

What Drives Consumer Impulse Buying? Evidence from a Retail Setting in Taiwan

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ABSTRACT

Extant research work in impulse buying focuses on the Western context. Based on the theory from environmental psychology, this paper analyzes the causal relations among stimuli, affect, and impulse buying in the Taiwanese retail context. The results reveal that shoppers perceive store-related attributes of merchandise and service quality as must-be, whereas they consider environment and price as attractive in generating emotional responses. Likewise, shopper's availability in time and money may engender negative emotions if absent, but not necessarily arouse positive emotional response when present. In addition, shopping enjoyment is critical in affecting both types of emotions. Finally, both positive and negative emotions affect shopper's impulse buying behavior and serve as important mediators.

Keywords: *Impulse Buying, Mehrabian-Russell Model, Emotional response*

INTRODUCTION

Impulse buying occurs “when a consumer experiences a sudden, often powerful and persistent urge to buy something immediately” (Rook, 1987). Impulse buying may be consequent to consumer perceived environmental cognitions or experienced internal states or traits, which can evoke positive reactions from shoppers that lead to profit gains (Newman & Patel, 2004). Anecdotal evidence reveals that most shoppers occasionally buy on impulse. This pervasive phenomenon draws substantial research interest. Early studies concentrate on its definitional distinguishableness from non-impulse buying, or developing and validating scales to measure the impulse buying tendency (e.g., Piron, 1991). Later research focuses on providing a theoretical framework for examining impulse buying (Adelaar, Chang, Lancendorfer, Lee, & Morimoto, 2003; Beatty & Ferrell, 1998; Zhou & Wong, 2003). Despite the growing research interest in impulse buying, extant studies mainly focus on the Western context. There exists a need to explore more the impulse buying behavior in a non-Western context, especially for those emerging countries as they are becoming the most lucrative markets in the world. Hence, the present study aims to fill this research gap by examining consumer's impulse buying behavior in the Taiwanese retail context. Particularly, the present study draws from the environmental psychology (Mehrabian & Russell, 1974) to investigate the antecedents (i.e., different store- and shopper-related stimuli) of emotions/affect, and their consequences on impulse buying (Fig. 1).

Figure 1. Theoretical framework

THEORY DEVELOPMENT

Shopper Emotions in Retail Store

Mehrabian and Russell (1974) propose an environmental psychology approach. Researchers often use the framework to explore consumer's emotional and behavioral responses in a physical (e.g., Jang & Namkung, 2009) or virtual environment (e.g., Adelaar et al., 2003). Mehrabian and Russell (1974) argue that factors from the surroundings may alter an individual's essential emotional responses. In particular, they propose a bipolar framework for emotional responses to environmental stimuli, in which emotional states fall into three domains, namely, pleasure (happy or sad), arousal (to feel stimulated or uninspired to take action), and dominance (ability to control a situation or be submissive). These emotional responses thereby result in an individual's approach—avoidance behaviors (i.e., either approaching the situation or avoiding the environment altogether). Scholars apply the bipolar framework in retailing and a variety of services (e.g., Caro & Garcia, 2007; Kaltcheva & Weitz, 2006; Zhou & Wong, 2003). Nonetheless, some researchers argue that several limitations impede the bipolar framework's application to consumption-related emotion studies in retailing. For example, Yalch and Spangenberg (2000) posit that dominance does not relate to behavior. Most importantly, the bipolar conceptualization is deficient in interpreting consumer emotions and might result in the occurrence of neither pleasant nor unpleasant states (Babin, Darden, & Babin, 1998). Thus, several studies (e.g., Jang & Namkung, 2009; Lee, Lee, Lee, & Babin, 2008; Yalch & Spangenberg, 2000) suggest two independent unipolar dimensions, that is, positive and negative affect, instead of a pleasure and arousal scheme in examining their relationship with behavioral outcomes. Accordingly, this study adopts the unipolar view to measure concurrently, for example, happiness and unhappiness for their consequences on impulse buying.

Synthesis of Shopping Stimuli in Retail Store

Various stimuli exist and influence shopper's emotional states. These stimuli range from the extrinsic retail store image that shoppers perceive, to the intrinsic shopper traits and situational factors ascribable to individual differences. The retail store image such as merchandise, service, environment, and price that shoppers experience are generally under the control of the retail store. Conversely, individual and situational factors such as available time, available money, and shopping enjoyment also arouse shopper's emotions but beyond the control of the retail store. The following section discusses these possible stimuli.

