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### The influence of atmospheric elements on emotions, perceived value and behavioral intentions

# Farideh Bigdelia\*, Azam Bigdelib and Fariba Bigdelia

<sup>a</sup>Social Security Organization of Iran

<sup>b</sup>Central Bank of Iran

# CHRONICLE

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#### ABSTRACT

This research proposes a comprehensive integrated model, which investigates the relationships between atmospheric elements, emotions, perceived value and behavioral intentions. Data collected through customers of three Salian chain stores by using stratified random sampling method and the analysis uses 390 questionnaires to collect the information. Structural equations modeling by using LISREL was performed to empirically test the relationships between the constructs of this research. Results show that ambience, interaction and design factors had a positive influence on customer emotions. However, effects of ambience, interaction and design on perceived value were not significant. In addition, results indicate that customer emotions and perceived value had a positive and significant effect on behavioral intentions. Finally, it suggests that managers should focus on designing atmospheric elements in a way that contributes positively in creating positive emotions in customers, which in turn enhance customer's positive behavioral intentions.

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#### 1. Introduction

The service sector dramatically influences our lives and in today's changing environment, service firms must be certain that their service environments appeal and suitable for their customers. Recognizing the role of store environment on customer buying behavior, retailers devote substantial resources to activities of store design, ambience and decoration. The effect of the shopping environment on customers' emotions and buying behaviors is an important issue for retailers and stores. Learning more on what environmental components (physical and social) influence on the emotion states of shoppers can recommend appropriate marketing strategies to help create and keep positive shopping experiences in customers. Recent studies indicated that construct of atmosphere related with customers' perception of specific components in various service settings (Hansen et al., 2005; Slatten et al., 2009). Mehrabian and Russell's (1974) model is the basis of many studies on the effect of environmental factors on customer behavior. This research is originated in Mehrabian and Russell's model from the field of environmental psychology. Mehrabian and Russell's model

\*Corresponding author.

E-mail addresses: Bigdeli farideh@gmail.com (F. Bigdeli)

proposes that environment variables influence people's emotional responses to the environment, which in turn motivate people to approach or avoid the environment. Mehrabian and Russell detect three dimensions of emotional responses including pleasure, arousal, and dominance. However, in some marketing studies, emotions are represented by only two dimensions; namely pleasure - arousal (PA model) (Russell, 1978; Russell & Pratt 1980).

Bitner (1992) stated that the atmosphere components were important for service firms because services were produced and consumed, simultaneously. Environment researchers applied environment elements vary widely across studies. Bitner (1992) proposed servicescape where it focuses on the physical perspectives of the environment, including ambient and design factors. However, for many service firms, the effect of social environment is also essential, i.e. customers and service employees, often more important than physical environments. In fact, construct of atmosphere embraces both the physical environment and social environment. The atmosphere may be divided into three facets including Ambience, Interaction; and Design (Heide & Gronhaug, 2006). Recent studies determined that physical and social environments had a positive impact on individual's behavior on consumer settings such as stores (Sheng et al., 2011). It seems that there was a lack of research as a comprehensive view on constructs linked to customers' experiences in service settings and there is a need for more research on how environment constructs affect customers' experiences in service settings. The present study tries to propose and empirically examine a more comprehensive model of service environments, which include social as well as physical environment. In fact, the primary purpose of this study is to investigate the atmospheric experiences in association with customers' emotional responses, customer perceived value and behavioral intentions in chain store context.

This paper is organized as follows: We first review the conceptual framework and concepts that are related to our research. We next present a conceptual model and discuss the relationships among model constructs, along with research methodology and data collection. Finally, we present the findings, discuss implications, and suggest future research directions.

