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FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION

PhD DOMAIN: **MARKETING**

**THE IMPACT OF CLOTHING STORES ATMOSHERE ON  
SHOPPING BEHAVIOR**

- SUMMARY OF PhD THESIS-

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2013

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**KEY WORDS:**

Store atmosphere; store atmosphere variables (windows display, colors, lighting, scent, music, crowding); pleasure, arousal; approach-avoidance behavior, Stimulus-Organism-Response model

## INTRODUCTION

The decision of choosing the addressed theme is not an easy one neither for me, nor for most of my PhD colleagues as we all want our topic to be attractive, of great interest, original and maybe in a certain manner to be representative for each of us. Even if the studied domain offers us the possibility of researching a wide variety of new themes, the choice of the current study theme is not accidental. I remember with great pleasure that from the faculty the domain of *consumer behavior* drew my attention in a particular manner, being one of my favorite subjects. Continuing the studies at master's level, after doing a project for the subject "*The design of products*" on the "*aesthetics in marketing*" in the context of the clothing stores, I decided to develop this interesting topic within the master's thesis under the supervision of Mrs. Lect. univ. dr. Raluca Băbuț. Although I initially wanted to do a research for the master's thesis, I didn't receive the store managers' approval for collecting the data. I renounced to the idea maybe too easy, without taking into account other possibilities in order to conduct a research and I performed only a case study for the master's thesis. I consider that it was the moment in which I realized my interest in the topic, becoming more and more critical while going shopping and making a pleasure within my leisure time from exploring the stores. I discovered that as a buyer I prefer to visit and buy from those shops which draw my attention not necessarily in respect to the products offered or their prices but thanks to some distinct elements such as a special odor, display windows which arouse my curiosity, particular lighting, employees in professional attire which make me enter the store etc. In this way I succeeded to understand in time the strategies adopted by the clothing storekeepers who invest in creating an atmosphere specific to the store and thus determine unique experience in shopping. All these aspects contributed to my desire of continuing the research on this very interesting topic which is still, in my opinion, underdeveloped in the Romanian context. Nevertheless, during my first year of PhD studies, I began to have more and more doubts related to the chosen theme as it was difficult to find relevant information on the topic. Moreover, after consulting some scientific articles to which I had access, I was feeling that the "*aesthetics in marketing*" was not the topic I wanted to study as it focuses more on brands and not necessarily on identifying a possible relation between the brand and the consumer's behavior.

My doubts on the addressed theme continued, things became unclear as while searching for materials from the foreign specialized literature to which I had access, aesthetics was more and more associated with art, philosophy... the concept of aesthetics in marketing being criticized by some of the marketing professionals. Then I started to focus on the sensory marketing and it felt like I was diverging from the topic I wanted to study. Meanwhile, my coordinator was encouraging me and advised me to do a research internship abroad preferable in Great Britain in order to be able to understand the direction in which I would like to focus within my paper. Although, at the beginning I didn't understand the reason for choosing that specific location, giving the fact that other colleagues opted for their preferred countries, I would like to thank Mr. Professor PhD. Ioan Plăiaș because he insisted so much to do the research in the UK as along the way I understood the reasons behind, being very satisfied with the experience gained. Even if it was not easy to find a university for the research internship, finally, one of the teachers I contacted seemed interested in the addressed topic, offering me the chance to do a 6-month internship research within the University *Westminster Business School* from London. I am grateful to Professor PhD Jaafar El-Murad for the opportunity to study at *Westminster Business School*. I consider that the experience gained during the doctoral internship abroad, the discussions with several professors from the marketing department (specialized in the customer's behavior or the marketing of retail market ) and also the unlimited access to international databases helped me to realize that the research path I wanted to address all this time was actuality the study of the relation between the concept of the "*store atmosphere*" and the consumers behavior in the context of clothing stores.

More and more retail stores *understand the importance of creating a specific atmosphere in their stores* as a differentiation tool on the market (Levy and Weirtz, 2008), especially in those situations when the differences between the products bought or consumed are slightly noticed. In the specialized literature, I identified a series of studies which analyze the impact of specific variables of store atmosphere such as the *display windows, colors, lighting, music, odor, crowding* or *placement of merchandise* or interactions of these elements on emotional, cognitive or behavioral answers through field or laboratory experiments. But until the present moment, we haven't identified studies conducted in Romania designed to propose a conceptual model

regarding the impact of store atmospheric variables such as display windows, colors, lighting, odor, music or crowding on the consumer's behavior within the clothing stores.

Thus, the main scope of the current research is that one of analyzing the impact of a series of atmospheric stimuli from the clothing stores (*display windows, colors, lighting, music, odor, the level of crowding*) on shopping behavior (in terms of *the time spent in the store, the amount spent, the intention to return to the store, the intention to communicate with the store personnel, the store exploration and the pleasant atmosphere within the store*).

Regarding the structure of the present paper, it is composed of two theoretical chapters relevant for our theme and a chapter detailing the methodology of research followed by the results of the study.

Within the first chapter, our purpose is to define the main concepts, to identify the main typologies related to the store atmosphere variables and to present the research perspectives identified in literature after analyzing the theoretical and empirical studies on the impact of atmosphere on the buyer shopping behavior.

The second chapter focuses on presenting the theoretical framework S-O-R Stimulus-Organism-Response based on which were built the proposed theoretical model for modeling and also the presentation and the arguments for the variables included in the model; based on the literature, we have formulated the research hypothesis related to the possible relation between the proposed variables to be analyzed within the conceptual theoretical model proposed.

The third chapter presents in detail the methodology of research specific for this study and in the 4th chapter there are presented the results of the research.

