape in the research related to online shopping; the stimulus-biology-response (S-O-R) theoretical research framework adopted; and the "flow experience" theory used as the intermediary. Further, it explores the influence factors of social cues and physical cues on consumers' impulse purchase intention in the e-commerce live streaming service scene, the influence factors of the flow experience of online consumers, and their relationship with their impulse purchase intention. Build a more comprehensive and targeted structural model of servicescape affecting consumers' impulse purchase intention, and based on the conclusions drawn from the model, put forward more targeted suggestions on the characteristics of live-streamers in e-commerce live streaming rooms, atmosphere creation and design layout, and e-commerce direct broadcast marketing strategies, etc. It aims to guide e-commerce enterprises and live-streamers to understand consumers' psychological and behavioral characteristics in live broadcasts and formulate more effective live-streaming marketing strategies to improve the effect of live-streaming marketing of e-commerce enterprises significantly.

This paper is mainly based on empirical research on the influence of e-commerce live streaming servicescape on consumers' impulsive purchase intentions under the intermediary flow experience.

Research Objectives

1. To study the impact of e-commerce live streaming servicescape and flow experience on consumers' impulse purchase intentions.
2. To establish a model of the impact of e-commerce live streaming servicescape on consumers' impulsive purchase intention.
3. To put forward more targeted and effective e-commerce live-streaming marketing suggestions for e-commerce enterprises, consumers, and live-streamers.

Literature Review

Theory of S-O-R model

The S-O-R (Stimulus-Organism Response) model evolved from the behaviorist "stimulus-response" S-R model. Stimulus refers to the signal given to the individual by the external environment, and the response is the individual behavior change and result generated by the individual receiving the external environment signal. With the change in people's psychological understanding, they gradually realize that the information processing process of people starts from a physical stimulus, followed by the acceptance of external stimuli through the sensory system; after processing by the nervous system, the initial decision and finally, the output of action response. Mehrabian and Russell proposed the S-O-R (Stimulus-Organism Response) model in 1974. The S-O-R model was first used in the field of environmental psychology (Shuang, 2019; Zhao & Phakdeephrot, 2023) and later modified by Jacoby (2002) to explain the influence of external stimuli (S) on individual behavior and decision-making (R). In it, various aspects of the external environment act as stimuli, which affect people's internal states and thus drive their behavioral responses. Yuzhen (2017) built a research model based on the research paradigm of external environmental stimulus S-organism O-behavioral response R. Think of social presence as a stimulus, flow experience as an organism, and willingness to shop online as a reaction. Yuxi & Li (2020) conducted an empirical analysis of the impact of e-commerce live broadcasting on consumers' purchase intention using the Iceberg and SOR models. The former was used to find the intermediary emotion variable required by the latter, and then the SOR model was built with consumers' purchase intention as the dependent variable. Based on the S-O-R model, Wenwen (2021) analyzed the influence of live shopping atmosphere on consumers' purchase intention according to the logic of "live broadcast atmosphere - perceived value - consumers' purchase intention."

In conclusion, the "S-O-R" model has been proven to apply to consumer behavior. This study believes that in the context of e-commerce live streaming, the stimulation of social and physical cues in the e-commerce live streaming servicescape can cause changes in consumers' psychological and behavioral decisions. Therefore, based on the "S-O-R" model, this paper constructs social cues of servicescape (live-streamer credibility, live-streamer interaction, live-streamer professionalism) and physical cues of servicescape (atmosphere cues and design cues) as independent variables, namely external stimuli (S), and introduces flow experience as an intermediary variable (O). The impulse purchase intention of consumers is the dependent variable (R), which is the theoretical basis of the model constructed in this paper.

Theory of Scene Marketing

The scene has the natural advantages of authenticity and sensibility, which marketers have favored. Researchers' exploration focuses on how to apply scenes to the marketing field.

Traditional scene marketing is everywhere; the classic case is Ikea IKEA. The personalized store layout creates a warm and comfortable scene, attracting many consumers for the on-site experience. Lei (2017) explored scene marketing strategies in the mobile Internet era by analyzing features such as deep experience in scene marketing, precision marketing, and personalized communication (Phattharaphongmanee & Rattamapongpingyo, 2023). Foreign scholars mentioned this phenomenon earlier and used the term contextual marketing. Kenny & Marshall (2000) proposed that contextual marketing companies should follow the following principles: Do not try to bring the customer to the website, but bring the information directly to the customer when they need it. Xueming Luo (2003) believed that contextual marketing, which provides customers with personalized and contextualized information when needed, has become a pivotal element in contacting and retaining online customers. In fact, in an information economy that is already overloaded with information (Yoosuk et al., 2023), consumers need not only information but also relevant, customized, and contextualized products and services at the time of purchase.

