

Social environment, Emotions, and Impulse Buying: A Meditational analysis

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Abstract- Previous research has shown relationships between variables of the retailing environment, such as design and ambiance, and impulse buying. However, little is known about the influence of social environment on this type of purchase. Therefore, the main purpose of this current study is to examine the effect of social environment variables on emotions felt in the point of sale and on achieving an impulse buying. Following a survey conducted in a hypermarket, the results show direct and indirect effects of social environment on making an impulse purchase decision. The pleasure mediates the influence of sales staff on impulse buying. Otherwise arousal has a mediating role in the variables of social environment - pleasure link. Hence, this study provides practical guidance for how retailing firms can manage social environment and emotions felt on the point of sale to induce a rewarding impulse buying experience.

General Terms- Retailing Behavior, shopping, causal modeling

Keywords- Social environment; Emotions; Impulse buying

1. INTRODUCTION

The share of impulse purchases in total purchases is more and more increasing (Luo, 2005). The growing interest in understanding the mechanisms underlying impulse purchase decisions reveals the importance that researchers and practitioners give to this concept. Originating from research in environmental psychology, Mehrabien and Russel's Stimulus-Organism-Response (SOR) model (Mehrabien and Russel, 1974) was a suitable theoretical framework to conduct significant research examining the effect of environmental variables on individuals' internal states as well as their impulse buying behavior (Babin and Darden, 1995). Without being oblivious to the contribution of this research, focusing on product-related stimuli and physical environment has been at the expense of studying the effect of social environment on impulse buying behavior (Mattila and Wirtz, 2008). The paper then aims at examining the impact of social environment and in particular sales staff, crowding and accompaniment on customers' reactions in terms of pleasure and arousal and impulse buying behavior. First, we present our theoretical framework and hypothesis. Second, we describe the methodology used and next we report our findings. Finally, we discuss the contributions, limitations and research venues of our study.

2. LITERATURE REVIEW

2.1 The role of social environment in explaining impulse buying behavior

Proposed by Kollat and Willet (1967) as a simple "unplanned" purchase activity, the concept of impulse buying has undergone several changes to be admitted more recently as a complex hedonic experience (Rook, 1987). Impulse buying is defined as an unplanned purchase decision, occurring along fairly intense positive emotions and reflecting the buyer's quick reaction to a stimulus (Gardner and Rook, 1988; Youn, 2000). The complexity of impulse buying ushered in numerous studies that have attempted to explain the phenomenon in terms of situational factors. Accordingly, factors related to products and marketing tools, such as price and promotions, have been claimed to act as conditions for triggering this type of purchase (Prasad, 1975, Cobb and Hoyer, 1983). Moreover, research of the effect of the atmosphere and design of the point of sale is abundant in the literature (Eroglu and Machleit, 1993, Mitchell, 1994; Mattila and Wirtz, 2001). However, studies which examined the effect of social environment elements on making impulse purchases are very few (Park and Lennon, 2006; Mattila and Wirtz, 2008; Yu and Bastin, 2010). According to Baker (1986), social environment refers to the human dimension of a sales environment. It is the effect of other consumers or buyers as well as the effect of store employees. This study therefore proposes to explain the impact of social environment on impulse buying by examining the three factors of sales staff, crowding and being accompanied or not in the store.

The effect of sales staff on impulse buying behavior

Sales staff behavior is assessed in terms of attention and verbal and gestural behavior engaged with customers

(Lewis and Reinsch, 1988). Studies on the effect of these variables on impulse buying are limited and are very few despite their importance (Reynolds and Beatty, 1999; Agrawal and Schmidt, 2003). Haussman (2000) put an emphasis on the important role of vendors in facilitating impulse purchases. Poor perception of sellers' attitude negatively influences customers' behavior and even reduces the probability of making impulse purchases. Thus, some researchers pointed to the positive effect of interacting with sales staff on the tendency to make impulse purchases (Park and Lennon, 2006; Mattila and Wirtz, 2008; Yu and Bastin, 2010)

The effect of crowding on impulse buying behavior

Crowding means a negative and a subjective evaluation of a high density (Eroglu and Harrell, 1986). It should be noted that research on the effect of this factor on impulse buying is rare and is known at best by confusing results. Some studies have pointed to a positive effect of crowding on spending in supermarkets and making impulse purchases (Sibénil, 1994; Giraud, 2002). However, it is expected that crowding pushes customers to opt for an avoidance behavior (Stockdale, 1978). This behavior is more likely to take place in a context of window-shopping (Dion, 1999). In a crowded store, consumers' attention to elements of the sales environment is weakened and the probability of inducing them into impulse purchases shrinks. The results of a qualitative research on the issue (author, 2007) corroborate this finding and put an emphasis on the negative effect of crowding on making impulse purchases.

