The Effects of Situational and Individual Factors on Impulse Buying

Mohammad Ali Abdolvand, Kambiz Heidarzadeh Harzaee, Afshin Rahnama and Mahsa Khoshpanjah

1Department of Business Management, Science and Research Branch, Islamic Azad University, Tehran, Iran
2Department of Business Management, Islamic Azad University, Qazvin Branch, Iran

Abstract: The main objective of this study is to investigate the effects of situational and individual factors on impulse buying using the S-O-R model. This study attempts to describe impulse buying by integrating the effects of situation and individual characteristics on the concept. Data was collected from a sample of 220 questionnaires and was analyzed using structural equation modeling. This study shows that the positive mood created by the environment of a store contributes largely to impulse buying. Essentially, the store environment and the arousal created by this environment instill a positive mood, which subsequently leads to a purchase without prior intention. The store environment has a direct effect on the emotional and psychological status of an individual. In contrast, the mood has a reverse effect on impulse buying. The study also reveals that individual characteristics including innovativeness and extroversion have no effect on buying behavior. Few studies have investigated the simultaneous effects of situational factors and individual characteristics on impulse buying. These features have been mainly studied separately to the exclusion of the joint effects of these factors. This study investigates the effects of both situational and individual factors on impulse buying. What’s more, this study suggests a gap in the study of impulse buying in various geographical locations, notably Iran. Impulse buying is increasingly more prevalent in the Iranian society due to its purchase culture, but there have been few studies on this topic in this country.

Key words: Impulse Buying, Store Environment, Psychological Status, S-O-R Model

INTRODUCTION

Impulse buying is an important aspect of consumer behavior and a vital concept in the market [1]. Retailers have long discovered the power of impulse buying, which is in fact a main point in many buying activities. For example, unplanned purchases constitute 27-62 percent of purchases in store settings [2].

Retailers attempt to increase impulse buying through store design, product display, package design and promotion [3]. Due to prevalence of impulse buying in today’s markets, academic research regarding impulse buying has increased in the last decade. However, information regarding impulse buying and its numerous influential variables is sparse.

Most studies performed regarding impulse buying thus far have focused on situational aspects. For example, Rook has described the nature of impulse buying [1], and later has focused on the influencing norms [4]. Past research depicts a number of situational effects on impulse buying and personal characteristics of impulsive buyers, but they have been unsuccessful in complete modeling of both variable groups. What remains to be seen are the joint effects of these factors. How do personal characteristics influence the effectiveness of situational factors? A descriptive model of impulse buying describes the complexity of impulse buying behavior. Therefore, this study attempts to describe impulse buying, including the joint effects of situational factors and personal characteristics. In addition, this study portrays the applied concepts in the findings. Once the relative importance of situational factors on impulse buying is illustrated, effective marketing strategies and previous design procedures can be employed by retailers to attract impulse buyers.
Literature Review

Impulse Buying Behavior: Researchers agree that impulse buying occurs when an individual makes an unintended, unreflective and immediate purchase [1, 4]. The purchase is unintended because it is made while shopping, although the individual was not actively looking for that item, had no pre-shopping plans to purchase that item and was not engaged in a shopping task which the item satisfies, such as looking for a gift. Unintended buying arises from a sudden urge to buy a specific item while shopping. The desire and decision to buy occurs after the person sees the article [5]. Unintended and unplanned attributes have long been associated with impulse buying and are necessary, but not sufficient for categorizing a purchase as an impulse buy [6, 1, 4].

Impulse buying behavior is a sudden, compelling, hedonically complex buying behavior in which the rapidity of an impulse decision process precludes thoughtful and deliberate consideration of alternative information and choices [7]. Several researchers have reported that consumers do not view impulse purchasing as wrong; rather, consumers retrospectively convey a favorable evaluation of their behavior [8, 9, 1]. Other researchers have treated impulse buying as an individual difference variable with the expectation that it is likely to influence decision making across situations [10, 4, 11].

Impulse buying is influenced by economic factors, personality, time, location and even cultural factors. Stern differentiated four categories of impulse buying in 1962: (1) pure impulse buying; (2) reminder impulse buying; (3) suggestion impulse buying; and (4) planned impulse buying [12].

Finally, consistent with general impulsiveness, impulsive buying is immediate [13, 1]. The time interval between seeing the item and buying it is very short and the decision to buy is made hastily. An individual making an impulse purchase responds quickly to the urge and makes a spontaneous decision to purchase the item without delay. Furthermore, the individual is not likely to postpone the purchase in order to gather more information, comparison shop, seek advice or simply “cool off”.