The last part of the paper reveals the conclusions, the focus being on verifying the research hypothesis, the main contributions brought by the present paper and also the limits of the research and the future directions of research.



## CHAPTER I. THE STORE ATMOSPHERE – CONCEPTUAL APPROACHES AND RESEARCH PERSPECTIVES

### 1.1. Conceptual approaches regarding the store atmosphere

The term of “*atmosphere*” is a relatively common term used both in daily life and in business domain. Nevertheless, the meaning of this concept remains quite ambiguous. In this chapter, we discuss on the one hand the definition of the atmosphere concept and on the other hand two research perspectives identified in literature. The first perspective is based on the analysis of specific variables related to the store atmosphere (display windows, colors, lighting, music, crowding, product display) and the second perspective focuses on studies which analyze the store atmosphere at a general level (a holistic one).

The impact of the store atmosphere variables on the shopping consumers’ behavior represents a topic of interest for many researchers. But, few are the professionals who focused on providing a clear delimitation of the *concept of atmosphere* within the retail stores and who analyzed constructs like “*the store ambient*”, “*servicescapes*”, “*virtual atmosphere*”. The first studies on atmosphere concept (Kotler, 1974-1974; Markin et al., 1976, Milliman and Fugate, 1993) come from *environment psychology*. According to Mehrabin and Russell (1974), the *physical environment* creates some emotional responses which in turn determine an approach or avoidance behavior towards the stores. Kotler (1973-1974:50) is the first author to define the term of “*atmosphere*” in order to describe the creation of some specific shopping environments (stores) which can generate emotional effects on buyers and thus a future increase of the purchasing probability. Through this definition, it is stated the fact that the adequate delimitation of the “*aesthetics of the space*” may determine certain emotional states which will influence the cognitive, emotional and behavioral consumers’ responses. Bitner (1992:65) introduces the concept of “*servicescapes*” to describe the environment where the services are provided, considering “*servicescapes*” a “*built environment*” or an “*environment created by humans*”. Another concept developed in more recent studies refers to the “*virtual atmosphere*” of online stores on the consumer’s behavior (Dailey, 1999, 2004; Eroglu et. al, 2001; Vrechopoulos et al.,

2004). Based on the atmosphere definition, Milliman and Fugate (1993:68), describe the *virtual atmosphere* as „any component within the website interface which stimulates the senses in the individual’s perception”.

A series of professionals emphasize in a particular manner the importance of identifying the variables related with the store atmosphere. Within the first studies, the focus is on a general classification of variables related with the store atmosphere consisting of ambient, design and social factors (Baker, 1986; 1994; Bitner, 1992; d Astous, 2000) without proposing a separate category for the external variables. Moreover, within the social factors category the focus is especially on employees, the influence of crowding being omitted especially in the context of retail stores. More recently, based on Berman and Evans (1995) classification, Turley and Milliman (2000) propose a comprehensive classification of the store atmosphere variables composed of 5 categories: *external variables, general interior variables, layout and design variables, point of purchase and decoration variables, human variables*. We consider that, taking into account the present context (clothing stores) within the current paper, the classification proposed by Turley and Milliman (2000) is the most representative as it encompasses the influence of external, interior and human variables.

## **1.2. Research perspectives identified in the study of store atmosphere**

A general view on the literature stream related to store atmosphere, indicates the fact that the previous approaches focus, on the one hand, on the conceptualization of the store atmosphere and identification of store atmosphere variables (Kotler, 1973-1974; Baker, 1986, 1994; Binter, 1992; Milliman and Fugate, 1993, Foxall, 1997; Berman and Evans, 2005; Turley and Milliman, 2000) and on the other hand, on studying the impact of the relation between store atmosphere and emotional, cognitive and behavioral consumers’ answers. All these aspects receiving research attention can be grouped in two *research perspectives* (Tai and Fung, 1997), some professionals focusing on the study of *specific elements of store atmosphere* (Bellizzi et al., 1983; Milliman 1982, 1996; Eroglu and Harrell 1986; Kellaris and Kent 1992; Herington and Capella, 1996; Yalch and Spangenberg 2000; Set et al., 2002) while others on *the study of store atmosphere as a holistic concept (general)*, analyzing the impact of the overall store atmosphere

on the buyers' behavior (Donovan and Rossiter, 1982; 1994; Sherman et al., 1997; Tay and Fung, 1997; McGlodrick and Pieros, 1998; Gilboua and Rafaeli, 2003).

### **1.2.1. Approaches regarding specific variables of the store atmosphere**

Within the research perspective which treats *individually the specific variables of the store atmosphere*, most studies refer to the impact of the store atmosphere variables such as *windows display, colors, lighting, music, odor, store layout, product display or the level of crowding in the store* on approach or avoidance behavior towards the store in terms of *time spent in the store, the amount spent, the intention to return to the store, the intention to recommend the store, communication with the store personnel and with other consumers within the store or evaluating the stores and the products offered and the satisfaction with the store.*

In a literature review on the impact of store atmosphere on shopping behavior, Turley and Miliman (2000) notice a *lack of research addressing the impact of external variables related to the store atmosphere on consumers' behavior*. Recently, the researchers' interest in this category of variables has considerably increased. The first studies (Grosbart et al., 1975; Ward et. al., 1992; Pinto and Leonidas, 1994) analyze the impact of external variables such as *macro environment and facilities regarding the parking place* on the buyer's behavior. Studies conducted especially after 2000 examine especially the display windows effect on shopping buyers' behavior (Sen et al., 2002; Cornelius et al., 2010; Oh and Petrie, 2012, Mower et. al. 2012). Summarizing the results of several studies on display windows impact as a variable of store atmosphere, we identified the conclusion that display windows influence the consumers shopping decisions (*the decision to enter the store and the decision of buying*) in the context of context stores (Sen et. al., 2002, Oh and Petrie, 2012). The link between the store's display windows and the emotions felt during the shopping visit is not well represented in the literature. Mower et al., (2012) reveal that the external variables do not have a direct effect on the pleasure and stimulation. But the store display windows influence the consumers' preferences for the exterior of the store and the buying intentions.

