The Influence of Shopping Motivation, Optimum Stimulation Level, Perception of Store Atmosphere, and Satisfaction on Repatronage Intention

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#### Abstract

This study focuses on the relationship between shopping motivations, optimum stimulation level, perceptions of store atmosphere, store patronage satisfaction and repatronage intention. Three hundred and thirty shoppers, across three store types, were surveyed over a two week period. The results indicate that shopping motivations have a moderate influence on the perception of interior layout, social factors and store space while OSL has a slight effect on the perception of store atmosphere. Furthermore, the study found that store patronage satisfaction is influenced by the perception of interior layout, social factors and store space. In turn, this store patronage satisfaction affects repatronage intention. In light of the findings, recommendations for retailers are provided.

Keywords: shopping motivation, optimum stimulation level, store atmosphere, store patronage satisfaction and repatronage intention.

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## **Background**

While there is strong support for the relationship between store atmosphere and shopping behaviour, there has been little research investigating the influence of shopping motivation on in-store experience (Arnold and Reynolds, 2003). In general, however, motivation has been recognized as an important factor to explain behaviour (Lawson et al., 1996; Schiffman et al., 1997; Cardoso and Pinto, 2010) and influencing how people perceive the environment as well as how they process information (Lawson et al., 1996). Thus, studying the relationship between shopping motivation, optimum stimulation level and the perception of store atmosphere could further the understanding of the role of store atmosphere. In addition, this study examines the relationship between the perception of store atmosphere and store patronage satisfaction which will in turn affect repatronage intention.

### Shopping motivation

As one of the key focuses of this study is on hedonic shopping motivation, the typology developed by Arnold and Reynolds (2003). The validity of this typology has been confirmed by others (cf, Cardoso and Pinto, 2010) and so is viewed as appropriate for the current study. The motivations are as follows:

- 1. Adventure motivation shopping is viewed as adventure;
- 2. Social shopping shoppers see the main purpose of shopping as an opportunity to socialise:
- 3. Gratification shopping shopping is used as reward;
- 4. Idea shopping this shopping is undertaken to provide the shopper with up-to-date information on products and trends
- 5. Role shopping shopping motive relates to the shopper's role in society
- 6. Value shopping the purpose of this activity is to find a bargain; and,
- 7. Anticipated utility the aim of the shopping is to obtain the product. Shoppers expect to gain the utility offered by the product purchased.

#### Optimum Stimulation Level

The optimum stimulation level (OSL) illustrates how peoples' affective state responds to the stimulation induced by the environment. According to this theory, the response follows an inverted U-shaped function. People who have a high OSL tend to be involved in activities that result in high levels of stimulation while a low OSL person would avoid a high stimulation activity. For them, to achieve their optimum level, the low stimulation activity would be preferred (Mehrabian and Russell, 1974; Raju, 1980; Guido, Capestro and Peluso, 2007).

In the current study, it is proposed that OSL is associated with store atmosphere. A person categorised as having a high amount of arousal to fulfil would explore all available stimuli (Lawson et al., 1996). Thus, the exploration of store atmosphere would be influenced by the state of arousal so that a high OSL person would tend to explore store environment, whereas, a person with low OSL would neither attempt to explore the environment nor become engaged in the shopping experience.

# Perception of store atmosphere

A number of distinct views exist for the classification of store atmosphere (cf, Kotler, 1973; Mehrabian and Russell, 1974; Baker, 1986; Berman and Evans, 1995). The present study, however, uses the store atmosphere classification developed by Baker (1986). According to this classification, store atmosphere consists of ambient factors, design factors and social factors. Ambient factors are background features that may or may not be consciously perceived but that affect human senses such as air quality, noise, scent and cleanliness. Meanwhile, design factors represent features directly discernible by consumers such as aesthetics and functionality. Social factors, on the other hand, refer to people in the environment including the sales people and the customers in the store. This classification was chosen as it was thought to be more closely linked to the hedonic responses.

The current study hypothesises that perception of store atmosphere is affected by OSL and shopping motivation. Furthermore, perception of store atmosphere is hypothesised to influence satisfaction.

