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#### THE STUDY ON ANTECEDENTS OF CONSUMER BUYING **IMPULSIVENESS IN AN ONLINE CONTEXT**

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#### Abstract

The global recession caused by the financial tsunami has seriously impacted numerous industries. Although the market scale of global e-commerce market has declined, global online shopping continues to grow. Many previous researches focused on the effect of website design characteristics on online impulsive buying behavior, and few have explored such behavior from consumer individual internal factor perspectives. This paper aims to explore and integrate individual internal factors influencing consumer online buying impulsiveness, and further to recognize the relationships among these factors. The results showed as follows: (1) hedonic consumption needs, impulsive buying tendency, positive affect and normative evaluations positively influence buying respectively; impulsiveness, (2)hedonic consumption needs positively influence positive affect; (3) impulsive buying tendency positively influences normative evaluations; (4) normative evaluations positively influence positive affect.

#### Introduction

In the second half year of 2008, financial tsunami led to global recession, and the shrinkage of consumption expenditure resulted in serious economic impact on many industries. Companies which have poor constitution or bad management were forced to lay off employees or go bankruptcy. Although the growth rate of output value in global e-commerce market decreased, overall market scale of worldwide online shopping still increased continuously (e.g., Europe, America, and Japan). Regarding e-commerce market in Taiwan, except for B2B market scale slightly declined, the number of enterprises and market scale in B2C market are increasing. In other words, even in recession, e-commerce is still the important business model which enhances overall consumption; it is helpful to stabilize and maintain economic development in Taiwan [10].

In recent years, with the prevalence of the Internet, the population of Internet users in Taiwan has increased significantly. New transaction models (e.g., online shopping and auction) have been widely accepted by consumers and e-transactions which relate to food, clothes,

residence and transportation begin to penetrate into daily consumption. As a result, output value of e-commerce market has sharply increased. In 2008, B2C e-commerce market scale in Taiwan reached \$ 53.21 hundred million. Even if the market growth rate decreased due to global recession, Taiwan's B2C e-commerce market scale in 2009 still reached \$ 64.87 hundred million [10]. Overall, the Taiwan's development of e-commerce is continuously supported from industrial. governmental, and academic circles, their efforts (e.g., developing e-business and construction of e-commerce platform) have had positive outcomes. Therefore, online shopping still has considerable potential business opportunity in the future.

Since individual sellers in C2C platform have different credit rating, the problems of credit security easily result in numerous frauds and consumption disputes. Thus, most of consumers have little trust in C2C transaction. As consumers have begun to emphasize the convenience and reliability of online shopping, it is gradually common for internet users to have transaction with creditable or well-known online stores. The statistics in past years showed that B2C users are increasing than C2C users [10]. In addition, the survey in 2008 indicated that the top three market scales of B2C online stores in Taiwan are travel service (20.7%; it is also the first in 2007), investment and finance (16.8%), and 3C products (10.8%) in turn [9]. In the context of global recession, the growth rate of sales in travel and 3C products slightly decreased. However, in general, the market scale of travel products in Taiwan has continued to increase from \$21.87 hundred million in 2008 to \$25.56 hundred million in the third quarter of 2009 [10]. Consequently, the development potential of online travel market in the future is still worthy being concentrated.

Previous research issues have focused on consumers' impulsive buying behavior, such as consumers' impulsive traits, normative evaluations, behavioral characteristics, pre-purchase and post-purchas emotion [14] [34] [33] [34] [35]. These findings become the major bases of the subsequent academic studies. However, most of them investigated the consumers' impulsive buying behavior in physical shops; instead, the impulsive buying behavior of online shopping is less explored. In virtual worlds, web pages are filled with various advertising and promotion messages; since theses diverse marketing stimuli could result in consumers' impulsive buying behavior at any time, recent researches have begun to concentrate on e-impulse buying [1] [15] [20] [22] [26] [30].