### 2. Conceptual framework and hypotheses

#### 2.1 Environmental psychology and Atmospherics

Kotler (1973) defined atmospherics as "the effort to design buying environments to produce specific emotional effects in the buyer that enhance his purchase probability'. Mehrabian and Russell (1974) introduced the atmospherics model (M-R model) into the environmental psychology literature. In fact, atmospheric studies falls under the broad discipline of environmental psychology, which often employs the stimulus-organism-response model. Mehrabian and Russell (1974) model have been implemented in both retail and services domains. This model suggests that environmental stimuli (S) lead to emotional responses (O) that, in turn, drives consumers' behavioral responses (R) based on the stimulus-organism-response paradigm. Mehrabian and Russell (1974) model also, proposes that consumers have three emotional in response to environmental stimuli: pleasure, arousal, and dominance (Mehrabian & Russell, 1974). These emotional responses result in two contrasting behaviors: approach behavior or avoidance behavior, where approach is a desire to stay, explore and affiliate, and avoidance is the opposite. This implies that the effect of atmosphere on consumer behavior is mediated by the individual's emotional states. Dominance, however, has been shown to have a non-significant effect on behavior. In fact, Donovan and Rossiter (1982) applied an abbreviated version of the PAD scale to retailing research. They found that pleasure-arousal dimensions were adequate to represent individual's emotional responses to a wide range of environments and shopping behaviors were not associated with measures of Dominance. In recent marketing studies, emotions are represented by only two dimensions: pleasure – arousal.

There is a conceptual framework for atmospherics based on the foundation of environmental psychology. Recent studies empirically investigated the relationship between consumer's responses to atmospherics and consumer behaviors (Bitner, 1992; Donovan et al., 1994; Mattila & Wirtz, 2001; Ryu & Jang, 2008, Sheng et al., 2011). Service settings are capable of evoking customers' emotions. Obermiller and Bitner (1984) found that consumers who viewed retail products in an emotionally pleasing environment evaluated products more positively than consumers who considered the same products in an unpleasant environment. Eroglu and Machleit (1990) explained that crowding associated with negative affect and increases consumers' desire to leave. In addition, recent studies have indicated that positive affect stimulates customers to stay longer and interact with other employees and customers in store environment (Donovan & Rossiter, 1982; Hui & Bateson, 1991). Also Dube' et al. (1995) reported that positive affect induced by background music stimulates the desire to affiliate. Slatten and Mehmetoglu (2009) findings disclosed that design and interaction were positively associated with customers' feelings of joy. Pleasure derived from service environment, influences in-store behaviors such as spending levels, amount of time spent in the store, and willingness to revisit (Donovan & Rossiter, 1982; Donovan et al., 1994; Yoo et al., 1998). Therefore, service firms have a strategic stake in understanding how service environments foster and increase customers' positive emotions (Sherman et al., 1997). A summary table of the 10 published empirical studies of the effect of marketing atmospheres on consumers is presented in Table 1.

Table 1
Representative empirical research on marketing atmospheres

Authors	Sample	Notable findings			
Yalch & Spangenberg, 1993	Actual shoppers	Music factor effects tend to vary by the type of shopper and by type of department. Younger males liked foreground music; older females liked background music.			
Areni & Kim, 1994	171 actual shoppers	Lighting factor influenced number of items examined and handled. A lighting shelf level interaction was significant but lighting by customer type was not significant. However, a main effect for customer type was significant. Brighter stores cause more handling and examination but do not influence sales or time spent in the store.			
Baker et al., 1994	297 undergraduate students	Results showed that Ambient and social factors have greater influence than design factors on service and merchandise quality perceptions and on store image.			
Hirsch, 1995	Actual gamblers	Investigated effects of two ambient odors on the amount taken in by slot machines. One odorant significantly increased the amount gambled while the other did not. The effective odorant apparently enhanced the gambling mood of casino patrons.			
Grewal et al., 2003	213 graduate business students	Number of visible store employees, number of customers, and music were critical antecedents of store patronage intentions in the context of the service-intensive retail.			
Michon et al., 2003	Data were collected in three separate waves to capture retail density	Relationship between ambient odors and mall perception adopts an inverted U shape. Also, ambient odors positively influence shoppers' perceptions only under the medium retail density condition.			
Countryman & Jang, 2006	102 responses in hotel lobby	color, lighting, and style were found to be related to the overall impression of a hotel lobby			
Ryu & Jang, 2008	253 restaurants customers	Facility aesthetics, ambience, and layout as dining environments had significant and positive effects on the degree of customer pleasure, while facility aesthetics and employees significantly influenced the level of arousal. In addition, the results indicated that facility aesthetics and employees among physical environments had direct influences on behavioral intentions.			
Slatten & Mehmetoglu, 2009	162 visitors in winter park	Design and interaction are linked to customers' feelings of joy. Also, feelings of joy are highly related to the construct of customer loyalty.			
Sheng et al., 2011	fashion apparel retailers	both social and physical environments have a positive influence on customer emotion and satisfaction, which in turn affect behavioral intentions			

