

Study on Influencing Factors of Consumer Engagement and Effect of Time Pressure in Chinese Online Shopping Festival

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Abstract. The purpose of this study is to examine the impact of promotional product characteristics, environmental factors, and personal shopping preferences on shoppers' participation in online shopping events. As the background of the study is the e-commerce shopping festival "618", an S-O-R model is constructed by adding the moderating effect of consumers' internal organismal psychological activities. Using SPSS and AMOS software to analyze the data of 255 questionnaires, it is found that the diversity of products, the infectivity of the environment and the impulse of online shopping have obvious positive effects on "618" and other shopping festivals. In addition, we found that time pressure, a moderating variable, moderates the effect of product diversity on participation. The influence of product richness on participation can be regulated positively by time pressure, while online shopping impulsivity can be weakened by it, while environmental contagiousness can't be controlled by it. In the context of economic downturn, it is meaningful to figure out how to stimulate online shopping engagement which is the main way of boosting economic growth these years.

Keywords: Shopping Festival Promotion; S-O-R Theory; Time Pressure; Participation; Structural Model.

1. Introduction

The rapid advancement and widespread acceptance of e-commerce have rendered e-commerce shopping festivals a significant component of the contemporary consumer market. In China, for instance, the e-commerce shopping festivals such as "618" have evolved into a grand shopping feast that consumers eagerly anticipate. Traditional retailers typically conduct a consolidated promotion at the onset of new stores, seasonal changes, holidays, and other crucial moments that have the potential to generate sales. Similarly, online shopping festivals are essentially a consolidated promotional consumption model.

Due to the success of shopping festival promotional strategies, academics and businesses have all realized its extraordinary benefit as an important marketing strategy. Scholars have elaborated the theoretical basis of consumer behavior in online shopping festivals, including the explanation of the research on the formation of consumer purchasing behavior in online shopping festivals such as "Double 11" and "Cyber Monday", and explored the effectiveness of online promotion strategies [1-4]. But there is no research on the effects of specific promotional strategies on consumers with different characteristics. In addition to focusing on the overall efficacy of promotional strategies for online shopping festivals, merchants ought to pay greater attention to the varying impact of the time strategy of promotional shopping festivals on the willingness of diverse consumers to participate.

This research aims to analyze the impact of promotional product characteristics, environmental factors, and personal shopping preferences on consumers' participation in e-commerce shopping festivals. It also constructs the Stimulus-Organism-Response (S-O-R) model by incorporating the moderating role of consumers' internal mental activities. The study utilized the Chinese e-commerce shopping festival "618" as the background to collect and analyze data from 255 questionnaire samples, and utilized SPSS and AMOS software for statistical analysis. During the course of the study, scholars have discovered that product richness, environmental contagiousness, and online shopping impulsiveness have a significant positive impact on participation in shopping festivals such as "618". The perceptions of consumers regarding product richness, which encompasses product variety, brand selection, and price concessions, play a significant role in influencing their willingness to participate

in e-commerce shopping festivals. Furthermore, the environmental transmission, i.e., the collective shopping environment and consumption scene created by shopping fairs, also enhances consumer involvement. The impulsivity of online shopping, as a characteristic of consumers, also has a significant positive impact on participation of online shopping events.

Furthermore, it was found that time constraints positively influenced the effect of product richness on social engagement. As the shopping festival activities approached, consumers faced the pressure of time constraints, rich products can better meet consumers' shopping needs, thus further promoting engagement, as consumers faced the pressure of time constraints. However, time constraints also weakened the impact of online shopping impulsiveness on engagement, which shows that consumers are more inclined to buy according to their own requirements and plans, rather than impulse purchases.

2. Theoretical Framework and Literature Review

2.1. S-O-R Theory

The S-O-R model was proposed by Mehrabian and Russel in 1974 which believes that the stimulus of the external environment can cause people's organisms to change in emotion and cognition, and then affect people's response [5]. The stimulus has the potential to induce emotional and cognitive changes in individual organisms, thereby influencing their response, which encompasses both approach and avoidance. Many scholars are using S-O-R model to explore consumers' purchase intention, which has gradually become the basic framework for studying e-commerce consumers' purchase behavior.

This research adopts S-O-R model theory as the basis to carry out empirical research on online shopping festival "618". For external stimuli (S), the characteristics of various aspects of the product, the environment, and the shopping itself are considered factors. It examines the shopping festival participation response (R) influenced by the stimulus of shopping promotions, with a emphasis on examining the moderating role of the dimensions of the consumers' psychological activities (Figure 1).