The interior variables of store atmosphere are the best represented in literature. Starting from the classification proposed by Berman and Evans (1995; 2009), respectively Turley and Milliman (2000), variables such as *lighting, colors, odor, music* are the most often used by researchers. *Music is the most studied variable of the store atmosphere* (Smith and Curnow, 1966; Milliman, 1982, 1986;; Yalch and Spangenberg, 1988, 1990, 1993, 2000; Herrington and Capella, 1996; Caldwell and Hibbert, 2002, Bailey and Areni, 2006, Morin, et al., 2007).

At the same time, a series of researchers consider that particular attention should be given not only to the colors of the products offered but also to the colors used for decorating the store, for the furniture and for the supporting bodies. Numerous previous studies (Bellizzi et al., 1983; Belizzi and Hite, 1992; Crowley, 1993) conducted through laboratory experiments show that consumers prefer the interior of the stores where there are predominantly cold colors (blue) considered more attractive and more pleasant as compared with the stores where warm colors are mostly exposed, the latter being considered more irritating and negative. The results from laboratory experiments were recently confirmed by studies conducted in malls. Different consumers' perceptions of colors may be explained through cultural differences (Chebat and Morrin, 2007) or by the fact that women and men have different perceptions of colors (Silver and Ferrante, 1995; Ellis and Ficek 2000; Khouw, 2002).

Another interior variable which has received attention from the researchers refers to the *lighting within the store*. Together with the colors used, an appropriate lighting within the store means much more than providing lighting for a space (from the lighting used within the display windows to the lightening bodies within a store)., as the lighting can influence the image of the store and the consumers' behavior (Lopez, 1995). In the first studies it was proved the fact that a combination between *classical music and weak lighting* vs. *pop music and strong lighting* influences the pleasure experienced by consumers during the visit in the store (Baker et al., 1992; Baker et al., 1994). In more recent studies, (Areni and Kim, 1994, Summers and Hebert 2001; Quartier et al., 2008) it was proved that in most cases consumers examine and handle more merchandise if *strong* as compared with *poor lighting* is used. But, the intensity of lighting does not exert an influence on sales and time spent in the store.

An specific *scent* to the store influences the consumers' perceptions of the store and all the products sold within the respective store (Miller 1993; Parsons, 2009). A review of the literature allows us to understand that the smell as a stimulus of store atmosphere is analyzed from 3 general aspects: the first aspect refers to the fact that *the smell is congruent with the products sold* in the store (Bone and Jantrania, 1992; Mitchell et al., 1995; Ellen and Bone, 1998; Mattila and Wirtz, 2001). The second aspect regarding the odor refers to the fact that the *presence of an scent* may determine affective or emotional answers from consumers (Spangenberg et al., 1996; Bone and Ellen, 1999; Morrin and Ratneshwar, 2000). The third aspect refers to the fact that in general the *pleasant nature of scent* may determine positive emotional and behavioral answers in comparison with an unpleasant odor which may determine negative emotional and behavioral answers (Mitchell et al., 1995; Morrin and Ratneshwar, 2000). A combination of odor and music within the store has a significant effect on the buyers' emotions and these in turn influence both the buyers' shopping behavior and the level of satisfaction (Mattila and Wirtz, 2001, Spangenberg, et al., 2005; Morrison et al., 2011).

After reviewing the literature from different fields, Bloch and Gulas (1995) note the fact that the perception of smell forms based on the objective odor experience within a store's atmosphere. The odor perceived by consumers in combination with the consumers' preferences for the odor influences the emotional responses. This relation is moderated by other store atmosphere variables. The emotional responses generated by the odor from the store will determine consumer's approach or avoidance reactions in relation with the consumption situation. When the store odor has an influence on the emotional states, these in turn will have an influence on the store and the products assessment. Ward, et al., (2003a) and Davies et al., (2003b) develop the model proposed by Gulas and Bloch (1995) considering that the consumers' perceptions of odor are influenced by the cultural differences and the psychological states of consumers. The model reflects the potential importance of belonging to a group, the individuals' characteristics and their preferences.

*Music* is one of the controlled variables of store atmosphere which can be studied through its volume (loud or soft), genre (classical, contemporary), rhythm (steady or slow) or preferences (pleasant or unpleasant). Most of the previous studies state that music influences the emotional

states of the buyers, (Bruner, 1990; Lin and Wu, 2006), the cognitive processes (Kellaris and Kent, 1992; Herrington and Capella, 1994; Oakes, 2003; Spangenberg et al., 2005; Morrin et al., 2007) and the buyers' behavior both in the retail and services domains (Milliman, 1982, 1986; Yalch and Spangenberg, 1990, 1993, 2000; Sullivan, 2002; Caldwell and Hibbert, 2003, Broekemier et al. 2008; Andersson et. al. 2012). In many cases, a specific atmosphere created by retailers can have a bigger influence on the decision making process than the product itself (Morrison, 2002). Alpert and Alpert (1990) demonstrate that the music played in a store is a critical element for the store atmosphere perception. Morrison and Beverland (2003) highlight that the music within the store influences the store image, the store design or the satisfaction with the store. According to Hui et al. (1997) music determines an improvement of the store atmosphere assessment which in turn can have an effect on the approach behavior towards the store.