In conclusion, domestic and foreign scholars' current research on scene marketing provides a solid theoretical foundation for this study. Although scene marketing is no longer a new concept, the current analysis and research on scene marketing is still relatively superficial and needs to be more profound. At home and abroad, the connotation of scene marketing is mainly proposed from the angle of theoretical elaboration, but the concept of scene marketing needs to be unified. The quantitative research on scene marketing could be more robust. In addition, scene marketing needs to expand the research space further in the mobile Internet era.

Theory of servicescape

The academic research on servicescape mainly focuses on the origin of the concept of servicescape, the division of content and dimension, and the influence effect. The connotation of the servicescape concept is evolving with society's development. Kotler (1973) was aware of the importance of the service environment and found its impact on consumers. They pointed out that the interaction between customers and service personnel in service places is significant. When contacting customers, an appropriate attitude and aesthetic ability should be adopted to represent service personnel's excellent performance. According to Nickson et al., appropriate "aesthetic skills" and "appearance" are required for service personnel to "look good" and "sound good" at the time-of-service contact, pointed out that the interaction between consumers and service staff and other customers in the process of receiving services has a direct impact on consumers' perception of service quality. Jianbo (2017) studied the positive effects of aesthetic appeal, functional layout, and financial security on value co-creation in network service scenarios and the mediating role of customer co-creation of value. Yu Ping (2018) found that emerging scene technologies can effectively help transmit information in servicescapes' physical, social, and symbolic dimensions. Jiangzhe (2017) studied the influence mechanism of social cues in network service scenarios on customer citizenship behavior by using a structural equation model based on social presence theory and social exchange theory, verified the critical role of social cues in network service scenarios on customer citizenship behavior, business friendship, and sustained credibility, and confirmed the mediating role of business friendship and sustained credibility. It expands and extends the research field of network service scenarios. (Sihai, 2016; Meizhen, 2021; Ke & Yu, 2023) studied the social clue and consumer scene attachment of the e-commerce live servicescape. They proposed that the service scenario social clues of the shopping website can be divided into three dimensions: language communication, behavior, and service skills.

In conclusion, the development process of the dimensional division of servicescape is comprehensively analyzed, and the previous definitions and dimensional division of

servicescape and network servicescape are used for reference. This study agrees with Baker's view and divides the e-commerce live streaming servicescape into social and physical dimensions. By referring to their definition of servicescape and dimension division, it carries out subsequent research on the influence mechanism of the e-commerce live streaming service field on consumers' impulsive purchase intention. The main reasons are as follows: In defining the elements of a service scenario, Baker proposed, based on Bitner, that a service scenario should contain physical and social elements. His definition and dimension division of network servicescape is based on previous significant studies under specific network environments from an overall perspective. The two dimensions contain most of the factors of the online shopping environment in the existing relevant literature, and the dimension division is based on the dimension division of Bitner's physical servicescape. Moreover, the service scenario is divided into two dimensions, each containing multiple indicators. Hence, the conceptual framework of the established e-commerce service scenario is comprehensive and in-depth.

Theory of flow experience

Csikszentmihalyi (1975) first proposed the concept of "flow experience," and Csikszentmihalyi (1989) defined flow experience as the overall feeling of an individual fully invested in a particular activity. When people are in a flow state, everything they do attracts them (Ye and Tan, 2023). The mood was pleasant, and it felt like time had passed quickly. Cong Fang (2008) believes that when consumers are in the state of flow experience, they are in a state of concentration, complete devotion, and inner pleasure. For a long time, there have been many different views on the measurement dimension of flow experience in the academic circle, and there are debates between single-dimension and multi-dimension. At present, it is mainly divided into three types: The first is direct, single-dimensional measurement. Hoffman & Novak (2009): This method measures direct, single-dimensional flow experience. The second is the derived single-dimensional measurement. Also, flow experience was taken as a unidimensional construct when studying the flow experience model of consumers browsing travel websites (Chaijaroen & Premthongsuk, 2023). The third is multidimensional measurement. With the in-depth study of flow experience, the measurement dimension of flow experience has gradually evolved from single-dimensional measurement to multidimensional measurement. Multidimensional measurement methods have two main dimensions (including concentration and happiness). Three dimensions (fun, sense of control, and focus) (Kourfaris, 2002); four dimensions (including control, concentration, novelty, and pleasure) (Webster et al., 1993; Chang & Chen, 2012). Csikszentmihalyi (1975) found that "high concentration of attention under limited incentives" can distract individuals from other unrelated thoughts, worries, or distractions (Csikszentmihalyi, 1990).