The effect of accompaniment on impulse buying behavior

The literature on the variable accompaniment that attempted to explain shopping behavior has not reached enough empirical evidence, especially in the context of impulse purchases (Luo, 2005). Some authors have insisted on anonymity as a factor encouraging impulse buying (Rook and Fisher, 1995). Thus the shopper makes an impulse buying when he is alone. However, according to other authors, the presence an accompanying person increases the chances of making an impulse buying (Yu and Bastin, 2010). Then, being accompanied adds to the shopping experience a pleasure aspect which exceeds the simple utility purpose of purchases. In this sense, social presence and group interactions are suppose to influence consumer behavior and lead to impulse buying.

All of the above allows us to formulate the following hypothesis:

H1: The variables of social environment influence impulse buying.

H1.1: The point of sale's staff positively influences making an impulse buying.

H 1.2: Crowding negatively influences making an impulse buying.

H 1.3: Being accompanied positively influences making an impulse buying.

1.2 Application of the SOR model to study the impact of social environment on impulse buying behavior: the mediating role of emotions

The contributions of environmental psychology in improving our understanding of the effect of environmental stimuli on emotions and behavior are undeniable. Developed by Mehrabian and Russell (1974), the SOR model hypothesizes for the effect of environmental stimuli on individuals' internal states, including the emotions of pleasure, arousal and dominance which are assumed to act, in turn, on consumers' opting for an approach or avoidance behavior in response to that environment. As we have already stated, the definition of impulse buying attributes to this kind of purchase reactive and experiential dimensions. The process generating these reactions can be studied under the SOR model. Then, an examination of the mediating role of emotions on the relationship between social environment factors and impulse buying is proposed. In line with previous research (Russell and Pratt, 1980; Donovan and Rossiter, 1982; Sherman, Mathur and Belk, 1997), this study focuses only on the dimensions of pleasure and arousal of the Pleasure-Arousal-Dominance (PAD) scale. Moreover, researchers agree that arousal and pleasure are interrelated. Thus, Wakefield and Baker (1998) and Chebat and Michon (2003) suggest that the exciting and challenging side of shopping enhances the pleasure of the experience. Like these authors, we assume, in the context of this study, the arousal acts positively on pleasure.

Sales staff and emotions

Staff behavior acts on the degree of pleasure experienced at the point of sale. Similarly, staff helps create an exciting and stimulating atmosphere. The more sales staff is available and helpful, the more the environment is perceived as active and stimulating (Baker, Levy and Grewal, 1992). Yoo, Park and MacInnis (1998) pointed to an effect of sales staff behavior on the emotions of pleasure, arousal, happiness, satisfaction and pride felt in the point of sale. The effect of this social component on pleasure and arousal has also been revealed in other studies like those of Lemoine and Plichon (2000).

Crowding and emotions

Crowding has been often recognized as the result of a negative emotional reaction to a dense environment (Eroglu and Harrell, 1986; Hui and Bateson, 1991; Pons and Laroche, 2007; Machleit, Eroglu, and Mantel, 2000). A very dense crowd is supposed to be a source of irritation and negative emotions. This is true in some stores at peak times or sale periods. In such situations, the visitor feels less pleasure. Hui and Bateson (1991) and Machleit and al. (2000) found a negative effect of crowding on pleasure felt when visiting a store. As for the arousal dimension, crowding is expected to increase tension and arousal (Stokols, 1972). The study of Machleit et al. (2000) did not support this result by showing a negative effect of crowding on arousal. This result can be attributed to the

measurement of this dimension. These authors used items that consider the positive aspect (stimulating and exciting) than the negative aspect of arousal (tension, nervousness and restlessness). In line with these authors, we assume that a very dense crowd negatively affects perceived stimulation when shopping.

