

Purchase Motivation, Experiential Value Related to Continuance Intention to Purchase on China's Double 11 Shopping Festival

Jian-Hong Ye¹, Jhen-Ni Ye^{2*}, Yu-Feng Wu³, Jon-Chao Hong⁴

¹ Dhurakij Pundit University, 110/1-4 Prachachuen Rd., Laksi, Bangkok, Thailand.

² Graduate Institute of Technological & Vocational Education, National Taipei University of Technology, No. 1, Sec. 3, Zhongxiao E. Rd., Taipei, Taiwan.

³ Physical Education Research and Development Center, National Taiwan Normal University, No. 162, Section 1, Heping E. Rd., Taipei, Taiwan.

⁴ Department of Industrial Education and Institute for Research Excellence in Learning Sciences, and Chinese Language and Technology Center, National Taiwan Normal University, No. 162, Section 1, Heping E. Rd., Taipei, Taiwan.

* Corresponding author. Email: jhen13211321@gmail.com

Manuscript submitted March 13, 2021; accepted May 18, 2021.

doi: 10.17706/ijejee.2022.12.1.1-15

Abstract: As well as bringing convenience to consumers, online shopping also represents an enormous business opportunity. In online shopping, the Double 11 shopping festival (hereafter Double 11) organized by China's Alibaba has set records and has continued to grow rapidly for the last 10 years. To understand this phenomenon, this study adapted self-determination theory to explore customers' motivation and perceived values with respect to Double 11. This study focused on people who live in China who shopped during the China Double 11 Carnival Shopping Festival in 2018. A total of 399 validated data were collected and then confirmatory factor analysis with structural equation model was conducted. The results of the study show that purchase amotivation is not significantly related to, but extrinsic purchasing motivation is positively related to hedonic value and social value. Moreover, continuance intention to purchase can be positively predicted by hedonic value and social value. With a better understanding of these results, managers operating electronic businesses can use certain approaches to increase customers' extrinsic motivation and enhance their experiential values to promote their continuance intention to purchase goods on a particular day, for example, by creating more shopping festivals.

Key words: Purchase motivation, experiential value, Double 11 shopping festival, continuance intention to purchase.

1. Introduction

The proportion of consumers shopping through Internet channels continues to rise, and the revenue of e-retailers is growing rapidly [1]. In Alibaba Group's Tmall Mall on the 2018 Double 11 Shopping Festival (11.11 Global Shopping Festival), sales reached 213.5 billion yuan (about 30.8 billion US dollars), an increase of 27% over 2017. On the same day, the logistics order volume of the mall reached 1.042 billion yuan [2]. The economic effect of the Double 11 Shopping Festival (hereafter Double 11) also caused other e-commerce websites (such as JD, Yihaodian, Suning, Gome and Amazon) to offer significant discounts and promotions on the 11th [3]. Clearly, the Internet is changing the way consumers buy goods and is quickly

evolving into a global phenomenon [4]. However, current research on shopping behavior in China focuses on the sustainable shopping behavior of consumers, and thus cannot ignore the special situation of the Double 11 Shopping Festival [5].

There are many factors influencing consumers' shopping. The three factors most mentioned by the researchers include motivation, value and intention. Consumer shopping often involves multiple motivations [6], while the emotional needs associated with consumption are related to the pursuit of happiness and choice behavior [7]. Based on the theory of self-determination, purchase motivation is one of the key constructs of shopping behavior research, and is highly related with the development of retail marketing strategies [8], [9]. Self-determined motivation is a leading theory of human motivation that has been proven to effectively identify factors that affect motivation and behavior [10]. Particularly, the Alibaba Group designed a variety of activities (such as shopping games, gifts, TV shows and live performances) for Double 11 to share happiness and celebration, not just business promotion [11].

From a social psychology perspective, it is worth studying how Double 11 affects consumers' experience of experiential value and continuance intention to purchase [12]. Therefore, in order to understand the influencing factors for Chinese consumers on Double 11, this study explored the relationship between the no-specific and external purchase motivation and experiential values of Chinese consumers and their intention to purchase on Double 11.

2. Literature Review

2.1. Self-determination Theory in Online Shopping

Self-determination motivation defines different types of motivations such as amotivation, external motivation, and intrinsic motivation [13]. Shopping motives can also be classified as having amotivation (a lack of intention to act, which has been ignored in the marketing literature), external motivation, and intrinsic motivation [14]. Amotivation means that certain human behaviors cannot be described as intrinsic or extrinsic [15] and there is a lack of a specific motivation resulting in a lack of intention to act [16], or a lack of ability to predict behavioral or willful behavior outcomes [17]. The importance of intrinsic motivation has been supported in past studies [9], [18]. However, the motivation of external shopping and the influence of no-specific shopping motives on shopping are still unclear and need further exploration. Therefore, this study focuses on the contribution of extrinsic motivation and amotivation as no-specific shopping motives to examine participants' purchase motivation.

Extrinsic motivation means that the motivation for the task comes from outside, whereas behavior performed as a means of separable purpose is generally considered to be extrinsic [19]. Intrinsic motivation is manifested only in personal enjoyment, satisfaction, and pleasure, and is manifested to some extent without any external consequences [20]. Most studies use intrinsic motivation as a shopping motive, which has less influence on extrinsic purchase motivation and purchase amotivation. Therefore, this study uses purchase amotivation and extrinsic purchase motivation as an observation of consumers' behavior on Double 11.

2.2. Online Purchase Experiential Value

The customer-oriented view stipulates that since personal experience belongs to the consumer category, only a particular person can experience the experiential value [21], [22]. Hedonic value is an intrinsic benefit [23]. The main shopping goal of consumers with high hedonic purchasing motivation is to seek and gain self-satisfaction. Hedonism can be assessed as a predictor of online shopping [1]. Social value is considered to be a fundamental determinant of people's goals in relationships [24], [25]. The social value generated by shopping includes attracting the attention of others and companions [26]. Since the value of

experience is important for marketing, the consumer expects to create values; for example, enjoyment, cognition (information), social and personal interests should be examined to promote business [27], [28]. In related research, shopping activities can bring consumers value, particularly a high degree of hedonic and social value [29]; thus, this study focused on participants' hedonic and social value experienced on Double 11.