Numerous studies from the literature prove the fact that music has an influence on the cognitive answers in terms such as the consumers' expectancies towards the stores (Morrison, 2002) and the consumers' perceptions, previous studies showing that when consumers listen to music for a certain period of time, they perceive this amount of time as being longer (Kellaris and Kent 1991, 1992; Kellaris and Mantel 1994; Chebat et al., 1993; Hui et. al., 1997; Yalch and Spangenberg, 2000). Music also proved to have an influence on the store assessment (Dube and Morin, 2001, Morin et al., 2007).

Properly selected music has a significant influence on the consumers' emotional states and on the store's image (Morrison, 2001). Based on a review of studies, Garlin and Owen (2006) state that when music is present, it has a positive impact on the consumers' emotional states and behavior.

A great interest was showed by the researchers in the study of the relation between music and the consumers' shopping behavior. Numerous studies prove that the use of music has a high influence on the time spent in different contexts. For example the time spent in supermarket was significantly shorter if the music volume was high (Smith and Curnow, 1966, Milliman, 1982). Young consumers spend more time in the store when they listen to background music (instrumental music, this style seems to be more restrictive as to the music rhythm, frequency

and volume) while older consumers spend more time in store when they are exposed to foreground music (this style includes „original” artists whose songs have words) (Yalch and Spangenberg, 1988, 1990). Andersson et. al., (2012) state that music influences the time spent in the store and the amount spent and the approach behavior is moderated by the shoppers’ gender. But music does not have any effect on the approach-avoidance behavior.

Music has a high influence on the amount of money spent, specifically the music genre reinforces the buying intentions and determines consumers to buy more expensive products (Areni and Kim, 1993, North and Hargreaves, 1998, Wilson, 2003). Within the retail setting, the researchers focused on the music influence in supermarkets (Smith and Curnow, 1966, Milliman 1982, Herington and Capella, 1996) or in the clothing stores (Yalch and Spangenberg, 1990, 1993, 2000; Morrison, 2001; Eroglu et. al., 2005; Garlin and Owen, 2006; Broekemier et al., 2008, Andersson et. al., 2012).

In the category *layout and design* there are included variables such as *fixtures, allocation of space within the store, product groupings and allocations within departments*. A literature review indicates there is little research on these variables of store atmosphere and on their influence on consumers’ behavior. The studies conducted within this field show a relation between the layout and design variables and the level of sales (Iyer, 1989, Park et al., 1989; Newman and Foxall, 2003).

*Point-of-purchase and decoration variables* include *product display, point-of-purchase display or storage space, posters, signs, teletext messages or wall decorations* (Turley and Milliman, 2000). Within the literature, there have been identified different studies that examine the effect of product display on sales (Curhan, 1974; Chevalier, 1975; Wilkinson, Mason and Paksoy, 1982; Gagnon and Osterhaus, 1985). A special, attractive and innovative display can raise consumers’ attention towards some product characteristics or can determine an increase of consumers’ emotions towards a visual stimulus (Curhan, 1974; Wood, 1998; Kallai and Miao, 2010; Fiore et al. 2000; Wu et al., 2012).

Berman, Evans (1995), Turley and Milliman (2000) are the first authors to propose human variables as a specific category of store atmosphere variables (*crowding, customer characteristics, employee or personnel characteristics and employee uniforms*). Baker (1987) and Bitner (1992) consider human variables as social factors within the classifications they are proposing: the number of employees, the appearance and the behavior of employees. Based on Turley and Milliman classification (2000), human variables can be subclassified into two areas: *the influence of employees on shopping behavior* (Bitner, 1990; Baker et al., 1992; Baker et al., 1994) and *the influence of other shoppers on consumers' shopping behavior*.

One of the most important components of human variables is “*crowding*”. Generally, crowding can be defined as a state of psychological pressure which appears when the consumers' demand for space within the store is bigger than the offer related to the disposable space (Stokols, 1972). Harell and Hutt (1976) consider crowding a multidimensional concept consisting of two components – on the one hand the *actual shopper density* and on the other *the perceived crowding*. In turn, *perceived crowding* contains two components – *perception of human crowding* (meaning the number of individuals) and the *social interactions*, respectively the *perception of spatial crowding* (meaning the *quantity of products and fixtures offered and their setting within the store*) (Harell and Hutt, 1976; Harrell et al., 1980; Machleit et al., 1994). The studies from literature can be grouped in two categories – on the one hand studies which analyze the *antecedents of crowding* in retail setting and the studies which analyze the *consequences of crowding* in retail setting (Olăhuț et al., 2012). The studies focusing on the antecedents of crowding take into account factors such as the *perceived risk* (Eroglu and Machleit, 1990), the *personal control* (Hui and Bateson, 1991), the *level of expectations* (Machleit et al., 2000), while the studies on the consequences of crowding analyze the relation between the perceived crowding within the retail setting and the emotional and behavioral responses and the level of satisfaction (Eroglu and Machleit, 1990; Hui and Bateson, 1991; Machleit et al., 1994; Machleit et al., 2000). One of the most important aspects addressed in literature refers the perceived crowding dimensions which are the human and the spatial crowding (Harrell and Hutt, 1980; Machleit et al., 1994). Most of the studies were conducted in retail area, and only few in the services domain.