Antecedents of Impulse Buying: Largely, antecedents of impulse buying are categorized into two types—personal characteristics of consumers and situational influences. Consumers’ personal characteristics are their consistent attributes that influence their impulse buying tendencies across situations. Situational influences are environmental factors including a store displays and sales associates, or a consumer’s situational attributes including mood and involvement, increase the likelihood of that consumer engaging in impulse buying in a specific situation (Tables 1 and 2).

Mood: Understanding how moods influence consumer behavior is important because consumers experience a variety of moods when making decisions. Individuals can take actions based on an emotional feeling with or without a low level of cognitive activity [33, 34]. Moods can be a situational influence since moods are transient and easily influenced by little things or they are caused by consumers’ exposure to stimuli at each buying situation [35].

<table>
<thead>
<tr>
<th>Personal characteristics studied as antecedents of impulse buying</th>
<th>Authors (Date of publication)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal traits</td>
<td>Youn and Faber (2000)</td>
</tr>
<tr>
<td>Lack of control</td>
<td>Verplanken and Hernadii (2001)</td>
</tr>
<tr>
<td>Extroversion</td>
<td>Phau and Lo (2004)</td>
</tr>
<tr>
<td>Innovativeness</td>
<td></td>
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<tr>
<td>Culture</td>
<td></td>
</tr>
<tr>
<td>Individualism</td>
<td>Kealen and Lee (2002)</td>
</tr>
<tr>
<td>Materialism</td>
<td>Treice, Christopher, and Marek (2006)</td>
</tr>
<tr>
<td>Behavioral intention</td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>Rook and Fisher (1995)</td>
</tr>
<tr>
<td></td>
<td>Omar and Kent (2001)</td>
</tr>
<tr>
<td></td>
<td>Peck and Childrens (2006)</td>
</tr>
<tr>
<td>Subjective norm</td>
<td>Zhang, Prybutok, and Strutton (2007)</td>
</tr>
<tr>
<td>Hedonic consumption</td>
<td>Hausman (2000)</td>
</tr>
</tbody>
</table>
Table 2: Situational characteristics studied as antecedents of impulse buying

<table>
<thead>
<tr>
<th>Situational characteristics</th>
<th>Authors (Date of publication)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mood</td>
<td>Weinberg and Gottwald (1982)</td>
</tr>
<tr>
<td></td>
<td>Gardner and Rook (1988)</td>
</tr>
<tr>
<td></td>
<td>Beatty and Ferrelli (1998)</td>
</tr>
<tr>
<td></td>
<td>Park, Kim, and Forney (2006)</td>
</tr>
<tr>
<td>Physical surroundings</td>
<td>Youn and Faber (2000)</td>
</tr>
<tr>
<td>Product stimuli</td>
<td>Youn and Faber (2000); Zhou and Wong (2003)</td>
</tr>
<tr>
<td>Promotional stimuli</td>
<td>Mattila and Wirtz (2001); Zhou and Wong (2003)</td>
</tr>
<tr>
<td>Atmospheric stimuli</td>
<td></td>
</tr>
<tr>
<td>TV shopping host</td>
<td>Luo (2005)</td>
</tr>
<tr>
<td>Shopping companies</td>
<td></td>
</tr>
<tr>
<td>Consumer's involvement</td>
<td>Kwon and Armstrong (2002)</td>
</tr>
<tr>
<td>With sport team merchandises</td>
<td></td>
</tr>
<tr>
<td>With fashion</td>
<td>Park, Kim, and Forney (2006)</td>
</tr>
<tr>
<td>Product categories</td>
<td>Bellenger, Robertson, and Hirschman (1978)</td>
</tr>
<tr>
<td>Clothing, shoes and accessories</td>
<td>Shandil and Rook (1989)</td>
</tr>
<tr>
<td></td>
<td>Dittmar, Beattie, and Friese (1995)</td>
</tr>
</tbody>
</table>

The notion that positive emotions have a significant effect on impulse buying is supported by prior research [10, 24, 25, 23]. As noted earlier, Mehrabian and Russell (1974) proposed that three emotional states including pleasure, arousal and dominance, mediated approach-avoidance behaviors. Pleasure resulting from exposure to store atmosphere has been shown to influence in-store behaviors including spending levels, amount of time spent in the store and willingness to visit again [36, 37, 38].