2.3. Continuance Intention

Continuance intention is the intensity of a consumer's intention to perform a particular behavior, representing actual continuing behavior and the individual's perception of his or her likelihood of participating in a continuing behavior [30]; continuance intention is also important for the performance of a particular behavior [31]. Past research has also shown that increased shopping will help increase consumer shopping opportunities [32]. How those antecedents affect consumers' intention to continue purchasing goods on Double 11 was explored in this study.

2.4. Hypothesis

Most consumers think that they can have fun when they spend time with family or friends shopping as a social activity. By shopping with family or friends, they get information about what to buy [33]. Customers separate social value from hedonic value and define it as the effectiveness of the client's social self-concept [34]. In this study, the value creation on the shopping festival is considered as a two-dimensional value; that is, it consists of enjoyment value and social value. Relevant research indicates that hedonic value is closely related to online shopping motives [35]. In addition, in leisure activities, motivation and value are positively related [36]-[38]. Therefore, this study explores the relationship between the Chinese people who shop on Double 11, their specific shopping motives, the motivation of extrinsic shopping and the value of enjoyment and social value. The variables in the shopping festival context are used to explore the impact of these two shopping motives on the value of experience. The relevant research hypotheses are as follows:

H1: Purchase amotivation is significantly related to hedonic value.

H2: Purchase amotivation is significantly related to social value.

H3: Extrinsic purchase motivation is positively related to hedonic value.

H4: Extrinsic purchase motivation is positively related to social value.

Value judgments generate consumer preferences, which then increase the consumer's behavioral intent to participate in certain shopping processes [39]. Perceived value is increasingly important in academic research and practice, and can be regarded as the most important indicator of repurchase intention [40]. In the case of consumers gaining positive enjoyment value from the products they enjoy, they may show positive intention to act in the future [41]-[43]. Moreover, sustained intention is directly influenced by the value of hedonism [44], and social value affects customers' intention to buy again [45]. Accordingly, this study explores the relationship between the enjoyment value and social value of the Chinese people who shop on Double 11. The relevant research hypotheses are as follows:

H5: Hedonic value is positively related to continuance intention to purchase

H6: Social value is positively related to continuance intention to purchase.

2.5. Research Model

Purchase motivation is one of the key concepts of consumer shopping behavior research [9], and self-determination theory states that the understanding of human motivation needs to consider the inherent psychological needs of individual autonomy and relevance [46]. In addition, this study is based on the theory of self-determination motivation [47]. Six research hypotheses are proposed, and a research model is constructed.

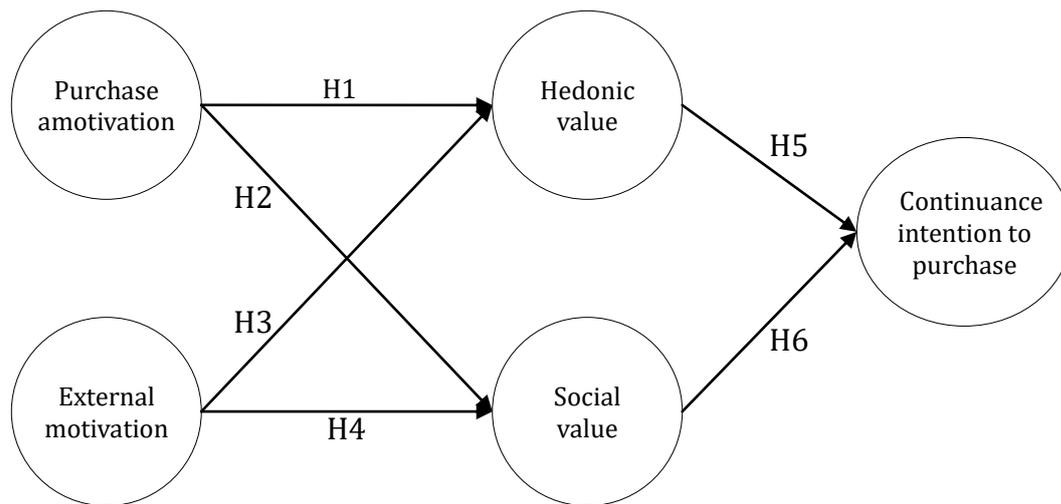


Fig. 1. Research model.

3. Method

3.1. Procedure

The questionnaire was administered from November 11 to 17, 2018, and the invited participants lived in China in large cities (such as Beijing, Shanghai, Chongqing, Guangzhou, Nanjing, etc.). The people who participated in the Double 11 shopping activities filled out the questionnaire, of which a total of 502 were collected.

3.2. Participants

Of the 502 recovered questionnaires, 103 invalid questionnaires were discarded, leaving an effective sample of 399; the effective recovery rate was 79.5%. Among them, there were 231 (57.9%) women and 168 (42.1%) men, while the consumption during Double 11 was 54 (13.5%) people below RMB 2,500, 189 (47.4%) between RMB 2,501 and RMB 5,000, and 156 (39.1%) people above RMB 5,000.

4. Research instrument

4.1. Measurement

This study adopts a confirmatory study. The content of the questionnaire is designed with reference to previous past research and related theories, and reviewed by relevant experts to review its readability and content validity to test the surface validity of the instrument. The reliability and validity of the items and dimensions were tested, and the content of the questionnaire was based on a 5-point Likert scale (1 to 5 meaning *strongly disagree* to *strongly agree*).

- 1) Extrinsic purchase motivation: Extrinsic motivation is where motivation for a task comes from outside, and the purpose of the behavior performed is usually considered to be external [19]. Therefore, items related to shopping amotivation were designed to determine how consumers perceive the extrinsic buying motives on Double 11. Extrinsic shopping motive in this study refers to the consumer's perception of the extrinsic shopping motive on Double 11.
- 2) Purchase amotivation: No specific motivation is the absence in individuals of any particular intention to act [16]. Therefore, items related to Purchase amotivation were designed to determine how consumers perceive purchase amotivation on Double 11. Extrinsic shopping motive in this study refers to the consumer's perception of purchase amotivation on the Double 11 Carnival Shopping

Festival.