This study defines the flow experience as a single-dimensional concept because it considers watching live e-commerce is a subjective psychological state of consumers, so it is defined as a single-dimensional concept. In order to take into account the effectiveness of measurement, the second measurement method is adopted: the derived single-dimensional measurement method, which covers the items of concentration, loss of time, and pleasure.

Conceptual Framework

This research studies e-commerce live streaming servicescape on consumers' impulsive purchase intention under the intermediary of flow experience. The researcher defines the research conceptual framework based on the "S-O-R" model with social cues (live-streamer credibility, live-streamer interaction, live-streamer professionalism) and physical cues (atmosphere cues and design cues) of servicescapes as independent variables and introduces

flow experience as an intermediary variable to construct a model with consumers' impulse purchase intention as the dependent variable. The details are as follows.

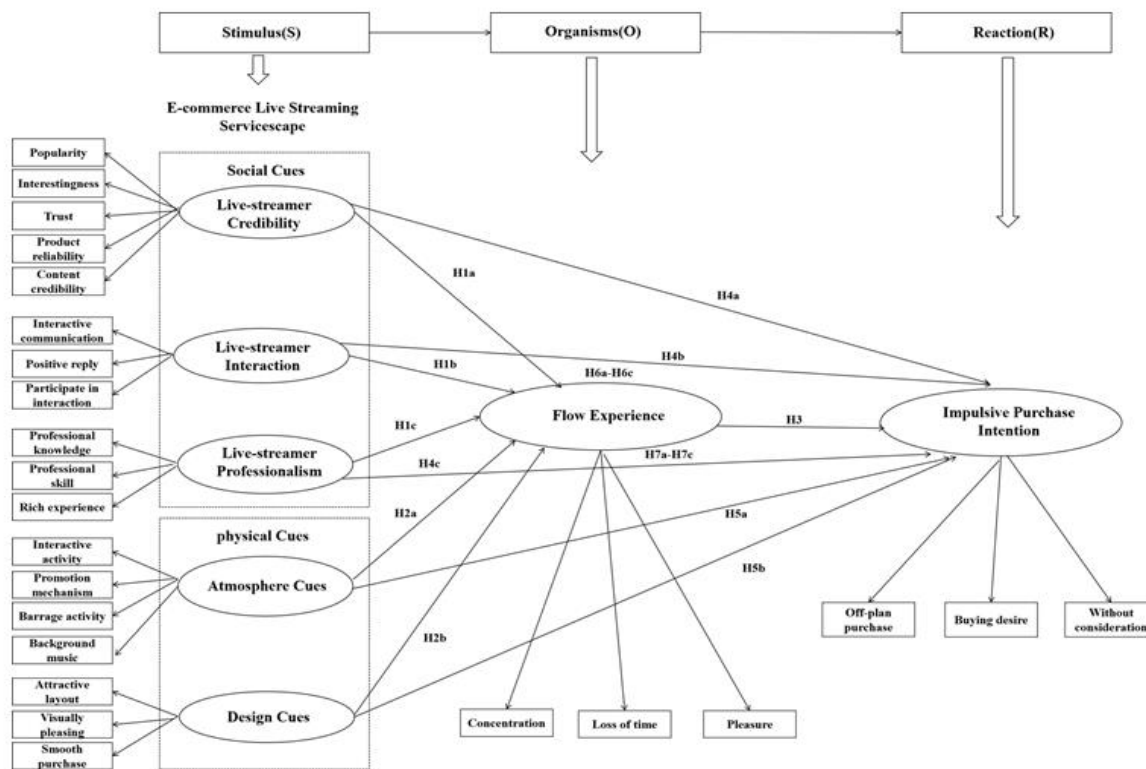


Fig. 1. Conceptual Framework

Research Methodology

This research is a mixed method research. The research area is located in China, and the research platform is mainly aimed at China's e-commerce live-streaming platforms. For quantitative research, the population is consumers with experience watching or buying live e-commerce. These include mainstream e-commerce platforms such as Taobao, Tmall, Jingdong, and Vipshop and short video live-streaming platforms such as Douyin and Kuaishou. The exact number is unknown. The sample group was 405 consumers with experience watching or buying live e-commerce streaming using a simple selection method. For qualitative research, the sample group was the main interviewees:

Two college students, two precious mothers, two e-commerce live-streaming company employees, two department directors of e-commerce live-streaming companies, and two ordinary employees in other industries. A total of 10 people were selected using a convenient method. There are two types of research tools: 1) a questionnaire consisting of 3 parts: Part 1 Basic information statistics of respondents, Part 2 Survey of consumers' use of e-commerce live streaming and Part 3 E-commerce live streaming service scenario, flow experience, impulsive purchase intention information was used as a quantitative study on the influence of e-commerce live streaming servicescape on consumers' impulsive purchase intention under the intermediary of flow experience. 2) In-depth interview This interview is nine questions about the impact of e-commerce live streaming service scenarios on consumers' impulsive purchase intentions. Used for qualitative study express their views and suggestions on e-commerce live broadcasting from the respondents' perspective. The researcher collected data from September 2022 to September 2023. Quantitative data were analyzed by descriptive

statistics such as frequency, percentage, mean, and standard deviation, which describe the characteristics of variables, independent variables, and dependent variables that affect them. Consumers' impulse purchase intention. SPSS27.0 and the structural equation model (SEM) were used to analyze the collected sample data to test the research hypothesis and draw the research conclusions, and the results were analyzed and elaborated. Qualitative data: Use document research, analyze, synthesize data, and then write a descriptive narrative.

Research Results

Objective 1. The results showed that social clues include live-streamer credibility, interaction, and professionalism. It will positively and significantly affect consumers' impulsive purchase intention. Moreover, physical clues, including atmosphere and design clues, will positively affect consumers' impulsive purchase intention.

Table 1. Description and analysis of e-commerce live streaming servicescape social cues

Variable	Mean	Std. Deviation
Live-streamer Credibility	3.65	1.022
LC1	3.54	1.225
LC2	3.61	1.199
LC3	3.64	1.168
LC4	3.69	1.034
LC5	3.79	1.019
Live-streamer Interaction	3.86	0.905
LI1	3.82	1.103
LI2	3.90	0.990
LI3	3.86	1.075
Live-streamer Professionalism	3.79	0.980
LP1	3.80	1.163
LP2	3.80	1.063
LP3	3.77	1.155
Total	3.75	1.079

According to Table 1, the mean value of social clues items and variables in e-commerce live streaming servicescapes are above the median of 3, and their standard deviation is between 0.905 and 1.225. The mean value of live-streamer credibility is 3.65, and the standard deviation of each item is 1.225, 1.199, 1.168, 1.034, and 1.019, respectively. The mean of live-streamer interaction was 3.86, and the standard deviation of each item was 1.103, 0.990, and 1.075. The mean value of live-streamer professionalism was 3.79, and the standard deviation of each question item was 1.163, 1.063, and 1.155. The above results show that the overall selection trend of the group is good. The mean and standard deviation of each item corresponding to the social cue variable of impulse purchase intention in the e-commerce live streaming service scenario did not have extreme values; that is, the distribution of answers answered by the participants was scientific and reasonable.

Objective 2. The results showed that servicescape's social and physical cues are taken as independent variables, and flow experience is introduced as the intermediary variable. The

model with consumers' impulsive purchase intention as the dependent variable is constructed and tested.

Table 2. Description and analysis of e-commerce live streaming servicescape physical cues

Variable	Mean	Std. Deviation
Atmosphere Cues	3.72	1.074
AC1	3.49	1.290
AC2	3.86	1.143
AC3	3.91	1.245
AC4	3.63	1.211
Design Cues	3.88	0.935
DC1	3.85	1.119
DC2	3.88	1.105
DC3	3.93	1.025
Total	3.79	1.127

According to Table 2, the mean values of social cues and variables in e-commerce live streaming servicescapes are above the median of 3, and their standard deviation is between 0.935 and 1.290; the mean values of atmosphere cues are 3.72, and the standard deviations of each item are 1.290, 1.143, 1.245, and 1.211, respectively. The mean value of the design clues was 3.88, and the standard deviations of each item were 1.119, 1.105, and 1.025, respectively. The above results show that the overall selection trend of the group is good. There is no extreme value in the mean and standard deviation of each item corresponding to the physical cue variable of impulse purchase intention in the e-commerce live broadcast service scenario; the distribution of answers answered by the participants has a specific scientific and reasonable value.

