Abstract

A shopping mall is a complex of stores located in a building and it is managed as a single property. This retail format has shown the maximum growth because there, people can find a variety of shopping choices in a friendly and appealing environment, spending their time pleasantly. This issue inspired the implementation of a research paper, whose main objectives are to identify how the physical environment quality affects visitors’ attitude, and whether these feelings influence the visitors’ satisfaction and loyalty. The research frameworks of Ruiz et al. (2004) and Michon et al. (2007) have been applied in order to accomplish the main objectives. Research took place in the city of Larisa, where 229 shopping mall visitors answered a structured questionnaire, forming a representative sample with a response rate of 40%. The findings confirm the hypotheses that visitors’ satisfaction and their emotions are affected by the ambience and design of a shopping mall’s physical environment. Hence, visitors’ loyalty is affected positively by the same reasons. Finally, the managerial implications are discussed, along with the interesting research opportunities arising from this pathfinder work.

Key words: Physical environment quality, customer emotions, shopping malls.

Track: Marketing Psychology
1. Introduction
The development of shopping malls has increased competition among retailers, turning customers’ attention to alternative ways of retailing, through evaluating the physical environment quality. Nowadays, the basic structure of malls gives the majority of emphasis to design and entertainment elements which influence customers’ attitude. The environment in which customers prefer to shop is never ‘neutral’ because of the design, plan and merchandise of retail venues. This influences and shapes the behaviour of visitors (Markin et al., 1976). Customers who want to combine their strong shopping motivations with pleasure and enjoyable activities prefer the attractive habitat of shopping malls that urges their buying behaviour (Mattila & Wirtz, 2004; McGoldrick & Pieros, 1998). Thus, the physical environment quality of shopping malls evolves the positive emotions of visitors in order to feel comfortable. The primary target of this paper is to look into the environment of shopping malls, illustrating how customers benefit emotionally from their visit, and how this attitude affects customers’ perceived satisfaction and loyalty. Specifically, this paper examines an alternative perception of shopping malls, examining the visitors’ notions from the design of each shopping mall. Aside from that, this study recommends some issues that shopping malls should take into account, in order to refashion their environment and provide high quality shopping services and facilities. This paper contributes to the growing area of shopping malls’ environment and how it influences customers’ attitude and behaviour. The aspects of customers’ emotions related to physical environment are highlighted using reliable and valid instruments for assessing shopping malls’ design, architecture and general environment. The better understanding of the feelings and needs of mall’s visitors fulfils their shopping requirements.

After the first part of Introduction, the second section reviews the relevant literature, discusses the physical environment of shopping malls, and introduces the main studies for measuring customers’ satisfaction, customers’ loyalty and visitors’ emotions. The third part analyzes the research’s method that has been followed in order to accomplish the research objectives. Section four illustrates the findings of the research, with a discussion of them. The fifth part concludes the main findings together with implications. At the end, limitations and recommendations for future research are proposed.

2. Conceptual framework
It is true that enclosed and large shopping malls are the most common place where people with different profiles are able to meet a recreational consumption in a stylish place (Bloch et al., 1991), providing modern colourful design, restrained shopping and spaces for leisure (Ertekin et al., 2008).

A cardinal and significant factor for visitors are the satisfaction which they receive during their visit to the shopping mall, ‘at least as important as proximity’ (Leo & Philippe, 2002). Particularly, satisfaction with the global service provided by a commercial mall has a significant contribution in the formation of customer's behaviour. Researchers come to the conclusion that the design of malls is influenced by the demand for overall satisfaction requested by the visitors. At the same time, the delight of the overall atmosphere affects the feeling of satisfaction which the shoppers enjoy. Therefore, these visitors who are satisfied, not only with the services which are provided but also with the overall design of the mall, will be loyal to it.

The kind of loyalty which takes place in shopping malls varies. Marketing literature focuses on how customers’ loyalty is measured. There is the store loyalty which is explained by the retail constitution and brand loyalty which is showed by the frequency of visits to the same mall and the pleasure of using the services (Chebat et al., 2009). It is essential to clarify according to Majumbar (2005) that many times while customers are loyal to a specific shop
inside a shopping mall, they can be also loyal to the mall itself. Although, there is a connection between store and brand loyalty, the present paper examines only the brand loyalty.