### **1.2.2. Approaches regarding the store atmosphere variables at a general level (holistic)**

The second perspective concerns the study of the store atmosphere impact at a holistic level. There are only a few studies which analyze the impact of the store atmosphere at a general level as compared to those analyzing the specific variables of the store atmosphere. Donovan and Rossiter (1982) are the first authors to introduce the conceptual model proposed by Mehrabian and Russell (1974), the *M-R model* in retail setting, the *S-O-R model* analyzing the relation between the *emotional states and behavioral tendencies*. Summarizing the results of several previous studies, we can state that the third dimension of the PAD approach – “*the dominance*” is not significantly correlated with none of the components of approach-avoidance behavior (Russell, 1976; Donovan et al., 1994). Specifically, dominance negatively influences the time spent in store and the amount of money spent (Russell and Patt, 1980; Donovan and Rossiter, 1982; Donovan et al., 1994). Most previous studies state that the social, design and environmental factors have a high influence on the emotional states and on the approach-avoidance behavior (Sherman et al., 1997). Other researchers showed an interest in studying the factors which moderate the relation between the perceived atmosphere and the individuals’ emotional states as for example the familiarity with the ambient, the personality of individuals, the reasons for shopping and the expectations regarding the store visit (McGoldrick și Pieros, 1998). Thus, the authors consider that the quantity of information (the stimuli of perceived atmosphere) is directly proportional with the level of stimulation. The reasons for shopping influence the pleasure and the stimulation. The level of expectations regarding the store atmosphere influence the way in which consumers perceive the store atmosphere and also the level of pleasure and stimulation. Andreu et al., (2006) demonstrate that the pleasant atmosphere has an influence on positive emotions felt by consumers during the shopping experience, on the intentions of returning to the store and on the desire to stay more in the store. Kaltcheva and Weitz (2006) state that the stimulation and the motivational orientation have an interactive effect on the shopping behaviour, this effect being mediated by pleasure. As it can be noticed, the previous studies’ purpose was not testing the impact of atmosphere variables proposed by Turley and Milliman (2000) or their influence on the shopping behavior. Within the first studies, the focus is put on the relation between the emotional states and the consumers’ shopping behavior (Donovan et al., 1994) and more recently, authors take into account the influence of ambient,

design and social factors on the consumers' behavior without emphasizing the role of external or human variables.

## **CHAPTER II. THEORETICAL FRAMEWORK – THE S-O-R- MODEL (STIMULUS – ORGANISM – RESPONSE)**

A systematic analysis of literature revealed that most researchers which study the impact of store atmosphere on consumers' shopping behavior use as a conceptual framework the *S-O-R model (Stimulus-Organism-Response)*, where the *stimuli S* are the store atmosphere variables which influence the *emotional states - the organism or intervention variables (O)* - (Pleasure-Arousal-Dominance or PAD) which in turn can influence *the consumers' responses (R)* – the approach or avoidance behavior.

### **2.1. The S-O-R Model (Stimulus - Organism – Response)**

After Donovan and Rossiter (1982) introduce the S-O-R model in the retail setting, many researchers show an interest in identifying the stimuli from the S-O-R model, namely the store atmosphere variables. In their review, Turley and Milliman (2000) identified 58 variables specific to the store atmosphere, these being the most complex classification from the literature. Mehrabian and Russell (1974) use the concept of “*information rate*” or “*diversity of information*” to define the stimuli from the S-O-R model.

*The emotional states of consumers – as organism variables* within the S-O-R model represent the buyers' emotional answers when these are exposed to store atmosphere variables (Donovan et al., 1994). According to Mehrabian and Russell (1974) the *organism variables* are composed of 3 basic emotional states known as PAD (Pleasure-Displeasure, Arousal-Nonarousal, Dominance-Submissiveness), each dimension being independent of the others.

Most of the times, the response from the S-O-R model refers to approach-avoidance behavior in terms of: more time spent in the store, a larger amount of money spent, the measure in which the store atmosphere is evaluated as pleasant by consumers, the store exploration, the intention to

return to and to recommend the respective store, the communication with the store's personnel (Donovan and Rossiter, 1982; Sherman and Smith, 1986; Donovan et al., 1994; Tay and Fung, 1997; Sherman et al., 1997).

## 2.2. The conceptual framework proposed and the research hypothesis

The conceptual framework proposed starts from the conceptual model *Stimulus – Organism – Reponse (S-O-R)*, where *Stimuli* are the *store atmosphere variables*, the *Organism* variables are the emotional states of consumers and the *Response* is the consumers' approach-avoidance behavior in retail settings. Within the present paper, *the concept of store atmosphere* is considered from a *holistic perspective (general)*, the *external, internal and human variables* proposed by Turley și Milliman (2000) being included in the model. The *windows display* are the most representative *external variables* for the analyzed context, these being defined based on two dimensions: *merchandise focused windows display* (they provide more information regarding the product offer, prices and the last trends in fashion) and *innovative/artistic windows display* (draw the consumers' attention, arouse individuals' curiosity and determine the consumers to enter the store for additional information (Sen et al., 2002; Cornelius et al., 2010; Oh and Petrie, 2012). A second category of variables included in the conceptual model proposed is composed of internal variables – *colors, lightings, odor and music*. *Colors* and *lighting* as variables of store atmosphere are defined through two dimensions – cold colors (blue, violet, green) and warm colors (red, yellow, orange) ((Bellizzi et al., 1983; Bellizzi and Crowley 1992; Crowley, 1993) and respectively bright and weak lighting (Areni and Kim, 1994; Summers and Hebert, 2001). The *scent* is also defined through two dimensions – the presence of smell vs. its absence (Gulas and Bloch, 1995; Crowley and Henderson, 1996; Pearson, 2009). *Music* is the most commonly component of store atmosphere and is characterized by the following aspects: *music volume* (loud or soft), *rhythm* (steady or slow) and *genre* (classical or top 40) (Milliman, 1982, 1986; Yalch and Spangenberg, 1990, 1993, 2000; Mattila and Wirtz, 2001; Oakes, 2003; Eroglu et al., 2005., Spangenberg et al., 2005). The last category of variables included in the model refers to *human variables* from which we selected the *variable crowding* consisting of two components – *human crowding* (the number of persons within the store) and *spatial crowding* (the perception of space within the store and merchandise arrangement) (Eroglu and