Mehrabian and Russell (1974) indicated that all reactions to an environment can be considered as approach or avoidance behaviors. They classified reactions using the following: (1) a desire physically to stay in (approach) or to get out of the environment (avoidance); (2) a desire or willingness to look around and to explore the environment (approach) or to avoid moving through or interacting with environment (avoidance); (3) a desire or willingness to communicate with others in the environment (approach) or to ignore communication attempts from others (avoidance); and (4) the degree of enhancement (approach) or hindrance (avoidance) of performance and satisfaction with task performance. These behaviors can be easily applied in a retail environment. Store patronage intention, in-store browsing, interaction with sales personnel, shopping frequency and time and money spent are all forms of approach behaviors and can all yield impulse buying [10].

In 1982, Donovan and Rossiter used Mehrabian and Russell’s model to predict customer behavior in retail stores and stated that a store that has a pleasant environment can exert a positive effect on shoppers, thereby leading to positive purchase behaviors [38].

**Store Environment:** Postrel (2003) mentioned that shopping malls are pursuing aesthetics to attract consumers who seek an entertaining experience. Shopping malls can be viewed as fantasy environments providing a range of entertainment: musical, visual and theatrical for today’s consumers" [39]. Thus, store environments are intentionally designed to result in a pleasurable consumer experience. Some researchers have noted that experiential pleasures result from browsing and shopping [40, 41].

As noted earlier, impulse buying can be considered a type of hedonic consumption with the primary purpose to obtain pleasure and gratification in shopping [41]. Donovan, Rossiter, Marcoclyn and Nesdale (1994) found that pleasant environments encouraged consumers to stay longer in the selling environment and to make unplanned purchases. It has also been documented that stores’ environmental stimuli triggered impulse buying [27, 31, 14, 26].

Research indicates that high arousal reduces people’s ability to think through the implications of their actions [42, 43]. Moreover, Mattila and Wirtz (2008) suggest that store environments that are perceived as
over-stimulating lead to lower levels of self-control and therefore to high levels of impulse purchases. Store environments that are perceived as under-stimulating or neutral in terms of arousal, on the other hand, are likely to lead to lower levels of impulse buying [44].

Research Model and Hypotheses

The S-O-R Model: Using existing empirical findings concerning antecedents of impulse buying as a starting point, we developed an impulse buying model that illustrates the multifaceted relationships among situational influences and personal characteristics as they relate to impulse buying. This model integrates the effects of personal characteristics and situational influences on impulse buying and was developed on the basis of the stimulus-organism-response (S-O-R) framework developed by Mehrabian and Russell (1974).

Mehrabian and Russell (1974) first presented the S-O-R framework as a model to explain the effects of the physical environment on human behaviors. They identified emotional states as significant mediators between environmental stimuli and human behaviors. They suggested that environmental stimuli caused primarily an emotional response, which in turn caused reactions to the environment, in other words, behaviors. The stimuli includes features of the environment, which evoke individuals' emotional status.

Based on this framework, the study hypotheses were prepared as follows (Figure 1):

- Store environment has a direct effect on emotional and psychological condition of customers.
- Store environment has a direct effect on impulse buying of customers.
- Emotional and psychological status of customers has a direct effect on impulse buying of customers.
- Personal characteristics of customers have a direct effect on impulse buying of customers.

Methods

Measurements: The questionnaire for this study was designed based on indices proposed by Wakefield and Baker (1998) for store environment, Mehrabian and Russell (1974) for emotional and psychological status, Stern (1962) for impulse buying, Hendriks et al. (1999) for extroversion (personal characteristics) and Goldsmith and Hofacker (1991) for innovativeness (personal characteristics). The authors revised and localized the above-mentioned indices. As such, the indices used in this questionnaire were adapted to the specific circumstances of the study space.

As for the validity of the questionnaire, it is noteworthy that the questionnaire had an acceptable level of content validity and factor validity.
Questionnaire validity was investigated with exploratory factor analysis. In the process of this analysis, some questions with lower factor loadings and common factors were removed in order to obtain acceptable results from confirmatory factor analysis.

**Sampling and Data Collection:** Data collection was performed in this study using the survey method. The information was part of the statistics collected from visitors to "Shahr-eKetab" bookstore in Niavaran, Tehran. The visitors were asked to complete the questionnaires immediately after making their purchase trip. At the end of the 4-week period, the respondents completed the research questionnaire, which included the criteria for impulse buying, store environment, emotional and psychological mood, personal characteristics and demographic variables. The total number of distributed questionnaires was 300, of which 220 were returned.