In line with shopping in physical stores, consumers' internal emotion and potential impulsive traits are often triggered by various advertising and promotion messages on websites, and lead to irrational buying behavior. Early studies have found some direct and indirect factors influencing impulsive buying behavior, such as personal emotion and mood, affect, normative evaluations, impulsive buying tendency, and individual needs [6] [17] [33] [43]. Since online shopping is conducted on human-computer interface, many external environmental factors (e.g., store atmosphere and promotion of salespersons) can have no direct influence on consumers (e.g., they get online at personal working room or bedroom). Different from consumption in physical stores which is easily affected by many uncontrollable external factors, browsing any web pages in online shopping process is primarily determined by the consumers. Therefore. consumers' individual internal factors (e.g., individual demands, trais, values and affect) have more significant and strong influence on their buying behavior. However, some previous researches focused on the effects of website design factors on online impulsive buying behavior. For instance, Koufaris [22] explained online impulsive buying behavior by technology acceptance model, Madhavaram and Laverie [26] identified the characteristics of web pages which result in online impulse buying, and Parboteeah et al. [30] examined how variations in the human-computer interface influence online impulse buying. However, few studies explore the e-impulse buying behavior from the consumers' individual internal factors perspectives (e.g., motivation, needs, affect, traits, and values). Thus, based on the results and viewpoints of previous researches [6] [17] [33] [43] [30], this study aims to explore and integrate the consumers' individual internal factors influencing impulsiveness. online buving and further recognizes the causal relationships among hedonic consumption needs, positive affect, impulsive buying tendency, normative evaluations, and buying impulsiveness. In sum, the purposes of this study are described below: (1) to explore how individual hedonic consumption needs influence both positive affect and buying impulsiveness; (2) to investigate how consumers' impulsive buying tendency influence both normative evaluations and buying impulsiveness; (3) to examine the relationships among normative evaluations, positive affect, and buying impulsiveness. Overall, by learning how consumers' buying impulsiveness

is affected by individual internal factors in online shopping, this study intends to provide some insights for academia and online store practitioners to develop operational strategies of online market in the future.

#### **Literature Review**

## Impulsive Buying Behavior and Buying Impulsiveness

Impulsive buying behavior is a sudden, immediate, and unplanned purchase [6] [33] [35] [40] [43]. Stern [40] suggested that impulsive buying refers to when consumers are influenced by external stimulus, and thus lead to an irrational and unreflective buying behavior; further, the study proposed the concept of impulse mix, and divided impulsive buying into pure, reminder, suggestion, and planned. Rook [32] defined impulsive buying as "a consumer experiences a sudden, powerful and persistent urge to immediately buy something." Moreover, since buying impulsiveness is complex and interesting, it could stimulate emotional conflicts. In other words, before entering the stores, consumers have no intention to purchase a specific product; however, consumers had a sudden and immediate buying desire when they see the product. Therefore, the impulsive buying behavior is usually spontaneous and unreflective [6]. The concept of impulsive buying behavior involves unintended, immediate, unreflective, and is accompanied with intense affect [43] [44]. Overall, this study suggests that impulsive buying behavior refers to consumers' sudden, unreflective, and unintended buying behavior after experiencing some internal and external stimuli.

As argued by some researches, the actual impulsive behavior observed in controllable contexts (e.g., website) is quite problematic [24] [30]. When respondents are asked to recall the latest impulsive buying, or when their actual behaviors are monitored, their reactions or behaviors could be biased because they perceive the need to responses in a socially desirable manner [39] [30]. In studies on impulse purchases, impulsiveness and impulsivity are the replaceable terms [33]. Compared with difficulty and bias of measuring actual impulse purchase, Beatty and Ferrell [6] suggested that the psychological notion of impulsivity is more proper to be incorporated as operationlization of impulse buying behavior. This study defines buying impulsiveness as a spontaneous, immediate and unreflective, and kinetic consumer's purchase intention. In a study on online impulse purchase, Zhang, Prybutok, and Strutton [45] replaced consumers' impulsive buying behavior by their impulsivity and quoted the scale of buying impulsiveness developed by Rook and Fisher [33]. Consequently, this study treats buying impulsiveness as a reasonable proxy construct of impulsive buying behavior and adopts the scale of Rook and Fisher [33].

