

The Impact of Emotional Intensity of E-commerce Live Stream Anchors on Consumer Purchase Intention: The Mediating Role of Perceived Value

Zining Chen

Department of Creative Arts, Hong Kong Metropolitan University, 999077, Hong Kong, P. R. China

ABSTRACT

Live streaming is favored by consumers and businesses due to its low threshold, high heat, low cost, and great efficiency. To boost the sense of engagement and meet the needs of entertainment, communication, and shopping, consumers can participate in the development of content via the live broadcasting platform. Businesses transfer their items into the live streaming room in order to develop the market, enhance sales, and even promote new products. With the rapid expansion of the e-commerce live marketing model, the skill of e-commerce anchors is uneven, and how to cultivate anchors that are sought after and liked by consumers has progressively come into focus. The emotions shown by e-commerce anchors during live broadcasts have a direct impact on the viewing experience of consumers in the live broadcast room. In this context, this study attempts to evaluate the impact of e-commerce anchors' emotional intensity on customers' purchase intention, with an emphasis on the mediating role of perceived value.

KEYWORDS

E-commerce live streaming; Anchor's emotional intensity; Perceived value; Purchase intention

1 Introduction

This study will use SOR (Stimulus-Organism-Response) theory as a theoretical framework to investigate the impact of e-commerce anchors' emotional intensity on consumers' purchase intention, with a focus on the mediating role of perceived value. By using SOR (Stimulus-Organism-Response) theory, it is possible to deeply investigate the relationship between emotional intensity and purchase intention, which can broaden the application of SOR theory. The relationship between emotional intensity, perceived value, and purchase intention can be investigated in depth using the SOR (Stimulus-Organism-Response) theory, and the applicability of the SOR theory can be expanded. Furthermore, based on the SOR (Stimulus-Organism-Response) theoretical framework, this study uses the emotional intensity of e-commerce anchoring as the stimulus received by customers and incorporates emotion theory into the analysis of consumer behavior. This study can fill a vacuum in the literature and provide a new perspective on consumer behavior. Furthermore, from a practical standpoint, this paper serves as a reference for optimizing the e-commerce anchor strategy, improving the user experience, and developing the e-commerce sector.

This study investigates the mechanism by which the anchor's emotional intensity influences

customers' purchase intentions, using the degree of high emotion (emotional intensity) as the independent variable, perceived value as the mediator, and contextual circumstances as moderating variables. This research focuses on the emotional intensity approach used by e-commerce anchors, the mediating mechanism of perceived value, and the application and applicability of SOR theory to the study of e-commerce anchors' emotions.

Classification and application of emotional intensity strategies used by e-commerce anchors, i.e. to categorize emotional intensity strategies used by e-commerce anchors into positive and negative emotional strategies, and to clarify the application and effect of each type of emotional strategy in e-commerce live broadcasting. The experimental method is used to investigate the mediation mechanism of perceived value between the emotional intensity of e-commerce anchors and purchase intention. The extension and applicability of SOR (Stimulus-Organism-Response) theory in the research of e-commerce anchors' emotions, that is, to investigate the applicability of SOR theory in the relationship between e-commerce anchors' emotional intensity and customers' buy intention. Applicability.

This study will uncover the relationship law between the emotional intensity of e-commerce anchors and customer buy intention, as well as further investigate the role mechanism of emotional intensity in the e-commerce environment. Specific empirical evidence about the relationship between emotional intensity and purchase intention is offered using the experimental approach to increase understanding of the role mechanism of emotion in the formation of buy intention. Meanwhile, this study investigates the validity of perceived value's mediating function in the relationship between emotional intensity and purchase intention. This study will validate the role of perceived value as a moderator in the relationship between emotional intensity and e-commerce anchor purchase intention, as well as provide new empirical support for the application of SOR (Stimulus-Organism-Response) theory in the relationship between emotion and purchase intention.