### 2.2 Atmospherics, emotions and perceived value

Many studies have concentrated on the importance of customers' experience and customer behavior in service settings (Slatten et al., 2009; Heide & Gronhaug, 2006; Pine & Gilmore, 1998). Kotler (1973) reported that atmospherics could be a marketing tool to create positive behaviors in

consumption situations where products or services were consumed. In the literature, the construct of atmosphere consists of customers' perception of specific elements in various service settings. Baker (1986) divided the physical environment into three sections: (1) ambient factors, that is, background characteristics that may or may not be consciously perceived by customers but that effect on customer emotions (e.g., scent, music, color and lighting), (2) design factors, that is, characteristics that are directly perceptible by customers and can influence on customer's experiences, and (3) social factors, that is, people in the environment consist of employees and other customers. Baker (1986) further divided design factors into aesthetic and functional components. He also divided social factors into sales personnel and other customers. Store environment is a social construct that composed of both physical and social elements, and that the perception of store can be based on both physical and social cues represented schematically in consumer's mind. In fact, the elements of service environment can thus be categorized into social and physical environments (Sheng et al., 2011). In this study, atmosphere divided into three aspects that contain of both physical and social components of Ambience, Interaction; and Design. In the following section we describe each of these three atmospheric dimensions and their relationship to customers' emotions and perceived value.

Ambience factor indicates intangible background features that influence on the human senses and may have a subconscious impact on customer's behavior. These backgrounds include music, scent, color, lighting, and temperature (Ryu & Jang, 2008). This study concentrates on the joint effect of different components of ambience in relation to customers' emotions in chain store setting. It is limited to the focus of the three facets of ambience for this context. These ambient factors are: light, scent and sound. Several studies indicated that the physical environment plays essential role in creating customer's pre-consumption mood before the actual service is supplied (Mattila & Wirtz, 2001; Namasivayam & Mattila, 2007). These studies suggest that environment can positively or negatively influence mood. For instance, previous research detected that background music could influence on customer perceptions of stores, increase sales, influence purchase intentions and increase shopping time and waiting time (Mattila &Wirtz, 2001, Baker et al., 1992; Yalch & Spangenberg, 2000). Recent studies indicated that Ambient might also influence on consumer's emotion and behavioral intentions (Ryu & Jang, 2008; Fitzgerald Bone, & Scholder Ellen, 1999). Also, Mehrabian and Russell (1974) found that people tend to be drawn to light sources.

Recent studies of the ambient components indicate that these components are all linked to customers' experiences in setting. Based on these literatures, it is reasonable to assume that the use of ambience facets in a chain store is associated with customers' emotions and perceived value. Based on these arguments, we test the following hypotheses:

H<sub>1</sub>: Customers' perception of ambience in a chain store is positively associated with their emotions.

H<sub>2</sub>: Customers' perception of ambience in a chain store is positively associated with their perceived value.

The next variable in our research model involves Interaction factor. Bitner (1992) distinguishes social stimulus to three sections: customers only, both customers and employees and employees only. This study is limited to the interaction between customers and service providers. Therefore, in this research interaction is defined as an interaction between customers with the service provider in chain store setting. The appearance of store employees is essential since it can be applied to convey a firm's ideals and attributes to consumers (Solomon, 1985). Some service providers spend several months training employees in various methods of how to interact with customers during their stay in their settings (Rubis, 1998). The effects of social components (number/friendliness of employees) was explored as a part of a study conducted by Baker et al. (1992) in which they found that the more social components present in the store environment, the higher customers subjects' arousal. Chase (1981) found that higher degrees of contact and relationship between employees and customers increased sales opportunities. Also, Turley et al.(2000) found that the store with the prestige-image social cues were perceived as providing of higher service quality than did the store with the discount