#### **Hedonic Consumption Needs**

Stern [40] proposed nine factors affecting impulsive buying, and one of them is the degree of consumer marginal need for items. Hedonic consumption needs means that consumers seek to satisfy the needs for fun, novelty, and surprise during their shopping experience [17]. Hedonic shopping reflects entertainment and emotional worth in consumers' shopping [4] [7], and it is related to multisensory and emotional arousal [18]. Beatty and Ferrell [6] suggested that shopping enjoyment is associated with the pleasure obtained by individual in the shopping process, and the shoppers may enjoy this specific shopping environment. Overall, this study defines hedonic consumption needs as consumers' potential needs to satisfy individual subjective fun and pleasure during the shopping process.

Rook [32] indicated that impulsive buying behavior includes hedonic elements, and it makes consumers feel good, happy, satisfied, light, wonderful, or high. Some researchers agreed that impulsive buying involves hedonic or affective components [8] [17] [31] [33] [42]. Many consumers also suggested that impulse purchase could satisfy their hedonic desires [17] [31] [32] [41]. Previous studies reported that consumers satisfy various hedonic needs by shopping, and their purchase of specific products is secondary to the action during shopping; since shopping experience aims to satisfy hedonic needs, the products selected in the period of shopping appear to be the unplanned purchase and represent an impulse buying behavior [17]. In short, impulsive buying primarily results from a need to purchase (e.g., fun) than a need for a product [32]. The study demonstrated that individual consumers' impulsive buying behavior relates positively to their desires to fulfil hedonic needs [17]; in other words, consumers would make impulse buying for hedonic reasons (i.e., hedonic consumption needs) [6] [17] [22]. Therefore, the hypothesis is proposed as follows:

H<sub>1</sub>: Hedonic consumption needs have a positive impact on buying impulsiveness.

#### **Impulsive Buying Tendency**

Gerbing, Ahadi, and Patton [16] defined impulsive buying tendency as "a tendency to respond quickly to a given stimulus, without deliberation and evaluation of consequences." In study on the antecedents of impulsive buying behavior, Beatty and Ferrell [6] define impulsive buying tendency as the tendencies to spontaneous and sudden urges to make immediate purchases without reflection and evaluation of consequence. Rook and Hoch [35] proposed a psychological model of consumers' impulsive buying, and pointed out the five elements of impulse buying as follows: (1)a sudden and spontaneous action desire; (2)a state of psychological disequilibrium; (3)the occurrence of psychological conflict and struggle; (4)reduction of cognitive evaluation; (5) without reflection of action consequences. Weun et al. [43] define impulse buying tendency as the extent to which an individual may make unintended, immediate, and unreflective purchases. Overall, this study defines impulsive buying tendency as a consumers' trait which respond quickly to a given stimulus without deliberation of action outcomes.

Rook and Fisher [33] suggested that consumers' actual impulse buying depends on their impulsive buying trait tendencies and normative judgments. In other words, consumers with impulsive traits tend to have buying impulsiveness. Therefore, the hypothesis is proposed as follows:

## H<sub>2</sub>: Impulsive buying tendency has a positive impact on buying impulsiveness.

#### **Positive Affect**

Affect or mood has been recognized as a critical variable that significantly influences some actions (including impulse buying) [6] [14] [32] [34]. Beatty and Ferrell [6] indicated that the importance of affect in shopping process is consistent with the literature on the effect of mood on impulse buying. For consumers, unintentional browsing or shopping may be sometimes more important than actual acquisition of products since it can provide a highly pleasant buying experience [6] [25] [37]. For many shoppers, browsing tends to result in positive feelings (i.e., positive affect). Positive affect is defined as the extent to which individual feels enthusiastic, active, and alert; that is, this affect is a state of high energy, full concentration, and pleasant involvement [6]. Overall, this study defines positive affect as consumers' positive emotion in shopping.

