# Research of the Impact of Low-Carbon Network Development on the Impulsive Purchase Intention: Empirical Evidence based on SOR Model

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## Abstract

In the context of global warming, a "low-carbon economy" based on low energy consumption and low pollution has become a global hot spot. The popularity of the Internet has brought competitive advantages to the "non-contact economy" of webcasting. Therefore, the development and promotion of the service model of webcasting with goods has become an effective way to implement a low-carbon economy. Based on the Stimulus-Organism-Response (S-O-R) theoretical model, this paper analyzes the influence factors of consumers' impulsive purchase intention from two aspects of consumer pleasure and arousal using online questionnaire data. The results show that: 1) The aesthetic, entertainment and authentic stimulations of the live webcast of visual merchandising have significant positive impacts on consumers' impulsive purchase intention. 2) Positive pleasure and arousal have some mediating effects between the aesthetic, entertainment and authentic stimulation of the live webcast of visual merchandising and consumers' impulsive purchase intention. 3) when other conditions remain unchanged, there is a significant positive correlation between positive emotion and impulsive purchase intention. Therefore, enhancing the multiple stimuli of live visual merchandising and grasping the emotional dynamics of consumers are helpful to the formation of impulsive purchase intention.

## Keywords

Low-carbon; SOR Model; Structural Equation Model; Random Forest Model.

## 1. Introduction

Under the general trend of consumption upgrades, consumer needs are increasingly showing individual characteristics, and scene-based needs have gradually become a consumer trend (Agdayemawer and Kumar 2019). Compared with the general online shopping platform, consumers can enter the live webcast room to watch and purchase at any time, which greatly reduces the time and space limitations of the shopping scene (Floh and Madlberger 2013). Webcast being a new way of shopping, and in the context of the continuous popularity of mobile terminals such as mobile

phones and the continuous acceleration of the mobile Internet, the entertainment of interaction and the authenticity of the display can be fully displayed in the webcast room (Turkyilmaz et al. 2015).

According to the 45th "Statistical Report on China's Internet Development Status" by China Internet Network Information Center, as of March 2020, the number of live webcast users in our country has reached 560 million (In 2020). This is an increase of 163 million from the end of 2018, accounting for 62.0% of the total netizens. Online live marketing, through real-time product display and interaction with consumers, deeply restores the real-life entertainment and consumption scenes to consumers, strongly attracts consumers' attention, and accelerates the generation of impulsive shopping desires.

Under the continuing impact of COVID-19, live webcast has attracted more and more attention from the government and enterprises. However, current researches on the marketing model of webcast mainly focus on the characteristics of the media or the factors affecting consumer shopping satisfaction. There are few related studies on the impact of live web marketing on impulsive shopping. Therefore, this article constructs a consumer impulsive purchase willingness model with the stimulus factors of live webcast visual marketing being independent variables and consumer psychological emotions being the intermediary variable. Through a questionnaire survey and empirical analysis, we explore the impact of webcast visual marketing on consumers. The influence of impulsive shopping willingness can improve the relevant theoretical system, which has a certain reference significance for the government to expand domestic demand, stimulate consumption, and help enterprises formulate webcast marketing strategies.

## 2. Literature Review

Impulsive purchase intention refers to the sudden desire to purchase without a clear plan (Beatty and Ferrell 1998). This impulsive buying phenomenon is common in people's online shopping (Adelaar et al. 2003). Parboteeah's research results reveal that the possibility and extent of consumers' impulsive purchase intention are directly or indirectly stimulated by visual attraction (Parboteeah et al. 2009). Engel and Blackwell find that when consumers feel a sudden and strong emotional reaction, impulsive purchase intention will be triggered (Weinberg and Gottwald 1982). It can be seen that consumers' impulsive purchase intention is influenced by visual perception and psychological emotion. Therefore, live webcast visual marketing needs to attract consumers' attention and promote positive consumer sentiment to effectively stimulate the generation of buying impulse.

Sensory marketing such as visual marketing stimuli can lead consumers to produce emotional experiences (Silva et al. 2018). At the same time, the research results of (노희정 and 김동진 2019) show that the improvement of visual marketing has a significant positive impact on consumers' purchasing intention. Visual Merchandising is the aesthetic consumption of silent language (Zheng and Li 2018). Charla Mathwick finds that marketing scene design, which is worthy of taste and appreciation, gives consumers a visually beautiful and comfortable aesthetic feeling and can strongly affect consumers' inner world (Benjamin 1999). Stimulated by visual merchandising, it can enhance consumers' perception of visual aesthetics and hedonic value, and help promote the sale of goods (SACKRIDER et al. 2009).