image social cues. In recent studies, it was found that employees were closely associated with the desired social density, which influence on customer affective and cognitive responses as well as repurchase intentions (Tombs & McColl-Kennedy, 2003). Some studies suggest that service employees' expression of emotions may create an emotional state in customers. Customers often interpret an employee's emotional display as part of the service, thus, an employee's displayed emotions will influence a customer's behavior (Tsai & Huang, 2002). It is important that a service provider has a primary objective to induce the positive emotions in customers when contacting with its customers. In general, people apprise others who express positive emotion as more likable and courteous, all else being equal, when in a transactional or business relationship or service setting (sheng et al., 2011). Thus, we can assume that service employees who are particularly helpful, and who show empathy, as well as being very friendly, may induce bigger levels of positive emotions in customers. Thus, based on the present study, we assume that customers' general perception of their interaction with the service providers in a chain store is linked to customers' emotions and value. Consistent with this argument, the following hypotheses are proposed:

- H<sub>3</sub>: Customers' perception of interaction with employees in a chain store is positively associated with their emotions.
- H<sub>4</sub>: Customers' perception of interaction with employees in a chain store is positively associated with their perceived value.

Design components are store environmental elements that are more visual in nature, including layout and facilities (Baker et al., 1994). Design factor in retail environments can create positive consumer emotions and increase the likelihood of positive behavior intentions (Kotler, 1974, Donovan & Rossiter, 1982). Humans can perceive design elements through our senses. In fact, design factors, that is, features that are directly perceptible by consumers (d'Astous, 2000). The construct of design in the present study concentrates on physical context of the atmosphere that customers experience during shopping. Design is various from ambience in nature; design focuses on tangible aspects of environment while the ambience factor focuses on intangible aspects of customers' experiences in environment.

A survey of the other studies shows that customers' experiences of design factors have been associated with important results. It seems, however, that there are mixed findings on whether design matters or not. Some studies indicate support for the importance of design and effect of this factor on human behaviors. These studies found that design factors enhance customer positive emotions and generating excitement among customers (Harris & Ezeh, 2008; Sherman et al., 1997). Design can induce positive visual effects, create a sense of coziness and help customers in forming a mental picture that introduce emotional response (Jang & Namkung, 2009). Therefore, it is likely that properly designed physical environment may evoke customers' emotions and perceived value. Based on the theoretical framework, we therefore include design in our model via the following hypotheses:

- H<sub>5</sub>: Customers' perception of design in a chain store is positively associated with their emotions.
- H<sub>6</sub>: Customers' perception of design in a chain store is positively associated with their perceived value.

### 2.3 Emotions, behavioral intentions and perceived value

Consumption emotions can be defined as "the set of emotional responses obtained specifically during product usage or consumption experiences, as described either by the distinctive categories of emotional experience and expression (e.g., joy, anger, and fear) or by the structural dimensions underlying emotional categories, such as pleasantness/ unpleasantness, relaxation/action, or calmness/excitement" (Westbrook & Oliver, 1991). There are three generally accepted approaches to studying emotions in the marketing field: categories approach, dimensions approach and cognitive appraisals approach. The second approach, retained for this investigation. The dimensions approach

takes into consideration that emotional states exist in bipolar categories. These categories consist of pleasure-displeasure, arousal non-arousal and dominance-submissiveness. Donovan and Rossiter (1982) implemented an abbreviated version of the PAD scale to retailing research. They found that pleasure—arousal dimensions were adequate to represent individual's emotional responses to a wide range of environments and shopping behaviors were not related to dominance measures. In recent marketing studies, emotions are represented by only two dimensions: pleasure — arousal. Previous research indicates that there is a positive and significant relationship between emotions and behavioral intentions (Westbrook, 1987; Han & Back, 2007; Ladhari, 2007; Bigne et al., 2008).

Zeithaml et al. (1996) defined behavioral intentions as: "signal whether customers will remain with or defect from the company". They grouped behavioral intentions into favorable and unfavorable groups: Favorable behavioral intentions (positive word of mouth, recommending, remaining loyal, spend more, and paying a price premium), and unfavorable behavioral intentions (negative word of mouth, switching to another company, complaining to external agencies, less business with company). In this paper, we focus on word of mouth communication and repurchase intention. In literature, word-of-mouth communications has been proven to be one of the strongest predictors for shaping the behaviors and attitudes of customers. WOM consists of oral, person-to-person interact between a receiver and a sender whom the receiver perceives as non-commercial, regarding a brand, product or service (Buttle, 1998). In general, with repurchase intention, customers continue to repurchase from an organization or store and with positive word of mouth, new customers are attracted to an organization or store. Therefore, behavioral intentions are a set of activities that customer intends to do after the shopping, specifically with respect to engaging in repurchase and/or positive word-of-mouth communication (Oliver, 1993).