2 Literature review

Investigate the style and strategy of e-commerce live streaming development. Scholars did multifaceted research on the distinctive mode and development plan of e-commerce live broadcasting. Baoyi Wang contends that e-commerce live broadcasting establishes a "goods to people" scenario, effectively locates the target group and accurately identifies consumer demand, and promotes the change of the efficient supply-demand matching link between the enterprise and the consumer^[1]. Quanzhong Guo believes that e-commerce live broadcasting is an advanced form and a new mode of content e-commerce, and that its "live+same+interactive" feature promotes content innovation, empowers users to participate in real-time and interactivity, establishes a lasting sense of trust, and aids enterprises in establishing a lasting sense of trust. It creates a brand image and achieves "product effect unity."^[2] In contrast, Yongsheng Zhou et al., on the other hand, subdivided social presence based on the live broadcasting scene and characteristics, built a model based on the SOR (Stimulus-Organism-Response) model theory, and investigated the impact of these two types of presence on consumers' purchase intention^[3]. According to Park and Lin, the match between the product and the live content influences the user's attitude toward the anchor, which in turn influences the user's attitude toward the product and the brand. Anchors must attract viewers through participatory and entertaining activities, while vendors must understand the personal traits of Netflix anchors as well as the peculiarities of live content^[4]. Hu et al. constructed a theoretical model of relational ties affecting consumer engagement based on the SOR (Stimulus-Organism-Response) theoretical model, and verified the influence mechanisms of social, structural, and financial relational ties on consumer engagement, respectively^[5].

Because this study is centered on the consumer sector, it analyzes studies on service personnel's emotional expression in customer service scenarios. According to Grandey's research, clients anticipate salespeople to display pleasant emotions and utilize them as part of their judgment of great service when they obtain it. According to Arik et al., effective emotional expression by service employees can greatly increase consumers' evaluations of service quality and products; poor emotional expression can have the reverse effect. Appropriate emotional expressions can considerably increase consumer assessments of service quality, customer satisfaction, and products, as well as improve favorable opinions of products and brands; incorrect emotional expressions can have the opposite effect. However, emotions do not always convey the communicator's genuine intention and purpose, and too exaggerated or intense emotional expressions may not win the other party's trust. In the live shopping scenario, the anchor's emotion influences the consumers' viewing experience and behavioral decisions. According to Jun Xiao and Sunan Guo, emotional communication by anchors is a fundamental ability and skill; they use the atmosphere of the live broadcast room and their own emotional contagion to continuously stimulate consumers' emotional responses, and timely emotional interaction with consumers to promote the occurrence of purchasing behavior^[6].

Emotional strategies are the deliberate and intentional behaviors or procedures used by an individual to regulate, express, or hide emotions in a given setting. There are three sorts of emotional strategies: high emotion strategy, medium emotion strategy, and depressed emotion strategy. The exorbitant emotion strategy in the live broadcast of e-commerce anchors refers to the e-commerce anchor displaying a positive, pleasant, and excited emotional state, creating a relaxing and pleasant shopping atmosphere, enhancing the emotional resonance of the audience, and promoting the audience's willingness to buy. A medium emotional approach is a type of emotional expression that falls somewhere between extravagant and depressed. The e-commerce anchor exhibits a smooth and neutral emotional state under the medium emotion approach, and aims to preserve professionalism without losing affinity. The e-commerce anchor exhibits a sad, dejected, and unenthusiastic emotional state under the declining emotional strategy. This emotive method may provide the audience with a sense of closeness and intimacy, emphasizing genuineness and intimacy. Overuse of declining emotions, on the other hand, may result in unfavorable audience emotions.

Through combing the literature, we discovered that research on perceived value involves advertising, branding, offline sales, virtual communities, social media, and many other fields, and that as new technologies emerge, scholars from various perspectives have injected new vitality into the theory of perceived value. Because of its media richness, Chin-Lung et al. discovered that live broadcasting had a considerable impact on brand loyalty. The entertainment, information, and social value that consumers perceive from the timely feedback, multiple cues, linguistic richness, and interactions of anchors in live broadcasts can increase customer stickiness and loyalty^[7]. Hilvert-Bruce et al. demonstrated that obtaining an entertainment experience from live broadcasts is an important motivation for users to watch live broadcasts, and, in addition, live broadcasts can also be a channel for anchors to channel to provide product or service sales. According to Yukui Luo, timely engagement of anchors during live broadcasting to answer queries and provide more information can considerably enhance the time consumers stay in the live broadcasting room and ultimately make purchase decisions^[8]. According to Xiangguo Li and other scholars, perceived value is the consumer's judgment of items and services based on subjective experience and personal feelings, such as entertainment, information, and social experiences acquired from products or services.

