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Full Research Paper

Antecedents of Consumers' Impulsive Buying Intention in Live Streaming Commerce —— Perspective of Live Streamer's Persuasive Ability

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Abstract: As a new form of e-commerce, live streaming commerce can easily drive consumers to buy impulsively in a short period of time, which brings significant benefits to business. By applying Aristotle's rhetoric appeals, we define the concept of e-commerce live streamer's persuasive ability and distinguish its four dimensions, i.e., logic, expertise, morality and emotional contagion. Based on S-O-R paradigm, our study constructs a theoretical model to investigate how live streamer's persuasive ability influences impulsive purchase behavior in live-streaming commerce. The results demonstrate that four dimensions of live streamer's persuasive ability has varying degrees of impact on consumers' affective reactions, i.e., affective trust and perceived pleasure, which in turn leads to their impulsive buying intention. This investigation provides both theoretical implications for the literature of live streaming commerce and practical implications for e-commerce live streamer.

Keywords: live streaming commerce, e-commerce live streamer, persuasive ability, impulsive buying intention, S-O-R paradigm

1. INTRODUCTION

Live streaming commerce has continued to flourish rapidly over the past few years in China. Live streaming commerce is a new form of e-commerce that a live streamer promotes or sells products on live streaming platform. It represents a considerable evolution of e-commerce, as well as brings significant benefits to business. As of June 2021, China's live streaming commerce users had reached 384 million, accounting for 38% of the total netizens. Live streaming e-commerce provide consumers with not only vivid and detailed product information but also more opportunities for real-time interactions with live streamers. The exciting atmosphere in live streaming arouses consumers' positive emotions and drive them to buy impulsively. The reasons and mechanism behind this phenomenon have not been fully studied. Previous studies related to user's purchasing behavior in live streaming are mainly carried out from the perspectives of live streaming system^[1], viewers^[2] and interaction^[3]. However, most of them only focus on planned purchase behavior.

In live streaming commerce, product promotion depends on the live streamer's shopping guide ability to a large extent, which is mainly reflected in streamer's persuasion ability. Specifically, live streamer's different persuasion styles may result in different viewing experience of consumers. Live streamers' persuasion could stimulate consumer to purchase products, thus promote product sales^[4]. The reason for huge sales volume in live streaming commerce may lie in consumers' impulsive buying. Previous studies have confirmed that consumer emotional factors are an important reason for impulse buying^[5]. We hold that live streamer's persuasive ability are very likely to play a pivotal role in affecting consumers' emotional states and finally lead to users' impulsive buying. However, live streamer's persuasive ability has yet to be systematically defined. Current studies investigated the influence of linguistic style on the success rate of crowdfunding^[6] and so on. However, these

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studies merely applied text mining and analysis methods to conduct the research, seldom explored the role of linguistic persuasive style using empirical method. The mechanism behind which live streamer's persuasive ability affecting impulsive buying through consumers' affective reactions is still unclear. Our research thus aims to investigate what leads to impulsive buying intentions in live streaming from the perspective of live streamer's persuasive ability.

2. THEORETICAL BACKGROUND

2.1 Aristotle's Rhetoric Appeals

Persuasion is a kind of behavior that guides the recipient's attitude and behavior towards the persuader's intended direction. Rhetoric refers to linguistic skills and strategies for persuasion. Aristotle defined rhetoric as "the faculty of observing in any given case the available means of persuasion" and distinguished three modes of persuasion: *logos* (appeal to logic), *pathos* (appeal to emotions), and *ethos* (appeal to credibility)^[6]. Three modes of persuasion represent different persuasion styles. Logos uses logical arguments in the discourse to support certain claims. Pathos intends to produce emotions in the audience and ethos is a way to achieve credibility by establishing a good personal character. Credibility can be achieved not only by showing ethical characters, but also another means such as competence and professionalism. Therefore, different linguistic styles result in different persuasion effects.