Service quality perceptions are multidimensional and multilevel (Dadholkar et al., 1996). Rust and Oliver’s (1994) theory supports that customers’ evaluations of service quality are based on three dimensions: the technical quality, the functional quality and the environment. However, customers tend to break service quality dimensions into various subdimensions (Carman, 1990). Given the complexity of evaluating the service quality, there is a significant gap for physical environment quality.

Bitner (1992) uses the term “servicescape” for physical environment, which reflects the physical and built environment on customer service evaluations. This view was affirmed by several studies such as Baker et al. (1994), Rust & Oliver (1994), Spangenberg et al. (1996), Wakefield et al. (1996). Brady & Cronin’s (2001) study, names three factors that influence physical environment quality. These are: ambient conditions, facility design and social factors. Ambient conditions refer to the factors that may affect the five senses through background characteristics of the environment such as temperature, scent, music, lighting and so on (Bitner, 1992). The next subdimension, facility design, pertains service facility’s layout or architecture, which includes functional (practical pleasing such as stores layout) and aesthetic (visually pleasing such as shopping malls odor) components of the environment (Bitner, 1992; Brady & Cronin, 2001; Hsieh & Hiang, 2004). Social factors concern the behaviour of people involved in the service setting. Social factors were not included in the present analysis, due to the large number of people involved in a shopping mall, a fact that makes difficult for customers to evaluate them as a total.

Baker et al. (2002) propose that the design of a retail store environment is an important matter for consumers’ evaluations. Moreover, Shamdasani & Balakrishman (2000) revealed in their study that physical environment is a key determinant for customer satisfaction. Thus, if customers’ perceptions of physical environment are favourable, they may be more satisfied with the services (Bitner 1990; Harrell et al., 1980) which are provided in a shopping mall. According to Bitner (1990), satisfaction is considered to act as an antecedent of loyalty. Therefore:

$$H_1: \text{Customers’ perceptions of a shopping mall’s physical environment quality are salient predictors of customer satisfaction and customer loyalty.}$$

Atmospherics or physical design and decor elements affect both consumers and workers (Bitner, 1990) and it is mentioned virtually in several marketing, retailing and organizational studies. The ability of the physical environment to influence customer behaviours and to create an image is particularly apparent for service businesses such as hotels, restaurants, professional offices, banks, and hospitals (Booms & Bitner 1982; Kotler 1973; Shostack 1977; Zeithaml et al., 1985). Indeed, such environment factors affect the character and feelings of visitors. According to Armitage’s (2005) survey at school area, the indoor environment and design influence student efficiency and general their attitude and emotions. Thus:

$$H_2: \text{Customers’ perceptions of a shopping mall’s physical environment quality have an influence on their emotions.}$$

Schmit & Allscheid (1995) discussed the emotional influence which affects the consumers through physical environment quality. Especially, consumers of shopping malls change their behaviour and their mood during their visit in a shopping mall due to the environment which prevails inside it. Schmit & Allscheid (1995) also outlined that the emotional response shapes the customers’ behaviour and specifically their satisfaction.
Furthermore, research in the past decade offers strong evidence that customers’ attitudes have an impact on customer loyalty (Kandampully, 1998). Emotional response appears to be an important antecedent of consumer loyalty. It is evident that perceptions of good mood are positively related to customer loyalty. These led to the formation of the following hypotheses, (see appendix, figure 1):

$H_3$: Emotional response from shopping mall’s physical environment quality has a positive effect on customer satisfaction.

$H_4$: Customers’ emotions about shopping mall’s physical environment quality have a positive effect on customer loyalty.