- 3) Hedonic value: Hedonic value is defined as the degree to which a product creates a pleasant experience and positive emotion for the customer [48]. Therefore, according to this definition, this study adapted the scale of hedonic value developed by Hong Kong, Hwang, Tai and Kuo particularly refers to the consumer's perception of the hedonic value on Double 11 [49].
- 4) Social value: Social value stems from the improvement of customer social relationships and social well-being [50]. Social values can be reflected through friendship, social support, and intimate relationships that are acquired through the participation and communication of one person with other members [51]. Therefore, the design of the item is based on this definition and this reference and the definitions proposed by To *et al.* [26]. The extrinsic purchase motivation referred to in this study refers to the consumer's perception of social value on Double 11.
- 5) Continuance intention to purchase: Continuance intention is the intensity of a consumer's intention to perform a particular behavior [30]. Therefore, according to this definition, continuance purchase intention in this study refers to consumers' perceptions of their continuance intention to purchase on Double 11.

4.2. Item Analysis

The internal calibration analysis of the items in this study was performed by first-order confirmatory factor analysis, where the χ^2/df value should be less than 5, and the root mean square error of approximation (RMSEA) must be lower than .100, goodness of fit (GFI) and adjusted goodness of fit index (AGFI) should be higher than .800, and the factor loading (FL) should be no higher than .500. The items that do not pass these thresholds should be deleted from the original questionnaire [52], [53]. In this study, the number of items for extrinsic purchase motivation was reduced from 5 to 4, purchase amotivation was reduced from 6 to 4, social value from 5 to 4, and continuance intention to purchase was maintained at 5 items.

The external validity of the study was used to determine if the range of the study can be used for other participants and in other contexts [54]; the discriminative power is determined significant when the t value (critical ratio) is larger than 3 (** $p < .001$). Table 1 indicated that the t value is greater than 15.251 (** $p < .001$), which means that every item is not the same, and every item is capable of concluding the degree of response of different samples [55].

Table 1. First-Order Confirmatory Analysis

Index	Threshold value	Shopping amotivation	Extrinsic motivation	Hedonic value	Social value	Continuance intention
χ^2	---	7.5	1.7	10.3	4.5	11.4
df.	---	5	2	9	2	5
χ^2/df .	< 5	1.5	0.85	1.144	2.25	2.28
RMSEA	< .10	.036	.000	.019	.056	.057
GFI	> .80	.992	.998	.991	.995	.988
AGFI	> .80	.977	.989	.98	.973	.964
t value	> 3	17.253~ 24.651	18.814~ 21.929	20.256~ 22.402	18.962~ 24.104	15.251~ 24.024

4.3. Dimension Reliability and Validity Analysis

Reliability: This study used Cronbach's α to confirm the internal consistency of the questionnaire, and reliability was verified by composite reliability (CR). Hair *et al.* considered that when Cronbach's α is greater than .700 it is an acceptable standard [52]. The CR value should also exceed .700. The Cronbach's α

values in this study are between .824 and .892, and the CR values are between .816 and .916, thus meeting the recommended criteria, as shown in Table 2.

Convergence Validity: convergence validity is confirmed by factor loading (FL) and averaging variance extracted (AVE). Hair *et al.* suggested that the FL value should exceed .500, and that items below this value should be deleted [52]. The items in this study are in line with the standards recommended by scholars, and the factors with Purchase amotivation are between the load values, that is, from .691 to .849. The factor of external purchase motivation load ranged from .603 to .783, the value of the hedonic value load ranged from .772 to .820, the social value factor load value ranged from .772 to .812, and the dimension of the continuance intention to purchase is between .701 and .755, as shown in Table 3. Hair, Ringle, and Sarstedt suggest that the AVE value must be greater than 0.5 to indicate that the dimension has convergence validity [56]. In this study the AVE value ranges from .528 to .632, as shown in Table 2.

Dimension discrimination validity: Awang indicates the value of the AVE root number of each dimension [57]. If it is greater than the Pearson correlation coefficient of another dimension, it means that the dimension has discriminant validity. Another measure is the correlation between dimensions [58], where the correlation coefficient should be less than .850 [59]. The analysis results show that each dimension in this study has discriminatory validity, as shown in Table 3.

Table 2. Analysis of Validity and Reliability of Items

Constructs	M	SD	α	CR	AVE	FL
Purchase amotivation	2.564	.844	.873	.879	.592	.691~.849
Extrinsic purchase motivation	3.180	.581	.824	.816	.528	.603~.783
Hedonic value	3.420	.721	.892	.912	.632	.772~.820
Social value	3.323	.786	.847	.864	.614	.772~.812
Continuance intention	3.468	.700	.858	.850	.532	.701~.755

Table 3. Dimension Discrimination Validity Analysis

Constructs	1	2	4	5	6
1. Shopping amotivation	(.769)				
2. Extrinsic purchase motivation	.157	(.727)			
4. Hedonic value	.105	.531	(.795)		
5. Social value	.101	.447	.677	(.784)	
6. Continuance intention	.141	.529	.712	.702	(.729)

5. Results

In this study, AMOS 20.0 was first used for overall fit analysis, and finally the model was validated. The findings and discussion are presented as follows.

5.1. Model Fit Analysis

In order to have a good model fit and represent the validity of model construction, relevant scholars recommend that the value of χ^2/df be less than 5 [52]; RMSEA should be less than .100, and GFI, AGFI, NFI, NNFI, CFI, IFI and RFI should all be greater than .800 [60]. PNFI and PGFI should be greater than .500 [52]. The values of the fit indicators in this study are in line with the scholars' recommended standards, as shown in Table 5.