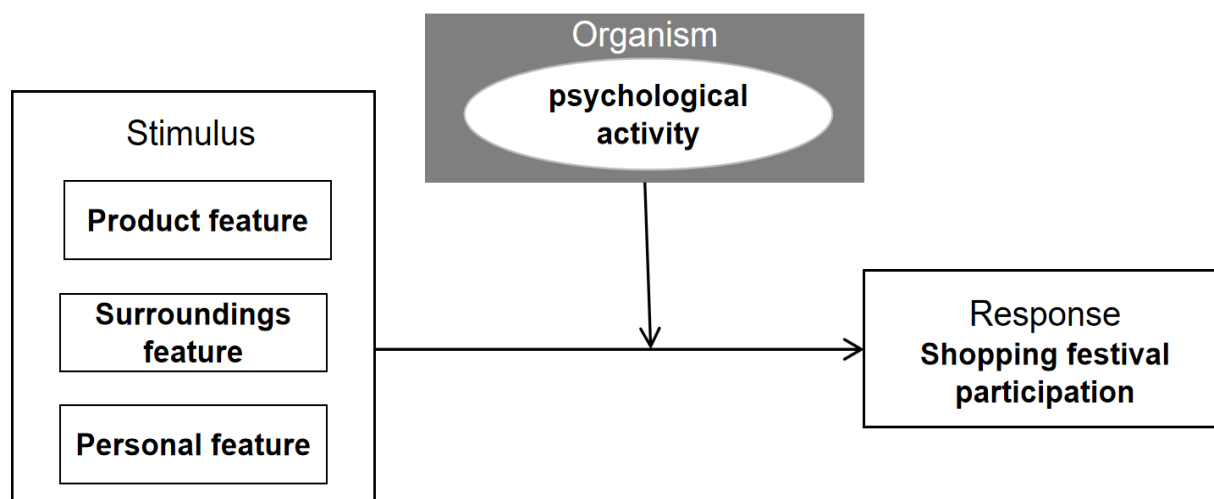


Fig. 1 S-O-R Model of Participation in Shopping Festival

2.2. Promotional Stimulus

Talking about stimuli in the shopping process, they always can be roughly produced in three dimensions, including product feature, surroundings feature, and personal feature. Regarded as a product aspect, the variety and depth of promotional goods refer that the product categories, numbers, discounts, and other preferential activities are more extensive and diverse than usual. The assumption behind international research is that offering consumers more options to pick from can stoke their shopping urges. From this perspective, more products are always better than less products. Wu and his team's findings suggest that the variety of products has a positive impact on brand selection, with

perceived quality playing a mediating role [6]. Kahn concluded that the degree of product diversity is positively correlated with consumers' favorability of the product, and that they tend to make additional purchases because they expect a more enjoyable consumption experience [7].

Furtherly Chinese scholars have discovered that in addition to the price and product aspects, other aspects of promotional activities also have an impact on shoppers' purchasing intentions, for instance, Chen et al. have found that the promotion strategy should also emphasize auxiliary promotional means of entertainment to stimulate the consume [8]. According to Tsaia et al., the study on atmospheric stimulation in shopping revealed that audience participation is crucial in establishing a warm live-streaming atmosphere, which is conducive to users' perceptions of warm and harmonious group relationships and positive attitudes towards live streaming [9]. Chang et al. showed that due to skepticism towards online sellers or advertisements, users are more likely to choose trustworthy friends or even strangers as shopping references [10]. Consumers have heuristic cues to evaluate products because of the shopping atmosphere created by promotions.

The stimulus of personal factors usually reacts through the psychological level. In previous studies, impulsivity towards online shopping was proved to show a typical personal preference. Floh et al. believe that there are objective differences in impulsivity among different users; while Chang et al. found that all participants were in a specific e-commerce scene, and different audiences had different impulsive characteristics of online shopping, and individuals with high impulsivity were more likely to be stimulated by stimuli [11,12]. Researchers from diverse fields generally acknowledge that the personal characteristics of consumers and the stimulus presented in the shopping environment are pivotal factors in influencing purchases.