Harrell, 1986; Eroglu et al., 1994; 2005). Within the conceptual model proposed there are also included the consumers' emotional states (pleasure and stimulation), the approach-avoidance behavior and the reasons for shopping (hedonic and utilitarian motivation). These three concepts are integrated into the model thanks to their link with the store atmosphere concept. The answer to the environmental stimuli represents the consumers' emotional reactions felt in the store. Shoppers' *emotional states* are included in the conceptual model proposed as a series of authors (Meharabin and Russell 1974; Donovan and Rossiter, 1982; Darden and Babin, 1994; Hui et al., 1997; Sherman et al., 1997) demonstrated that the relation between the atmosphere variables and approach-avoidance behavior is mediated by the emotional states felt by consumers. For measuring the consumers' emotional states we used the PAD model (Pleasure-Arousal-Dominance). The dimension "*dominance*" as emotional state was not taken into consideration in the model from theoretical reasons and because of the lack of empirical support. Previous studies' results (Russel and Patt, 1980, Donovan and Rossiter, 1982; Donovan et al., 1994) demonstrate that dominance as emotional state has an insignificant influence on buyers' behavior. Pleasure and stimulation are analyzed individually as previous studies (Meharabian and Russell, 1974; Donovan and Rossiter, 1982; Donovan et al., 1994; Sherman et al., 1997; Sweeney and Wyber, 2002) show that each of them influences on a different manner the consumers' behavior. On the other side, the relation between the store atmosphere variables and the emotional states (pleasure and stimulation) is a direct and positive one. Thus, an increase of consumers' perception of store atmosphere will determine an increase of the emotions felt by consumers, except for the negative effect of crowding. In the conceptual model proposed there are included the following specific components of approach-avoidance behavior: *more time spent in the store, an amount of money spent larger than the one planned, pleasant atmosphere, store exploration, the intention to return to the store and communication with the personnel* (Donovan and Rossiter, 1982; Sherman and Smith, 1997; Tay and Fung, 1997). As to the relation between the emotional states and the behavioral answers, the relation is direct and positive. Thus, an increase of emotions (pleasure and arousal) felt by consumers will determine an increase of the approach behavior related to the store. Besides, it is assumed that the relation between the atmosphere variables and the approach-avoidance behavior is mediated by the emotional states. *The reasons for shopping* are included in the conceptual model as a series of authors (Kim, 2006; Yan et al., 2011) reveal that the relation between the perception of store atmosphere variables

and the emotional states, respectively the relation between the emotional states and the approach-avoidance behavior is moderated by the reasons for shopping. More precisely, depending on the reasons for which the consumers go shopping either utilitarian (for fulfilling a task) or hedonic (for relaxation, joy and pleasure), the relation between the store atmosphere variables and the emotional states is amplified or diminished by the reasons for shopping.

## **CHAPTER III. RESEARCH METHODOLOGY**

This chapter is structured in two main parts. In the first part, there are presented aspects related to the research paradigm, namely the justification for including the present paper within the positive paradigm. In the second part there is presented the methodology of research, the purpose being that one of presenting the aspects taken into consideration throughout the research process.

### **3.1. Research Philosophy**

A research paradigm is defined as “*a set of basic beliefs that provide the principles for understanding the world and, hence, the basic principles underpinning research in the social sciences*” (Langdrige, 2007:4). From the two research paradigms (Positivism and Interpretativism) we choose the positivism as the belonging paradigm of the present paper based on the following reasons: in literature, most studies which analyze the impact of store atmosphere use the positive paradigm and positivism is the most appropriate paradigm for predicting and explaining the consumers’ behavior based on the causality relation between different variables (stimuli) of store atmosphere and the study of their impact on the final consumers’ shopping behavior. Based on an objective philosophical vision – the positive paradigm – the research hypothesis for attaining the research objectives and the theoretical framework will be tested, the generalization of results being made at the level of the entire population studied. The methodology and the research methods will be established according to the assumptions of the adopted paradigm, the positive one.

### **3.2. Data collection methods**

For studying *the impact of store atmosphere on the buying behavior of final consumers*, the *analytical investigation* was chosen as data collection method. It should be stated that our study supposes a one-time data collection process. The main reasons for choosing the investigation as a collection data method are the financial and time restrictions and the lack of contact information or other relevant information regarding the chosen sample. Besides, we consider that the analytical investigation as the research method is the most appropriate methodology associated with positivism and its specific assumptions in order to attain the established objectives. At the same time, the investigation is the most used research method for the study of consumers' shopping behavior.

### **3.3. The population studied and sampling techniques**

*The target population* is composed of the consumers from Cluj-Napoca. Although a research at a national level would have been preferred, the target population was restrained at the level of Cluj-Napoca from financial and time reasons and also because of number of interview operators available. Concerning the representativity of the studied population in relation with Romania's urban population, it was stated that Cluj-Napoca is the second largest city (according to the data provided by The National Institute of Statistics through the Tempo database) after the capital from the entire urban population of Romania. This thing allows us to generalize the results and consumers to the Romanian consumers.

The sample method for the current study is an *empirical method* (non probabilistic or through rational choice), according to which the sample results from a rational choice (Pop, 2004). The reason for choosing this sample method is related to the costs, to the survey administration method, to the number of questions addressed to respondents, to the time available and the lack of a sampling frame. *The type of the sample method* considered to be the most appropriate for the present research is the *quota method*, being one of the most used non random sampling methods in the quantitative surveys (Buiga, 2008). Specific to this method is the fact that the sample

structure is very similar to the population structure taking into account some established criteria (Plăiaș et al., 2008). For the quota sampling, the variables we are using are *sex and age*.