Other studies found that there was a positive relationship between customer's emotions and customer behavior (Izard, 1977 Bagozzi et al., 1999; Yi-Ting & Dean, 2001, Lahari, 2007, Hanzaee & Khanzadeh, 2011). Neuhaus (1997) found a significant relationship between emotions and customer loyalty. Most studies apply repeat-purchase intention as an index of service loyalty (Zeithaml et al., 1996). Westbrook (1987) found that positive and negative emotions influence the amount of WOM communication. Derbaix and Vanhamme (2003) reported that surprise, negative emotions and positive emotions are all highly correlated with the likelihood of WOM. Babin et al. (2005) and Babin and Attaway (2000) suggested that positive affect was associated positively with perceived value. In addition, consumption emotions impact information processing, measure the effects of marketing cues, goal-directed behaviors and serve as ends and measures of consumer welfare (Ladhari, 2007). Based on these arguments, we test the following hypotheses:

H<sub>7</sub>: Customers' emotion in a chain store is positively associated with perceived value.

H<sub>8</sub>: Customers' emotion in a chain store is positively associated with word of mouth communication.

H<sub>9</sub>: Customers' emotion in a chain store is positively associated with repurchase.

### 2.4 Perceived value and behavioral intentions

Value is one of the most powerful forces in today's marketplace. The role of value is becoming an increasing concern among consumers and marketers. Superior value of a product/service represents a competitive advantage for the firm and creates profit and customer satisfaction (Naumann, 1995). Perceived value is defined as "the consumer's overall assessment of the utility of a product (or service) based on perceptions of what is received and what is given" (Zeithaml, 1988). Recent research results suggest that perceived value may be a better predictor of repurchase intentions than either satisfaction or quality (Cronin et al., 2000; Oh, 2000). Dubrovski (2001), Schneider and Bowen (1995) and Frenzen and Nakamoto (1993) found that value was correlated to positive word-of-mouth communication and repurchase intention in their studies. In addition, Cronin and Morris (1989) found that value was positively correlated to repurchase. Turel and Serenko (2006) revealed that perceived

value was positively associated with customer satisfaction. Oliver (1999) proposes that value influence other variables such as loyalty. In addition, Ryu et al. (2011) reported that customer perceived value was positively associated with loyalty. Consistent with these arguments, the following hypotheses are proposed:

H<sub>10</sub>: customer perceived value is positively associated with word of mouth communication.

H<sub>11</sub>: customer perceived value is positively associated with repurchase.

#### 3. Research model

Based on preceding literature, the hypothesized relationships are shown in the conceptual framework in Fig. 1, which investigates the effects of atmospherics on emotion, perceived value and behavioral intentions.

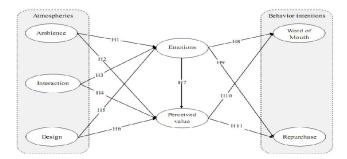


Fig. 1. Research conceptual model

#### 4. Research Methodology

### 4.1 Measurement items, Sample population and Data Collection Procedure

Self-administrated questionnaire was used for entire survey. In this study, questionnaire includes two parts, i.e. demographic questions and questions related to knowing the effects of the environment and emotions. In order to test the hypotheses empirically, multi-item scales validated in previous studies were adopted for this study. The constructs were measured by means of 5-point Likert scale. The sources for each construct and their items used in the questionnaire of this study are as follows:

Ambience was assessed with three items from Schmitt (1999). These items were light, scent and sound. Interaction was measured with 4 items adapted and modified from Hightower et al. (2002). Design was measured with two items adapted and modified from Mossberg (2007). Consumption emotion was measured by using eight items from Ruiz et al. (2004) and Yuksel (2007), representing the pleasure and arousal dimensions. Perceived Value was measured using the three-item five-point Likert scale (Lasser et al., 1995, Taylor et al., 2004, Ryu et al., 2008). To measure the word of mouth, we used tree items five-point Likert adapted and modified from ladhari (2007) and White and Yu (2005). Repurchase was measured by using the five-item five-point Likert adapted from Molinari et al. (2008).