Retail Store Image

Porter and Claycomb (1997) depict a commonly accepted definition of retail store image which states "an individual's cognitions that are inferred from perceptions or memory inputs that are attached to a particular store and which represent what the store signifies to an individual." Subsequent researchers make attempts to measure its dimensions and elaborate their characteristics (e.g., Mitchell, 2001). The present study, however, characterizes the retail store image by four frequently endorsed components, namely, merchandise, service, environment, and price.

First, the merchandise component refers to the extent to which the store provides products that meet shopper's needs. Specifically, the study evaluates the products in terms of number of choices in variety and brand (Bell, Corsten, & Knox, 2009). Second, the service component generally relates to any act of help or assistance the shopper perceives, when needed, that the store or the sales clerk offers. The attribute of service includes friendliness and courtesy, error-free sales transactions, promptness of service, and willingness to offer assistance (O'Cass & Grace, 2008). Third, the environment component refers to the extent to which shoppers perceive the store atmosphere to be comfortable. The various atmospheric elements within a retail store include visual and auditory cues such as design, color, lighting, function, music, etc. Finally, consumers also care about the price related issues of a product. Promotions and special offers often attract shoppers.

Prior research reports that merchandise related cues are crucial in determining customer's satisfaction (Raajpoot, 2002) as well as emotional states (Jang & Namkung, 2009) in the service context. Furthermore, researchers claim that in hospitality industries, the reliability and responsiveness of the service provider, the assurance the service staff provides, and the empathy they show to customers are intangible social cues that influence perceived quality evaluations, customer satisfaction (Brady & Robertson, 2001), and emotional states (Jang & Namkung, 2009).

Likewise, atmospheric design relates to customer satisfaction. Particularly, color is crucial in a physical setting which draws customer attention and evokes emotional responses. Indeed, when concordant with color and décor, lighting too stimulates pleasant shopping experience (Steffy, 2002). Also, if shoppers perceive the retail store's sales and specials to be real bargains, or vice versa, they may intrinsically engage in posterior emotional responses. Hence, the study proposes the following hypotheses:

H₁: Shopper perception of (a) merchandise, (b) service, (c) environment, and (d) price components relate positively to positive emotion.

H₂: Shopper perception of (a) merchandise, (b) service, (c) environment, and (d) price components relate negatively to negative emotion.

Individual and situational factors

The present study considers three types of individual and situational factors, namely, available time, available money, and shopping enjoyment as stimuli. First, Time available for shopping refers to the amount of time the shopper feels he/she has available that day during the shopping trip. Time pressure alters individuals' mood and impedes their search activities while shopping. Specifically, limited time available for shopping may lead to frustration and negative reactions to the surrounding environment, which in turn generates negative emotional states. Ample amount of time available for shopping, however, does not guarantee to bring forth positive emotional states. Second, money available for shopping refers to the amount of budget or extra money an individual comprehends he/she can spend that day during the shopping trip. Shoppers may feel aroused when they perceive having extra money to spend, thus eliciting positive emotional states. Conversely, available money will produce less negative emotions when shopping in the retail store. Finally, shopping enjoyment is the pleasure an individual acquires in the process of shopping. Individuals who enjoy shopping are recreational shoppers as they are gratified more by the process of shopping than the merchandise they purchase. Prior research maintains that shopping enjoyment relates to shopper's positive emotional states (Beatty & Ferrell, 1998). Likewise, shopping enjoyment relates to shopper's negative emotions. Thus, the study proposes the following hypotheses:

H₃: Shopper perception of (a) available time does not relate, whereas (b) available money and (c) shopping enjoyment relate positively to positive emotion.

H₄: Shopper perception of (a) available time, (b) available money, and (c) shopping enjoyment relate negatively to negative emotion.

Behavioral Outcome in Impulse Buying

Researchers in environmental psychology recognize the importance of shopper's affective reactions in the retail and services domain and contend that the emotional responses lead to a variety of consumer behaviors such as spending levels (Chebat & Michon, 2003) and loyalty (Caro & Garcia, 2007). When consumers experience positive emotions, they are more likely to adopt approach behavior (Yalch & Spangenberg, 2000). In particular, Adelaar et al. (2003) aver that the more an individual feels a positive emotion towards the stimuli, the greater the impulse buying intent for music compact discs. Consequently, the study posits that

H₅: Shopper's positive emotion relates positively to his/her impulse buying behavior.

The study expects the stellar effect of emotional states being consequential from the positive aspect. Negative emotional states also relate to the behavioral outcomes. For example, research indicates that impulse purchases may be a result of seeking to relieve depression or to cheer oneself up (e.g., Youn & Faber, 2000). The present study argues that both positive and negative influences of negative emotional states on behavioral outcomes exist, which possibly generate a diluted and negative influence on shopper's impulse buying behavior.