If the sample method is empiric (non probabilistic) as in the present situation, it is not necessary to calculate the sample size, the researcher being free to select the sample with the mention that the sample size has to be large enough in order to be able to generalize the results to the entire population studied. In this conditions, the sample size for the present research is established based on previous studies which analyze the impact of store atmosphere on consumers' behavior where the sample size varies from 200 to 500 questioned persons Sherman and et al., 1997; Tay and Fuy, 1997; Roy an Tay, 2003; Yan et al., 2011). Thus the sample used in the present study – **386 valid questionnaires** – represents a number large enough to attain the purpose of this paper's objectives.

### **3.4. The research instrument**

The data collection instrument is the *questionnaire* which allows the analysis and explanation of the causal relations between the model variables. As the conceptual model proposed is a new one, we haven't identified in literature any study to comprise all the variables included in our model. Thus, given the fact that for the internal variables (*colors*, lighting, odor and music) we haven't identified specific measure scales we proposed alternative conceptualizations based on the experimental studies conducted (for colors, lighting, odor and music) and for the other model constructs (crowding, pleasure, stimulation, approach-avoidance behavior, hedonic and utilitarian reasons) we used the validated scale measures used in literature. The measuring scales used within the present paper are 7-point Likert - type scales (1 – total disagreement; 7 – total agreement) and respectively the 7-point semantic differential scale for measuring the emotional states (pleasure and stimulation). In order to identify the possible errors - linguistic or other nature the questionnaire was pre-tested on a 10-person group (6 members of the teaching staff – 1 being specialized in quantitative data analysis statistics and one being responsible for verifying the English translated questionnaire, 2 students, a store manager and two persons who go shopping on a regular basis in the stores taken into consideration). After pre-testing the

questionnaire, the research itself was conducted throughout two weeks in the period **May 20 – June 1st 2013**.

#### **CHAPTER IV. THE RESULTS OF THE RESEARCH**

This chapter presents the results obtained from data analysis taking into account the main purpose of the present research namely that one of evaluating the measure in which the consumers' perceptions regarding the clothing stores atmosphere variables influence their shopping behavior. In an initial phase, it was tested the conceptual model proposed. According to Hair (2010), the most appropriate statistical technique for analyzing the supposed dependent relations between the variables of the theoretical model proposed is the *structural equation modeling*. This statistical technique allows the testing of supposed causal relations between the independent and dependent variables of the conceptual model proposed.

Structural equation modeling requires two steps in order to analyze the data. The former is accomplished through *confirmatory factor analysis* in order to build an initial measurement model. Within the second step the causal relation between the variables has been analyzed and a *structural model* was built based on the reliability of the measurement model.

After data analysis, the results obtained confirm a large part of the hypothesis proposed. The variables of store atmosphere taken into account in this study have a significant statistical impact on the emotional states felt by consumers within the store. The stimuli of the store atmosphere such as the *store windows, the music, the odor, the level of crowding* have a statistical significant impact on *pleasure* as emotional state felt by shoppers whereas *display windows, colors and lighting* have a statistical significant impact on *stimulation* as emotional state. Regarding the direct relations believed to exist between the store atmosphere variables and the approach-avoidance behavior, most of them have been confirmed. Precisely, the store windows, the lightings, music and odor have a direct influence on the approach-avoidance behavior.

Moreover, only pleasure as emotional state influences the approach-avoidance behavior. Regarding the mediator role of emotional states, only pleasure mediates the relation between the



store atmosphere variables and the approach-avoidance behavior. Specifically, the introduction of the concept of pleasure as emotional states felt by consumers within the structural model determines a modification in the intensity of the relation between the concepts. The relation between the odor and behavior is totally mediated by the pleasure felt by consumers during the shopping visit. Regarding the relation between the store windows and music and the approach-avoidance behavior, the pleasure felt by consumers was found as a partial mediator.

Concerning the reasons' for shopping moderating role in the relations between the store atmosphere variables and the emotional states and respectively between the emotional states and approach-avoidance behavior, only some of the supposed relations between concepts have been confirmed. Specifically, the reasons for shopping moderate (amplify) the relation between pleasure and approach or avoidance behavior. The reasons for shopping inversely moderate the relation between the store windows and pleasure, respectively they negatively moderate (diminish) the relation between crowding and pleasure.

We can conclude that the conceptual model proposed is partly confirmed and thus it can be used for modeling the impact of clothing store atmosphere on Romanian consumers' behavior taking into account certain limits.

## **GENERAL CONTRIBUTIONS OF THE STUDY TO THE LITERATURE**

Based on the results obtained, the current study brings some contributions to the general knowledge of the concept of store atmosphere. This paper is among the first which analyze the relation between the three categories of store atmosphere variables (*external, internal and human*) and the consumers' shopping behavior, creating a more general and comprehensive view on the S-O-R model stimulus taxonomy and their influence on the buyers' emotional states and the shopping behavior of the final consumers.

The present study adopts the strategy suggested by Turley and Milliman (2000). According to these researchers, the studies which analyze the external variables of store atmosphere in retail setting are rare although it is known that this category of variables are very important as based on

them consumers form their first impression regarding the store. Moreover, if these variables are not properly managed, it is possible that the rest of the atmosphere do not count anymore.

Through the results obtained in this study it is demonstrated that the atmosphere variables such as display windows, colors, lighting, odor, music and crowding influence both the consumers' emotional states and the approach-avoidance behavior, this study being among the first which study the impact of internal variables in uncontrolled environments (in real, not simulated, conditions). Thus, the present paper puts in question the results of the previous studies (Bellizzi et al., 1983; Bellizzi and Hite 1992; Yalch and Spangenberg, 1990; 1993; 2000; Mattila and Wirtz, 2001; Babin et al., 2003; Michon et al. 2005; Chebat and Morrin, 2007; Teller et al., 2012) obtained in controlled environments (experiments and laboratory experiments) which claim that internal variables such as colors, odor and music do not influence the consumers' emotional states or the approach-avoidance behavior within the store.