Aristotle's rhetorical appeals have been applied to various research areas, such as e-commerce platform^[7], politics^[8], public complaints^[9] and online crowdfunding^[6]. However, previous studies seldom examine its effect in live-streaming commerce. E-commerce live streamer is main introducer of commodity and the vital channel for consumers to gain relevant information. They use different linguistic persuasion style to influence viewers' attitude, thought, and behavior, which ultimately leads to purchasing. This process fits well with the meaning of persuasion, thus we identify e-commerce live streamer's persuasive ability based on Aristotelian rhetoric. E-commerce live streamer's persuasive ability refers to the skills or strategies of live streamer to persuade consumers to buy products through different linguistic styles. We distinguish four dimensions of persuasive ability based on Aristotle's three modes of persuasion. Ethos focuses on moral character as well as competence and professionalism. Thus, we select *morality* and *expertise* correspond to these two aspects respectively. Pathos appeal emphasizes the importance of emotional empathy or emotional contagion. So, we take *emotional contagion* to represent Pathos appeal. In live streaming commerce context, logos appeal refers to using integrated demonstration structures and rigorous argument ideas to show that products are worth buying. Therefore, *logic* is used to describe this mode of persuasion. Specific definitions of persuasive ability are shown in the following table.

Table 1. Constructs of persuasive ability

Aristotle's Rhetorical Appeals	Constructs	Definition
Ethos	Morality	Live streamer's ability to show ethical characters and build moral images of themselves through linguistic expression.
	Expertise	Live streamer's knowledge and experience associated with the goods or service transaction conveyed by linguistic expression.
Logos	Logic	Live streamer's competence to provide integrated demonstration structure and clear argumentation process through logical argumentation.
Pathos	Emotional contagion	Live streamer's ability to activate affective reactions of consumers via induction of streamers' emotion states and behavioral attitudes conveyed by linguistic expression.

2.2 The S-O-R paradigm

S-O-R paradigm proposed by Mehrabian and Russell holds that environmental stimuli induces people's internal state (organism), which directs their behavioral response^[10]. S-O-R paradigm provides a theoretical basis for user behavior research and is widely used to investigate consumer's impulsive buying behavior in e-commerce context^[11-13].

Stimulus refers to the triggers that induce individual's perceptions and then influence the response^[5]. Common stimulus in live streaming include price discount, real-time interaction, etc. Live streamer related stimulus have not been fully studied. We select live streamer's persuasion ability as stimulus variable, which contains four dimensions — logic, expertise, morality and emotional contagion.

The organism is an internal state of an individual which is regarded as an intermediary state between the stimulus and responses^[5]. It is divided into cognitive reactions and affective reactions. Perceived pleasure and affective trust are two common affective reactions that may exert impact on unrational behaviors^[14]. E-commerce live streaming is a form of online transactions where trust in sellers is a necessary condition to facilitate a deal. Online trust refers to consumers' confidence in the ability of online sellers to deliver products or services as promised, as well as their subjective expectations for seller's satisfactory after-sales service. Higher level of affective trust leads to higher possibility of consumers adopting seller's product recommendations^[15]. The role of affective trust cannot be ignored when considering consumers' purchasing decisions. During the process of online shopping, individual's positive emotion is a decisive antecedent of users' impulsive purchase behavior^[16] and pleasure is one of the most typical positive emotions. Therefore, we adopt perceived pleasure and affective trust as organism variables in this research. Affective trust is defined as the reciprocal interpersonal care and concern or the emotional bond between the consumer and the live streamer^[17], while perceived pleasure is defined as the extent to which the process of viewing the live streaming and purchasing goods is perceived to be enjoyable.

Response refers to the outcome of consumers' reactions toward the stimuli and their internal evaluations^[5]. Previous studies adopted the impulsive buying intention as an alternative to actual impulse purchase behavior^[11, 12]. We also adopt the impulsive buying intention as response variables rather than actual impulse buying.

3. RESEARCH MODEL AND HYPOTHESES

3.1 Research hypotheses

3.1.1 Persuasive ability and affective reactions

Logic refers to live streamer's competence to provide integrated demonstration structure and clear argumentation process through logical argumentation. Logic is an effective way to weed out false information and an effective means to dispel rumors^[18]. Logical persuasive style help the consumers to gain detailed product information such as the price advantage, and grasp sufficient reasons to purchase. It can relieve consumers' anxiety due to information uncertainty and strengthen their preference for the live streamer. By using concise expressions to introduce commodity information, live streamer can ensure logical clarity, thus, improve the readability of information, and reduce the cognitive efforts of consumers to understand information accurately. In this way, consumers will be delighted with relaxing watching experience. Thus, we have the following hypotheses:

Hypothesis 1a. Logic is positively associated with affective trust in live streamer.