A chain store was selected as the research setting to test the conceptual model and research hypotheses outlined in Fig. 1. Data were collected from customer's three Salian chain stores in Karaj city. Salian chain stores are supplier of wide variety of wearing, bag and shoes. Stratified random sampling was used; however, the method of selecting respondents was random sampling. Data collected from 450customers of chain stores. A total of 390 usable questionnaires were retained. The demographic characteristics of the sample were shown in Fig. 2.

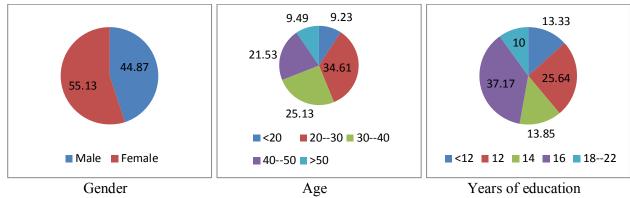


Fig. 2. Personal characteristics of the participants

### 5. Analysis and Results

Structural Equations Modeling (SEM) by using LISREL for Windows was performed to test the relationships between constructs in this study. In this model, as suggested by Anderson and Gerbing (1988), data were analyzed by using the two-step approach in which the measurement model was first confirmed and then the structural model was tested.

#### 5.1 Measurement model estimation

Confirmatory factor analysis (CFA) was directed to test the factor structure of the measurement model in this paper (Anderson & Gerbing, 1988). Table 2 presents the factor loadings and Cronbach's alphas of the items on the latent constructs as estimated by the CFA. Cronbach's alphas of latent constructs were acceptable for all ten constructs (0.72-0.88). Values were all above 0.70 as suggested by Nunnally (1978), and therefore indicated internal consistent. The overall evaluation of the model fit was based on multiple indicators. These indicators included the  $\chi 2$ ; the normed fit index (NFI), the non-normed fit index (NNFI), the comparative fit index (CFI), the root mean squared error of approximation (RMSEA), the Goodness of Fit Index (GFI) and Adjusted Goodness of Fit Index (AGFI). The fit statistics showed that the measurement model fit the data reasonably well.

### 5.2 Structural Model

After assessing and confirming the total measurement model, the structural model was estimated; Results indicated an acceptable level of fit between the hypothesized model and the data. ( $\chi$ 2=503, df =308, GFI = 0.91, AGFI= 0.89, NFI = 0.98, NNFI = 0.99, CFI = 0.99, IFI=0.99,RFI=0.98 and RMSEA = 0.040). As predicted, Ambience was positively related to emotions (path coefficient = 0.45, t = 2.37). However, relationship between ambience and perceived value was not significant (path coefficient = 0.20, t = 0.64). Interaction was positively related to emotions (path coefficient = 0.52, t = 6.56), thereby confirming H3. However, interaction was not positively related to perceived value (path coefficient = 0.41, t = 0.88). Consistent with H5, design was positively related with emotions (path coefficient = 0.48, t = 3.72). However, the hypothesized effect of design on perceived value (H6) is not supported (path coefficient = 0.23, t = 0.90). Customer emotion was positively related to perceived value (path coefficient = 0.42, t = 2.55), word of mouth (path coefficient = 0.49, t = 4.35) and repurchase intentions (path coefficient = 0.54, t = 7.54), providing support of H7, H8 and H9.Results also supported H10 and H11, where perceived value had a positive relationship with word of mouth (path coefficient = 0.62, t = 8.34) and repurchase intentions (path coefficient = 0.56, t = 7.22).