The webcast directly stimulates the perception of consumers' eyes, ears and other organs by providing interactive and interesting activities, and enhances the resonance of Hedonic Value. At the same time, real-time live dynamic image display that cannot be edited or retracted further triggers consumers' visual authenticity experience and enhances emotional pleasure. In summary, this article divides the stimulus factors of live webcast visual marketing into aesthetics, entertainment, and authenticity, and believes that these stimuli will affect consumers' emotional response, and then affect consumers' impulsive purchase intention.

(Russell and Pratt 1980) classifies psychological emotions into two dimensions, one is Arousal, which can be divided into high and low levels; the other is Pleasure, which can be divided into positive and negative. Once the external marketing stimulus successfully induces customers' sudden and strong

inner emotional response, and such response is positive, it will have a positive influence their impulsive purchase intention (Dholakia 2000).

## 3. Theory and hypothesis

### 3.1 Theory

SOR model is based on environmental psychology, which believes that consumers generate motivation under the stimulation of various external situational factors (Mehrabian and Russell 1974). Driven by motivations, including internal pleasure, Gilbert Ryle arousal and other emotional motivations, consumers will form the external purchase reaction of approaching or avoiding. Up to now, many scholars have used the SOR theory to study consumer behavior (Floh and Madlberger 2013).

This article applies the SOR theory to the field of online live shopping and uses the stimulus factors of live online visual marketing as predictor variables, which are aesthetics, entertainment, and authenticity. Take pleasure emotion and arousal emotion as intermediate variables. And take impulsive buying intention as the result variable to establish the logic model of this article (Donovan et al. 1994).

### 3.2 Hypothesis proposed

Visual Merchandising variables have significant effects on impulsive buying variables (Widayati et al. 2019). The higher the consumers evaluate their visual aesthetic sense, the more they will be able to experience the positive emotion of joy, and the more likely they will form the impulsive buying willingness. (Morgan 2011) believes that an authentic and dramatic visual setting is a catalyst for buying intention. Webcast, being a new online shopping channel, brings consumers a powerful visual experience. Therefore, by improving consumers' sensory visual marketing stimuli, merchants can attract consumers to watch and promote consumer impulsive purchases. Based on the above analysis, this article proposes the following hypotheses:

H1: When other conditions remain unchanged, the stimulus of live webcast visual merchandising has a significant positive correlation with impulsive purchase intention.

H1a: The aesthetic stimulation of live webcast visual merchandising positively affects consumers' impulsive purchase intention.

H1b: The entertainment stimulation of live webcast visual merchandising positively affects consumers' impulsive purchase intention.

H1c: The authentic stimulation of live webcast visual merchandising positively affects consumers' impulsive purchase intention.

(Kotler 1973) establishes the concept of store atmosphere, believing that store atmosphere is the focus of marketing. Adam 's survey results show that there is a positive correlation between visual marketing stimuli and consumers' impulsive buying behavior (Adam 2020). By generating visual impact and attraction through store atmosphere to stimulate consumers' sensory perception can significantly affect consumers' emotions and increase their purchasing possibility. Good visual marketing stimuli can successfully promote impulsive purchases through positive emotion. Based on the above analysis, this article proposes the following hypotheses:

H2: When other conditions remain unchanged, the stimulus of live webcast visual merchandising indirectly promotes the increase of impulsive purchase intention through positive emotional factors.

H2a: Pleasant emotion is the mediating variable of live webcast visual merchandising's stimulating factor to promote impulsive purchase intention.

H2b: Awakening emotion is the mediating variable of live webcast visual merchandising's stimulating factor to promote impulsive purchase intention.

Since the 1980s, the emotional consumption logic of consumers has gradually taken shape (Lipovetsky 2007) . Researches find that emotional guidance and stimulation in the marketing process

play an important role in promoting consumers' shopping intention. Hausman 's research shows that positive emotional responses may promote consumers' impulsive purchases (Hausman 2000). Therefore, this paper proposes the following hypotheses:

H3: When other conditions remain unchanged, positive emotions have a significant positive correlation with impulsive buying intention.