Compared with other consumers, impulsive shoppers are more emotionalized [42]. Previous studies found that consumers' positive affect is influenced by shopping enjoyment [6] [22]. Overall, this study infers that consumers' hedonic consumption needs would positively enhance their positive affect in shopping. Therefore, the hypothesis is proposed as follows:

## H<sub>3</sub>: Hedonic consumption needs have a positive impact on positive affect.

Impulsive shoppers usually showed higher feelings of amusement, delight, enthusiasm, and joy [42]. Additionally, Weinberg and Gottwald [42] suggested that impulsive buying behavior is affected by consumers' strong emotion; in other words, since impulsive shoppers are usually more emotionalized, taking emotional variable as the predictor of impulsive buying behavior is reasonable. Rook and Gardner [34] found that 85% respondents indicated a positive mood would more easily contribute to impulsive buying than a negative mood. The study suggested that consumer positive emotion positively affects impulsive buying behavior [33]. Based on literature review, the major effect of affect on buying impulsiveness comes from its positive affect rather than its negative [6]. When consumers are in positive emotion, they tend to accept the risk and easily have impulsive buying behavior [11]. Overall, this study infers that consumers' positive affect in shopping would result in their impulsive buying behavior. Therefore, the hypothesis is proposed as follows:

H<sub>4</sub>: Positive affect has a positive impact on buying impulsiveness.

#### **Normative Evaluations**

Ajzen and Fishbein [2] proposed the viewpoint of normative evaluations in the theory of reasoned action (TRA), and suggested that individuals' subjective norms would be reflected on their behaviors. Rook and Fisher [33] considered that the probability that consumers actually engage in impulse buying depends both on impulsive buying trait tendencies and normative judgment. Normative evaluations are defined as consumers' judgments about the appropriateness of making an impulsive purchase in specific shopping situations [33]. Most previous researches thought that impulsive behavior is irrational, immature, wasteful, and risky. However, for many consumers, the motives for and consequences of impulsive purchase only slightly violated social behavior norms. In specific situations, normative evaluations might even contribute to impulsive behavior since consumers consider it to be right [33]. Overall, this study defines normative evaluations as the degree of consumers' judgments about positive appropriateness of impulsive buying behavior.

Normative evaluations have been the important force affecting individual consumption behavior [27]. Zhang et al. [45] studied online impulse purchasing behaviors and found that consumers' subjective norms positively influence their purchase intention and impulsivity. Overall, first, this study infers that the higher the consumers' impulsive buying tendency, the higher the positive evaluations (i.e., rationalization and legitimization of the behavior) on impulsive buying behavior. Second, consumers' positive judgment on impulsive buying behavior would enhance their positive affect in shopping. Finally, this study suggests that the more positive the consumers' judgment on impulsive buying behavior, the higher the buying impulsiveness. Therefore, the following hypotheses are proposed:

H<sub>5</sub>: Impulsive buying tendency has a positive impact on normative evaluations.

H<sub>6</sub>: Normative evaluations have a positive impact on positive affect.

H<sub>7</sub>: Normative evaluations have a positive impact on buying impulsiveness.

#### Method

#### **Research Framework**

Most previous studies focused on the effects of website design factors on online impulsive buying behavior [22] [26] [30]. Few studies explore the e-impulse buying behavior from the consumers' individual internal factors perspectives (e.g., needs, affect, and traits). Thus, this study aims to explore and integrate the consumers' individual internal factors influencing online buying impulsiveness, and further recognizes the causal relationships among hedonic consumption needs, positive affect, impulsive buying tendency, normative evaluations, and buying impulsiveness. Finally, Figure 1 shows the theoretical model in this study.