H₆: Shopper's negative emotion relates negatively to his/her impulse buying behavior.

METHOD

Data Collection and Sample

Data were collected in three major Taiwanese retail chain stores located in the metropolitan areas. The study employs a dual-phase data collection approach, that is, pre- and post-shopping interviews. This dual-phase approach permits the respondents to answer questions in the appropriate temporal sequence, reducing potential common method bias (Podsakoff, MacKenzie, Lee, and Podsakoff, 2003), while providing for defensible temporal association. Specifically, the interviewers randomly select and approach the shoppers when they enter the store. Pre-shopping interviews begin once the shoppers demonstrate their willingness to participate in the study. These individual complete the first section of the questionnaire pertaining to shopping plans, available time and money, shopping enjoyment for this particular shopping trip, as well as demographical information. Next, the interviewers ask each participant to return to fill out the second (i.e., remaining) section of the questionnaire at the end of the shopping trip. The interviewers ask questions pertinent to perceived in-store elements, emotional states, and impulse buying behavior during this post-shopping interview. In order to increase the participating rate, each respondent receives a bookstore certificate worth of NT\$ 150 (approximately US\$ 5) in the end of both phases. The study matches pre- and post-shopping interview results, resulting in 600 usable questionnaire packets—a 51% overall response rate.

Measures

The study records all responses on 7-point Likert-type scales anchored by 1 (strongly disagree) and 7 (strongly agree) unless otherwise noted. To ensure the content validity of the scales, the measured constructs are adopted based on prior related studies. The study develops the items according to O’Cass and Grace (2008), and Bell et al. (2009) to measure in-store elements. To measure available time, available money, and shopping enjoyment, the items suggested by Beatty and Ferrell (1998) are adopted. Additionally, the study assesses positive and negative emotional states based on Beatty and Ferrell (1998). Finally, the study evaluates the impulse buying behavior based on Adelaar et al. (2003). In order to control for any extraneous effects due to certain consumer characteristics, the study also includes several control variables, namely, gender, household income, shopping frequency, transportation mode, and education level. Researchers affirm these factors being influential to shopper’s impulse buying behavior (e.g., Inman, Winer, & Ferraro, 2009).

ANALYSIS AND RESULTS

The study analyzes the data using AMOS (version 7.0). Particularly, the study first conducts a confirmatory factor analysis (CFA) with a maximum likelihood estimation to verify the underlying structure of constructs. As Table 1 shows, the level of internal consistency in each construct is acceptable, with Cronbach’s alpha estimates ranging from .781 to .963 (Nunnally & Bernstein, 1994). All of the composite reliabilities of the constructs are over the value of .787, ensuring adequate internal consistency of multiple items for each construct. To further examine convergent validity, all confirmatory factor loadings exceed .70 (Hair, Black, Babin, Anderson, & Tatham, 2006) except one, which is .685. The average variance extracted (AVE) of all constructs exceeds the minimum criterion of .50 (Hair et al., 2006). Furthermore, Table 1 demonstrates that the correlations between constructs range from -.33 to .57 and are less than .90 (Hair et al., 2006). Indeed, the square root of AVE of each construct is larger than the construct’s correlations with other constructs, which also indicates good convergent and discriminant validity. The χ^2 value with 482 degrees of freedom is 1109.430 ($p < .05$). Given the known sensitivity of the χ^2 statistics test to sample size, several goodness-of-fit indices demonstrate that the confirmatory factor model fits the data well (NFI = 0.923, CFI = 0.955, IFI = 0.955, and RMSEA = 0.047).

Table 1: Means, standard deviations, correlations, reliabilities, and confirmatory factor analysis properties

Construct	Mean/S.D.	M	S	E	P	T	O	J	V	N	B
Merchandise (M)	5.4/1.00	1.00									
Service (S)	4.9/1.09	0.50 ^c	1.00								
Environment (E)	4.7/1.05	0.51 ^c	0.56 ^c	1.00							
Price (P)	4.4/1.19	0.50 ^c	0.50 ^c	0.57 ^c	1.00						
Available time (T)	4.6/1.27	0.15 ^b	0.11 ^a	0.07	0.10 ^a	1.00					
Available money (O)	4.5/1.10	0.15 ^b	0.12 ^a	0.08	0.02	0.49 ^c	1.00				
Shopping enjoyment (J)	4.8/1.24	0.32 ^c	0.34 ^c	0.34 ^c	0.28 ^c	0.33 ^c	0.29 ^c	1.00			
Positive emotion (V)	4.6/1.02	0.39 ^c	0.41 ^c	0.49 ^c	0.43 ^c	0.15 ^b	0.15 ^b	0.48 ^c	1.00		
Negative emotion (N)	2.6/1.21	-0.32 ^c	-0.30 ^c	-0.21 ^c	-0.24 ^c	-0.33 ^c	-0.28 ^c	-0.31 ^c	-0.32 ^c	1.00	
Impulse buying (B)	3.7/1.52	-0.04	-0.03	-0.04	-0.05	-0.03	0.03	0.06	0.20 ^c	0.13 ^b	1.00
AVE		0.644	0.694	0.605	0.644	0.687	0.553	0.660	0.813	0.868	0.694
Composite reliability		0.844	0.901	0.859	0.879	0.867	0.787	0.852	0.929	0.963	0.871
Cronbach's alpha		0.840	0.900	0.856	0.876	0.866	0.781	0.849	0.927	0.963	0.865