### Satisfaction

A number of studies have examined the role of satisfaction as it relates to products; however, the literature reveals only a few satisfaction studies set in the retail context. Swan and Trawick (1981) and Oliver (1981) confirm the applicability of disconfirmation of expectation theory in order to explore the satisfaction concept in the retail setting. Westbrook (1980) identified the sources of shopping satisfaction as store salespersons, store environment, merchandising policies, service orientation, product or service satisfaction, clientele, value or price relationship and special sales. Store salesperson, special sales, product or service and value-price relationship were found to be the most influential factors in affecting shopper satisfaction. Other empirical research also found a relationship between store image, store satisfaction and store loyalty (Ruyter, Bloomer and Peeters, 1997; Koo, 2003).

## Repatronage intention

Repatronage intention aims to measure the likelihood that the shopper will patronise the store in the future. This behavioural intention is the ultimate shopping outcome measurement in this study. A number of researchers (Olivia et al., 1992; Wakefield and Blodgett, 1994; Babin and Darden, 1996; Babin and Griffin, 1998, Brady et al., 2001 and Stoel et al., 2004) argue that higher levels of satisfaction lead to repeat purchase.

Grace and O'Cass (2005) investigated the antecedents of repatronage intention across department stores and discount stores. The study found that satisfaction, perceived value for money and consumption feelings are the antecedents of the intention to revisit the store. Satisfaction was found to be the strongest variable to influence repatronage intention.

#### Method

Three sampling frames were used in the current research design: respondents, retail environments and time of day. A total of three hundred and thirty shoppers were recruited to serve as subjects. The stores involved were a supermarket, a speciality store and a department store. These stores were selected as it was thought that they would provide for differences in store atmosphere and shopping motivation. The data was collected from 10.00 a.m. to 12.00 a.m. and 3.00 p.m. to 5 p.m. over two week period. The respondents were equally distributed between the types of store (i.e., 110 per store) and were approached upon completion of their shopping trip and asked to participate in a survey.

Measures used in the current study were those developed by previous researchers. Shopping motivation was measured using Arnold and Reynolds (2003) scale which consisted of 18 Likert-scaled items, optimum stimulation level utilised Steenkamp and Baumgartner's (1995) short form OSL measurement, the perception of store atmosphere was measured using Sherman et al.'s (1997) 18 semantic differential phrases, store patronage satisfaction utilised three items (Magi, 2003) and repatronage intention was measured on three Likert scales (Stoel et al., 2004). All scales had been previously tested for reliability and were found to be reliable measures.

# **Analysis and Discussion**

Exploratory factor analysis, using a varimax rotation was conducted on each measure. Factor analysis on shopping motivation resulted in six different factors. These factors were named role motivation, idea motivation, adventure motivation, social motivation, value motivation and product acquisition motivation. While the factors are mostly consistent with what previous literature has suggested, gratification motivation for shopping was not a separate factor. Rather, the items used to measure this motivation loaded on the role motivation factor.

Factor analysis of the OSL measurement produced two factors. The first factor represents the respondent's novelty seeking behaviour, while the variables that load most heavily on the second factor reflect a routine response. According to the concept of OSL, as defined by Steenkamp and Baumgartner (1995), the first factor more closely represents the concept of OSL.

Store atmosphere perception resulted in six factors -interior layout, store attractiveness, social, store space, aisle merchandise and crowding. This result is not supported by the literature. The factor analysis on store patronage satisfaction resulted in two factors whereas this measure is generally treated as a single factor. Finally, all items designed to represent repatronage intention load heavily on the same factor. As a result, this factor is identified as repatronage intention.

To examine the relationship between shopping motivations and the perception of store atmosphere, a series of stepwise multiple regression analyses was conducted. The first hypothesis, which dealt with the relationship between shopping motivation and the perception of store atmosphere, is provided partial support. As can be seen from the results, shopping motivation has a moderate effect on interior layout, social factors and store space, while there was no significant effect on other elements of store atmosphere.

Table 1: The relationship between shopping motivation and the perception of store atmosphere

Independent variable	Interior layout	Store attractiveness	Social factors	Store space	Crowding	Aisle and merchandise
Role	0.131*	-0.061	0.159**	0.014	0.031	-0.023
Adventure	0.135*	-0.079	0.284***	0.058	0.019	-0.045
Social	0.173**	0.039	0.108	0.070	0.124	-0.105
Value	0.047	-0.065	-0.021	0.124*	0.053	-0.050
Idea	0.111	0.144*	0.040	0.108	0.127*	0.021
Product	0.167**	-0.011	0.047	0.185**	0.063	0.117
Adjusted R <sup>2</sup>	0.090***	0.015	0.103***	0.050**	0.018	0.008