2.3. Organism internal mental activity -- time pressure

Time pressure is widely recognized as a situational variable that affects consumer decision-making in-store environments [13-15]. Chowdhury and colleagues defined time pressure as the individuals' perception of time urgency during information processing or decision-making due to limited decision time [16]. Xu Y et al. posited that economic incentives constitute the lower stage of the development of consumers' psychological commitment, requiring consumers to invest minimal cognitive resources and processing efforts [17]. Hence, in the realm of online commerce, the greater the perceived time pressure, the greater the tendency for users to focus on positive, superficial information such as discount percentage, thereby facilitating the formation of a positive and emotional identity towards live e-commerce.

2.4. Participation in the shopping festival

Online shopping events function as a collective sales promotion, and past studies have demonstrated that online shopping events can not only boost the overall sales volume but also enhance the brands' authority by way of such large-scale promotional events with exceptional impact [4,18]. The e-commerce shopping festivals have made a big splash these years and have become national promotional festivals to stimulate national consumption during the economic downturn. Academics have provided a more theoretical explanation for the mechanism behind consumer behavior during online shopping festivals, like on “double eleven” and “Black Friday”, a significant e-commerce holiday in foreign countries [1-3,19].

3. Hypotheses and Model Construction

Firstly, people have found that the variety of goods plays a role in both the purchase intention of shoppers and their overall contentment. Wu et al. revealed that having more product choices gives consumers more room to experiment and compare, and they're more likely to pick the ones they like, satisfying their various wants and tastes [6]. According to Su et al., their study observed that the diversity of e-commerce platform products has a significant impact on the e-commerce platform that consumers choose to utilize [20].

As per the theory of informative influence, individuals will rely on the conduct of others in uncertain circumstances to formulate their own behavioral decisions. During online shopping, which is a shopping venue with a shielding of information, merchants are inclined to display information that is advantageous to them to attract consumers. At present, consumers will be influenced by the willingness of others to participate in the shopping experience.

In addition, consumers' perceived value of goods, as well as their own needs, can be significantly influenced by personal shopping habits or styles. When individuals possess a high level of online shopping impulsivity, they are inclined to make decisions without pause, thereby leading to a greater willingness to make purchases.

The organism's internal characteristics tend to regulate its decision-making process, such as the psychological activities of people when shopping. Since shopping festival promotions are limited in time, consumers must decide to buy within a limited period. However, consumers feel that missing out on this purchase opportunity will result in a greater loss. Thus, consumers feel that missing out on this purchase opportunity will result in a greater loss [21]. The time pressure from online promotions can make consumers exaggerate the perceived benefits and reduce the perceived risks, according to Lu Changbao [22].

Therefore, this paper proposes the following six hypotheses, and the model construction is depicted in Figure 2.

H1: Product richness has a positive impact on participation in online shopping festivals.

H2: Environment positively influences online shopping festival participation.

H3: Online shopping impulsivity positively influences participation in online shopping festivals.

H4: The effect of time pressure on shopping festival participation played a moderating role in terms of product richness.

H5: The effect of time pressure on shopping festival participation played a moderating role in terms of environmental effect.

H6: The effect of time pressure on shopping festival participation played a moderating role in terms of online shopping impulsiveness.

