Urban design and tenant variety influences on consumers’ emotions and approach behavior

Alessandro De Nisco a,⁎, Gary Warnaby b,1

a University of Sannio, Italy
b University of Liverpool Management School, Chatham Street, Liverpool, L69 7ZD, United Kingdom

A R T I C L E   I N   F O

Article history:
Received 1 January 2012
Received in revised form 1 August 2012
Accepted 1 October 2012
Available online xxxx

Keywords:
Retail environment
Shopping street
Atmospherics
Physical design
Tenant variety
Pleasure
Arousal

A B S T R A C T

This paper extends Mehrabian and Russell’s Stimulus–Organism–Response framework to investigate the influence of two selected environmental variables – esthetic design and tenant variety – relating to an urban shopping area on consumers’ emotional states and actual shopping responses. Results of a survey conducted in an Italian town center show that the variety of tenant-mix positively affects both pleasure and arousal while esthetic design has a significant influence only on pleasure. Moreover, emotional states induced by the urban environment exert a different influence on shopping outcomes, with pleasure increasing the amount of money and time spent, and arousal positively influencing unplanned shopping and negatively affecting time and money. The paper concludes by discussing managerial and research implications for both retail and urban marketing.

© 2012 Elsevier Inc. All rights reserved.

1. Introduction

Since Kotler’s (1973, p. 50) definition of the concept of atmospherics as “the effort to design buying environments to produce specific emotional effects in the buyer that enhance his purchase probability” the marketing literature provides reliable support to the notion that characteristics of a store or service environment are able to affect consumers’ perceptions and shopping outcomes. Notwithstanding this large body of research, most existing research concentrates on internal stimuli within a store or service setting, while the effect of “external variables” (e.g. building architecture, the character of the surrounding urban area, etc.) remains relatively neglected by comparison (Puccinelli et al., 2009; Turley & Milliman, 2000). A better understanding of the influence on consumer shopping behavior of environmental cues in the urban area surrounding a retail outlet is a relevant topic from an urban marketing perspective. As town and city centers seek to counter their perceived disadvantages in relation to “off-center” retail development, optimizing their appeal as retail destinations has increasingly become an important aspect of urban revitalization projects (Warnaby & Davies, 1997) and urban management initiatives (Warnaby, Alexander, & Medway, 1998; Whyatt, 2004). Thus, many urban centers are devoting consistent resources to enhance the esthetic design of physical spaces in inner-city shopping streets and to provide related services aiming to facilitate a pleasant shopping experience. However, although literature in this field emphasizes the importance of built environment and amenities – including “retail-related” factors (e.g. tenant mix and merchandise value), and “environmental” factors (in particular “atmosphere”) – as being important in influencing the attractiveness of inner city shopping streets (Teller, 2008) and downtown patronage intentions (Bearden, 1977), little of the existing research seeks to clarify how the manipulation of such stimuli is actually able to affect consumption responses.

This paper examines the role of two environmental stimuli pertaining to an inner-city shopping area – esthetic design and tenant variety – on customers’ emotional states and actual shopping outcomes in the retail outlets therein. The proposed framework builds on Mehrabian and Russell’s (1974) environmental psychology model, and on similar studies developed in both retail and service settings (Baker, Levy, & Grewal, 1992; Donovan & Rossiter, 1982; Gilboa & Rafaeli, 2003; Sherman, Mathur, & Smith, 1997).

2. Theoretical background

Mehrabian and Russell’s (1974) seminal contribution constitutes the basis of much research on the influence of environmental stimuli on consumers’ emotional states and shopping behavior. This model is based on
the Stimulus-Organism-Response (SOR) paradigm in that it assumes that features of the environment (S) are able to affect individual’s approach–avoidance behavior (R) and that such a relationship is mediated by three categories of internal emotional responses (O): pleasure-displeasure, arousal–non arousal and dominance–submissiveness, which are collectively referred to as the PAD dimensions. However, subsequent research finds that in comparison to pleasure and arousal, dominance is unable to explain most of the variance in affect and behavior (Bellizzi & Hite, 1992; Donovan & Rossiter, 1982; Donovan, Rossiter, Marcooyln, & Nesdaie, 1994; Russell & Pratt, 1980). As a consequence, more recent summaries of the model do not include the dominance construct (Kaltcheva & Weitz, 2006; Sherman et al., 1997).

The main findings from this large body of research can be summarized as follows:

1. The physical environment is able to influence emotional responses in a wide range of situations where a product or a service is purchased or consumed, including retail stores (Chebat & Morrion, 2007; Donovan & Rossiter, 1982; Tai & Fung, 1997), restaurants (Jang & Young, 2009), hotels (Aubert-Gamet & Cova, 1999), leisure services (Wakefield & Blodgett, 1999), sporting events (Hightower, Brady, & Baker, 2002) and on-line stores (Ergolu, Machleit, & Chebat, 2003).