Hypothesis 1b. Logic is positively associated with affective consumers' perceived pleasure.

Morality refers to live streamer's ability to show ethical characters and build moral images of themselves through linguistic expression. Leader's morality is the basis for employees to have emotional trust in him/her^[19]. In the context of live streaming commerce, moral qualities such as honesty shown in live streamer's linguistic

expression increase consumers' psychological safety. Consumers believe that live streamers would attach great importance to consumers' benefit and spare no efforts to help them in a sincere manner^[20]. These conduce to establish an emotional connection between consumers and live streamer, which in turn enhance consumers' affective trust towards the live streamer. Xu et al. confirmed that kindness and sincerity of sellers have a positive impact on consumer's satisfaction^[21]. Thus, kindness, sincerity and other moral characters shown by live streamer's linguistic expression could increase consumers' satisfaction and bring them pleasure. Therefore, we have the following hypotheses:

Hypothesis 2a. Morality is positively associated with affective trust in live streamer.

Hypothesis 2b. Morality is positively associated with affective consumers' perceived pleasure.

Expertise refers to live streamer's knowledge and experience associated with the goods or service transaction conveyed by linguistic expression. Professional knowledge and expertise conduce to build a good relationship and increase users' satisfaction^[22]. It may raise relationship quality between users and live streamers and strengthen their affective association. Professional introduction of products could improve information richness and validity, thus save consumers' time and efforts on searching goods. It could create a relaxing and pleasant shopping experience for consumers. Moreover, accurate and consumer-related commodity information will attract consumers' attention and get them involved in shopping with delight^[23]. Hence, we have the following hypotheses:

Hypothesis 3a. Expertise is positively associated with affective trust in live streamer.

Hypothesis 3b. Expertise is positively associated with affective consumers' perceived pleasure.

Emotional contagion refers to live streamer's ability to activate affective reactions of consumers via induction of streamers' emotion states conveyed by linguistic expression. In order to create appealing atmosphere, e-commerce live streamer are likely to display an active and cheerful emotional state through linguistic expression. In such climate of high spirits, consumers are easily infected, forming emotional empathy and generating positive emotions similar to those of live streamer^[24]. In addition, live streamer tends to emphasize the pleasant using experience and good efficacy of commodity. Consumers would image the positive emotional reward of using product due to live streamer's description, thus feel pleasant. When consumers view live streaming, online celebrities will emphasize his/her close attention to consumer's demand as well as genuine concern for them, in order to gain instant favor and fondness from viewers^[25]. Live streaming viewers will further strengthen the emotional relationship with the live streamer through care and benevolence they perceived, which also ultimately enhances emotional bond between consumers and the live streamer and promote affective trust. Therefore, we propose that

Hypothesis 4a. Emotional contagion is positively associated with affective trust in live streamer.

Hypothesis 4b. Emotional contagion is positively associated with affective consumers' perceived pleasure.

3.1.2 Affective reactions and impulsive buying intention

The impulse buying literature indicates that positive emotions trigger the unplanned purchase behavior^[11, 13, 16]. Individuals are more likely to conduct impulsive buying or excessive consumption in positive affective state^[26]. Affective trust reflects a positive emotional relationship in live streaming. If users have emotional dependence and connection with the streamers, there will be more satisfaction of the relationship between users and live streamers^[21]. Users will enjoy the shopping process and be more willing to buy the products recommended^[25]. Hence, we have the following hypotheses:

Hypothesis 5. Affective trust in live streamer is positively associated with impulsive buying intention.

Hypothesis 6. Consumers' perceived pleasure is positively associated with impulsive buying intention.

Hypothesis 7. Affective trust in live streamer is positively associated with consumers' perceived pleasure.

3.2 Research model

Based on the above discussion, the model shown in Figure 1 is constructed to investigate the impact of live streamer's persuasion ability on consumers' impulsive buying in live streaming commerce. Drawing on S-O-R paradigm, we propose that live streamer's *persuasion ability* (i.e., logic, expertise, morality and emotional contagion) acts as a *stimulus* that influences the consumer's *affective reactions* (i.e., perceived pleasure and affective trust), which ultimately affect *impulsive buying intention* (i.e., the response).