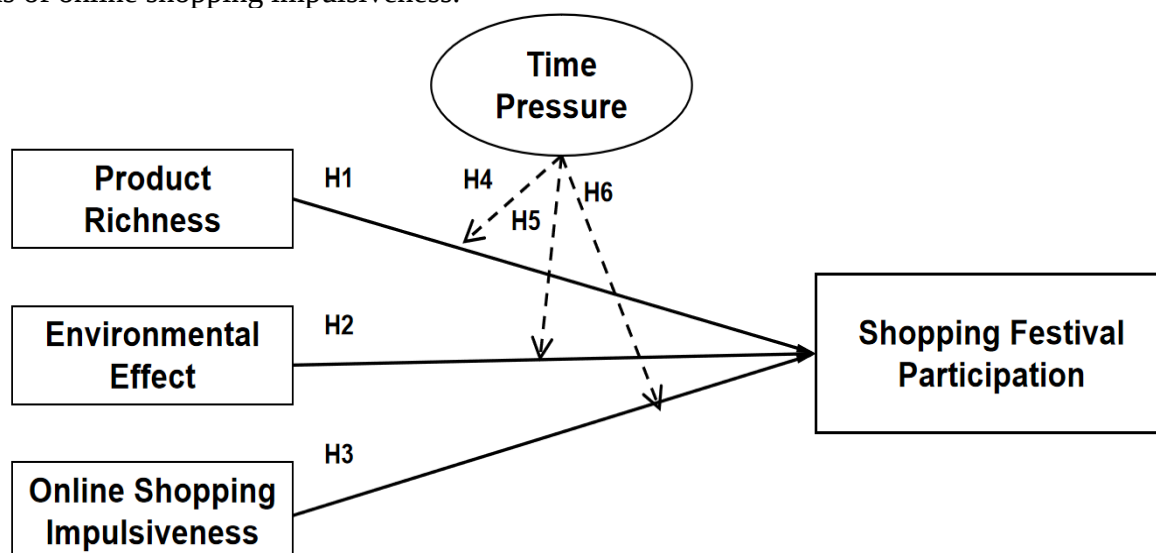


Fig. 2 Research design model

4. Data collection and analysis of results

4.1. Scale design and data collection

The research variables are measured using the Likert seven-point scale, and all the variables are measured concerning the mature scales in the literature. They are adapted to the characteristics of the current "618" online shopping festivals. There are four demographic variables, namely gender,

education level, age and personal monthly income. In order to investigate the various aspects of the model in more depth, we designed a questionnaire covering five different areas such as product richness and environmental effects., etc.

The study was conducted using a questionnaire method and distributed through the Questionnaire Star platform, resulting in 255 questionnaire returns. Simultaneously, the initial inquiry of the questionnaire was formulated as "Have you had any online shopping experience within the past six months?" to eliminate those who have low familiarity with online shopping festivals and low purchasing enthusiasm. And then 30 subjects with complete duplicates of all variable options were individually screened and eliminated, and the final valid questionnaires amounted to 202.

4.2. Descriptive Statistic Analysis

According to the statistics, female subjects accounted for 66.34% of the total, while male subjects accounted for only 33.66%, and the proportion of women was significantly higher. In terms of education, as the questionnaire was issued by researchers in the undergraduate stage, which affected the distribution of the educational variables of the questionnaire, the proportion of undergraduates amounted to 56.44%, 24.75% of the subjects were high school/secondary school, 7.43% of the subjects were junior high school and below, the number of specialties amounted to 7.92%, and the remaining 3.47% were the most excellent in education. In terms of age, the subjects were mostly young consumers, 65.35% of the subjects were 18–25 years old, 17.82% of the subjects were under 18 years old, over 40 years old, 31–40 years old, and 26–30 years old accounted for 7.43%, 5.45%, and 3.96%, respectively. In terms of personal monthly income, 1501- 3000 yuan had the most subjects (38.61%), 25.74% of the subjects were 1500 yuan and below, 22.28% of the 3001-6000 yuan monthly income group, and 6.93%, 3.96% and 2.48% of the subjects in the 6001–9000 yuan, 9001–15000 yuan and 15000 yuan and above respectively (Table 1).

Table 1. Questionnaire data on the variables of respondents

Research Indicators	Choices	Amounts of Samples	Proportion (%)
Gender	Male	68	33.66%
	Female	134	66.34%
Education background	Junior high school and below	15	7.43%
	High school/Secondary school	50	24.75%
	Specialties	16	7.92%
	Undergraduates	114	56.44%
	Master	5	2.48%
	Doctor and above	2	0.99%
Age	Under 18	36	17.82%
	18~25	132	65.35%
	26~30	8	3.96%
	31~40	11	5.45%
	above 40	15	7.43%
Personal income per month (RMB)	≤1500 ¥	52	25.74%
	1501~3000 ¥	78	38.61%
	3001~6000 ¥	45	22.28%
	6001~9000 ¥	14	6.93%
	9001~15000 ¥	8	3.96%
	≥15000 ¥	5	2.48%

As per the descriptive statistics analysis and normality test results obtained by SPSS (Table 2), it can be inferred that the environmental effect has a mean score between 2-3, the variables of product

richness, online shopping impulsivity, participation in shopping festival, and time pressure all have mean scores between 3-4, and the scale is scored negatively from 1-7. Thus, it can be inferred that the variables outlined above are above the medium level for the group of subjects in the present study. In addition, through the skew and peak analysis of the data in this study, the conclusion is that the data of all dimensions involved in this study show a normal distribution.