5.2. Path Analysis

Purchase amotivation was not significantly related to hedonic value ($\beta = .042$, $t = .936$), purchase amotivation was not significantly related to social value ($\beta = .049$, $t = 1.020$), extrinsic purchase motivation

was positively related to hedonic value ($\beta = .687^{***}$, $t = 10.735$), extrinsic purchase motivation was positively related to social value ($\beta = .625^{***}$, $t = 9.705$), hedonic value, was positively related to continuance intention to purchase ($\beta = .493^{***}$, $t = 7.931$), and social value was positively related to continuance intention to purchase ($\beta = .516^{***}$, $t = 8.116$).The explanatory power between purchase amotivation and extrinsic purchase motivation was 47.4%. Purchase amotivation and extrinsic purchase motivation on social value has an explanatory power of 39.3% for hedonic value. Hedonic value and social value has an explanatory power of 72.9% for continuance intention to purchase. According to Hair *et al.*, all explanatory power were suitable in this study [52].

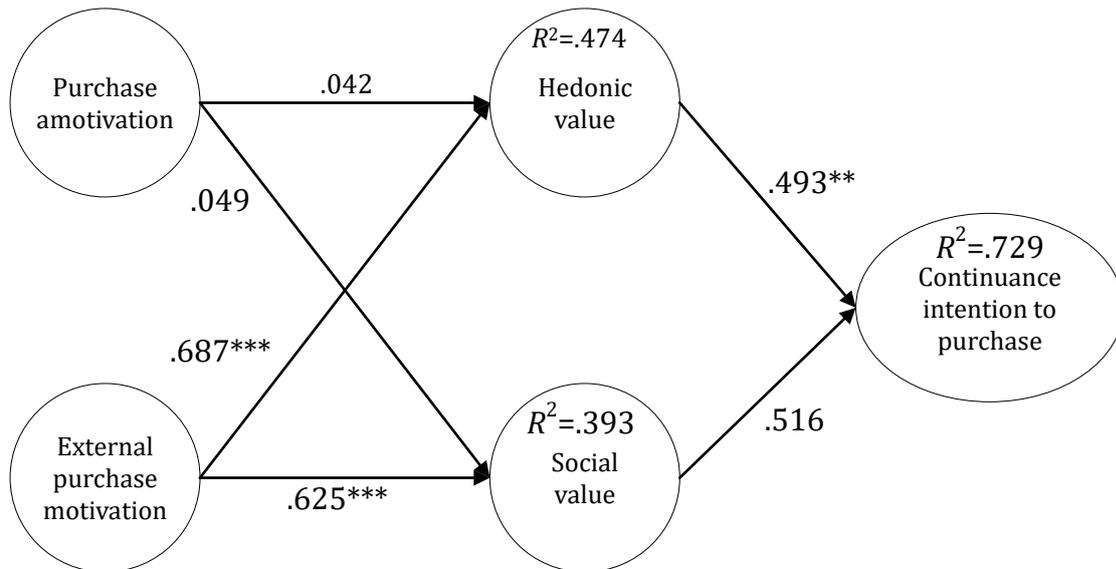


Fig. 2. Verification of research model.

5.3. Indirect Effect Analysis

In social science research, when the variable-to-effect variable is regulated by an interventional variable, it has an indirect effect [61], and the indirect effect analysis of this study shows that there is purchase amotivation or continuance intention to purchase. With no indirect relationship ($\beta = .46$), the extrinsic purchase motivation has an indirect positive relation with the continuance intention to purchase ($\beta = .661^{**}$), as shown in Table 4.

Table 4. Indirect Effect Analysis

Construct	Purchase amotivation		Extrinsic purchase motivation	
	β	95% CI	β	95% CI
Continuance intention to purchase	.046	[-.067, .156]	.661**	[.572, .744]

** $p < .01$

6. Discussion

Two dimensions of SDT were applied to explain the purchase motivation of Double 11 shopping in this study. According to the observation of construct average, participants have a lower perception of purchase amotivation ($M = 2.564$, $SD = .844$). The result also indicated that consumers showed above average

extrinsic purchase motivation ($M = 3.18, SD = .581$). Regarding the average hedonic value, the result showed that participants have superior experience when shopping on Double 11 ($M = 3.42, SD = .721$). With respect to the average of social value, the results also showed that participants hold superior social value perceptions of the Double 11 shopping activities ($M = 3.323, SD = .786$). In this study, participants were shown to have a good continuance intention to purchase for the Double 11 Carnival Shopping Festival ($M = 3.468, SD = .700$).

In examining H1 and H2, this study showed that amotivation is not significantly related to two types of experiential values. Whenever there is no specific motivation, that means there is no motivation [62], which represents that people lack motivation and present a lower perceived value [63], indicating that the task is considered unattractive [64]. That is to say, for a person without specific motivation, there will be no value attraction for a certain task. The result of this study showed that amotivation for shopping is irrelevant to the hedonic value. SDT identifies the possibility of a lack of motivation [65], and no specific shopping motives represent a lack of social value [63]. In exploring how amotivation related to two types of experiential values of Double 11, this study found that amotivation was also not significantly related to two types of experiential values of Double 11.

The value of shopping is the value gained through the shopping experience and is associated with purchase motivation [66]. To *et al.* pointed out that shoppers can be motivated just to find the products they need, and hedonistic consumers prefer to shop because they like the shopping process [26]. However, this study shows that extrinsic purchase motivation is positively related with hedonic value. Moreover, the focus of social shopping is on social influences and interpersonal relationships while shopping together [67], [68]. In exploring how extrinsic motivation related to two types of experiential values of Double 11, this study found that social value was positively related to social value. That is, the results of this study show that extrinsic purchase motivation is positively related to social value.

Consumer value is the cornerstone of successful trading, which drives consumers to make purchases repeatedly [69]. For example, research on a travel company's website shows that the importance of experiential values as a user-characteristic factor can strongly influence online purchase intentions [70], [71]. A study of image mobile applications shows that hedonic and social value have a major impact on a user's long-term intention to act, both of which lead to continuance intention, while hedonic and social value also affect the user's intention to pay [72]. Particularly, Li's research indicates that hedonic factors have a stronger positive impact on intention to make further purchases [73]. In exploring how hedonism relates to continuance intention to purchase on Double 11, the results of this study show that the value of hedonism is positively related to the continuance intention to purchase.