Table 3. Description and analysis of flow experience

Variable	Mean	Std. Deviation
Flow Experience	3.76	0.987
FE1	3.69	1.168
FE2	3.80	1.078
FE3	3.80	1.097
Total	3.76	1.083

According to Table 3, the mean value of social cues items and variables in the e-commerce live broadcast servicescape is above the median of 3, with a standard deviation between 1.078 and 1.168. The above results show that the overall selection trend of the surveyed group is good. The mean and standard deviation of each item corresponding to the flow experience of impulse purchase intention in the e-commerce live streaming service scenario did not have extreme values; that is, the distribution of answers answered by the participants was scientific and reasonable.

Table 4. Description and Analysis of Impulsive Purchase Intention

Variable	Mean	Std. Deviation
Impulsive Purchase Intention	3.83	0.913
IPI1	3.73	1.094
IPI2	3.85	1.029
IPI3	3.89	1.053
Total	3.83	1.022

According to Table 4, the mean value of social cues items and variables in the

e-commerce live broadcast servicescape are above the median of 3, and the standard deviation is between 1.029 and 1.094. The above results show that the overall selection trend of the surveyed group is good. In the scenario of an e-commerce live streaming service, there is no extreme value in the mean and standard deviation of each item corresponding to the impulsive purchase intention of consumers with impulse purchase intention; that is, the distribution of answers answered by the participants is scientific and reasonable.

Objective 3. The results showed that as for marketing countermeasures to enhance consumers' impulsive purchase intention in the context of e-commerce live broadcasting, targeted countermeasures, and suggestions are proposed based on e-commerce live broadcasting platforms, e-commerce live broadcasting enterprises, e-commerce live broadcasting live-streamers and consumers who watch e-commerce live broadcasting.

Table 5. Reliability analysis of variables

Variable	Cronbach's Alpha	N of Items
Live-streamer Credibility	0.943	5
Live-streamer Interaction	0.818	3
Live-streamer Professionalism	0.838	3
Atmosphere Cues	0.901	4
Design Cues	0.827	3
Flow Experience	0.862	3
Impulsive Purchase Intention	0.827	3

As seen from Table 5, Potential variables Credibility, Interaction, Professionalism, Atmosphere Cues, Design Cues, and Flow Experience, the reliability of Impulsive Purchase Intention is above 0.8. Hence, the reliability of questionnaire variables is good, meeting the study requirements.

Discussions

First, this study enriches relevant empirical research on e-commerce live-streaming service scenarios. In this study, the e-commerce live broadcast servicescape is divided into two dimensions -- social cues and physical cues as annex-dependent variables, and social cues are subdivided into three dimensions: live-streamer credibility, live-streamer interaction, and live-streamer professionalism. Physical cues are subdivided into two dimensions: atmosphere cues and design cues. The impact of e-commerce live streaming service scenarios on consumers' impulsive purchase intention is analyzed in a multidimensional and more comprehensive way, providing a new idea for the study of e-commerce live streaming consumers' impulsive purchase intention provides a theoretical basis for later scholars and specific data support.

Secondly, based on the stimulus-bio-response (S-O-R) theoretical research framework, this study constructed a research model on the impact of e-commerce live broadcast service scenarios on consumers' impulsive purchase intention. It was verified through empirical methods such as questionnaire surveys and qualitative investigations. 2016 is the first year of the development of e-commerce live broadcasting, and the tide of e-commerce live broadcasting has officially opened since then. In recent years, the scale of e-commerce live-streaming users has been growing. With the influence of 5G, AI, MR Technology development,