Note: ^a $p < .05$; ^b $p < .01$; ^c $p < .001$.

As in the next step, the study estimates the structural model (Fig. 1, Table 2). The estimation produces the following statistics: $\chi^2 = 2150.482$, $df = 665$, $p < .05$, $NFI = 0.862$, $CFI = 0.900$, $IFI = 0.900$, and $RMSEA = 0.061$. The model's fit is satisfactory, providing a good basis for testing the hypothesized paths. As Table 2 shows, the results support H1-H6 mostly except H1a, H1b, H2c, H2d, H3b, and H6.

To examine the mediating effects of emotions, the study estimates models consistent with Baron and Kenny (1986) and Shrout and Bolger (2002), and examines four conditions for mediation. The first condition verifies if the independent variables (stimuli constructs) affect the mediators (emotion constructs). The second condition evaluates if the mediators affect the dependent variable (impulse buying behavior). The results meet both conditions mostly (see Hypothesized model in Table 2). That is, the results support H1-H4 and H5-H6 mostly. The third condition analyzes if the independent variables affect the dependent variable. Thus, the Direct model estimates only direct paths from stimuli to impulse buying behavior. All of the direct paths are insignificant ($p > .05$) with standardized coefficients ranging from -.070 to .088. The fourth mediating condition checks if the direct paths from the independent variables to the dependent variable become insignificant (i.e., full mediation) or reduced (partial mediation) when the Hypothesized model includes the above direct paths (i.e., the Full model in Table 2). Indeed, the fit of the Full model ($\chi^2 = 2140.322$, $df = 658$, $p < .05$, $NFI = 0.862$, $CFI = 0.900$, $IFI = 0.901$, and $RMSEA = 0.061$) is not significantly better than the fit of the Hypothesized model ($\chi^2_{diff} = 10.160$, $df = 7$, $p > .05$), indicating that adding direct paths does not significantly improve the Hypothesized model. Collectively, the influence of stimuli on impulse buying behavior is affirmed to be via emotions.

Table 2: Structural model results

<i>Hypothesized paths</i>	<i>Standardized path estimates</i>		
	<i>Hypothesized</i>	<i>Direct</i>	<i>Full</i>
<i>Fit statistics</i>			
H1a: Merchandise → Positive emotion	0.071		0.071
H1b: Service → Positive emotion	0.070		0.071
H1c: Environment → Positive emotion	0.220 ^c		0.222 ^c
H1d: Price → Positive emotion	0.147 ^b		0.148 ^b
H2a: Merchandise → Negative emotion	-0.152 ^b		-0.152 ^b
H2b: Service → Negative emotion	-0.133 ^a		-0.133 ^a
H2c: Environment → Negative emotion	0.041		0.041
H2d: Price → Negative emotion	-0.072		-0.072
H3a: Available time → Positive emotion	-0.014		-0.014
H3b: Available money → Positive emotion	0.024		0.024
H3c: Shopping enjoyment → Positive emotion	0.317 ^c		0.316 ^c
H4a: Available time → Negative emotion	-0.190 ^c		-0.190 ^c
H4b: Available money → Negative emotion	-0.117 ^a		-0.117 ^a
H4c: Shopping enjoyment → Negative emotion	-0.123 ^a		-0.124 ^a

H5: Positive emotion → Impulse buying behavior	0.286 ^c		0.341 ^c
H6: Negative emotion → Impulse buying behavior	0.189 ^c		0.180 ^c
Merchandise → Impulse buying behavior		-0.023	-0.014
Service → Impulse buying behavior		-0.036	-0.031
Environment → Impulse buying behavior		-0.030	-0.104
Price → Impulse buying behavior		-0.037	-0.066
Available time → Impulse buying behavior		-0.070	-0.032
Available money → Impulse buying behavior		0.019	0.031
Shopping enjoyment → Impulse buying behavior		0.088	0.008
R ² —Positive emotion	0.382		0.384
R ² —Negative emotion	0.233		0.233
R ² —Impulse buying behavior	0.224	0.140	0.230

Note: ^a $p < .05$; ^b $p < .01$; ^c $p < .001$.