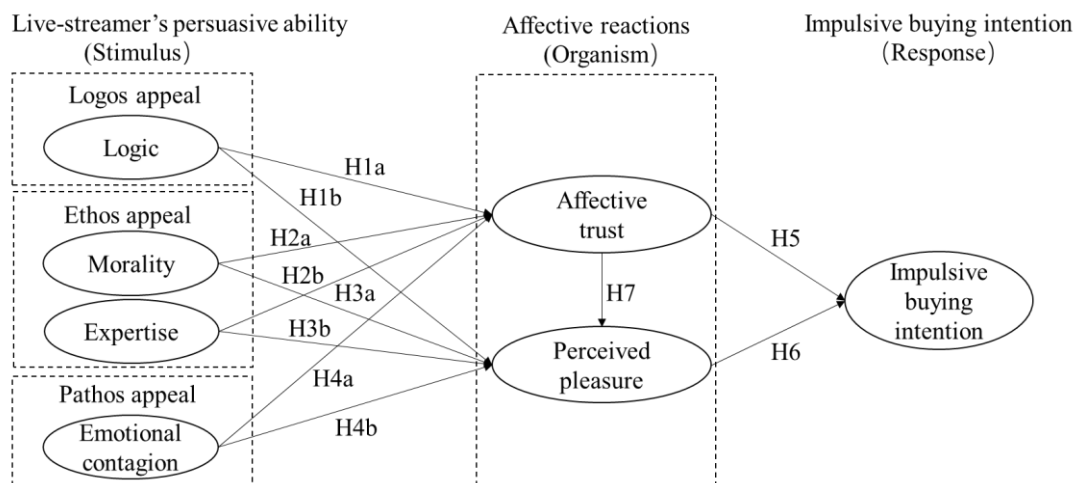


Figure 1. Research Model

4. METHODOLOGY

4.1 Data collection and demographic analysis

Our study was not limited to a specific live streaming commerce platform. We chose experienced users as the research objects from mainstream platforms in China, such as Taobao, TikTok, Kuaishou, Jingdong, etc. The sample was randomly collected through the well-known online survey platform wjx(<https://www.wjx.cn/>) in China. The survey hyperlink was placed online, and only those experienced users were targeted for data gathering. Screening questions were included to ensure that all respondents used more than one platform. The data were collected in April 2021. A total of 307 respondents participated in this survey, and 13 were excluded owing to incomplete or invalid answers, which resulted in a valid sample size of 294.

Table 2. Sample Demographics

Measure	Item	Frequency	Percentage
Gender	Male	128	43.5%
	Female	166	56.5%
Age (years)	18-25	82	27.9%
	26-35	164	55.8%
	36-45	37	12.6%
	>45	11	3.7%
Education	High school or below	4	1.4%
	Two-year or four-year College	270	91.8%
	Graduate or above	20	6.8%
Live streaming platforms	Taobao	275	93.5%
	Kuaishou	139	47.3%
	Jingdong	114	38.8%
	TikTok	87	29.6%
	Xiaohongshu	49	16.7%

Table 2 shows the demographic information of the subjects. Among them, 57.6% were female and 83.7% were aged below 35. The sample profile is consistent with findings from iiMedia Research that users of e-commerce live streaming platforms are generally younger and there are more women than men watching the livestream. As for the choice of platforms, 93.5% of the respondents used Taobao, followed by Tik Tok (77.6%) and Kuaishou (47.3%), which coincides with the current market share of live streaming commerce applications.

4.2 Measurement development

The questionnaire contained 7 constructs made up of 22 items. Most measurement items were identified from previous literature with minor modifications to fit the context of live streaming commerce. The measurements of morality adopted and amended by Zhou^[27]. Expertise commitment was measured with items adapted from Devon^[28]. The measurements of emotional contagion adopted from Shen et al^[29]. We have adapted items for affective trust from McAllister^[30], and items for perceived pleasure from Mehrabian^[10]. Impulsive buying intention was measured using items adapted from Parboteeah^[11]. The measurement of logic was formulated by extracting key information through text analysis of online interviews with users. A five-point Likert scale ranging from “1-strongly disagree” to “5-strongly agree” was used to measure the items.