and other aspects, online e-commerce live streaming has become a more "normal" way of shopping. Nowadays, shopping through the broadcast room has become one of the essential ways of shopping. According to the "China Live Streaming E-commerce Industry Report" released by iResearch 2021, live streaming order users accounted for 66.2% of live streaming users; nearly two-thirds of users have watched live broadcasts and made purchases. With the further expansion of the scale of Internet users in China, consumers have deepened their cognition of the interactive, social, and entertainment characteristics of live streaming, and live streaming provides the audience with the most cost-effective products, more exciting products, more intuitive display, higher credibility, and more immersive shopping experience. The acceptance of online live streaming and live streaming e-commerce is gradually improving. The average daily viewing time of live broadcasts continues to increase, the proportion of live broadcast e-commerce users in the overall Internet users has increased significantly, and more and more people recognize the consumption mode of shopping in the live broadcast room. E-commerce live broadcasting has become the focus of attention of enterprises, becoming a common way for enterprises to improve marketing transformation, and the industry has rapidly transitioned from simple traffic dividend mining to the dividend mining of the entire ecology, primarily through refined operation and supply chain penetration to achieve new increments of enterprises. In this context, this paper studies the impact of e-commerce live-streaming service scenarios on consumers' impulsive purchase intention, aiming to help e-commerce live-streaming enterprises explore effective paths and countermeasures to improve their sales transformation. The overall verification of the impact of e-commerce live streaming service scenarios on consumers' impulsive purchase intention provides empirical evidence for the impact of e-commerce live streaming service scenarios on consumers' impulsive purchase intention, proving the critical impact of various specific factors in e-commerce live streaming service scenarios on the improvement of consumers' impulsive purchase intention, which can improve the transformation of e-commerce enterprises' live streaming marketing. This paper expands the research scope of literature on e-commerce live streaming service scenarios, flow experience, and consumers' impulsive purchase intention and provides references for scholars' follow-up studies. It provides a new idea for studying consumers' impulse purchase intention in the context of e-commerce live broadcasting.

Thirdly, this paper takes flow experience as an intermediary to explore the intermediary role of flow experience between e-commerce live streaming service scenarios and consumers' impulsive purchase intention. Different factors of e-commerce live streaming service scenarios bring different psychological perceptions to consumers, and these perceptions have an essential impact on consumers' impulsive purchase intention. By reviewing and sorting out the existing literature, this study proposes that flow experience plays an intermediary role between e-commerce live streaming service scenario and consumers' impulsive purchase intention, verifies the existence of the intermediary effect through empirical research methods, and establishes a research framework of "e-commerce live streaming service scenario - flow experience - consumers' impulsive purchase intention," which enriches the relevant research on flow experience theory. It also expands the research results on the influence mechanism of consumers' impulsive purchase intention. From a psychological perspective, it provides a new perspective for studying consumers' impulsive purchase intention in e-commerce live broadcasting. It makes a specific supplement to the previous theories.

Knowledge from Research

The new knowledge is to use a structural equation model based on e-commerce live streaming and introduce servicescape theory to integrate and analyze social and physical cues in e-commerce live broadcast servicescapes and use flow experience as the medium to facilitate

quantification of unobserved variables and better judge the degree of influence of various factors on consumers' impulsive purchase intention.