DISCUSSION AND CONCLUSIONS

Implications

The findings advance understanding of what drives impulse buying in a non-Western retailing context. In contrast to prior empirical results in the Western context, the surprising results indicate that the in-store elements of merchandise and service (environment and price) do not affect positive (negative) emotions. Likewise, shopper's money availability is not influential to positive emotions. In addition, negative emotions appear to affect shopper's impulse buying behavior positively. The study conducts follow-up interviews with several of the respondents in an attempt to explain the above findings.

The interview results uncover the following possible explanations: First, shoppers perceive merchandise and service quality as hygiene factors of shopping. They can induce dissatisfaction if absent, but not necessarily arouse shopper's positive emotional response in that shoppers in Taiwan have learned to expect high levels in merchandise and service gratifications. Similarly, shoppers regard environment and price as delighter factors of shopping. They may not induce consumer's negative emotional states if not present, but certainly arouse shopper's positive emotional response if surmounting expectations. Namely, consumers perceive the retail store image of merchandise and service as must-be items, whereas they regard environment and price as attractive items based on Kano's (1984) categories of quality attributes. Second, the cultural difference between Taiwanese and the Westerns may possibly explain the finding that shopper's perceived available money does not significantly elicit their positive affect or excitement. Following Hofstede's (2001) conceptualization of culture, in long term oriented societies (e.g., Taiwan and China), people value actions and attitudes that affect the future such as persistence, perseverance, thrift, etc. Conversely, in short term oriented societies (e.g., U.S. and Europe), people tend to value actions and attitudes that result from the past or the present such as immediate stability, satisfaction, etc. Indeed, the respondents also demonstrate strong characteristics of being conservative in spending, even if they have extra money with them. In other words, Taiwanese shoppers may still buy on impulse but not necessarily to become excited when they have extra money to spend. Third, as H6 hypothesizes, the study expects both positive and negative influence of negative emotions, producing a marginal overall influence, which is negative, on buying impulsively. Nonetheless, the result indicates that shopper's negative affective states affect impulse buying positively. This finding suggests that Taiwanese shoppers' impulse purchases may be more due to their attempt to relieve (or escape) from stress and anxiety. Although beyond expectation, this inclination toward impulsive buying stemming from shopper's negative affect extends and enriches the current understanding of what drives impulse purchases.

Managerially, practitioners and academics can draw several insights from the present study. First, retail store managers should maintain competitive merchandise and service quality and strive to create a positive experience especially in environment and price for shoppers. Marketers should be cautious about the result that negative emotions, though still engendering impulse buying, may create negative impacts in other aspects such as customer satisfaction and loyalty. Second, the results suggest several different routes through which shoppers become susceptible to impulse buying. This observation sheds light on segmentation of shoppers. Third, while shopper traits

are generally beyond the control of the retail store, the findings highlight the criticality of individual difference variable (i.e., shopping enjoyment) in arousing both positive and negative emotions. Traditionally, retail stores can hone on recreational shoppers for specific sales events, for example, via issuing special membership cards to attract them. Indeed, a more proactive approach could be designing more hedonic elements into the shopping environment such as holding entertaining events in the retail store. Additionally, retail store managers should also attempt to facilitate an individual's shopping trip by making shopping more efficient and effective as time pressure has become inherited literally to most shoppers. For example, the adoption of mobile shopping assistant (MSA) may facilitate the shopping activity.

Limitations and Future Research

While the findings help broaden the understanding of antecedents to impulse buying, certain limitations are of note. First, the present study examines the impacts of in-store elements from multiple sections (e.g., food, appliance, apparel, etc.) in a retail store as antecedents of emotions and impulse buying. Indeed, these in-store elements may engender different levels of influences across sections on the affective responses and buying behavior. Consequently, additional research to detect context-specific effects may be valuable. Second, the model includes only a subset of the shopper related variables that affect emotional responses. Indeed, shopper's affective states can relate to other individual differences as well (e.g., information gathering style, store knowledge, etc.). Third, the concentration on the single dependent variable (i.e., impulse buying behavior) constitutes one other limitation. In fact, impulse buying is a complex conceptualization involving different meanings such as pure, reminder, suggestion, and planned impulse buying. Thus, further research efforts can be contributive by investigating a broader scope of consequences on various types of impulse buying.

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