5. RESEARCH RESULTS

We use SmartPLS Version 3.0 for data analysis. Partial Least Squares approach was employed in this study as it is a component-based statistical technique for causal modeling. As a structural equation modeling technique, PLS analyze the measurement model and the structural model simultaneously in one operation. Why we have chosen PLS was also due to the fact that PLS has less stringent sample size and indicator distribution requirements than the traditional SEM, such as LISREL approaches. This study conducted a two-step approach to conduct data analysis. First, we used confirmation factor analysis (CFA) to assess the reliability and construct validity. Second, we used the structural equation model analysis to empirically test the research hypothesis.

5.1 Assessment of measurement model

We assessed the composite reliabilities (CR) of all constructs to evaluate the internal consistency of the indicators measuring a given factor. In Table 3, the CR and Cronbach’s alpha of all constructs is above 0.7, indicating that the proposed model measures possess sufficient construct reliability. Table 3 showed that the standardized factor loadings for different measurement items are above the suggested threshold of 0.70 (range from 0.756 to 0.936) and average variance extracted(AVE) for all constructs are above the suggested threshold of 0.50 (range from 0.663 to 0.837). The results indicate good convergent validity of the measurements.

Discriminant validity was assessed by comparing the squared root of the AVEs of each construct with the correlations between the constructs, which suggest that the proposed model possesses sufficient convergent validity. As is presented in Table 3, the squared root values of the AVEs for constructs were greater than the correlations between constructs. The results demonstrate satisfactory discriminant validity, which means that all of the constructs differ from each other.

The research data were collected through a single self-reported survey, thus common method variance (CMV) was deemed a potential concern in this study. Therefore, we adopt the Harman’s single-factor test. The results suggest that no single factor explained most of the variance, suggesting common method bias was unlikely to be a serious threat in our study.

5.2 Analysis of structure model

The results of the analysis are depicted in Figure 2, which presents the overall explanatory power, the estimated path coefficients (all significant paths are indicated with asterisks) and the associated t-value of the paths. It is indicated that all our hypotheses were supported with the exception of H2a (morality affects affective trust). Impulsive buying intention, affective trust and perceived pleasure was explained by 25.8%, 31.8%, and

45.0% variances, respectively.

The results show that live streamer's persuasive ability has significant impact on consumers' affective state. Logic is positively associated with affective trust ($\beta = 0.232$, $p < 0.01$) and perceived pleasure ($\beta = 0.114$, $p < 0.05$); morality is positively associated with perceived pleasure ($\beta = 0.14$, $p < 0.05$); expertise is also positively associated with affective trust ($\beta = 0.164$, $p < 0.05$) and perceived pleasure ($\beta = 0.214$, $p < 0.001$); and so is emotional contagion (affective trust: $\beta = 0.210$, $p < 0.01$; perceived pleasure: $\beta = 0.249$, $p < 0.01$). Whereas, the effect of morality on affective trust was not statistically significant. Therefore, our results show that the four dimensions of live streamer's persuasive ability each positively impact on consumers' affective state to varying degrees in live streaming commerce. Furthermore, affective trust ($\beta = 0.191$, $p < 0.01$) and perceived pleasure ($\beta = 0.387$, $p < 0.001$) is positively associated with impulsive buying intention, these findings respectively support H5 and H6. The influence of affective trust on perceived pleasure was also supported ($\beta = 0.171$, $p < 0.01$). Therefore, the results confirmed that consumers' affective state is positively associated with impulsive buying intention.

In addition, the goodness-of-fit (GOF) measure was employed to measure the model fit degree. GOF is the square root of the product of average communality and average R^2 . The GOF in this study was 0.422, exceeding the medium criterion, which demonstrated a satisfactory model fit.