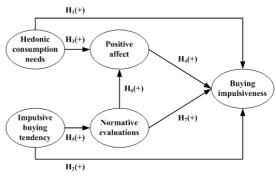


Figure 1 Theoretical model

#### **Instrument and Data Collection**

The measurement of variables in this study employed existing academic scales and properly modified the content of questionnaire items. Hedonic consumption needs are measured by the scale proposed by Hausman [17]. Consumers' positive affect in shopping is measured by the scale developed by Beatty and Ferrell [6]. The measurement of impulsive buying tendency used the scale proposed by Weun et al. [43]. The measurements of normative evaluations and buying impulsiveness are based on the scale of Rook and Fisher [33]. Besides demographic variables, this study measured the items using seven-point Likert scales anchored by "strongly disagree (1)" and "strongly agree (7)".

InsightXplorer [19] investigated Taiwan consumers' travel behavior in 2008, and found that the ranking of their favorite travel agencies is successively Liontravel, Eztravel, Settour. Startravel, and Ezfly. To obtain the representative samples, this study treated consumers who have purchased unplanned trips on these five websites in the recent half year as the subjects; moreover, respondents were asked to fill in online questionnaire based on their latest transaction experiences on the websites. One-month online survey was conducted on travel forum of Yahoo Kimo website in Taiwan (the most popular shopping platform for online users in Taiwan); finally, 364 valid samples were collected.

#### Results

#### **Descriptive Statistics**

According to analytical results, there are more female (57.4 %) than male (42.6 %). Most of the respondents are 26~35 years old (57.1%), followed by below 25 years old (33.0%); most of them have a college degree (66.8%), followed by those lower than a senior high school degree (25.8%). As for monthly income, 53.6 % of respondents are  $938\sim1,562$ , followed by 937 or below (36.5%).

#### **Measurement Model**

In terms of reliability testing, this study used Cronbach's  $\alpha$  coefficient to analyze the reliability of each scale. The results indicated that the Cronbach's  $\alpha$  coefficient of each variable was between 0.81 and 0.95, which was higher than 0.7 suggested by Nunnally [29]. Overall, the items in each scale had good internal consistency (see Table 1).

Table 1 Means standard deviations and correlation matrix

Wearis, standard deviations, and correlation matrix					
	1	2	3	4	5
1. HCN	0.75				
2. IBT	0.20**	0.68			
3. PA	0.27**	0.06	0.80		
4. NE	0.19**	0.15**	0.22**	0.82	
5. BI	0.27**	0.17**	0.34**	0.60**	0.83
М	3.75	3.64	5.16	4.93	5.42
SD	0.55	0.57	0.80	0.69	0.84

*Notes*: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001. Diagonal elements represent the square root of average variance extracted; the lower triangular region represents the correlation coefficients between the variables. HCN=hedonic consumption needs, IBT=impulsive buying tendency, PA=positive affect, NE=normative evaluations, BI=buying impulsiveness, M=mean, SD=standard deviation.

In terms of validity testing, this study conducted confirmatory factor analysis by estimation methods of measurement model proposed by Anderson and Gerbing [3] and used goodness-of-fit test to verify whether all variables possess good convergent validity and discriminant validity. First, The analytical results of convergent validity showed that all goodness-of-fit indices reached acceptable level (Chi-square=870.482, d.f.=550, GFI=0.884, AGFI=0.867, RMR=0.028, RMSEA=0.040, NFI=0.908, TLI=0.961, CFI=0.964, IFI=0.964). The factor loadings of all items reached statistical significance. The composite reliability (CR) for all variables also exceeded 0.6 [5]; the average variance extracted (AVE) for each variable was larger than the criterion of 0.5 [13]. Thus, each construct revealed good convergent validity (see Table 2). Second, as for discriminant validity, the results indicated that each construct's square root of AVE exceeded the correlation coefficients among other constructs. Consequently, each pair of constructs possessed good discriminant validity [13] (see Table 1).