The social value generated by shopping also includes attracting the attention of others, finding time and companions, or simply killing time, which is another motivation to promote people's shopping [26]. Social value affects customers' intention to buy again [45], [74], to consume organic cuisine [75] or to purchase luxury goods [76]. As perceived social value has a direct impact on repurchase intentions [43], the results of this study show that social value is positively related with the continuance intention to purchase on Double 11.

Chen stated that online shopping intention has a positive impact for online sports purchases [77]. In addition, Tang *et al.* pointed out that purchase motivation has a positive correlation with repurchase intention to shop for computer products [78]. In addition, Wang and Huang stated that the purchase motivation and purchase intentions have indirect relationships [79], while Lin and Hsu suggested that consumer motivation is positively correlated with the purchase intention for health foods for the elderly [80]. In examining the indirect effect between motivational factors and continuance intention to purchase mediated by two types of experiential values, the results of this study indicated that amotivation was not

significantly related to, but extrinsic motivation was positively related to continuance intention to purchase mediated by two types of experiential value perception when purchasing goods on Double 11.

7. Conclusions

Shopping has become a vital, accessible and socially recognized leisure and lifestyle activity [81], and value perception is considered to be the most important factor influencing shoppers' online shopping decisions [82]. Therefore, this study is based on the theory of self-determination motivation, and explores the relationship between purchase motivation, experiential value and intention to purchase. The results show that the two types of purchase motives are positively related with the value of the two types of experience, while the two types of experiential value are positively related with the intention to purchase.

7.1. Implication

Consumer values play a key role in consumer behavior research, while economic globalization highlights the importance of global shopping behavior research [83]. The research results regarding the consumers' motivation, value and cognitive perception of the shopping festival can be used as a reference for marketing personnel developing marketing strategies. In addition, investigating the continuance intention of online shopping is considered essential because, in a transforming electronic market environment, attaining new consumers may result in higher costs than generating duplicate business from existing customers [84]; however, few studies have been able to examine consumers' intention to buy, especially in online shopping environments [84]. In this study, we took continue to purchase as an important variable, the verification results show the positive impact of experiential value on continuing to purchase.

In this era of ubiquitous e-commerce, competition between mobile e-commerce is very intense [3]. Many studies have emphasized the discussion of value and shopping satisfaction or loyalty and motivation, but related research on the relationship between value and continuance intention to purchase goods is still underdeveloped. The results of this study therefore provide a useful reference for the field of marketing.

Retailers are concerned with how consumers shop by means of a variety of channels, so a survey of habits during the holiday shopping season can provide insights into multi-channel shopping behavior [85]. Many countries have seasonal shopping activities, such as Black Friday shopping. Studying such activities reveals cross-cultural differences in consumer behavior [86]. In the past, the field of marketing focused on Black Friday's purchasing behavior and related research. In the past decade, the consumption behaviors of the East and the West have not necessarily been the same. Therefore, exploring the Internet marketing activities in the East will help operators.

7.2. Limitations and Future Research

Hwang and Lee have pointed out that there is a significant gender difference in the visual attention to online shopping information and the attitude to shopping for the products presented [87]. Both male and female consumers have varying degrees of shopping behavior [88]. This is a related study but does not explore whether gender purchases, value perceptions, and continuance intention to purchase on the Double 11 Carnival Shopping Festival are significantly different. Therefore, in future research, gender variables might be explored.

In addition, it has been pointed out that age affects individuals' attitudes and behaviors [89]. However, in this study, there was no significant difference in the purchasing motivation, value perception or continuance intention to purchase of the different age groups. In future research, the discussion of age variables can be further explored.

Conflict of Interest

The authors declare no conflict of interest.

Author Contributions

First, second, and third author conducted the research and collected data; third and fourth author analyzed the data; all authors wrote the paper; all authors had approved the version.

Acknowledgment

This work was financially supported by the “Institute for Research Excellence in Learning Sciences” and “Chinese Language and Technology Center” of National Taiwan Normal University (NTNU) from The Featured Areas Research Center Program within the framework of the Higher Education Sprout Project by the Ministry of Education (MOE) in Taiwan.

References

- [1] Ozen, H., & Engizek, N. (2014). Shopping online without thinking: Being emotional or rational? *Asia Pacific Journal of Marketing and Logistics*, 26(1), 78-93.
- [2] Alibaba NEWS. (2018). Believing Is Seeing: Tmall Double 11 GMV Sets Record of 213.5 Billion RMB. Retrieved from the website: <https://alibabaneews.com/article/yinweixiangxinsuoyikanjian-tianmaoshuang11-gmvchuangxingaoda2135yiyuanrenminbi>
- [3] Zeng, M., Cao, H., Chen, M., & Li, Y. (2019). User behaviour modeling, recommendations, and purchase prediction during shopping festivals. *Electronic Markets*, 29(2), 263-274.
- [4] Kumar, A., & Thakur, Y. S. (2016). Beyond buying to Shoppers: Motivation towards online shopping. *BVIMSR's Journal of Management Research*, 8(1), 31.
- [5] Yang, S., Li, L., & Zhang, J. (2018). Understanding consumers' sustainable consumption intention at china's double-11 online shopping festival: An extended theory of planned behavior model. *Sustainability*, 10(6), 1801-1820.
- [6] Sebald, A. K., & Jacob, F. (2018). Help welcome or not: Understanding consumer purchase motivation in curated fashion retailing. *Journal of Retailing and Consumer Services*, 40, 188-203.
- [7] Goossens, C. (2000). Tourism information and pleasure motivation. *Annals of Tourism Research*, 27(2), 301-321.
- [8] Wagner, T. (2007). Purchase motivation revised: A means-end chain analytical perspective. *International Journal of Retail & Distribution Management*, 35(7), 569-582.
- [9] Wagner, T., & Rudolph, T. (2010). Towards a hierarchical theory of purchase motivation. *Journal of Retailing and Consumer Services*, 17(5), 415-429.
- [10] Gilal, F. G., Zhang, J., Paul, J., & Gilal, N. G. (2019). The role of self-determination theory in marketing science: An integrative review and agenda for research. *European Management Journal*, 37(1), 29-44.
- [11] Xu, X., Li, Q., Peng, L., Hsia, T. L., Huang, C. J., & Wu, J. H. (2017). The impact of informational incentives and social influence on consumer behavior during Alibaba's online shopping carnival. *Computers in Human Behavior*, 76, 245-254.
- [12] Al-Maghrabi, T., Dennis, C., & Vaux Halliday, S. (2011). Antecedents of continuance intentions towards e-shopping: The case of Saudi Arabia. *Journal of Enterprise Information Management*, 24(1), 85-111.
- [13] Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54-67.
- [14] Cadwallader, S., Jarvis, C. B., Bitner, M. J., & Ostrom, A. L. (2010). Frontline employee motivation to participate in service innovation implementation. *Journal of the Academy of Marketing Science*, 38(2),

219-239.