3 Research hypothesis

Based on the integration of the preceding literature, we know that there have been related studies on the impact of e-commerce anchors' emotional intensity on customers' buy intention. Many academics are interested in the function of emotions in sales and marketing, particularly the effect of emotional expression on customer purchase decisions. Relevant studies have proven the impact of emotional expression on customers' emotional resonance and purchase intention, underlining the relevance of emotions in establishing emotional connections with consumer brands. However, comprehensive research on the direct and indirect effects of e-commerce anchors' emotional techniques on consumers' purchase intention, as well as the mediation function of perceived value, is lacking.

This study will highlight the range of emotional intensity tactics and the mediating function of perceived value, as well as investigate in depth the mechanism of the influence of e-commerce anchors' emotional intensity on customers' buy intention. The experimental method's research design intends to uncover the direct influence of different emotional intensities on purchase intention, as well as the mediating role of perceived value in it.

As a result, the following research topics and hypotheses are proposed in this paper:

Q1: Is it possible for the emotional intensity of live e-commerce anchoring to impact users' purchasing intentions?

Q2: What role does perceived value play in the interaction between e-commerce value anchor emotional assessments and customer purchase intention?

H1: Emotional intensity in live streaming effects consumers' buying intentions positively.

H2: The association between live-streaming emotional intensity and customer purchase intention is mediated by perceived value.

4 Design of experiment

Before processing and analyzing the collected data, the control questions (i.e., the subjects' attitudes toward the anchors and the attractiveness of the products) were first processed to exclude data with extreme attitudes toward the anchors and the products shown in the formal experiment. After excluding 20 subjects, the final number of participants was 60, with 29 men and 31 females.

4.1 Experimental procedures

4.1.1 Information survey and group coding of experimental subjects

Prior to the experiment, the experimental respondents' basic information (gender, age, shopping frequency, etc.) as well as measurement indexes relating to buy intention and perceived value were collected. The gender of the experimental subjects was regulated to guarantee that each group of ten had ten males and ten girls. The subjects were divided into three groups: those who used positive emotion strategies, those who used negative emotion strategies, and those who used emotionally neutral strategies. To avoid bias in the experimental outcomes, the basic characteristics of the three groups were ensured to be similar.

4.1.2 Emotional intensity experimental simulation

Each experimental group watched a simulated live video of an e-commerce anchor with varying emotion intensity tactics. Subjects in the positive emotional intensity strategy group saw the experimental material in which the anchor explained the products with an excited tone,

exaggerated facial expressions, and more body movements; subjects in the negative emotional intensity strategy group saw the experimental material in which the anchor explained the products with a calm tone, stable expressions, and fewer body movements; and subjects in the emotionally neutral intensity strategy group saw the experimental material in which the anchor explained the products with a calm tone, stable expressions, and fewer body movements. Expression strategy based on emotional intensity.

4.1.3 Measurement of perceived value and purchase intention

After watching the video, the experimental subjects completed the perceived value measurement questionnaire, which was used to estimate their perceived value of the observed anchor's product or service. These evaluations included product quality, price reasonableness, and shopping experience. The experimental respondents were then asked to respond to purchase intention measurement questions, which were intended to assess their purchase intention for the items or services of the viewed anchors.

4.2 Data acquisition

As shown in Tables 1 and 2, this paper employs the Pleasure-Arousal Mood Scale developed by Patrick Van Kenhove and Patrick Desrumaux to assess both the independent variable Perceived Anchor Mood and the mediator variable Consumer Mood. This scale divides positive mood into two dimensions, Pleasure and Arousal.

Table 1 Perceived anchor mood measures

Variant	Dimension	Subject						
Sensing the positive emotions of an anchor	cheerfulness	Fulfillment	5	4	3	2	1	Frustrated
		Joyful	5	4	3	2	1	Unhappy
		Happy	5	4	3	2	1	Distressed
		Unrestrained	5	4	3	2	1	Irritable
	Arousal	Stimulation	5	4	3	2	1	Relaxed
		Euphoria	5	4	3	2	1	Calm
		Excitement	5	4	3	2	1	Unexcited

Table 2 Consumer Positive Emotions Measures

Variant	Dimension	Subject						
Positive consumer sentiment	cheerfulness	Fulfillment	5	4	3	2	1	Frustrated
		Joyful	5	4	3	2	1	Unhappy
		Happy	5	4	3	2	1	Distressed
		Unrestrained	5	4	3	2	1	Irritable
	Arousal	Stimulation	5	4	3	2	1	Relaxed
		Euphoria	5	4	3	2	1	Calm
		Excitement	5	4	3	2	1	Unexcited

As in Table 3, regarding the measurement of perceived value and willingness to buy, this paper refers to the results of Martin and William.