<sup>\*</sup> p<0.05, \*\* p<0.01, \*\*\* p<0.001 (two tailed test). The figure is standardized beta

Previous research has focused on the relationships between shopping motivation, in-store experience and shopping outcome (e.g., Roy and Tai, 2003; Kaltcheva and Weitz 2006). However, the relationship between the perception of store atmosphere and shopping motivation has not been addressed. In an attempt to address why the perception of only certain factors of store atmosphere were affected by shopping motivation, the researchers took a closer look at the data. One possible explanation is that the respondents for the most part (51.7%) shopped alone. This could have an impact on the way they interacted with the atmospheric elements. Research has shown that unaccompanied shoppers tend to spend less time and to relax less than accompanied shoppers and so may not be open to the influence of store atmospheric elements.

The second hypotheses aimed to explore the relationship between OSL and the perception of store atmosphere. The adjusted R square for the relationship between OSL and the perception of store atmosphere is low indicating that OSL does not explain the variance in the perception of store atmosphere well. Therefore, one can conclude that store atmosphere may not an influential factor in maintaining an individuals' OSL. One possible explanation for this finding is that the shoppers had a high degree of familiarity with the stores. The majority of the shoppers (95.1%) reported having previous experience with the store and therefore the 'sameness' may not have been stimulating.

Table 2: The relationship between OSL and the perception of store atmosphere

Independent variable	Interior layout	Store attractiveness	Social factors	Store space	Crowding	Aisle and merchandise
OSL	0.166**	0.010	0.158**	0.032	0.102	-0.018
Adjusted R <sup>2</sup>	0.024**	-0.004	0.021**	-0.003	0.007	-0.003

<sup>\*</sup> p<0.05. \*\* p<0.01. \*\*\* p<0.001 (two tailed test). The figure is standardized beta

The third hypothesis tests the relationship between the perception of store atmosphere and store patronage satisfaction. Table 3 provides the results of that test. As can be seen, 40.7 percent of the variance in the perception of store patronage satisfaction is attributable to the perception of store atmosphere with interior layout emerging as the most important store atmosphere element to influence store patronage satisfaction. This provides further insight

into store satisfaction. Combined with previous studies (e.g., Westbrook, 1980; Koo, 2003), it indicates that if retailers want to increase satisfaction levels, they must look at the overall retail offering rather than focusing on one element (i.e., salespeople).

Table 3: The relationship between store patronage satisfaction and the perception of store

atmosphere

	Satisfaction
Interior layout	0.558***
Store attractiveness	-0.019
Social factors	0.258***
Store space	0.185***
Crowding	-0.093
Aisle merchandise	-0.040
Adjusted R square	0.407***

<sup>\*</sup> p<0.05, \*\* p<0.01, \*\*\* p<0.001 (two tailed test). The figure is standardized beta

The last hypothes is examines the relationship between repatronage intention and store patronage satisfaction. Table 4 shows that repatronage intention is strongly affected by store patronage satisfaction. This supports previous research in the area of satisfaction and repatronage intention that found that the greatest predictor of repatronage was store satisfaction.

Table 4: The relationship between store patronage satisfaction and the perception of store

atmosphere

	Repatronage intention
Store patronage satisfaction	
Adjusted R square	0.407***

<sup>\*</sup> p<0.05, \*\* p<0.01, \*\*\* p<0.001 (two tailed test). The figure is standardized beta

#### Discussion

This study extends the present body of literature on store atmosphere by identifying the relationship between the perception of store atmosphere and shopping motivation and OSL. The regression analyses indicate that the perception of social factors, interior layout and store space are influenced by shopping motivation. OSL, however, is found to have very little effect on the perception of interior layout and social factors and no significant effect on the perceptions of store space. These findings indicate that different shopping motivations lead consumers to react differently to the shopping environment. Likewise, a respondent's OSL leads them to search different aspects of the store's atmosphere. Retailers can use this information to better develop and target their offerings.

This study offers strong support for the relationship between store patronage satisfaction and the perception of store atmosphere. Specifically, the perception of interior layout, social factors and store space emerge as the most important factors to affect shopper's satisfaction. Given the large amount of variance in store satisfaction captured by this variable, Australian retailers should turn more focus to store atmosphere as a means of increasing the shopper's satisfaction level. This focus on store atmosphere should in turn influence repatronage intention.

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