#### Structural Model

According to Bagozzi and Yi [5], three aspects of goodness-of-fit should be examined. First, for preliminary fit criteria, the measurement errors of all indicators in this study were not negative values, and the factor loadings were not lower than 0.50 or higher than 0.95 and all reached the significance level. Therefore, the analytical results were acceptable. Second, regarding overall model fit, Chi-square=878.106, d.f.=552, GFI=0.883. AGFI=0.867, RMR=0.035, RMSEA=0.040, NFI=0.907, IFI=963, CFI=0.963, PNFI=0.841, PGFI=0.774. Thus, the model fit reached the acceptance level. Third, regarding the fit of internal structure of model, both CR (>0.6) and AVE (>0.5) for each construct reached acceptable level. Therefore, the theoretical model possessed good fit of internal structure.

Table 2 showed the results of hypothesis testing. First, hedonic consumption needs, impulsive buying tendency, positive affect, and normative evaluations positively influence buying impulsiveness, respectively; thus,  $H_1$ ,  $H_2$ ,  $H_4$ , and  $H_7$  were all supported. Second, both hedonic consumption needs and normative evaluations significantly and positively influence positive affect; thus, H<sub>3</sub> and H<sub>6</sub> were supported. Finally, impulsive buying tendency significantly and positively influence normative evaluations; thus, H<sub>5</sub> was supported. Overall, all hypotheses in this study were supported. In addition, normative evaluations has the greatest effect on buying impulsiveness (total effects=0.59), and the ranking of effects on buying impulsiveness are positive affect (total effects=0.28), impulsive buying tendency (total effects=0.20), and hedonic effects=0.19), consumption needs (total respectively.

Table 2 Results of hypothesis testing

Path	Path coefficient	Conclusion			
1 aui	( <i>t</i> -value)				
H <sub>1</sub> : HCN→BI	0.11 (2.46)*	Supported			
H₂: IBT→BI	0.10 (2.08)*	Supported			
H <sub>3</sub> : HCN→PA	0.27 (4.44)***	Supported			
H₄: PA→BI	0.28 (5.68)***	Supported			
H₅: IBT→NE	0.17 (2.85)**	Supported			
H <sub>6</sub> : NE→PA	0.20 (3.44)***	Supported			
H <sub>7</sub> : NE→BI	0.53 (10.59)***	Supported			

*Note*: p < 0.05; p < 0.01; p < 0.01. HCN=hedonic consumption needs, IBT=impulsive buying tendency, PA=positive affect, NE=normative evaluations, BI=buying impulsiveness.

#### Conclusions

#### Discussion

According to the results of hypothesis testing, H<sub>1</sub> showed that hedonic consumption needs significantly and positively influence buying impulsiveness which is consistent with the views of previous researches [17] [22] [31] [32] [41]. In other words, consumers' impulse shopping is primarily to satisfy their various hedonic needs (e.g., happy and high), and the acquisitions of specific products are secondary to the purchase action. H<sub>2</sub> showed that impulsive buying tendency significantly and positively influences buying impulsiveness, consistent with Rook and Fisher [33]. In other words, consumers with higher impulsive buying tendency tend to increase their buying impulsiveness, and even contribute to purchase without deliberation. Previous researches indicated that affect is an important variable that strongly influences some actions (including impulse purchasing) [6] [14] [32] [34]; H<sub>3</sub> proved that positive affect is significantly and positively influenced by hedonic consumption needs. In other words, consumers do not only intend to acquire specific products in shopping process; sometimes, they would like to satisfy needs for pleasure. That is, such strong desires for needs easily evoke consumers' positive emotion. Further, H<sub>4</sub> proved that positive affect has a significant and positive impact on buying impulsiveness. As described in previous studies, impulsive shoppers are typically more emotionalized [42]. Thus, when consumers are in positive emotion, their buying impulsiveness tends to be enhanced (since they can accept higher shopping risk). H<sub>5</sub> revealed that impulsive buying tendency has a significant and positive influence on normative evaluations. In other words, consumers with high impulsive buying tendency suggested that their impulse buying is rational and legitimate (i.e., positive evaluations). In addition, both  $H_6$  and H<sub>7</sub> showed that normative evaluations significantly and positively influence positive affect and buying impulsiveness. Namely, consumers' positive affect and buying impulsiveness in shopping are easily enhanced if they have positive evaluations of impulsive buying behavior.