Accompaniment and emotions

Accompaniment is considered a key factor in explaining customers' store experience (Baker and Haythko, 2004). Despite its importance, studies examining the effect of accompaniment on emotions felt in the point of sale are rare. In this regard and in a qualitative study, Jones (1999) emphasized the potential role of accompaniment in creating a pleasant shopping experience. The relationship between pleasure and fun and entertainment while shopping was also validated by Luo (2005) and Debenedetti (2003). In this line of thinking, accompaniment is supposed to act positively on pleasure and arousal.

Emotions and impulse buying

With an operationalization centered on the unplanned nature of impulse buying, some authors have recognized the effect of pleasure and arousal on making unplanned purchases (Dawson, Bloch and Ridgway, 1990; Babin and Attaway, 2000). With a different conceptualization, Babin and Darden (1995) showed a significant effect of pleasure and arousal on resources spent while shopping (time and money). In summary, through this literature review, we found that sales staff, crowding and being accompanied influence consumers' emotions felt at the point of sale, which in turn may trigger an impulse buying. Thus, we propose the following hypothesis:

H2: Emotions mediate the effect of social environment variables on impulse buying.

H2.1: Emotions mediate the effect of sales staff on impulse buying.

H2.2: Emotions mediate the effect of crowding on impulse buying.

H2.3: Emotions mediate the effect of accompaniment on impulse buying.

3. METHODOLOGY AND MEASUREMENT

To test our hypotheses, a survey was conducted in a supermarket with a convenience sample consisting of 473 customers, 64.7% are women and 41.4% belong to the age range of [25 - 35]. As a reminder, impulse buying is defined as an unplanned purchase, taking place along fairly intense positive emotions and reflecting a quick response to a stimulus. Thus, for a purchase to be considered impulsive, we devised a set of conditions. The first relates to the fact that the purchase is unplanned. If the reaction is positive, the respondent is asked to respond to a five-point likert scale measuring the degree

of impulsiveness of the purchase based on both affective and reactive components. This scale was inspired by the impulsivity scales of Jeon (1990) and Youn (2000). We considered as impulsive those purchases with a score greater than or equal to three on the said scale. Emotions of pleasure and arousal were measured using the PAD scale of Mehrabian and Russell (1974) in its bi-dimensional form. To measure the variable sales staff, we referred to the scale of the social dimension of the sales atmosphere, developed by Baker, Grewal and Parasuraman (1994). The scale of Machleit, Kellaris and Eroglu (1994) was adopted to measure crowding. Finally, to measure accompaniment, the item was whether the person was accompanied or not when visiting the store.

4. STATISTICAL ANALYSIS AND RESULTS

In a first step, we checked the reliability and validity of our measurement scales. The analysis on the software Amos indicates good psychometric quality of scales. It should be noted that the presence of binary variables has justified the use of a Partial Least Square (Tenenhaus, 2005). In the absence of a goodness of fit index of the overall model under a PLS analysis, we proceeded to test the model, without taking into account the binary variables using the Amos software. The indices obtained indicate a good fit and then a good adjustment of the model to the data (Table 1).

Table 1 - The goodness-of- fit of the model

χ^2/DF	GFI	AGFI	CFI	TLI	RMSEA
2.201	.956	.933	.985	.979	.050

Analysis of the direct effects of social environment variables on impulse buying

In light of the obtained results, the positive effect of sales staff on making an impulse purchase is not significant. The negative effect of crowding on making an impulse purchase is not also significant. The possibility of an indirect effect of sales staff and crowding on impulse buying through emotions will be discussed later. Concerning accompaniment, the results indicate that it positively influences making an impulse buying ($\beta = 0.28 ; t=3.04$). This suggests that the *behavior* in the store is under the influence of the companion. The accompanied customer may be induced to spend more time, to visit more stores and spend more money. This result provides further confirmation of the importance of the presence of an accompanying person in making impulse purchases (Yu and Bastin, 2010).