5 Data analysis

As shown in Table 4, the correlation coefficients between positive emotional arousal and positive emotional pleasantness, positive emotional arousal of perceived anchors and positive emotional pleasantness of perceived anchors are all significant, with correlation coefficients of 0.937, 0.998,

Table 3 Measurement of perceived value and willingness to buy

Variant	Measurement items
Emotional intensity assessment	I find it pleasurable to watch this broadcast.
	I enjoy watching this broadcast.
	I found this live broadcast interesting.
Perceived value assessment	I found the product or service in the anchor's live stream useful to me.
	I found the content of the anchor's live broadcast interesting and engaging.
	The product or service in the anchor's live stream meets my needs and preferences.
	The product or service in the anchor's live stream has some value to me.
	I think it is worthwhile to purchase the product or service in the anchor's live stream.
Willingness to buy	There is a high likelihood that I would consider purchasing the product or service recommended by the e-commerce anchor.
	I would be willing to purchase a product or service recommended by this e-commerce anchor.
	There is a good chance that I will continue to purchase products or services recommended by this e-commerce anchor in the future.
	I would recommend this product or service to friends and family.

and 0.933, respectively, and the correlation coefficients are greater than 0, which means that the correlation coefficient between positive emotional arousal, positive emotional pleasantness of perceived anchors and positive emotional arousal of perceived anchors is 0.940 and significant at the 0.01 level. Pleasure, Perceived Anchor Volume The correlation coefficient value between consumer positive emotional pleasure and perceived anchor positive emotional arousal is 0.940 and shows significance at the 0.01 level, thus indicating that there is a significant positive correlation between consumer positive emotional pleasure and perceived anchor positive emotional arousal. The correlation coefficient between consumers' positive emotional well-being and perceived anchors' positive emotional well-being is 0.983 and shows significance at the 0.01 level, thus indicating that there is a significant positive correlation between consumers' positive emotional well-being and perceived anchors' positive emotional well-being. There is a positive correlation between the three items of Extreme Emotional Arousal, Perceived Anchor Positive Emotional Pleasure, and Perceived Anchor Positive Emotional Pleasure.

The value of the correlation coefficient between the perceived positive emotional arousal of the anchor and the perceived positive emotional pleasure of the anchor is 0.933 and shows a significance at the 0.01 level, thus indicating that there is a significant positive correlation between the perceived positive emotional arousal of the anchor and the perceived positive emotional pleasure of the anchor.

As shown in Table 5, the correlation coefficient between willingness to buy and perceived value assessment is 1.000 and shows a significance at the 0.01 level, thus indicating that there is a significant positive relationship between willingness to buy and perceived value assessment. The correlation coefficient value between willingness to buy and emotional appraisal strategy is 0.997 and shows significance at 0.01 level, thus indicating that there is a significant positive relationship between willingness to buy and emotional appraisal strategy.

The correlation coefficient value between perceived value assessment and emotion evaluation strategy is 0.997 and shows significance at 0.01 level, thus indicating that there is a significant positive relationship between perceived value assessment and emotion evaluation strategy.

The research hypotheses of this study were tested by analyzing the data using SPSS data analysis software and the test results are shown in Table 6.