Table 2. Latent variable normality test results

Variable	Choices	Mean	Standard Deviation	Deviation	Kurtosis	Population Mean	Population Standard Deviation
Product Richness	Q1a	3.58	1.228	-0.095	0.142	0.097	0.752
	Q1b	3.27	1.197	0.251	0.361		
	Q1c	3.12	1.228	0.438	0.469		
Environmental Effect	Q2a	2.56	1.213	0.662	0.054	0.568	-0.043
	Q2b	2.64	1.298	0.601	0.086		
	Q2c	2.68	1.296	0.539	0.161		
Online Shopping Impulsivity	Q3b	3.73	1.669	0.308	0.727	0.414	-0.097
	Q3c	3.25	1.48	0.609	0.08		
	Q3d	3.39	1.59	0.503	0.224		
Participation in Online Shopping	Q4a	3.53	1.543	0.361	0.385	0.374	0.037
	Q4b	3.08	1.448	0.646	0.126		
	Q4c	2.89	1.278	0.36	0.346		
Time Pressure	Q5b	3.94	1.523	0.084	0.275	0.131	-0.1
	Q5c	3.66	1.629	0.251	0.525		
	Q5d	3.69	1.458	-0.018	0.403		

4.3. Model Reliability and Validity Measurement

The exploratory factor analysis test revealed a KMO value of 0.918 for the questionnaire scale and the general reliability of the questionnaire for each variable exceeding 0.7, which, in line with the commonly used KMO metrics, indicates that the scale exhibits high reliability and is suitable for factor analysis.

During the exploratory examination, AMOS software was employed to conduct a validated factor analysis (CFA) to evaluate the reliability, average variance extracted, and the ability of the measurement model to differentiate is evaluated." Firstly, from the model fitness indicators, CMIN/DF (chi-square degrees of freedom ratio), CFI, TLI fit excellent, respectively, 2.43, 0.927, 0.909; root mean square of error (RMSEA) is 0.084, GFI is 0.851, which is in the range of good and acceptable standards, and comprehensively it can be seen that the shopping stimulus CFA model has good suitability.

SPSS software was used to conduct principal component analysis and equal maximum rotation for each variable dimension of the scale to further verify mean variance extraction (AVE) and combined reliability (CR). Table 3 shows that the variables have high convergence validity and combinatorial reliability because they all have AVE values greater than 0.5 and CR values greater than 0.7 in each dimension. The standardized correlation coefficients of each dimension are smaller than the square root of the AVE value of the dimension, which indicates that the difference validity of each dimension is high.

Table 3. AVE and CR test

	Path Relationship		Estimate	AVE	CR
Q1c	<---	F Product	0.868		
Q1b	<---	F Product	0.807	0.665	0.856
Q1a	<---	F Product	0.768		
Q2c	<---	F Environment	0.897		
Q2b	<---	F Environment	0.935	0.854	0.946
Q2a	<---	F Environment	0.94		
Q3b	<---	F Impulsivity	0.68		
Q3c	<---	F Impulsivity	0.849	0.671	0.858
Q3d	<---	F Impulsivity	0.911		
Q5b	<---	F Time	0.746		
Q5c	<---	F Time	0.948	0.584	0.800
Q5d	<---	F Time	0.544		

4.4. Correlation Analysis

This section examines the degree of correlation between the five variables analyzed in the study using Pearson correlation. Based on the significant magnitude and correlation coefficient of the analysis results, it can be inferred that there exists a significant positive correlation between the variables of shopping stimulation, shopping festival participation, and time pressure (Table 4). In addition to the two variables of online shopping impulsivity and environmental effect, which are significant at 95% significance level, the remaining variables are significant at 99% significance level.

Table 4. Variables correlation analysis

Dimensions	Product Richness	Environmental Effect	Time Pressure	Online Shopping Impulsivity	Participation in Shopping Festival
Product Richness	1				
Environmental Effect	.437**	1			
Time Pressure	.285**	.287**	1		
Online Shopping Impulsivity	.183**	.176*	.300**	1	
Participation in Shopping Festival	.477**	.501**	.389**	.341**	1

4.5. Hypothesis Test

In this study, AMOS was used to evaluate the validity of structural models and research hypotheses. All the model test fit indicators are within the acceptable good range (CMIN/DF = 2.520, RMSEA=0.087, GFI=0.821, AGFI=0.759, CFI=0.907, TLI =0.886). Product richness, environmental effect, and online shopping impulsivity significantly affect shopping festival participation and the explained variance of participation is 38.58%. As per the findings of the model run, it can be inferred that product richness significantly and positively influences participation in shopping festivals ($\beta=0.349$, $p<0.001$), environmental infectivity significantly and positively influences participation in shopping festivals ($\beta=0.337$, $p<0.001$) and online shopping impulsivity significantly and positively influences the participation in shopping festival ($\beta=0.275$, $p<0.00$). Hypotheses H1, H2, and H3 were proved respectively (Table 5).