The role of emotions in mediating the effect of social environment variables on impulse buying

To test the mediating effect of emotions, two models are tested: an unmediating model and a mediating model (Lam et al 2004.). Followed the approach of Baron and

Kenny (1986), which consists of verifying four conditions for testing the significance of the relationship between these three variables: independent variables (The three variables of social environment), dependent variable (Impulse buying) and mediating variables (emotions: pleasure and arousal)

- Condition 1: check, in the unmediated model, that the effect of social environment variables on impulse buying (a) is significant.
- Condition 2: Check, in the mediated model, that effect of social environment variables on emotions (b) is significant.
- Condition 3: check, in the mediated model, that effect of emotions on impulse (c) buying is significant.
- Condition 4: check, in the mediated model, that effect of social environment variables on impulse buying (a') is reduced, when the effect of the mediator emotions is controlled. If the effect is reduced, mediation is said to be partial. When the effect becomes insignificant, mediation is called perfect.

Table 2 - Mediating role of pleasure in the social environment variables- impulse buying link

Effect tested	Significance	Effect tested	Significance	Effect tested	Significance
SS (a) IB	.21	CR (a) AI	-.015 (NS)	ACC (a) IB	.28
SS (b) PL	.26	-	-	ACC (b) PL	.51 (NS)
PL (c) IB	.24	-	-	-	-
SS (a') IB	.15 (NS)	-	-	-	-

The mediating role of pleasure

The results presented in Table 2 indicate that in the fourth phase, the effect of sales staff (SS) on impulse buying (IB) has become insignificant. Mediation of pleasure (PL) is then perfect. Concerning crowding (CR) and accompaniment (ACC), the four conditions were not met. Thus, pleasure mediates only the link between sales staff and purchase.

The mediating role of arousal

The results in Table 3 indicate that the first condition is not validated for the sales staff and crowding. Regarding accompaniment, the second condition is not met too. This leads us to conclude that arousal (AR) does not mediate the relationship between environmental variables and impulse buying.

Table 3- Mediating role of arousal in the social environment variables- impulse buying link

Effect	signific	Effect	signific	Effect	signi
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tested	ance	tested	ance	tested	fican ce
SS (a) IB	.17 (NS)	CR (a) IB	-.00 (NS)	ACC (a) IB	.28
-	-	-	-	ACC (b) R	.13 (NS)

Moreover, like the work of Wakefield and Baker (1998) and Chebat and Michon (2003), we hypothesized that arousal influences pleasure. Thus, arousal may play a mediating role between environmental variables and pleasure. With reference to the results in Table 4, introducing the variable arousal leads to a decrease in the weight of the direct effect of sales staff on pleasure (.41 < .26). Therefore, we conclude that arousal partially mediate the relationship between these two variables. In addition, we found that arousal mediates perfectly the effect of crowding on pleasure. However, the mediating effect of arousal on accompaniment is not validated.

Table 4: Mediating role of arousal in the social environment variables- pleasure link

Effect tested	significance	Effect tested	significance	Effect tested	significance
SS (a) PL	.41	CR (c) PL	-.25	ACC (c) PL	.13 (NS)
SS (b) AR	.36	CR (b) AR	-.25	-	-
AR (c) PL	.5	AR (c) PL	.5	-	-
SS (a') PL	.26	CR (a') PL	-.013 (NS)	-	-

The final structural model adopted (Fig. 1 in Appendix) shows a perfect mediator fun effect in the relationship between the sales staff and impulse purchases. Similarly, activation appears as a partial mediator in the relationship between the sales staff and crowding, on one side, and impulsive purchase, on the other side.

4. DISCUSSION AND IMPLICATIONS

This research aims at providing answers on the effect of social environment on impulse buying behavior. The results point to the direct and indirect effects of sales staff, crowding and accompaniment on both pleasure and arousal and on consumers' impulse buying behavior. These results indicate that some variables of the social environment play a facilitating role while others disfavor impulse buying behavior. This study helped to highlight the effect of sales staff on emotions felt at the point of sale. Vendors' reception quality, availability and sympathy are critical in generating positive emotions that