H3a: There is a significant positive correlation between pleasure emotion in positive emotions and impulsive purchase intention.

H3b: There is a significant positive correlation between arousal emotion in positive emotions and impulsive purchase intention.

# 4. Empirical analysis

## 4.1 Data

This article selects consumers who have watched the webcast and have had purchase experience as the target group of the questionnaire. In this study, questionnaires were distributed online. A total of 428 questionnaires were distributed, with an effective rate of 100%.

The questionnaire adopts the Likert 5-level scale, which is suitable for the Cronbach's Alpha coefficient method to test the reliability of the questionnaire. Upon examination, the reliability coefficient of each variable in the questionnaire is more than 0.8, indicating that the sample is rather reliable. The KMO value is more than 0.7, and Bartlett's significance is 0.000, indicating that the sample quality of the questionnaire is high. Using the SPSS software to analyse the correlation between the variables, we find that the correlation coefficient r between the variables is more than 0.8, and there is a significant correlation at the 0.001 level, and the hypotheses have been preliminarily verified.

Table 1. The importance of the influence of various dimensions on impulsive purchase intention

| Dimension | Gini Index | Sort |
|---|---|---|
| Aesthetic feeling | 66.04 | 1 |
| Pleasure | 64.88 | 2 |
| Authentic feeling | 64.20 | 3 |
| Entertainment feeling | 61.21 | 4 |
| Arousal | 47.19 | 5 |
| Shopping time | 4.49 | 6 |
| Shopping frequency | 4.23 | 7 |
| Age | 3.86 | 8 |
| Education | 2.55 | 9 |
| Gender | 1.87 | 10 |
| Profession | 1.08 | 11 |

## 4.2 Factor Analysis

### 4.2.1 Factor analysis based on random forest

To verify the importance of visual merchandising stimuli (aesthetic feeling, entertainment feeling and authentic feeling), consumers' psychological emotions (pleasure, arousal), and some demographic variables and basic information (gender, age, occupation, education background, frequency of online shopping and length of watching time) on the impulsive purchase intention of the respondents in the live webcast situation, we use Random Forest model in machine learning in this paper. The Random Forest model is a classifier that uses multiple decision trees to learn the training samples and predict the results. (Breiman 2001) pointed out that based on the decision tree, the over-fitting and variance in the decision tree clustering algorithm could be greatly reduced by using the process of random sampling. This algorithm has advantages in high-dimensional data processing, and when combined with other models (such as boosting, bagging), can greatly improve the prediction accuracy,

applicability and research efficiency of the model. In the random forest process, each node uses the C4.5 algorithm to select the feature variable, and its measure standard is the Gini coefficient minimization criterion. The Gini coefficient represents the amount of information of the feature variable at the node. The larger the value is, the more information the feature variable contains, and the higher the importance is.

### 4.2.2. Factor Analysis based on structural equation

The structural equation model (SEM), which includes the measurement model and structural model, is a combination of the causal relationship model between latent variables and the factor relationship model between indicators and latent variables. It makes up for the potential variables in the field of consumer behaviour research that cannot be directly measured by traditional statistical analysis methods and is widely used in economics, marketing, psychology, and sociology. The measurement model aims to establish the relationship between the observed variables and the latent variables, while the structural model refers to the relationship between the latent variables and the part of the variance that cannot be explained by other variables in the model. If only measurement equations are included in the structural equation model, it is called the confirmatory factor model.