Table 5. Path Hypothesis test

Hypothesis	Path Relation	Estimate	S.E.	C.R.	P
H1	F Participation <--- F Product	0.349	0.073	4.236	***
H2	F Participation <--- F Environment	0.337	0.067	4.311	***
H3	F Participation <--- F Impulsivity	0.275	0.064	3.774	***

4.6. Test of the regulation function of time pressure

To evaluate the influence of time pressure on consumers' willingness to participate in online shopping festival aggregation promotion and the related adjustment effectthe study initially focused on shopping festival participation, product richness, environmental effect, online shopping impulsivity, and time pressure. Subsequently, model 1 conducted a regression of shopping festival participation (Y) on product richness (X) and time pressure (M), resulting in a coefficient R_1^2 . Subsequently, model 2 conducted a regression of Y on the interaction terms of X, XM, and product richness×time pressure (XM) interaction term regression, resulting in an R_2^2 . The coefficients of ΔR_2^2 and the interaction term were further derived to test for moderating effects. After adding adjustment variables, the adjusted R_2^2 increases, The explanatory ability of the model has been significantly improved, and the regression coefficient of interaction terms has reached a significant level.

$$Y = \alpha_1 X_1 + \epsilon_1 \quad (1)$$

$$Y = \alpha_2 X_1 + \beta_1 M_1 + \epsilon_2 \quad (2)$$

$$Y = \alpha_3 X_1 + \beta_2 M_1 + \gamma_1 X M_1 + \epsilon_3 \quad (3)$$

This indicates that the moderating effect of time pressure is significant. To verify the validity of the moderating effect of time pressure on shopping festival participation. The study conducted stepwise hierarchical regression in the above manner. Table 6 presents the outcomes of analyzing the

regression equation with participation as the dependent variable. Model M1 serves as the base equation, and the variables to be examined in this paper are progressively added to models M2~M10.

Table 6. Relation model of the regulation function of time pressure

Variables	Y Dependent Variables: Participation in Shopping Festivals								
	M1	M2	M3	M4	M5	M6	M7	M8	M9
<i>X</i> Independent Variables									
Product Richness	0.51 3 ***	0.41 2 ***	0.42 7 ***	—	—	—	—	—	—
Environmental Effect	—	—	—	0.49 4 ***	0.39 8 ***	0.38 7 ***	—	—	—
Online Shopping Impulsivity	—	—	—	—	—	—	0.37 9 ***	0.25 9 ***	0.26 1 ***
<i>M</i> Regulating Variables									
Time Pressure	—	0.29 6 ***	0.33 ***	—	0.31 6 ***	0.33 1 ***	—	0.34 6 ***	0.34 2 ***
Interaction Effect									
Product Richness×Time Pressure	—	—	0.15 6 **	—	—	—	—	—	—
Environmental Effect×Time Pressure	—	—	—	—	—	0.08 8	—	—	—
Online Shopping Impulsivity×Time Pressure	—	—	—	—	—	—	—	—	- 0.12*
Adjusted R^2	0.26	0.33 4	0.35 3	0.24	0.32 7	0.33 2	0.14	0.24 2	0.25 2
F	71.8 1 ***	51.6 2 ***	37.7 9 ***	64.7 3 ***	50.1 8 ***	34.4 2 ***	33.7 6 ***	33.1 4 ***	23.7 3 ***

The findings from Models 1-3 (refer to Table 6) demonstrate that time pressure has a positive and significant moderating effect on the influence of product richness on shopping festival participation, reaching a significance level of 99%, corroborating Hypothesis H4. On the contrary, according to the research results of models 4-6, the influence path of time pressure on shopping festival participation has not been significantly moderated, thus negating hypothesis H5. According to the results of models 7 to 9, it can be concluded that time pressure has a negative significant effect on the environmental impact path of the shopping festival participants, and this effect has a significance level of 95%. In addition, time pressure has a negative and significant effect on the impact of online shopping impulsivity on shopping festival participation, thus weakening the participation of consumers with impulsive online shopping style in shopping festival, as indicated in H6.