Demographic distribution of the sample was comparable to previous studies. The demographic statistics are shown in Table 3.

**Data Analysis:** Structural equation modeling (SEM) was used for data analysis. This technique allows modeling of relationships among several independent and dependent variables by a simultaneous analysis of those relationships.

SEM explains how certain latent variables in the research model directly or indirectly influence other latent variables in the model, assessing the hypothesized relationships between the independent and dependent variables [49]. The overall fit of the model was assessed by chi-square ($\chi^2$), goodness of fit index (GFI), adjusted goodness of fit index (AGFI) and root mean squared residual (RMSE).
Table 4: Fit index

<table>
<thead>
<tr>
<th>Index</th>
<th>Allowance amount</th>
<th>The resulting figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of $\chi^2$ to degrees of freedom</td>
<td>$\chi^2/df &lt; 3$</td>
<td>2.4</td>
</tr>
<tr>
<td>$p$ value</td>
<td>$&lt; 0.05$</td>
<td>0.00</td>
</tr>
<tr>
<td>Root mean square error of approximation (RMSEA)</td>
<td>$0.05 &lt; \text{RMSEA} &lt; 0.08$</td>
<td>0.080</td>
</tr>
<tr>
<td>Goodness of fit index (GFI)</td>
<td>$&gt; 0.9$</td>
<td>0.90</td>
</tr>
<tr>
<td>Adjusted goodness of fit index (AGFI)</td>
<td>$&gt; 0.9$</td>
<td>0.89</td>
</tr>
<tr>
<td>Comparative fit index (CFI)</td>
<td>$&gt; 0.9$</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Fig. 2: Model in the Significance form with T Values.

Fig. 3: Model in the Standard Form.

**Hypothesis Testing**

**Hypothesis 1:** Store environment has a positive causal effect on the emotional and psychological state of customers ($Y_1=0.87, p<0.001$).

The model in the standard form shows that store environment explains 87 percent of variations in the emotional and psychological status of customers and Hypothesis 1, the direct effect of store environment on...
the emotional and psychological status of customers, is accepted. The testing result for Hypothesis 1 was compared with previous studies Jaeha Lee (2008) and Gardner and Rook (1988). Both of these studies have shown a direct effect of store environment on the emotional and psychological status of customers. Therefore, the result of the present study is compatible with the results of previous research.

These findings show that store environment improves the emotional and psychological status of individuals through creation of an agreeable space and atmosphere. In fact, when individuals have a good feeling, they are willing to spend more time in the store and watch store products. This, in turn, leads to an increase in impulse buying.

**Hypothesis 2:** Store environment has a direct significant effect on impulse buying behavior ($Y_1 = 0.38; p < 0.001$).

Study results confirm the presence of a direct relationship between the store environment and the impulsiveness of consumer’s purchase. This finding suggests that the positive circumstance created by the store environment is a main factor in impulse buying. Essentially, the store environment and the resulting arousal leads to a positive mood, which causes a pleasant feeling in customers and leads to increased impulse buying. The positive influence of exciting retail environments on an unplanned purchase is compatible with psychological research showing that high arousal diminishes self-regulation of individuals. Also, high stimulation can decrease the individuals’ capability of thinking about their actions. It is no wonder that store stimulation can affect the buying patterns of consumers.

**Hypothesis 3:** The emotional and psychological status of customers has a reverse effect on impulse buying of customers.

This result does not confirm the hypothesis that display and excitement of the store help improve the emotional status of buyers and subsequently, the appropriate emotional status increases impulsiveness of purchase.

The testing result for Hypothesis 3 was compared to previous works by Beatty and Ferrell (1998) and Jaeha Lee (2008). Both studies confirm the direct effect of emotional and psychological status on impulse buying. Consequently, the result of the current study is not compatible with the research. It could be that in the statistical population of the present study, individuals were not stimulated according to emotional and psychological characteristics for impulse buying. The consumers possibly responded to actual and tangible stimuli in the store, leading to reasonableness of purchase, consequently decreasing its impulsiveness.

**Hypothesis 4:** There was no direct significant relationship between personal characteristics and impulse buying in the customers.