Table 4 .Measures of Emotional Arousal and Emotional Pleasure

		Positive consumer arousal	Consumer Positive Emotional Pleasure	Perceived positive emotional arousal of anchors	Perceived Positive Emotional Pleasure of the Anchor
Positive consumer arousal	Correlation coefficient	1			
	p-value	-			
	Sample size	-			
Positive consumer arousal	Correlation coefficient	0.937**	1		
	p-value	0.000	-		
	Sample size	61	-		
Perceived positive emotional arousal of anchors	Correlation coefficient	0.998**	0.940**	1	
	p-value	0.000	0.000	-	
	Sample size	61	61	-	
Perceived positive emotional arousal of anchors	Correlation coefficient	0.933**	0.983**	0.933**	1
	p-value	0.000	0.000	0.000	-
	Sample size	61	61	61	-

* $p < 0.05$ ** $p < 0.01$

Table 5 Analysis of Measurements of Perceived Value and Purchase Intention

		Willingness to Buy	Perceived Value Assessment	Emotional evaluation strategies
Willingness to Buy	Correlation coefficient	1		
	p-value	-		
	Sample size	-		
Perceived Value Assessment	Correlation coefficient	1.000**	1	
	p-value	0.000	-	
	Sample size	60	-	
Emotional evaluation strategies	Correlation coefficient	0.997**	0.997**	1
	p-value	0.000	0.000	-
	Sample size	60	60	-

* $p < 0.05$ ** $p < 0.01$

Table 6 Research hypothesis validation

Hypothesis	Hypothetical content	Test results
H1	Emotional intensity in live streaming positively influences consumers' purchase intention	Established
H2	Perceived value mediates the relationship between emotional intensity in live streaming and consumer purchase intention	Established

6 Conclusions

It was discovered through the experiment that the anchor with good effect in the live broadcast process states are very positive, high-pitched voice, faster speech, expression, and body language is extremely rich, as the starting point of the happy mood and transmitter, first and foremost to make their own state of positive in order to have enough infectious force. According to the findings of this

paper's research, good consumer emotions can greatly increase consumer trust in the brand and increase the consumer's propensity to buy. Among these, the sense of excitement is a key signal for stimulating consumers' emotional enjoyment and buying intent. As a result, marketers can concentrate on mobilizing consumers' sense of excitement, such as by allowing anchors to strengthen emotional infectivity and build emotional resonance with consumers. Network anchors can boost the emotional effect of a live broadcast by yelling in this manner, that is, by using a single recurring rhythm and simple, catchy lyrics to communicate with customers in order to activate the mood in the live broadcast.

7 Research limitations

(1) The limitations of experimental materials. The selection of anchor type is relatively single. The anchors were selected to be young anchors aged around 20 years old with better image quality, but in the actual live broadcasting scene, there are more types of anchors. Therefore whether other types of anchors as stimulus materials can draw conclusions consistent with this paper remains to be studied.

(2) The limitations of variable selection. This paper constructs a model from the perspective of anchor emotional intensity, but there are many factors that influence consumers to make purchase decisions during the process of watching e-commerce live broadcasts, and the variables selected in this paper do not allow for a comprehensive examination. Consumers may also be affected by factors such as the anchor's image, the atmosphere of the live broadcast room, and changes in consumer emotions to produce purchase behavior in the live broadcast.

About the author

Zining Chen is undergraduate of Department of Creative Arts, Hong Kong Metropolitan University, and her research field is marketing.

References

- [1] Wang B. (2021). The essence, logic and trend of livestreaming e-commerce. *China Business and Market*, 35(04), 48-57.
- [2] Guo Q. (2020). Development motivation, status and trend of e-commerce live streaming in China. *News and Writing*, 39(08):84-91.
- [3] Zhou Y., Tang S. & Xiao J. (2021). Research on consumers' purchase intention on e-commerce live streaming platform: Based on the perspective of social proximity. *Contemporary Economic Management*, 43(01):40-47.
- [4] Park H., & Lin L. (2020). The effects of match-ups on the consumer attitudes toward internet celebrities and their live streaming contents in the context of product endorsement. *Journal of Retailing and Consumer Services*, 52, 101934.
- [5] Hu M., & Chaudhry S. S. (2020). Enhancing consumer engagement in e-commerce live streaming via relational bonds. *Internet Research*, 30(3), 1019-1041.
- [6] Xiao J. & Guo S. (2020). Algorithmic emotion: Emotional communication in live bandwagon. *News and Writing*, 39 (09):5-12.
- [7] Hsu C., Lin J., & Miao Y. (2020). Why are people loyal to live stream channels? The perspectives of uses and gratifications and media richness theories. *Cyberpsychology, Behavior, and Social Networking*, 23(5), 351-356.
- [8] Luo Y. (2020). Analysis of factors influencing consumers' online purchase intention based on personalized recommendation. *Research on Business Economy*, 41(09):75- 79.