#### **Managerial Implications**

Different from previous researches which focus on how website design factors influence online impulsive buying behavior, this study explores the effects of consumers' individual internal factors (e.g., motivation, needs, affect, and traits). The academic contributions of this study are as follows. First, in online shopping environment, consumers' hedonic consumption needs not only directly influence buying impulsiveness, but also indirectly affect it through positive affect; in other words, hedonic consumption needs are the critical factor influencing online impulsive purchase intention. Second, consumers' impulsive buying tendency directly influences buying impulsiveness, and even indirectly influences it by positive normative evaluations. That is, individual internal impulsive traits tend to increase their impulsive purchase environment. intention in online Finally, consumers' positive judgment on impulsive buying behavior directly and positively influences their online impulsive purchase intention, and also has an indirect impact on it through positive affect (e.g., enthusiasm, concentration, and delight). Overall, the preceding findings are helpful to facilitate advanced studies in the future.

Moreover, regarding practical implications, this paper proposes some suggestions for travel website practitioners. First, from motivation perspectives, when travel websites can satisfy consumers' hedonic needs in browsing process, they may further trigger their impulse purchases. Therefore, website practitioners can adopt some measures to enhance consumers' pleasure in navigating process, such as detailed introduction of the human geograpies of travel spots on websites, launch of trips upon festival of specific spots, and proposition of theme trips (e.g., Valentine's Day or Honeymoon trips); thus, the consumers' impulsive purchase intention will be enhanced. Second, positive normative evaluations have the greatest influence on buying impulsiveness (path coefficient= 0.53); it means that if the enterprises can make consumers to perceive rationalization and legitimization of online impulsive buying behavior, the consumers' intention to impulsively purchase specific trips will be enhanced. Consequently, travel website practitioners should emphasize rationalization and legitimization of purchasing some trips. For instance, the enterprises can stress that the trips are above the money's worth or some spot sceneries only appear in specific seasons. As mentioned above, consumers' purchase intention would increase if they think that the purchases of such trips are rational and appropriate.

#### **Limitations and Future Directions**

Although this study tries to meet the scientific principles, some limitations still exist. First, this study takes buying impulsiveness as a rational proxy of impulsive buying behavior and attempts to predict consumers' actual buying behavior. Future studies should try to improve the operationalization and measurement of online impulsive buying behavior in order to conduct further studies. Second, Stern [40] divided impulsive buying behavior into pure, reminder, suggestion, and planned. Since this study does not investigate the types of the participants, the obtained conclusions are not detailed. Finally, traveling is still relatively expensive consumption for common consumers. Thus, promotion plans could influence consumer behavior. However, this study does not incorporate promotion-related variable; thus, it can limit the integrality of the theoretical model proposed by this study.

The suggestions for directions of future studies are proposed below. First, various online impulsive buying behavior and product promotion plans should be incorporated in this model in order to increase the completeness of theoretical viewpoints. Second, previous researches suggested that consumers' impulse buying might not be completely out of the needs for the products and can include some hedonic needs (e.g., fun, novelty, surprise, delight, enthusiasm, and joy) [6] [12] [17] [33] [42]. In recent years, some studies have widely applied the flow theory to explore online consumer behavior [22] [23] [21] [28] [36] [38]. Since flow experience is related to consumers' perceived fun and enjoyment when browsing the websites, it meets the viewpoint that consumers have hedonic needs. Therefore, future studies can apply flow theory to online impulsive buying behavior, and

even integrate the views of TAM to further acquire some academic and practical new insights.

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