Table 3. Results of reliability and validity analysis

Construct	Item	Standardized factor loadings	Cronbach's α	CR	AVE
Logic (LO)	LO1	0.860	0.745	0.855	0.663
	LO2	0.806			
	LO3	0.774			
Morality (MO)	ME1	0.821	0.746	0.855	0.663
	ME2	0.792			
	ME3	0.829			
Expertise (PR)	PR1	0.876	0.846	0.907	0.765
	PR2	0.865			
	PR3	0.883			
Emotional contagion (EC)	EC1	0.861	0.760	0.861	0.674
	EC2	0.756			
	EC3	0.842			
Affective trust (AT)	AT1	0.854	0.841	0.893	0.677
	AT2	0.822			
	AT3	0.790			
	AT4	0.825			
Perceived pleasure (PP)	PP1	0.885	0.902	0.939	0.837
	PP2	0.922			
	PP3	0.936			
Impulsive buying intention (IBI)	IBI1	0.873	0.831	0.899	0.747
	IBI2	0.856			
	IBI3	0.864			

Table 4. Results of discriminant validity analysis

Construct	LO	MO	PR	EC	AT	PP	IBI
LO	0.814						
MO	0.529	0.814					
PR	0.447	0.349	0.875				
EC	0.540	0.517	0.440	0.821			
AT	0.477	0.399	0.398	0.465	0.823		
PP	0.500	0.472	0.492	0.557	0.482	0.915	
IBI	0.299	0.351	0.424	0.468	0.378	0.479	0.864

Notes: Diagonal elements of the matrix are the square root of AVE, and the lower half of the matrix is the correlation coefficient.

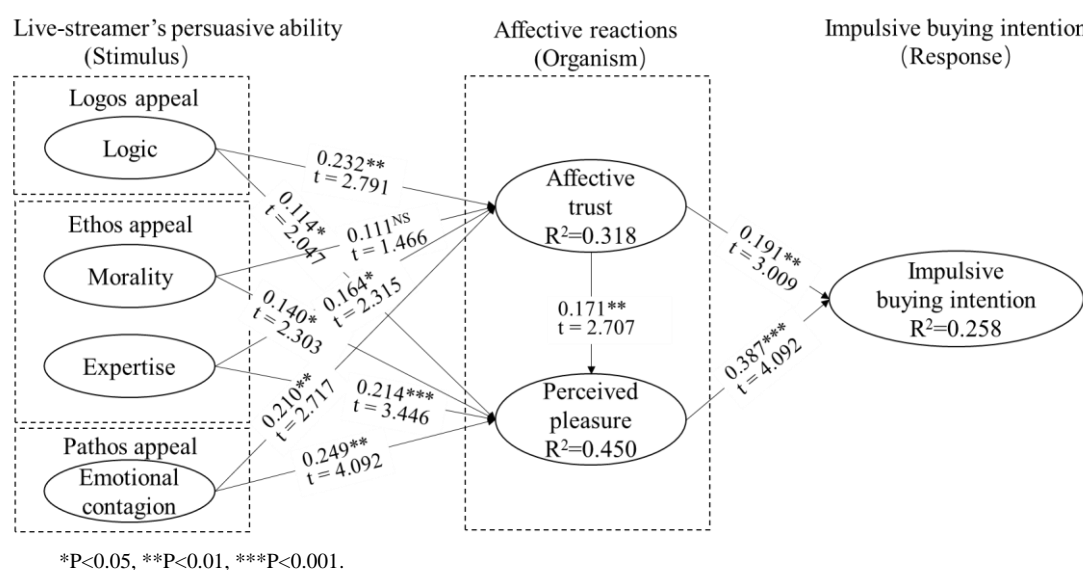


Figure 2. Results of model evaluation

6. DISCUSSION AND CONCLUSION

6.1 Conclusion

Drawing on S-O-R paradigm, this research attempts to make explorations into how e-commerce live streamer's persuasion ability influences consumers' impulsive buying intention in terms of their affective reactions. The results supported most of the proposed hypotheses. The key findings are summarized as follows.