The results of this study show that personal characteristics of shoppers such as innovativeness and extroversion, had no effect on their purchase decisions. In this regard, it can be argued that personal characteristics of customers include very broad and extensive topics. In this study, due to some limitations, we were forced to measure these features in only two dimensions. If other components had been considered in this research, the results could possibly be different. Retailers cannot expect store layout to have the same effect on all consumers. Specifically, consumer’s ability to self-regulate alters the effect of store layout on impulse buying behavior. The stronger a consumer has control over their behavior, the weaker is the impact of store layout on impulsiveness of the consumer’s purchase.

**CONCLUSIONS AND IMPLICATIONS**

This study investigates a structural model that relates store environment, emotional and psychological status and personal characteristics to impulse buying and presents some insights for retailers and researchers to understand the structural relationships between consumption features and buying behavior. The results show that store environment has a direct effect on emotional and psychological status and impulse buying by consumers. Furthermore, evidence shows that store environment and the arousal created by this environment creates a positive emotional state, which leads to impulse buying. In the structural model, environmental variables can be predicted using ambient and excitement factors. Ambient factors include music, smell and light. They include the circumstances prevailing in the store and they can affect the semi-conscious ego of consumers. According to this sample, store environment has an effect on impulse buying and excitement of the store most probably helps the impulsiveness of the purchase.

In regard to emotional and psychological state, the results of this study confirm the existence of a direct relationship between store environment and
emotional and psychological state of consumers during purchase. While in the statistical population of the present study, emotional and psychological state of individuals did not increase their impulse buying, but it is noteworthy that this is only a relative interpretation and it is open to debate, because it is at odds with previous research findings. In this study, the emotional and psychological state of customers was not an important factor in impulsiveness of their purchase, because consumers responded to actual and concrete stimuli in the store, leading to increased reasonableness and decreased impulsiveness of their purchase.

On the other hand, while we investigated the impact of store environment on shopper's mood, shopper's mood has been found to influence how individuals perceive a given environment [35]. The psychological literature suggests that mood appears to bias evaluations of store environment in mood-congruent directions: people selectively retrieve positive mood-congruent information and avoid negative thoughts that would undermine their mood. For example, Swinyard (1995) found that shoppers in a good mood exaggerated their evaluations of salespeople. Thus, participants may have evaluated the store environment positively not only because they liked the store environment, but also because they were in a good mood when they entered the store. In future research it is recommended that some measure of the shoppers pre-shopping mood be taken into account to further understand what impact store environment has on shopper mood [51].

The results of this study present implications for retailers to enhance their understanding and increase impulse buying in their stores. It is becoming increasingly difficult for retailers to differentiate their stores solely on the basis of merchandise, price, promotion or location. However, the store itself can offer a unique environment or atmosphere that may influence a shopper's behavior. At the point of purchase, in-store elements such as color, lighting, style, or music are likely to have immediate effects on the purchase decision. Atmospheres are often designed to create a buying environment that produces specific moods that will enhance a consumer's likelihood of purchase.

According to this research, retailers should pay attention to consumers' emotional status and the environment of the store, since these factors can enhance impulse buying of a variety of goods. Additionally, retailers continuously need to enhance impulse buying and positive mood of consumers through store layout, product display, packaging and promotion. They can differentiate the store by creating a relationship between store atmosphere and the emotional state of consumers. Purchasers who select a store because they like its environment spend unexpectedly large sums of money due to the positive atmosphere. Even if the consumers have a negative emotional state at the time of entering the store, their mood is upgraded and they spend more money.

Retailers attempt to focus on interest and excitement of customers and use specific strategies for increasing excitement in the store. Furthermore, positive practical reactions can be created through in-store entertainment. Therefore, retailers can focus on creating entertainment opportunities that show the subjective and practical value of the store.

All research has limitations that can potentially influence its results. The product categories used in this study, including stationery and books, were limited and data was collected from limited consumer types. These factors limit the generalizability of the results of the current study. The fact that participants' answers relied on their memory of their last shopping trip might have influenced the validity of participants' responses. Even though participants were asked to complete the questionnaire immediately after their shopping trip, their ratings of the impulsiveness of their purchase, evaluations of store environments and moods might have been inadequate.

More research should be done to extend the results of this study. Firstly, more extensive samples from broader geographical locations and cross-national comparisons are required. Secondly, this study can be extended to other categories and brands of goods.

Further, mood changes after making an impulse purchase may be different depending on pre-shopping moods. Investigation of differences in mood changes after impulse purchases between shoppers in a good pre-shopping mood and in a bad pre-shopping mood should be another avenue for future research.

REFERENCES