**Table 2**Confirmatory factor analysis results

	Constructs	Standardized loadings	t- value	Cranach's α
Ambience	Ambience 1	0.72		0.76
	Ambience 2	0.64	12.92	
	Ambience 3	0.68	14.19	
Interaction	Interaction 1	0.69		0.78
	Interaction 2	0.57	11.77	
	Interaction 3	0.64	13.52	
	Interaction 4	0.75	16.62	
Design	Design1	0.82		0.72
	Design2	0.76	16.64	
Consumption emotions	Consumption emotions 1	0.73		0.88
•	Consumption emotions 2	0.72	14.13	
	Consumption emotions 3	0.81	15.89	
	Consumption emotions 4	0.76	14.94	
	Consumption emotions 5	0.76	15.34	
	Consumption emotions 6	0.79	15.51	
	Consumption emotions 7	0.77	15.12	
	Consumption emotions 8	0.77	15.18	
Perceived value	perceived value 1	0.77		0.76
	perceived value 2	0.77	15.65	
	perceived value 3	0.80	16.14	
Word of mouth	WOM1	0.76		0.77
•	WOM2	0.77	15.26	
	WOM3	0.78	15.49	
Repurchase	Repurchase 1	0.76		0.87
*	Repurchase 2	0.72	14.47	
	Repurchase 3	0.72	14.48	
	Repurchase 4	0.79	15.99	

**Table 3**Path estimates and hypotheses results for proposed model

HypothesesPath confidentT-valueResult $H_1$ : Ambience → Emotions0.452.37Supported $H_2$ : Ambience → Value0.20.64Not supported $H_3$ : Interaction → Emotions0.526.56Supported $H_4$ : interaction → Value0.410.88Not supported $H_5$ : Design → Emotions0.483.72Supported $H_6$ : Design → Value0.230.9Not supported $H_7$ : Emotions → Value0.422.55Supported $H_7$ : Emotions → WOM0.494.35Supported $H_8$ : Emotions → Repurchase0.547.57Supported $H_{10}$ : Value → WOM0.628.34Supported $H_{10}$ : Value → Repurchase0.567.22Supported				
$H_2$ : Ambience → Value       0.2       0.64       Not supported $H_3$ : Interaction → Emotions       0.52       6.56       Supported $H_4$ : interaction → Value       0.41       0.88       Not supported $H_5$ : Design → Emotions       0.48       3.72       Supported $H_6$ : Design → Value       0.23       0.9       Not supported $H_7$ : Emotions → Value       0.42       2.55       Supported $H_8$ : Emotions → WOM       0.49       4.35       Supported $H_9$ : Emotions → Repurchase       0.54       7.57       Supported $H_{10}$ : Value → WOM       0.62       8.34       Supported	Hypotheses	Path confident	T-value	Result
H <sub>3</sub> : Interaction → Emotions       0.52       6.56       Supported         H <sub>4</sub> : interaction → Value       0.41       0.88       Not supported         H <sub>5</sub> : Design → Emotions       0.48       3.72       Supported         H <sub>6</sub> : Design → Value       0.23       0.9       Not supported         H <sub>7</sub> : Emotions → Value       0.42       2.55       Supported         H <sub>8</sub> : Emotions → WOM       0.49       4.35       Supported         H <sub>9</sub> : Emotions → Repurchase       0.54       7.57       Supported         H <sub>10</sub> : Value → WOM       0.62       8.34       Supported	$H_1$ : Ambience $\rightarrow$ Emotions	0.45	2.37	Supported
$H_4$ : interaction → Value       0.41       0.88       Not supported $H_5$ : Design → Emotions       0.48       3.72       Supported $H_6$ : Design → Value       0.23       0.9       Not supported $H_7$ : Emotions → Value       0.42       2.55       Supported $H_8$ : Emotions → WOM       0.49       4.35       Supported $H_9$ : Emotions → Repurchase       0.54       7.57       Supported $H_{10}$ : Value → WOM       0.62       8.34       Supported	$H_2$ : Ambience $\rightarrow$ Value	0.2	0.64	Not supported
$H_5$ : Design → Emotions       0.48       3.72       Supported $H_6$ : Design → Value       0.23       0.9       Not supported $H_7$ : Emotions → Value       0.42       2.55       Supported $H_8$ : Emotions → WOM       0.49       4.35       Supported $H_9$ : Emotions → Repurchase       0.54       7.57       Supported $H_{10}$ : Value → WOM       0.62       8.34       Supported	$H_3$ : Interaction $\rightarrow$ Emotions	0.52	6.56	Supported
$H_5$ : Design → Value       0.23       0.9       Not supported $H_7$ : Emotions → Value       0.42       2.55       Supported $H_8$ : Emotions → WOM       0.49       4.35       Supported $H_9$ : Emotions → Repurchase       0.54       7.57       Supported $H_{10}$ : Value → WOM       0.62       8.34       Supported	$H_4$ : interaction $\rightarrow$ Value	0.41	0.88	Not supported
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$H_5$ : Design $\rightarrow$ Emotions	0.48	3.72	Supported
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$H_6$ : Design $\rightarrow$ Value	0.23	0.9	Not supported
$H_{9}$ : Emotions $\rightarrow$ Repurchase 0.54 7.57 Supported $H_{10}$ : Value $\rightarrow$ WOM 0.62 8.34 Supported	$H_7$ : Emotions $\rightarrow$ Value	0.42	2.55	Supported
$H_{10}$ : Value $\rightarrow$ WOM 0.62 8.34 Supported	$H_8$ : Emotions $\rightarrow$ WOM	0.49	4.35	Supported
**	H <sub>9</sub> : Emotions → Repurchase	0.54	7.57	Supported
$H_{10}$ : Value $\rightarrow$ Repurchase 0.56 7.22 Supported	$H_{10}$ : Value $\rightarrow$ WOM	0.62	8.34	Supported
	$H_{10}$ : Value $\rightarrow$ Repurchase	0.56	7.22	Supported