E-commerce live streamer's persuasion ability has a significant impact on consumers' affective reactions including affective trust and perceived pleasure. The effect of emotional contagion is the most remarkable. It indicates that presenting a happy and excited state with strong emotional words in live-streaming is the most effective way to promote impulse buying. Morality has no significant effect on affective trust. It implies that moral characteristics like integrity are posteriori truths, live streamer can't gain consumers' trust in their moral characters only by linguistic expression. Although live streamers emphasize their good moral characters such as honest, these expressions are not convincing when lack of factual basis. Consumers would believe a live streamer indeed have good morals only when they confirm the fact that he/she can provide good products and after-sales service. Consumers' affective trust in live streamer and perceived pleasure all have positive impacts on their impulsive buying intention, which confirms that impulsive buying behaviors are mainly driven by consumers' positive emotions and is consistent with findings of Adelaar^[13]. Besides, we find that the association between affective trust and impulsive buying intention is partially mediated by perceived pleasure. This result reveals the intrinsic mechanism of affective trust's influence on impulsive buying intention, which further refines Chen's study^[14] and expands its research scenarios.

6.2 Implications for theoretical research

This study may contribute to the existing literature in the following two important ways. First, we apply Aristotle's rhetorical appeals to the e-commerce live-streaming, propose the concept of e-commerce live streamer's persuasive ability and distinguish its four dimensions, including logic, expertise, morality and emotional contagion. It extends the application scenarios of Aristotle's rhetorical appeals and provides a more diversified perspective for further studies on e-commerce live streaming user behaviors. Second, we investigate consumers' impulsive buying behavior in live-streaming commerce from the perspective of live streamer's persuasive ability based on S-O-R paradigm. It reveals the triggering mechanism of consumers' impulse buying behavior in live-streaming commerce, extends the influencing factors research in e-commerce impulse buying,

and provides a new way for researchers to understand consumer impulse buying.

6.3 Implications for practice

The findings of this research provide some valuable guidance for the cultivation of e-commerce live streamer's persuasive ability. First, in view of the significant impact of emotional contagion on consumers' affective response, it is recommended that e-commerce live streamers strengthen their emotional appeal through rhetorical skills such as metaphors parallelism, etc. and create a cheerful live-streaming atmosphere with emotive tone. Second, due to the positive influence of logic and expertise to the consumers' affective reaction, live streamers should prove necessity of purchasing based on commodity information like quality and so on, so as to ensure an integrated argument structure. They should also use concise expressions to introduce the products to ensure a clear argumentation process. Live streamers ought to learn more about commodity, such as brands and components. Furthermore, a professional selection team is needed to conduct a comprehensive analysis of commodity features so as to help live streamers to provide more abundant, complete and effective commodity information. At last, morality exerts the least impact on affective response. E-commerce live streamers should reduce the frequency of showing moral characteristics through linguistic expression and avoid using reputation to guarantee the quality of products.

6.4 Limitations and future researches

The research has several limitations to be improved. First, we only took the impact of consumers' positive emotions on impulsive buying behavior into consideration without any negative emotions such as sadness, empathy, fear, etc. Second, we used the questionnaire survey, so the impulsive buying intention couldn't translate into the actual behavior in reality. The further research can adopt consumer laboratory experiments to further verify the intrinsic mechanism of impulsive buying behavior in live-streaming commerce.

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REFERENCES

- [1] Sun Y, Shao X, Li X, Guo Y and Nie K(2019).How Live Streaming Influences Purchase Intentions in Social Commerce: An IT Affordance Perspective. *Electronic Commerce Research and Applications*,37:100886.
- [2] Addo P C, Fang J, Asare A O and Kulbo N B(2021).Customer engagement and purchase intention in live-streaming digital marketing platforms. *Service Industries Journal*,41(2):1-20.
- [3] Zhang M, Sun L, Qin F and Wang G A(2021).E-service quality on live streaming platforms: swift guanxi perspective. *Journal of Services Marketing*,35(3):312-324.
- [4] Luo H, Cheng S, Zhou W, Yu S and Lin X(2021).A Study on the Impact of Linguistic Persuasive Styles on the Sales Volume of Live Streaming Products in Social E-Commerce Environment. *Mathematics*,9(13):1576.
- [5] Chan T K H, Cheung C M K and Lee Z W Y(2017).The state of online impulse-buying research: A literature analysis. *Information & Management*,54(2):204-217.
- [6] Tirdatov I(2014).Web-Based Crowd Funding: Rhetoric of Success. *Technical Communication*,61(1):3-24.
- [7] Chu H, Deng Y and Chuang M(2014).Investigating the persuasiveness of E-commerce product pages within a rhetorical perspective. *International Journal of Business and Management*,9(4):31.
- [8] Bronstein J(2013).Like me! Analyzing the 2012 presidential candidates' Facebook pages. *Online Information Review*,37(2):173-192.
- [9] Al-Momani K R(2014).Strategies of persuasion in letters of complaint in academic context: The case of Jordanian university students' complaints. *Discourse Studies*,16(6):705-728.
- [10] Mehrabian A & Russell J A(1974).An approach to environmental psychology, Cambridge, MA, US: The MIT Press,

266, 266.