- [15] Sweetser, K. D., & Kelleher, T. (2011). A survey of social media use, motivation and leadership among public relations practitioners. *Public Relations Review*, 37(4), 425-428.
- [16] Harris, R. B., Harris, K. J., & Harvey, P. (2007). A test of competing models of the relationships among perceptions of organizational politics, perceived organizational support, and individual outcomes. *The Journal of Social Psychology*, 147(6), 631-656.
- [17] Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-determination in Human Behavior*. Berlin, DE: Springer Science & Business Media.
- [18] Garrity, E. J., O'Donnell, J. B., Kim, Y. J., & Sanders, G. L. (2007). An extrinsic and intrinsic motivation-based model for measuring consumer shopping oriented web site success. *Journal of Electronic Commerce in Organizations*, 5(4), 18-38.
- [19] Corpus, J. H., Haimovitz, K., & Wormington, S. V. (2012). Understanding intrinsic and extrinsic motivation: Age differences and meaningful correlates. In N. M. Seel (ed.), *Encyclopedia of the Sciences of Learning* (pp. 3372-3374). Boston, MA: Springer.
- [20] Ma, A. T., Chow, A. S., Cheung, L. T., & Liu, S. (2018). Self-determined travel motivation and environmentally responsible behaviour of Chinese visitors to national forest protected areas in South China. *Global Ecology and Conservation*, 16, e00480:1-e00480:15.
- [21] Jensen, Ø., & Prebensen, N. (2015). Innovation and value creation in experience-based tourism. *Scandinavian Journal of Hospitality and Tourism*, 15(1), 1-8.
- [22] Le Pennec, M., & Raufflet, E. (2018). Value creation in inter-organizational collaboration: An empirical study. *Journal of Business Ethics*, 148(4), 817-834.
- [23] Ajitha, S., & Sivakumar, V. J. (2017). Understanding the effect of personal and social value on attitude and usage behavior of luxury cosmetic brands. *Journal of Retailing and Consumer Services*, 39, 103-113.
- [24] Balliet, D., Parks, C., & Joireman, J. (2009). Social value orientation and cooperation in social dilemmas: A meta-analysis. *Group Processes & Intergroup Relations*, 12(4), 533-547.
- [25] Bogaert, S., Boone, C., & Declerck, C. (2008). Social value orientation and cooperation in social dilemmas: A review and conceptual model. *British Journal of Social Psychology*, 47(3), 453-480.
- [26] To, P. L., Liao, C., & Lin, T. H. (2007). Purchase motivations on Internet: A study based on utilitarian and hedonic value. *Technovation*, 27(12), 774-787.
- [27] Atwal, G., & Williams, A. (2017). Luxury brand marketing—the experience is everything! In J.-N. Kapferer, J. Kernstock, T. O. Brexendorf, & S. M. Powell (Eds.), *Advances in luxury brand management* (pp. 43-57). Cham, CH: Palgrave Macmillan.
- [28] Nambisan, S., & Baron, R. A. (2010). Different roles, different strokes: Organizing virtual customer environments to promote two types of customer contributions. *Organization Science*, 21(2), 554-572.
- [29] Rintamäki, T., Kanto, A., Kuusela, H., & Spence, M. T. (2006). Decomposing the value of department store shopping into utilitarian, hedonic and social dimensions: Evidence from Finland. *International Journal of Retail & Distribution Management*, 34(1), 6-24.
- [30] Amoroso, D., & Lim, R. (2017). The mediating effects of habit on continuance intention. *International Journal of Information Management*, 37(6), 693-702.
- [31] Tran, L. T. T., Pham, L. M. T., & Le, L. T. (2019). E-satisfaction and continuance intention: The moderator role of online ratings. *International Journal of Hospitality Management*, 77, 311-322.
- [32] Martins, J., Costa, C., Oliveira, T., Gonçalves, R., & Branco, F. (2019). How smartphone advertising influences consumers' purchase intention. *Journal of Business Research*, 94, 378-387.
- [33] Asnawati, A., & Wahyuni, S. (2018). The influence of hedonic purchase motivation to the impulse buying of online-shopping consumer on Instagram. *Russian Journal of Agricultural and Socio-Economic*

Sciences, 74(2), 99-107.