The current study supports the findings of previous studies (Sherman et al., 1997; Sweeney and Wyber, 2002; Michon et al., 2005; Mower et al., 2012) which reveal that pleasure has a mediator role in the relation between store atmosphere variables and the consumers' shopping behavior.

The sample has a single restriction related to the age, the minimum age being 15, the previous studies' samples being in general composed of students.

Finally, although there is a large number of studies analyzing the impact of specific store atmosphere variables (Bellizzi et al., 1983; Bellizzi and Hite 1992; Yalch and Spangenberg, 1990; 1993; 2000; Mattila and Wirtz, 2001; Babin et al., 2003; Michon et al. 2005; Chebat and Morrin, 2007; Teller et al., 2012; Oh and Petrie, 2012), the results of the present study suggest that consumers perceive atmosphere at a holistic level (general), this research being the starting point for the study of the relation between the store atmosphere and the consumers' shopping behavior.

## MANAGERIAL IMPLICATIONS

This study offers empirical proofs regarding *the impact of different store atmosphere variables (display windows, colors, lighting, odor, music, crowding) on the final consumers' shopping behavior*. The results of the present research offer to the clothing stores managers information regarding *the types of shop windows, the consumers' preferences regarding colors, lighting, music* and also about the consumers' unpleasant feeling when the level of *crowding* within the store is high. All these aspects proved to have a high influence on consumers' decision to enter the store and respectively on the approach-avoidance behavior within the store.

One of the most important implications for retail managers refers to the fact that the *store windows* influence both the *consumers' emotional states (pleasure and stimulation) and the consumers' approach-avoidance behavior* towards the store, element which hasn't appear in literature. The category of information obtained through the store windows and the type of windows (merchandise oriented or artistic store windows) can contribute to the increase of the number of consumers who enter the store in order to require information concerning the item exposed, who are willing to buy or who decide to return to that specific store. *Colors and lighting* influence the level of *stimulation* and thus, store managers should take into account the consumers' preferences for cold colors and weak lighting as these contribute to the creation of a unique store atmosphere. Both music and specific scent have a direct influence on pleasure and behavior, thus retailers should take into consideration that music at an appropriate volume and a pleasant rhythm influences in a positive way the consumers during the shopping visit. The greater the perception of *crowding* is, the more intense it will be the unpleasant feeling while shopping. The store managers should take into account these aspects as *consumers' emotional states* influence the consumers' shopping behavior, a certain control regarding the crowding perceived by consumers being strongly recommended.

A better understanding of the relation between the store atmosphere and the consumers' emotions helps the managers of clothing stores to create specific contexts able to raise the desired emotions and as a consequence the desired behaviors.

The reasons for shopping (hedonic or utilitarian) influence the relation between the pleasure felt by consumers and the approach-avoidance behavior. The retail managers should train their employees in order for them to identify if consumers are oriented towards hedonic experiences (relaxation) - situation in which employers should accompany the consumers in order to motivate them to buy or on the contrary if consumers are oriented towards utilitarian reasons (buying) – situation in which employers should observe if consumers need anything trying in this way to raise positive emotions which will determine an approach behavior towards the store.

## **LIMITS AND FUTURE RESEARCH DIRECTIONS**

The main limit of this research consists in the fact that it was conducted only at the level of Cluj-Napoca. *We consider that it would be appropriate to undertake a similar research on consumers' perception regarding the store atmosphere at the level of several cities from Romania.*

Data collection was made within the two malls (Iulius Mall and Polus Center) and it is possible for the consumers to have been influenced by the perceived atmosphere from the malls. *We are thus planning a future study using clothing store which are not situated in malls.*

Within the present research, only the reasons for shopping (hedonic or utilitarian) were considered as moderators. *Constructs such as cultural differences, individual characteristics, personality traits, the respondents' age or the respondents' gender should be included in the conceptual model proposed and analyzed in future studies.*

Besides, within the present research, the focus was especially on the effect of each of the 6 variables of store atmosphere (display windows, colors, lighting, odor, music crowding) on the approach-avoidance behavior, the interaction between these variables being excluded. *Thus, we consider it would be appropriate that future research analyze both the interaction between the proposed store atmosphere variables and the influence of these variables on the behavioral variables.*

Another methodological limit refers to the measurement scales of latent variables. In literature, most studies which analyze the impact of store atmosphere general internal variables (colors, lighting, music, odor) are either experimental, conducted within stores (where the atmosphere variables are manipulated) or laboratory experiments. Thus, the measurement scales have been developed for the analyzed variables based on experimental conditions and after improving the measurement model proposed some constructs remain only with two factors (colors, lighting, odor), thing which is not recommended for analyzing the results with the statistical program AMOS, soft which propose the general use of 3 items to measure the constructs from the models proposed (Byrne, 2010).

In these conditions, it should be examined the possibility of modeling the store atmosphere variables by representing the model constructs as formative latent variables and not reflexive ones as they are treated within the present study, this involving also the use of another statistical software such as PlsGraph sau SmartPLS, which are able to analyze the formative latent variables.

The current research's findings which are not consistent with the results of other similar studies from literature do not represent a disadvantage but rather they suggest the presence of an exploratory qualitative research regarding both the consumers and the clothing stores managers.

Finally, the current study was conducted in the context of Romania, for the generalization of results being necessary the testing of the conceptual model proposed within other countries where the stores analyzed within the current study are present.

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