Based on the structural equation model, this article calculates the factor loads of visual merchandising stimulus variables (aesthetic feeling, entertainment feeling and authentic feeling), on consumers' psychological and emotional pleasure and arousal, and consumers' psychological and emotional pleasure and awakening on impulsive purchase intention. The structural relationships among the factors are shown in the following figure.
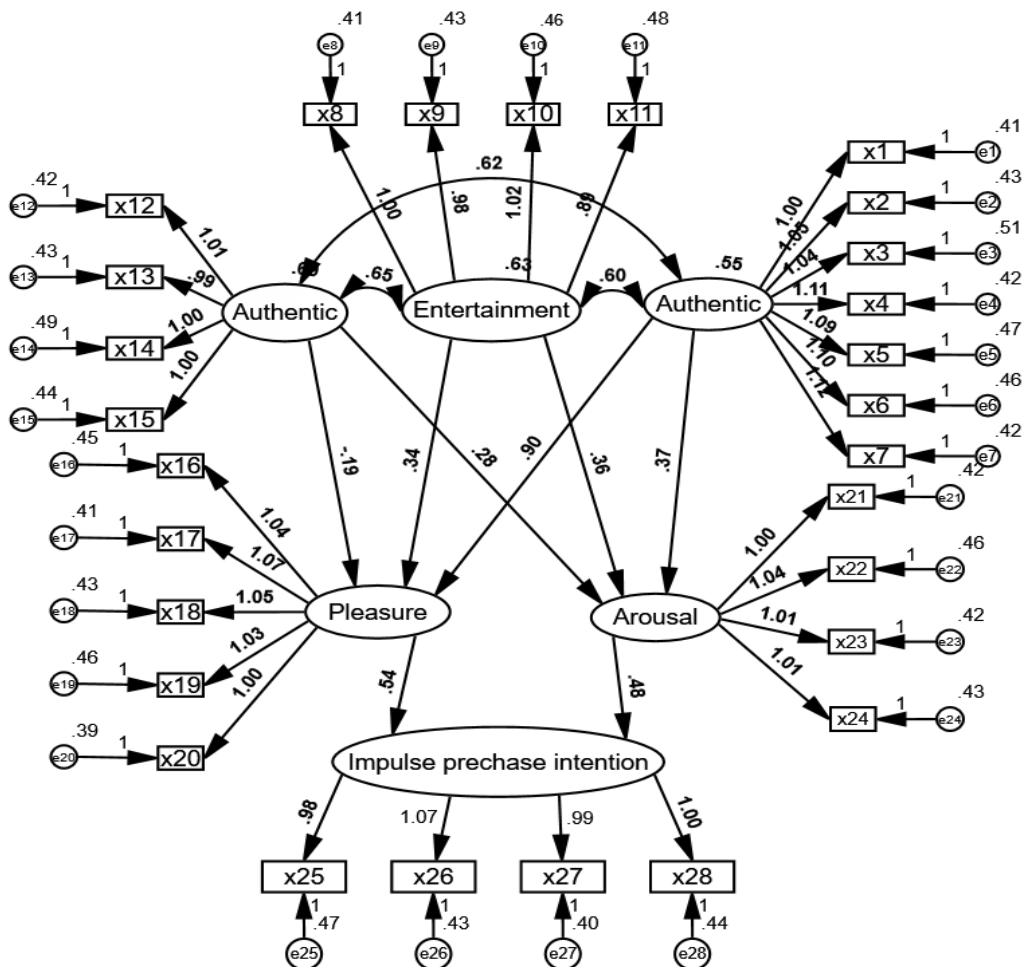


Figure 1. The structural relationships among the factors

Through the analysis of Table 2, we can see that the standardized influence coefficients of aesthetics, entertainment and authentic on pleasure emotion in visual merchandising stimulus factors are 0.501, 0.334, 0.267, and the standardized path coefficients for arousal emotion are 0.522, 0.273, 0.324. The corresponding significance levels are all less than 0.001, indicating that the data pass the statistical test at the 99.9% confidence level. This shows that aesthetic feeling, entertainment feeling and authentic feeling have significant positive effects on pleasure and arousal, which means that the stronger the aesthetic feeling, entertainment feeling and authentic feeling of visual merchandising stimulation factors are, the stronger the customers can feel the mood of pleasure and arousal. The test results show that the standardized influence coefficients of pleasure and arousal on impulsive purchase intention are 0.728 and 0.295 respectively, which are both significant at 0.001 level, indicating that positive emotion and impulsive purchase intention have a significant positive correlation when other conditions remain unchanged. Hypothesis H3 is verified. This indicates that in the situation of live webcast, the stronger the customers' pleasure and arousal are, the stronger their impulsive purchase intention will be. Hypothesis H3a and H3b are verified.