- [34] Zhang, M., Guo, L., Hu, M., & Liu, W. (2017). Influence of customer engagement with company social networks on stickiness: Mediating effect of customer value creation. *International Journal of Information Management*, 37(3), 229-240.
- [35] Chang, A. H., Chen, J. H., & Chen, C. J. (2005). Shopping values, motivations and preferences for e-commerce marketing strategies of online buying behaviors. *Fu Jen Management Review*, 12(1), 31-64.
- [36] Chung, C. W., Hsu, L. C., & Chang, C. W. (2013). A study on leisure motivation, visitors' value, satisfaction and loyalty for visitor - A case of 2013 Kaohsiung international invitational dragon boat race. *Journal of Sport and Recreation Management*, 10(4), 45-62.
- [37] Tsai, C. C., Hsu, S. F., & Shih, T. C. (2017). A study of the relationships among diet motivation, experienced value and brand performance of gourmet restaurant customers in metro area of Taiwan. *Journal of Commercial Modernization*, 8(3), 155-173.
- [38] Yang, S. C., & Chen, M. Y. (2012). A study of consumer motivation, perceived value, satisfaction, and repurchases intention for the BabyBoss City. *Leisure Study*, 4(1), 38-53.
- [39] Overby, J. W., & Lee, E. J. (2006). The effects of utilitarian and hedonic online shopping value on consumer preference and intentions. *Journal of Business Research*, 59(10-11), 1160-1166.
- [40] Parasuraman, A., & Grewal, D. (2000). The impact of technology on the quality-value-loyalty chain: a research agenda. *Journal of the Academy of Marketing Science*, 28(1), 168-174.
- [41] Dedeoglu, B. B., Bilgihan, A., Ye, B. H., Buonincontri, P., & Okumus, F. (2018). The impact of servicescape on hedonic value and behavioral intentions: The importance of previous experience. *International Journal of Hospitality Management*, 72, 10-20.
- [42] Lyu, J., Hu, L., Hung, K., & Mao, Z. (2017). Assessing servicescape of cruise tourism: The perception of Chinese tourists. *International Journal of Contemporary Hospitality Management*, 29(10), 2556-2572.
- [43] Pham, Q. T., Tran, X. P., Misra, S., Maskeliūnas, R., & Damaševičius, R. (2018). Relationship between convenience, perceived value, and repurchase intention in online shopping in Vietnam. *Sustainability*, 10(1), 156-169.
- [44] Hong, J. C., Lin, P. H., & Hsieh, P. C. (2017). The effect of consumer innovativeness on perceived value and continuance intention to use smartwatch. *Computers in Human Behavior*, 67, 264-272.
- [45] Choi, E. J., & Kim, S. H. (2013). The study of the impact of perceived quality and value of social enterprises on customer satisfaction and re-purchase intention. *International Journal of Smart Home*, 7(1), 239-252.
- [46] Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.
- [47] Deci, E. L., & Ryan, R. M. (1980). Self-determination theory: When mind mediates behavior. *The Journal of Mind and Behavior*, 1(1), 33-43.
- [48] Yang, W., & Mattila, A. (2016). Why do we buy luxury experiences? Measuring value perceptions of luxury hospitality services. *International Journal of Contemporary Hospitality Management*, 28(9), 1848-1867.
- [49] Hong, J. C., Hwang, M. Y., Tai, K. H., & Kuo, Y. C. (2016). Crystallized intelligence affects hedonic and epistemic values to continue playing a game with saliency-based design. *Computers & Education*, 95, 75-84.
- [50] Shi, S., Chen, Y., & Chow, W. S. (2016). Key values driving continued interaction on brand pages in social media: An examination across genders. *Computers in Human Behavior*, 62, 578-589.
- [51] Vock, M., Dolen, W. V., & Ruyter, K. D. (2013). Understanding intention to pay for social network sites. *Journal of Service Research*, 16(3), 311-325.

- [52] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- [53] Kenny, D. A., Kaniskan, B., & McCoach, D. B. (2015). The performance of RMSEA in models with small degrees of freedom. *Sociological Methods & Research*, *44*(3), 486-507.
- [54] Cor, M. K. (2016). Trust me, it is valid: Research validity in pharmacy education research. *Currents in Pharmacy Teaching and Learning*, *8*(3), 391-400.
- [55] Green, S. B., & Salkind, N. (2004). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (4th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- [56] Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139-152.
- [57] Awang, Z. (2015). *SEM made simple, a gentle approach to learning structural equation modeling*. Selangor, MY: MPWS Rich Publication Sdn. Bhd.
- [58] Ramayah, T., Lee, J. W. C., & In, J. B. C. (2011). Network collaboration and performance in the tourism sector. *Service Business*, *5*(4), 411-428.
- [59] Ahmad, S., Zulkurnain, N. N. A., & Khairushalimi, F. I. (2016). Assessing the validity and reliability of a measurement model in structural equation modeling (SEM). *Journal of Advances in Mathematics and Computer Science*, *15*(3), 1-8.
- [60] Abedi, G., Rostami, F., & Nadi, A. (2015). Analyzing the dimensions of the quality of life in Hepatitis B Patients using confirmatory factor analysis. *Global Journal of Health Science*, *7*(7), 22-31.
- [61] Chan, W. (2007). Comparing indirect effects in SEM: A sequential model fitting method using covariance-equivalent specifications. *Structural Equation Modeling: A Multidisciplinary Journal*, *14*(2), 326-346.
- [62] Stelling, A. G., Mastenbroek, N. J., & Kremer, W. D. (2019). Predictive value of three different selection methods for admission of motivated and well-performing veterinary medical students. *Journal of Veterinary Medical Education*, *46*(3), 289-301.
- [63] Cheon, S. H., & Reeve, J. (2015). A classroom-based intervention to help teachers decrease students' amotivation. *Contemporary educational psychology*, *40*, 99-111.
- [64] Leroy, N., & Bressoux, P. (2016). Does amotivation matter more than motivation in predicting mathematics learning gains? A longitudinal study of sixth-grade students in France. *Contemporary Educational Psychology*, *44*, 41-53.
- [65] Meens, E. E., Bakx, A. W., Klimstra, T. A., & Denissen, J. J. (2018). The association of identity and motivation with students' academic achievement in higher education. *Learning and Individual Differences*, *64*, 54-70.
- [66] Park, S. (2016). What attracts you to shopping malls? The relationship between perceived shopping value and shopping orientation on purchase intention at shopping malls in suburban areas. In K. K. Kim (Ed.), *Celebrating America's Pastimes: Baseball, Hot Dogs, Apple Pie and Marketing?* (pp. 663-669). Cham, CH: Springer.
- [67] Arnold, M. J., & Reynolds, K. E. (2003). Hedonic purchase motivations. *Journal of Retailing*, *79*(2), 77-95.
- [68] Kim, H. S. (2006). Using hedonic and utilitarian purchase motivations to profile inner city consumers. *Journal of Shopping Center Research*, *13*(1), 57-79.
- [69] Holbrook, M. B. (1994). The nature of customer's value: An axiology of service in consumption experience. In R. T. Rust, & R. L. Oliver (Eds.), *Service quality: New directions in theory and practice* (pp. 21-71). Thousand Oaks, CA: Sage.
- [70] Mohseni, S., Jayashree, S., Rezaei, S., Kasim, A., & Okumus, F. (2018). Attracting tourists to travel companies' websites: The structural relationship between website brand, personal value, shopping