- [11] Parboteeah D V, Valacich J S and Wells J D(2009).The Influence of Website Characteristics on a Consumer's Urge to Buy Impulsively. *Information Systems Research*,20(1):60-78.
- [12] Liu Y, Li H and Hu F(2013).Website attributes in urging online impulse purchase: An empirical investigation on consumer perceptions. *Decision Support Systems*,55(3):829-837.
- [13] Adelaar T, Chang S, Lancendorfer K M, Lee B and Morimoto M(2003).Effects of media formats on emotions and impulse buying intent. *Journal of Information Technology*,18(4):247-266.
- [14] Chen Y, Lu Y, Wang B and Pan Z(2019).How do product recommendations affect impulse buying? An empirical study on WeChat social commerce. *Information & Management*,56(2):236-248.
- [15] Komiak S Y X & Benbasat I(2006).The effects of personalization and familiarity on trust and adoption of recommendation agents. *MIS QUARTERLY*,30(4):941-960.
- [16] Shen K N & Khalifa M(2012).System design effects on online impulse buying. *Internet Research*,22(4):396-425.
- [17] Punyatoya P(2019).Effects of cognitive and affective trust on online customer behavior. *Marketing Intelligence & Planning*,37(1):80-96.
- [18] Gentes A & Selker T(2013).Beyond Rhetoric to Poetics in IT Invention, In Kotz é P., Marsden G., Lindgaard G., Wesson J. and Winckler M.,eds. *IFIP Conference on Human-Computer Interaction*. Berlin, Heidelberg: Springer Berlin Heidelberg, 267-279.
- [19] Lu X(2014).Ethical leadership and organizational citizenship behavior: The mediating roles of cognitive and affective trust. *Social Behavior and Personality*,42:379-390.
- [20] Wan Y, Zhang Y and Yan M(2020).What influences patients' willingness to choose in online health consultation? An empirical study with PLS-SEM. *Industrial Management & Data Systems*,120:2423-2446.
- [21] Xu J D, Cenfetelli R T and Aquino K(2016).Do different kinds of trust matter? An examination of the three trusting beliefs on satisfaction and purchase behavior in the buyer – seller context. *The Journal of Strategic Information Systems*,25(1):15-31.
- [22] Kennedy M S, Ferrell L K and LeClair D T(2001).Consumers' trust of salesperson and manufacturer: an empirical study. *Journal of Business Research*,51(1):73-86.
- [23] Liu H, Chu H, Huang Q and Chen X(2016).Enhancing the flow experience of consumers in China through interpersonal interaction in social commerce. *Computers in Human Behavior*,58:306-314.
- [24] Lin Y, Yao D and Chen X(2021).Happiness begets money: Emotion and engagement in live streaming. *Journal of Marketing Research*,58(3):417-438.
- [25] Meng L M, Duan S, Zhao Y, Lü K and Chen S(2021).The impact of online celebrity in livestreaming E-commerce on purchase intention from the perspective of emotional contagion. *Journal of Retailing and Consumer Services*,63:102733.
- [26] Robert D & John R(1982).Store atmosphere: an environmental psychology approach. *Journal of retailing*,58(1):34-57.
- [27] Zhou L & Whitla P(2013).How negative celebrity publicity influences consumer attitudes: The mediating role of moral reputation. *Journal of Business Research*,66(8):1013-1020.
- [28] Johnson D & Grayson K(2005).Cognitive and affective trust in service relationships. *Journal of Business Research*,58(4):500-507.
- [29] Reniers R L, Corcoran R, Drake R, Shryane N M and Völlm B A(2011).The QCAE: A questionnaire of cognitive and affective empathy. *Journal of personality assessment*,93(1):84-95.
- [30] McAllister D J(1995).Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of management journal*,38(1):24-59.