### Table 2. Structural equation model standardized path coefficient results

|  |  |  | Estimate | S.E. | C.R. | P |
|---|---|---|---|---|---|---|
| Pleasure | <—— | Aesthetic feeling | 0.501 | 0.06 | 8.342 | *** |
| Pleasure | <—— | entertainment feeling | 0.334 | 0.051 | 6.517 | *** |
| Pleasure | <—— | Authentic feeling | 0.267 | 0.046 | 5.874 | *** |
| Arousal | <—— | Aesthetic feeling | 0.522 | 0.07 | 7.405 | *** |
| Arousal | <—— | Entertainment feeling | 0.273 | 0.055 | 4.945 | *** |
| Arousal | <—— | Authentic feeling | 0.324 | 0.055 | 5.85 | *** |
| Impulse purchase intention | <—— | Pleasure | 0.728 | 0.177 | 4.964 | *** |
| Impulse purchase intention | <—— | Arousal | 0.295 | 0.163 | 4.113 | *** |

### Table 3. Results of multiple regression estimation

|  | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| Aesthetic feeling | 0.9224*** | 0.6345*** | 0.4288*** | 0.3347*** | 0.2996*** |
|  | (35.97) | (11.93) | (6.76) | (4.94) | (4.30) |
| Entertainment feeling |  | 0.3206*** | 0.2576*** | 0.1994*** | 0.1858*** |
|  |  | (6.10) | (4.95) | (3.71) | (3.44) |
| Authentic feeling |  |  | 0.2747*** | 0.2282*** | 0.2063*** |
|  |  |  | (5.54) | (4.51) | (4.01) |
| Pleasure |  |  |  | 0.2043*** | 0.1676*** |
|  |  |  |  | (3.60) | (2.82) |
| Arousal |  |  |  |  | 0.1105** |
|  |  |  |  |  | (2.02) |
| Gender | 0.0075 | 0.0066 | -0.0027 | -0.0041 | -0.0055 |
|  | (0.17) | (0.16) | (-0.07) | (-0.10) | (-0.14) |
| Age | 0.0251 | 0.0154 | 0.0183 | 0.0144 | 0.0137 |
|  | (0.93) | (0.59) | (0.73) | (0.58) | (0.55) |
| Profession | -0.1175* | -0.0899 | -0.0873 | -0.0760 | -0.0800 |
|  | (-1.84) | (-1.46) | (-1.47) | (-1.29) | (-1.37) |
| Shopping frequency | -0.0399* | -0.0249 | -0.0179 | -0.0102 | -0.0094 |
|  | (-1.68) | (-1.08) | (-0.81) | (-0.46) | (-0.43) |
| Shopping time | 0.0341 | 0.0273 | 0.0185 | 0.0170 | 0.0134 |
|  | (1.48) | (1.23) | (0.86) | (0.80) | (0.63) |
| Constant | 0.4305*** | 0.2835** | 0.2603** | 0.2297** | 0.2228* |
|  | (3.48) | (2.34) | (2.22) | (1.98) | (1.93) |
| Observed value | 428 | 428 | 428 | 428 | 428 |
| R-squared | 0.7568 | 0.7766 | 0.7919 | 0.7982 | 0.8001 |

Note: *, * * and * * represent 10%, 5% and 1%, respectively, and the t statistics of the corresponding explanatory variables are shown in parentheses. (The same as blow)

## 4.3 Regression result

### 4.3.1. Influence mechanism of various factors on impulsive buying intention

The following is a multiple regression analysis of the relationship between the core variables studied. Table 3 shows the results of multiple regression estimation. The results of model (1) show that aesthetic feeling has a significant positive effect on impulsive purchase intention in the visual merchandising stimulus. Model (2)-(5) by adding other factors (entertainment, authentic, pleasure and arousal) in turn, the results of regression estimation are consistent, indicating that visual merchandising incentives (aesthetic, entertainment, authentic) and consumers' psychological emotions (pleasure, arousal) have significant positive impacts on impulsive purchase intention. Regression analysis shows that gender, age, occupation, shopping frequency and shopping time do not significantly affect the individual's impulsive purchase intention.

As the impulsive purchase intention is a discrete and ordered variable as a dependent variable, Table 4 uses the ordered Logit model to further carry out regression analysis on the influencing mechanism of impulsive purchase intention. The results of the model analysis show that visual merchandising stimuli (aesthetic feeling, entertainment feeling, authentic feeling) and consumers' psychological emotions (pleasure, arousal) have significant positive impacts on impulsive purchase intention, which is consistent with the results of multiple regression estimation. Therefore, the robustness of the empirical results is verified.