2. A wide range of physical elements are able to induce emotional responses to store environment, including ambient factors (Baker et al., 1992) and design factors (Sherman et al., 1997). The physical environment is also studied as general or holistic constructs such as “atmospherics” (Kotler, 1973) and “store atmosphere” (Donovan & Rossiter, 1982; Donovan et al., 1994).

3. Emotional responses induced by the store environment affect a wide range of consumption outcomes, such as willingness to spend time and money in the store (Donovan & Rossiter, 1982; Sherman et al., 1997, Wakefield & Baker, 1998) and unplanned spending (Donovan et al., 1994). Emotional reactions to store environment are also able to influence consumers' perceived shopping value (Babin, Darden, & Griffin, 1994), store satisfaction and expected loyalty (Babin & Darden, 1996).

In spite of the large number of contributions provided over the last 40 years, there still remain some gaps that call for further research. Namely, as noted above, studies on store environment cover a wide range of internal stimuli while the role of external variables has largely been ignored. However, the external environment can arguably play an important role in influencing affective reactions towards the store since it is the first set of stimuli that consumers experience on entering a shopping area. For example, a well designed and pleasure-inducing urban shopping location may lead consumers to spend more time and to visit a large number of retail outlets. As a consequence, retail managers should be aware not only that the external physical environment of the broader urban shopping destination is important in the consumer's experience, but also of how emotional reactions related to the external stimuli affect specific shopping outcomes.

Moreover, existing research based on environmental psychology focuses mainly on traditional store and service settings, while studies that investigate the influence of environmental stimuli in more complex and multi-functional consumption settings such as shopping malls and urban shopping streets are scarce. Such places are, however, devoting increasing resources in attractively designing their physical facilities and they seek to provide a relatively wide assortment of stores, restaurants and entertainment facilities in order to attract consumers and generate more exciting shopping experiences (De Nisco & Napolitano, 2006; Wakefield & Baker, 1998; Warnaby, 2009).

3. Extending the Mehrabian and Russell’s SOR model to the urban environment

Fig. 1 provides a pictorial summary of the model proposed and tested in this study. The overall framework is based on the Stimulus-Organism-Response (SOR) paradigm in that it relates features of the environment (S) to approach–avoidance behavior (R), mediated by the individual’s emotional states aroused by the environment (O). The test of the SOR paradigm to the urban environment is accomplished by a causal modeling approach (Bagozzi, 1980).

With regard to the stimulus variables, the present study adapts categories developed in previous research conducted at the store and service provider level to a wider urban setting. In an attempt to provide significant managerial as well as research implications, the following criteria inform decisions regarding factors to be investigated: a) environmental variables that can be effectively managed by public and/or private sector actors; and b) environmental variables that have received less significant attention in the retailing and services marketing literature. Thus, two distinct urban environmental dimensions are chosen as object of investigation: 1) esthetic design, which includes pedestrian floor maintenance, building colors and urban furnishing design; and 2) tenant variety, which includes the number and variety of stores, dining and entertainment facilities.

With regard to response variables, consistent with Donovan et al. (1994) and Sherman et al. (1997), approach behavior measures actual shopping outcomes in terms of amount of time spent in the shopping street, number of products purchased, unplanned purchases and actual amount of money spent in the shopping street.

Finally, according to existing literature, organism variables include two domains of emotional states: pleasure, which relates to the degree that individuals feel happy, relaxed and pleased, and arousal, referring to the feeling of being excited, aroused and stimulated (Bellizzi & Hite, 1992; Donovan et al., 1994; Russell & Pratt, 1980).

3.1. Urban esthetic design—emotional states

In the store atmospherics literature, design factors refer to physical stimuli that are visual in nature and include both esthetic and functional features (Baker, Grewal, & Parasuraman, 1994). Research investigating the influence of store design on consumers’ emotional states is relatively limited and provides ambiguous results. Studies focusing on single-variables indicate that wall colors are able to affect the pleasure dimension, but not arousal or dominance (Bellizzi & Hite, 1992), while in studies conducted at factor-level, Wakefield and Baker (1998) and Wakefield and Blodgett (1999) report that an attractive architecture is significantly related to consumers' feelings of excitement. Conversely, Sherman et al. (1997) find a positive correlation between design factors and pleasure and a negative correlation with arousal.

The relationship between the exterior of a store and emotional responses has not been empirically tested. Scholars have noted however that the physical attractiveness of a urban retail location is likely to contribute to the aura of psychological qualities consumers associate with the stores located therein, by influencing their affective disposition towards the area and subsequent approach behavior (Bell, 1999), store image (Finn & Louvierie, 1996) and consumer attitudes (Ward, Bittner, & Barnes, 1992). Moreover, application of environmental psychology to the urban setting provides evidence that perception of the esthetic attributes of the streetscape is able to elicit emotional responses in terms of pleasantness, excitement, arousal and relaxation (Nasar, 1990; Russell & Snodgrass, 1987) and such emotional reactions, in turn, affect the evaluation of quality and the character of the environment (Nasar, 1994). As a consequence, since the exterior streetscape is the first set of stimuli seen by consumers during a shopping expedition to an urban shopping destination, the esthetic features...