encourage customers to make impulse buying. Through training, motivation and control, the role of sales staff may go beyond achieving a simple transaction to engaging in a face-to-face marketing strategy that fosters customer satisfaction and loyalty (Yu and Bastin, 2010). Consistent with the results of Machleit et al. (2000), the perception of a massive customer density makes the shopping experience less stimulating. In such a situation, customers feel less pleasure and may even need to avoid buying and even to leave the store. Retailers should take this into account in terms of store layout (locating rays, product presentation, number of checkout points, etc.), in particular during peak periods, to ensure a better flow of customer traffic, both within the store and at the level of the checkout points. In addition, the contribution of crowding makes sense to carry out further research on the possible interaction of this variable with some situational factors, such as motivation to visit the store, initial mood and time pressure. The direct effect of accompaniment on making an impulse purchase further confirms the importance of this component in the shopping experience. Thus, retailers should promote shopping in group, couple or with friends. Contrary to our expectations, the results do not validate the effect of accompaniment on emotions. This result opens up the door to future research directions, including the mediating role of personal variables, such as the degree of sensitivity to social influence and the type of companion (Luo, 2005), in explaining their effect on customers' internal states and impulsive behavior. Furthermore, recent studies argue for reinstating the dominance dimension in the study of emotions and their effects (Yani-de-Soriano and Foxall, 2006). The low determinacy of this variable in previous research points to the need to consider the adequacy of the PAD scale to measure perceived control in a point of sale. Finally, this research was conducted in a hypermarket. It is possible that customers' internal states and impulse buying behavior varied depending on the store's characteristics. For a better external validity, it seems important to replicate this work in other types of stores: shops, malls, online shops, etc.

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APPENDIX

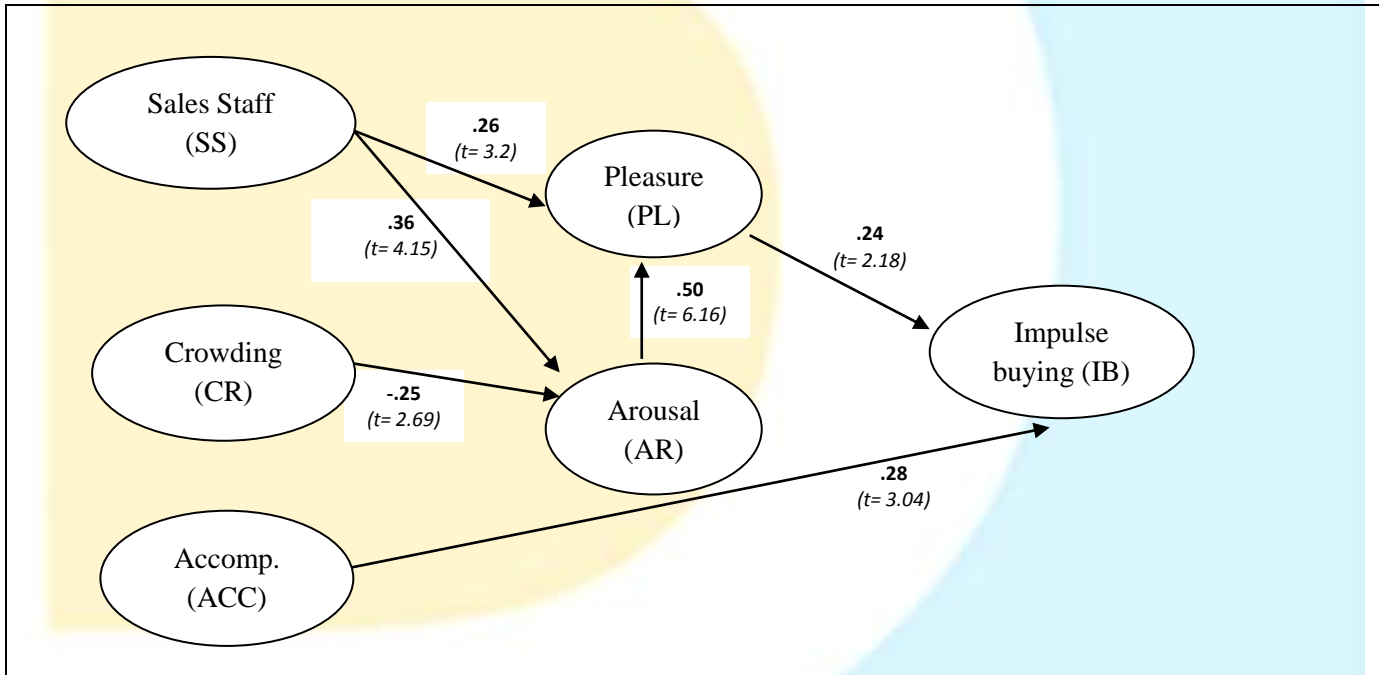


Figure 1: Final model with the relationships between social environment variables, emotions and impulse buying