Table 4. Results of ordered Logit regression estimation

|  | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| Aesthetic feeling | 2.2778*** | 1.5908*** | 1.0865*** | 0.8732*** | 0.7706** |
|  | (11.92) | (6.08) | (3.65) | (2.78) | (2.40) |
| Entertainment feeling |  | 0.9712*** | 0.8011*** | 0.6442** | 0.6165** |
|  |  | (4.05) | (3.26) | (2.51) | (2.40) |
| Authentic feeling |  |  | 0.8718*** | 0.7647*** | 0.6853*** |
|  |  |  | (3.81) | (3.25) | (2.85) |
| Pleasure |  |  |  | 0.6000** | 0.4817* |
|  |  |  |  | (2.27) | (1.76) |
| Arousal |  |  |  |  | 0.4250* |
|  |  |  |  |  | (1.65) |
| Gender | -0.0301 | -0.0376 | -0.0529 | -0.0534 | -0.0668 |
|  | (-0.17) | (-0.21) | (-0.30) | (-0.30) | (-0.38) |
| Age | 0.0970 | 0.0752 | 0.0761 | 0.0627 | 0.0641 |
|  | (0.85) | (0.67) | (0.67) | (0.55) | (0.57) |
| Profession | -0.4051 | -0.3262 | -0.3415 | -0.2944 | -0.3064 |
|  | (-1.54) | (-1.24) | (-1.29) | (-1.11) | (-1.16) |
| Shopping frequency | -0.1025 | -0.0657 | -0.0440 | -0.0304 | -0.0204 |
|  | (-1.02) | (-0.65) | (-0.44) | (-0.30) | (-0.20) |
| Shopping time | 0.1131 | 0.0998 | 0.0864 | 0.0826 | 0.0723 |
|  | (1.15) | (1.02) | (0.88) | (0.84) | (0.74) |
| Observed value | 428 | 428 | 428 | 428 | 428 |
| R-squared | 0.1473 | 0.1579 | 0.1673 | 0.1706 | 0.1724 |

### 4.3.2. Intermediary effect

In the field of social science research, in order to effectively analyse the influence process and mechanism of independent variables on dependent variables, a large amount of literature introduces the mediating effect model into the study of causality. Mediating effect means that the influence relationship between variables (X→Y) is not a direct causal chain relationship, but is generated through the indirect influence of one or more intermediary variables (M).

Figure 2 can be used to illustrate the relationship between variables. Suppose that X is an independent variable, Y is a dependent variable, and M is an intermediary variable. Among them, c is the total

effect of X on Y, ab is the mediating effect through the mediating variable M, and c' is the direct effect. According to the test method summarized by (Wen et al. 2010), this paper tests whether there is a mediation effect. In the first step, X regresses M; In the second step, X returns to Y; The third step is to regress X and M to Y at the same time; Finally, the judgment is made according to the significance of the coefficients in each regression model.
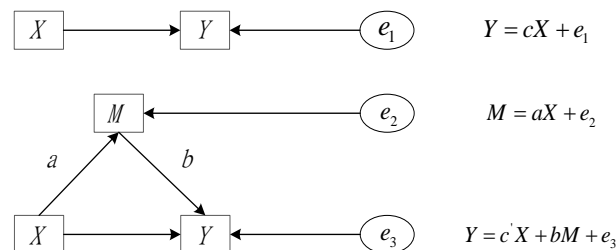


$$Y = cX + e_1$$

$$M = aX + e_2$$

$$Y = c'X + bM + e_3$$

Figure 2. Mediating effect model

Table 5. Estimation results of the mediation effect

|  | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Dependent variable | Impulsive purchase intention | Pleasure | arousal | Impulsive purchase intention |
| Aesthetic feeling | 0.4288*** | 0.4607*** | 0.4698*** | 0.2996*** |
|  | (6.76) | (8.56) | (8.04) | (4.30) |
| Entertainment feeling | 0.2576*** | 0.2849*** | 0.2173*** | 0.1858*** |
|  | (4.95) | (6.45) | (4.53) | (3.44) |
| Authentic feeling | 0.2747*** | 0.2279*** | 0.2731*** | 0.2063*** |
|  | (5.54) | (5.42) | (5.98) | (4.01) |
| Pleasure |  |  |  | 0.1676*** |
|  |  |  |  | (2.82) |
| Arousal |  |  |  | 0.1105** |
|  |  |  |  | (2.02) |
| Gender | -0.0027 | 0.0066 | 0.0152 | -0.0055 |
|  | (-0.07) | (0.19) | (0.41) | (-0.14) |
| Age | 0.0183 | 0.0190 | 0.0130 | 0.0137 |
|  | (0.73) | (0.89) | (0.56) | (0.55) |
| Profession | -0.0873 | -0.0556 | 0.0185 | -0.0800 |
|  | (-1.47) | (-1.10) | (0.34) | (-1.37) |
| Shopping frequency | -0.0179 | -0.0380** | -0.0198 | -0.0094 |
|  | (-0.81) | (-2.01) | (-0.97) | (-0.43) |
| Shopping time | 0.0185 | 0.0074 | 0.0350* | 0.0134 |
|  | (0.86) | (0.40) | (1.76) | (0.63) |
| Constant | 0.2603** | 0.1499 | 0.1115 | 0.2228* |
|  | (2.22) | (1.51) | (1.03) | (1.93) |
| Observed value | 428 | 428 | 428 | 428 |
| R-squared | 0.7919 | 0.8435 | 0.8177 | 0.8001 |