5. Suggestion

Some suggestions for the future of online shopping festivals were put forward, based on the results of the research. First, shopping events should focus on ensuring the precise management of promotion duration. Currently, the pre-sale and warm-up period for double eleven, “618” and other promotional festivals has been extended for nearly 30 days. This may potentially diminish the purchasing propensity of impulsive consumers, such as "shopaholics. The promotion can be limited to a certain

period. Merchants can confine the promotion to a specific time frame, allowing consumers to objectively feel the time pressure of the promotion, boost their interest in purchasing, and enhance their appeal. Simultaneously, merchants convey to consumers the message that it is more expensive to refrain from purchasing currently and to purchase again, thereby creating subjective time pressure on consumers, elevating the value of commodities in their minds, incentivizing consumers to purchase commodities promptly, and achieving the effect of promotion.

Secondly, through the conduct of research, the greater the number of e-commerce platforms that are capable of satisfying customers' requirements with a comprehensive range of products, the greater their likelihood of achieving success in the "Double Eleven" shopping festival events. Under the temptation of general promotional benefits, the formation of consumers' willingness to participate returns to the joy. Hence, the online shopping festival, as a promotional holiday, should be viewed as public opinion publicity, utilizing price discounts to enhance the appeal of promotional concessions. This will create a festival atmosphere of universal participation, thereby attracting more potential consumers and enhancing the enjoyment and enjoyment of shopping.

6. Conclusion

This study, which was conducted using the S-O-R theoretical model, examined the response process of the three-dimensional characteristics of product, environment, and shopping itself on consumers' stimulus factors, leading to their engagement during shopping festivals. The findings indicate that: In the beginning, product richness, environmental effect, and shopping impulsiveness all have a significant positive impact on shopping festival participation, while product richness has the largest ($\beta=0.349$). Furthermore, the effect caused by the environmental effect ($\beta=0.337$) is greater than the effect caused by online shopping impulsivity ($\beta=0.275$). The possible explanation is that the direct stimulus generated by the products during the shopping festival promotion is greater than the indirect stimulus generated by the environmental effect. Furthermore, online shopping impulsivity is a long-term consumer characteristic of consumers themselves, and will not have a greater impact than external stimuli during the shopping festival. Specifically, individuals who exhibit high levels of impulsivity in their online shopping behaviors have already demonstrated a greater willingness to shop online during their daily routine, whereas their shopping behaviors are more restrained during shopping holidays. The urgency of time played a moderating role in the participation of shopping festivals, and at the same time, the richness of product types also had a clear positive impact on the participation of shopping festivals. This means that consumers will pay greater attention to the richness of the product variety provided by the website during the shopping festival promotion when time pressure is greater, and the impact of this dimension will be amplified. It is possible that when consumers are under time pressure and see so many favorite products, they will directly generate the need to buy instead of considering the necessity of the products. Conversely, when consumers have a longer period to shop, it is easier for them to be distracted by the wide range of products in their shopping decision. In terms of the environment, time pressure does not have a significant moderating effect, probably because the contagiousness brought by the shopping festival participation of the neighbor is indirect, which is not in the same degree of influence relation with time pressure. The influence of online shopping impulsivity on shopping festival participation is significantly influenced by time pressure, which plays a significant negative moderating role among personal shopping characteristics. This implies that the greater the time pressure, the less online shopping impulsivity exerts an impact on shopping festivals. The survey group comprising 18–25-year-olds comprises 65.35% of the sample. It has been suggested that the impulsive nature of the youth group during the shopping festival may be attributed to a reverse psychology phenomenon, wherein the greater the time pressure, the greater the likelihood of a broken window effect, thereby reducing participation during the promotion.

There exist certain limitations in the study. For example, the study examines the impact of promotional stimulus on product abundance by examining its dimension, while the subsequent

discussion can focus on shelf price discounts as a promotional stimulus. It is important to comprehend the various ways of concessions, including red packets, full reductions, coupons, and gifts, which can have a significant impact on consumers. As for time pressure, the moderating variable, it is highlighted in this paper but the current shopping festival has adopted a strategy of increasing the warmup time year after year, which is reducing the time pressure and may lead to a loss of interest in shopping. The subsequent research could be conducted through targeted experiments to determine the specific impact of time pressure, to determine the most appropriate shopping festival, and to bring practical guidance for future Chinese promotional shopping festivals.

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