#### 6. Discussion and conclusion

The Maine objective of this study was investigation of the effects of atmospherics elements on emotions and behavioral intentions in chain store setting. In fact, this research proposes a comprehensive model that includes both social elements and physical elements in order to best understand the effect of chain store environments on service results. This research consists of three atmospherics elements including Ambience, Interaction; and Design. The research findings revealed that ambience, interaction and design factors had a positive effect on customer emotions that supporting Recent studies finding. Recent studies found that when environmental cues are pleasing and attractive, customers experience positive emotions (Sheng et al., 2011; Slatten & Mehmetoglu, 2009; Yoo et al., 1998; Sherman et al., 1997). However, relationship between ambience, interaction and design factors with perceived value was not positive and significant. These results not support the findings of Nsairi (2012), who reported that store atmosphere positively influences all types of perceived value. Customer Emotion had a positive effect on word of mouth and repurchases intentions. These results support previous research findings that relationship between emotional responses and behavioral intentions were positive and significant (Sheng et al. 2011; Slatten & Mehmetoglu, 2009; Ryu & Jang, 2008; Ladhari, 2007; Derbaix & Vanhamme 2003). Similar to the findings of Chen (2008) and Chen and Chen (2010), perceived value had a positive and significant effect on behavioral intentions.

This research finding revealed that atmospheric elements (ambience, interaction and design) affect customers' emotions. It is important to recognize that the atmospheric factors such as ambience, interaction and design can be controlled by managers. For example, elements of ambience such as music, color, lighting, and temperature can be controlled and changed by managers and service providers. In addition, results of this study showed that interaction factor have a positive effect on customer emotion. Therefore, organizations have to consider the employees' style when hiring them because interaction between employees and customers affect customer emotions. The research findings revealed that customer emotion has positive affect behavioral intentions. These findings indicate that managers should enhance positive emotions in customers through changing atmospheric elements, which, in return, emotional responses evoked by the atmospheric elements determine the extent to which customers intended to positive word of mouth, repurchase and to willing to pay more.

In addition, results of research showed that perceived value has a positive effect on behavioral intentions. Value is consumer overall assessment of the utility of a product or service based on perception of what's received and what is given (Zeithaml, 1988). Managers and service provider should seek ways in which they can reduce perceived monetary and nonmonetary costs and increase customer perceived benefits. This research has some limitations that research findings must be considered within the limitations of the research methodology. First, our data were obtained from chain store context, so the limitation in generalizability of the results is not deniable. Additional research is needed to examine these relationships within and across additional sectors. Second, in construct of behavior intention we investigate WOM and repurchase. Additional research is needed to entering new variable in study, for example, loyalty, recommendation and willing to pay more. Finally, demographic characteristic could be also pursued in future research because customers' response to atmospheric factors may be different depending upon their demographic differentiations.

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