- experience, perceived risk and purchase intention. *Current Issues in Tourism*, 21(6), 616-645.
- [71] Zhang, C. B., Li, Y. N., Wu, B., & Li, D. J. (2017). How WeChat can retain users: Roles of network externalities, social interaction ties, and perceived values in building continuance intention. *Computers in Human Behavior*, 69, 284-293.
- [72] Chen, J. H., & Fu, J. R. (2018). On the effects of perceived value in the mobile moment. *Electronic Commerce Research and Applications*, 27, 118-128.
- [73] Li, Y. (2016). Empirical study of influential factors of online customers' repurchase intention. *iBusiness*, 8(3), 48-60.
- [74] Hu, X., Huang, Q., Zhong, X., Davison, R. M., & Zhao, D. (2016). The influence of peer characteristics and technical features of a social shopping website on a consumer's purchase intention. *International Journal of Information Management*, 36(6), 1218-1230.
- [75] Shin, Y. H., Im, J., Jung, S. E., & Severt, K. (2019). Motivations behind consumers' organic menu choices: The role of environmental concern, social value, and Health Consciousness. *Journal of Quality Assurance in Hospitality & Tourism*, 20(1), 107-122.
- [76] Sun, G., D'Alessandro, S., & Johnson, L. W. (2016). Exploring luxury value perceptions in China: Direct and indirect effects. *International Journal of Market Research*, 58(5), 711-731.
- [77] Chen, C. Y., & Lin, Y. H. (2009). An analysis of motivation, risk factors, and intention to purchase through the internet for sport merchandise consumption. *Journal of Taiwan Society for Sport Management*, 8, 1-16.
- [78] Tang, T. C., Chung, C. Y., Liao, W. Y., Huang, W. L., Huang, Y. L., Hsiao, Y. S., ... Chen, Y. P. (2010). A study of purchase intention, customer satisfaction and repurchase willingness - A case of personal computer. *Journal of National Huwei University of Science & Technology*, 29(1), 29-41.
- [79] Wang, Y. H., & Huang, Y. C. (2014). A study on the purchase motivation and purchase intention for pet insurance. *Journal of Tourism and Leisure Management*, 2, 30-43.
- [80] Lin, L. Y., & Hsu, J. C. C. (2007). The moderating effect of reference groups and consumer attitude in the influence of consumer motivation on purchase intention: An example of elderly consumer purchase healthy foods. *Marketing Review*, 4(4), 421-448.
- [81] Horváth, C., & Adigüzel, F. (2018). Shopping enjoyment to the extreme: Hedonic purchase motivations and compulsive buying in developed and emerging markets. *Journal of Business Research*, 86, 300-310.
- [82] Coker, K. K., Boostrom, R. E., & Altobello, S. A. (2014). What makes social shoppers click? The role of social rewards in social shopping. *Marketing Management*, 24(1), 66-79.
- [83] Yang, S., Ding, S., & D'Alessandro, S. (2018). Are all Chinese shoppers the same? Evidence of differences in values, decision making and purchase motivations between the Han majority and other minorities in China. *Journal of Retailing and Consumer Services*, 44, 24-34.
- [84] Ahmad, N., Omar, A., & Ramayah, T. (2010). Consumer lifestyles and online shopping continuance intention. *Business Strategy Series*, 11(4), 227-243.
- [85] Swilley, E., & Goldsmith, R. E. (2013). Black friday and cyber monday: Understanding consumer intentions on two major shopping days. *Journal of Retailing and Consumer Services*, 20(1), 43-50.
- [86] Kwon, H. J., & Brinthaup, T. M. (2015). The motives, characteristics and experiences of US Black Friday shoppers. *Journal of Global Fashion Marketing*, 6(4), 292-302.
- [87] Hwang, Y. M., & Lee, K. C. (2018). Using an eye-tracking approach to explore gender differences in visual attention and shopping attitudes in an online shopping environment. *International Journal of Human-Computer Interaction*, 34(1), 15-24.
- [88] Atulkar, S., & Kesari, B. (2017). Satisfaction, loyalty and repatronage intentions: Role of hedonic shopping values. *Journal of Retailing and Consumer Services*, 39, 23-34.

[89] Yeh, C. H., Wang, Y. S., & Yieh, K. (2016). Predicting smartphone brand loyalty: Consumer value and consumer-brand identification perspectives. *International Journal of Information Management*, 36(3), 245-257.

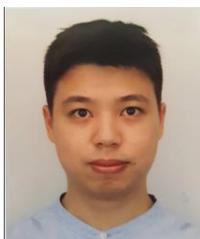
Copyright © 2022 by the authors. This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited ([CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)).



Jian-Hong Ye is a lecturer at the China-ASEAN International College, Dhurakij Pundit University. He served as a member at the Institute for Research Excellence in Learning Sciences and Chinese Language and Technology Center, National Taiwan Normal University. Dr. Ye's main research interests includes digital learning, game-based learning, and vocational education.



Jhen-Ni Ye is a PhD student at the Graduate Institute of Technological & Vocational Education, National Taipei University of Technology. She serves as a research assistant at the Department of Industrial Education, National Taiwan Normal University. Miss Ye's main research interests includes digital learning, game-based learning, and vocational education.



Yu-Feng Wu is a postdoctoral fellow at the Physical Education Research and Development Center, National Taiwan Normal University. Dr. Wu's main research interests includes organizational behavior, consumer behavior, sport wearables, eSport and game-based learning.



Jon-Chao Hong is a professor in Department of Industrial Education and Institute for Research Excellence in Learning Sciences, National Taiwan Normal University. Dr. Hong was granted two "Outstanding Research Award" given by the Ministry of Science and Technology in Taiwan. Dr. Hong's main research interests includes digital learning, game-based learning, inquiry learning.