After the regression estimation of the mediation effect model, the results in Table 5 are obtained. Among them, model (1) shows that the aesthetic feeling, entertainment feeling, authentic feeling are considered as independent variables in visual merchandising stimulus factors, which have significant positive impacts on the dependent variable-impulsive purchase intention. H1a, H1b and H1c are assumed to hold. Model (2) and model (3) show that the aesthetic feeling, entertainment feeling, authentic feeling in visual merchandising stimulation factors can significantly improve the pleasure and arousal emotion in the live webcast. Based on model (1), model (4) introduces the intermediary variables of pleasure and arousal emotion, and includes visual merchandising stimulus factors (aesthetic feeling, entertainment feeling and authentic feeling), psychological emotion (pleasure and arousal) and impulsive purchase intention into the regression equation at the same time. The results

show that the coefficients all pass the significance test, pleasure and arousal have significant positive effects on impulse purchase intention. It shows that in the situation of the live webcast, the greater the customers' pleasure and arousal caused by aesthetic feeling, entertainment feeling and authentic feeling in visual merchandising are, the easier they will have impulsive purchase intention, and the intermediary effect is established. Assuming that H2a and H2b are established. Moreover, the absolute values of regression coefficients of aesthetic feeling, entertainment feeling and authentic feeling on impulsive purchase intention in the model (4) are all smaller than those of aesthetic feeling, entertainment feeling and authentic feeling, which have a direct influence on impulsive purchase intention. This indicates that pleasure and arousal have partial mediating effects in the influence path of visual merchandising stimuli (aesthetic feeling, entertainment feeling and authentic feeling) on consumers' impulsive purchase intention.

## 5. Conclusion

Based on the SOR model, this paper makes an in-depth discussion on the internal mechanism of consumers' impulsive purchase intention in the context of live webcast marketing. Through factor analysis and regression analysis, this paper studies the relationship among visual merchandising, psychological emotion and impulsive purchase intention, The conclusions of this paper are as follows: 1) The visual merchandising stimuli (aesthetic feeling, entertainment feeling and authentic feeling) of the live webcast have a significant positive impact on consumers' impulsive purchase intention. 2) The above three stimulus factors positively influence consumers' impulse buying intention through positive emotions, which means pleasure and arousal have some mediating effects between the aesthetic stimulation, entertainment stimulation, authentic stimulation and consumers' impulsive purchase intention of the live webcast of visual merchandising. 3) When other conditions remain unchanged, pleasant emotions and arousal emotions have a significant positive correlation with impulsive purchase intention.

Based on the above research conclusions, this article puts forward the following marketing suggestions: 1) Create multiple stimuli in visual merchandising. Further strengthen the aesthetic stimulation of visual merchandising in the context of live webcast, and enhance the beauty and comfort of live scene design. Increase the entertainment settings in the live webcast room and innovate entertainment activities. Convey product information positively and interactively, so that consumers can get a hedonistic interactive experience. With the rapid application of big data and 5G, technologies such as HD live broadcast and holographic projection can be adapted to provide consumers with better live broadcast scenes, enhance consumers' sense of participation and interest in shopping, and better promote the generation of impulsive purchase intention. 2) Grasp the emotional dynamics of consumers. By grasping the psychology of potential consumers entering the network broadcast room, the consumers' mood of pleasure and arousal can be improved, and the generation of consumers' impulse purchase intention can be further promoted.

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