3. Methodology
In order to accomplish the objectives of this study, a structured questionnaire was used to obtain the necessary quantitative data. The questionnaire included 5-likert scale (ranging from 1=strongly disagree to 5=strongly agree) and multiple choice questions, types which are convenient for both researcher and respondents. Data collection took place during the period of 31st August up to 20th September 2009 and yielded a final usable sample of 211 completed questionnaires with 40% response rate. Respondents were asked to complete a closed-ended questionnaire about the specific attributes they perceived from the environment during their recent service experiences in a shopping mall.

The questionnaires were distributed at the main streets of Larisa, Greece. Respondents were asked to give answers according to their overall experiences within shopping mall’s environment. Participants were initially screened to ensure that they had visited a mall during the previous 12 months. To test the initial questionnaire, a pre-study sample of 10 respondents was used. Feedback from the pre-test was used to reword instructions and some item measures to make them more comprehensible.

The final questionnaire contained five parts. The first part figured the profile of respondents through multiple choice questions for demographics such as gender, age, education level etc. The second part had three questions for evaluating how familiar was the customer with the stated shopping mall. Part three consisted of 12 alternative choices of mall activities in order to appraise the basic reasons why consumers visited the shopping mall. These choices were adopted from the research of Bloch et al. (1991). The remaining parts were formed after studying carefully and extensively the relative literature and based on same methodological instruments which were used by Ruiz et al. (2004) and Michon et al., (2007). Thus, there were 16 questions based on likert method of scaling, measuring ambient conditions and facility design into shopping malls, perceived emotions and overall satisfaction. The final part evaluated consumer’s loyalty to stated shopping mall through 5 questions.

Factor analysis was employed to validate the factors of the measurement model. Kaiser-Meyer-Olkin (K-M-O) was used to indicate that the factor model is appropriate and measured the sampling adequacy which should be over 0.5 for a satisfactory factor analysis. Barlett’s Test measured the equal variance among the questions and their level of significance. In order to test the internal cohesion of questionnaire’s elements and ensure that the group questions measure the same thing (Howitt & Cramer, 2006) the method of reliability alpha was applied. As Bagozzi & Yi (1988) suggest, an alpha that is over 0.7 can be considered as strong evidence of convergent validity (See appendix, Table 1).
4. Findings

This part interprets the statistical data and translates them to statements. Briefly, the profile of shopping mall visitors should be shown below. Female are the main consumers of the shopping malls (56.4%) and the age of the majority of the customers (38.02%) is between 23 up to 30. The education level of the respondents is the bachelor degree (52.03%) and most of them (29.86%) work as public servants receiving 601 to 1200 € per month (36.02%). The majority of repliers (75.83%) live at Larisa in Greece and they are single (57.35%). All the respondents have experience a visit to a shopping mall and most of them visit the state shopping mall up to six month for up to 3 hours in each visit.

In order to test H1 hypothesis, a multiple linear regression was conducted for the determination of the variables of physical environment quality which influence customer satisfaction and customer loyalty. The produced model has an Adjusted R² of 32.7% at a 0.000 level of significance (F=52.096; p<0.05). The coefficient betas of the independent variables are 0.116 and 0.361 correspondence and their significance values are 0.000. According to these, both customer satisfaction and customer loyalty are significant predictors of physical environment quality and have a positive influence on customer satisfaction.

Getting on testing of H2 hypothesis, a linear regression was produced. The two independent variables (ambience and design) that have been employed to predict perceptions of customers’ emotions are responsible for the 31.1% of the variation. Moreover, the variation explained is unlikely to have occurred by chance (Saunders et al., 2000), because of the level of significance that is 0.000 (F=48,483; b1= 0.394, b2=0.206; p<0.05).

Shamdasani & Balakrishman’s (2000) study supports the results of this survey. People give attention to the environment which they are visiting and indeed this makes them feel more happy and satisfied. The controlled temperature inside the mall protects visitors from extreme weather conditions. The background music makes them feel pleasant. The odor and the lighting relax them. The layout of stores makes visiting them convenient. Finally, the decoration of a shopping mall makes the visit unique. And all these characteristics make the visitors loyal.