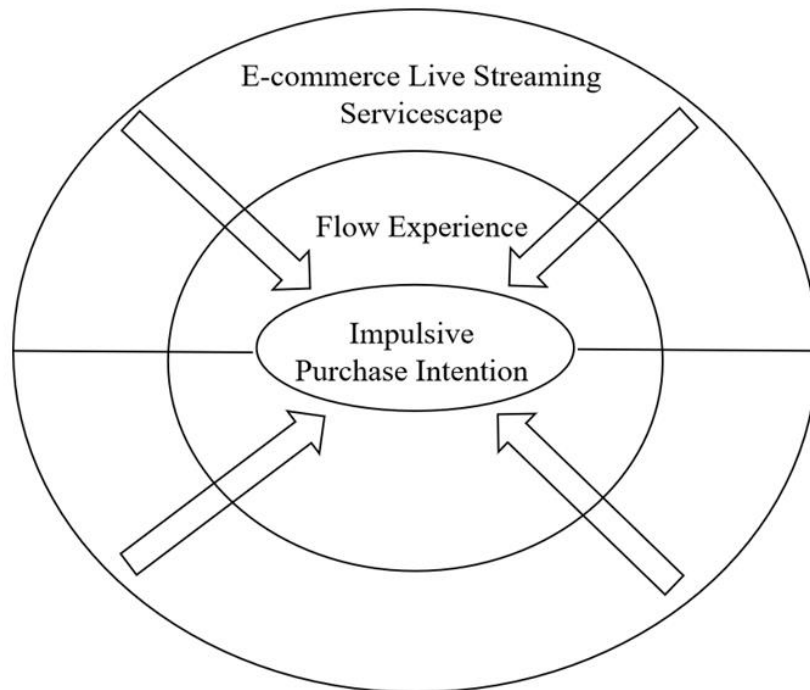


Fig.2. New Knowledge

Conclusion

Based on many kinds of literature and theories, this paper reviews and compares the e-commerce live streaming servicescape, flow experience, consumers' impulsive purchase intention, and their theoretical relationships. Based on the "S-O-R" model, the paper constructs social cues (live-streamer credibility, live-streamer interaction, live-streamer professionalism) and physical cues (atmosphere cues and design cues) of e-commerce live streaming servicescape as independent variables, introduces flow experience as the intermediary variable, and constructs a model with consumers' impulsive purchase intention as the dependent variable. The proposed research hypothesis and model were tested to examine the main effect between social and physical cues and impulsive purchase intention in e-commerce live streaming servicescapes and verify the flow experience's mediating role in this model. The main research findings show that: 1) Objective 1: For the influence factors of e-commerce live streaming service scenarios on consumers' flow experience, the research finds two dimensions: social and physical cues. 1.1) Social clues include live-streamer credibility, interaction, and professionalism. It will positively and significantly affect consumers' impulsive purchase intention. 1.2) Physical clues, including atmosphere and design clues, will positively affect consumers' impulsive purchase intention. 2) Objective 2: Introduce flow experience as the intermediary variable to build the impact model of e-commerce live streaming service scenarios on consumers' flow experience. Based on the "S-O-R" model, the social cues of Services Cape (live-streamer credibility, interaction, professionalism) and physical cues of Services Cape (atmosphere cues and design cues) are taken as independent variables, and flow experience is introduced as the intermediary variable. The model with consumers' impulsive purchase intention as the dependent variable is constructed and tested. 3) Objective 3: As for marketing countermeasures to enhance consumers' impulsive purchase intention in the context of e-commerce live broadcasting, targeted countermeasures and suggestions are proposed

based on e-commerce live broadcasting platforms, e-commerce live broadcasting enterprises, e-commerce live broadcasting live-streamers and consumers who watch e-commerce live broadcasting.

Suggestions

This paper studies the influence mechanism of e-commerce live streaming service scenarios on consumers' impulsive purchase intention, and there are many issues worth discussing. It is listed as follows for the reference of future generations:

1) Expand the survey sample. In the future, it is possible to conduct research on e-commerce live broadcasting for consumers in different regions and cultures, expand the sample size, expand the age range and group range for research, and collect a large number of data for general analysis.

2) Expand impact factors. In the future, more influencing factors can be considered to be included in the independent variables, in addition to the three dimensions of social cues (live-streamer credibility, live-streamer interaction, and live-streamer professionalism) and the two dimensions of physical cues (atmosphere cues and design cues) of e-commerce live streaming services. In addition, the appearance, language expression of the live-streamer, the consumer's own cultural level, occupation, consumption power, product involvement, presence, time pressure, consumer characteristics, and the behavior of other customers in the live broadcast can all impact consumer behavior. Future studies can be conducted from these perspectives and targeted.

3) Expand the research scope. E-commerce live-streaming products are divided into different categories, and different types of products have different appeals to consumers. Future studies can start from multiple product categories to explore the impact of e-commerce live-streaming service scenarios on the mechanism of action for consumers. The difference in the effect of e-commerce live broadcasting on different platforms is studied. Currently, the three major platforms of live e-commerce broadcasting are Taobao, Douyin, and Kuaishou. The three platforms have a large number of platforms. Do different platforms have different impacts on consumers? This aspect deserves further study. This study only considers the influence of flow experience as an intermediary on impulsive purchase intention. The role of credibility, presence, and other factors in live e-commerce streaming can be considered in the future. In this study, impulse purchase intention is adopted as the dependent variable, which does not equal behavior. In order to transform willingness into behavior, there is also a specific mechanism, and purchase behavior is actual consumption. On this basis, the process mechanism of transforming impulse purchase intention into impulse purchase behavior can be further discussed in the future.

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