In order to examine the effect of emotional response on customer satisfaction, linear regression was conducted. The model that was produced by this regression has an adjusted R² of 0.523 at a 0.000 level of significance. Hence, the independent variable, perceived customer emotions, that have been employed in order to predict the dependent variable which is customer satisfaction, is responsible for the 52.3% of the variation of customers’ satisfaction. The coefficient beta of perceived service quality and its significance value are b1=0.859, sig.0.000. According to this analysis, the independent variable is significant predictor of dependent variable and thus Customer satisfaction is positively affected by visitors’ attitude. A result of the above statement is that consumers feel satisfied when they feel pleasure and delight. Visitors expect good service quality from their activities that take place into the shopping mall; they believe that they get it, and this make them feel happy and satisfied.

For the testing of H4 hypothesis, regression analysis has been implemented. Using the collected data, a linear regression between customer emotions and customer loyalty was run. This regression equation has an adjusted R² of 0.428 at a 0.000 level of significance. The adjusted R² can be explained because emotional response is not the only one predictor of loyalty. There are many more such as physical environment quality which are examined above. In order to explain the relationship between customer attitude and loyalty, the coefficient beta and its significance level are b1=0.729, sig. 0.000. It is obvious that there is a positive effect on loyalty which is generated by customers’ emotions. The above relationship means that the belief of customers that they get more pleasure and become happy from visiting the mall influences them to visit it in the future and prefer it as the first choice for
future shopping or entertainment. Moreover, these customers will recommend the state mall to their friends.

5. Conclusions

Shopping malls is a rapidly developing area of research, relatively unexplored. The area of physical environment in malls is concerned as interesting and there is clearly a need for further research. In this study, it is presented a definition for the concept of shopping malls’ environment from consumers’ perspective. This paper has examined literature and conceptualisation relevant to the establishment of a specific research agenda on the current and potential role of physical environment quality in shopping malls. The opinions of the respondents about which physical environment factors determine their emotions and which affect their satisfaction and loyalty led to the extraction of a theoretical framework for the analysis of the topic under investigation. Consumers believe that environmental factors, such as design, theme, odorous atmosphere and the general desirable atmosphere, lighting, layout, music, new technologies like multimedia and innovative factors, imagination and appealing lead to the creation of a successful shopping mall. The results of the study show a significant influence of environment on consumer emotions, making shopping malls their first choice for future visits.

The findings help to understand what customers want from a shopping mall’s environment. From the literature, the aspects of service quality, physical environment quality and shopping malls have been studied at length and main theoretical concepts have been adopted. It can, therefore, be suggested that the main contribution of the present study concerns shopping malls’ management, providing a better understanding of the environment of shopping malls and customers’ needs and feelings and how all these influence their satisfaction and their loyalty. Delivering superior services affects positively customers’ perceived service quality, and increases the profitability of the firm. In order to maintain a high level of customer satisfaction, the administrators of shopping malls should pay attention to the dimensions that affect consumers and are tested in this paper.

In conclusion, the findings of this paper provide support for an integrative approach for examining the services that are provided by shopping malls, and the physical environment quality from an alternative perspective. Mall managers and developers have been working hard trying to make the shopping mall as enjoyable as possible and provide to visitors reasons to come more often and stay in the mall longer (Kim et al., 2005).

6. Limitations- Future research

This research suffers from some main limitations. Throughout the research, several methodological decisions had to be made such as the choice of the theory, conceptual frame of references, sample and data collection. One main limitation was the sample, which was customers who are located in Thessaly and visit shopping malls. As a result, the generalization of the findings might not necessarily apply to the total Greek population of shopping malls and especially to other countries where cultural differences could exist. Future studies can examine more samples from different areas of Greece, or different countries instead of samples only from Thessaly area. This study was limited by the lack of relevant to shopping malls studies, which evaluate their physical environment quality. As a result, it was not possible to make extensive comparisons with other studies. Future researches can extend this study by examining aspects which turn away customers to visit a shopping mall. For further this research, it could be examined other aspects that would be possible to influence customers’ motivations, satisfaction or loyalty. The rapid growth of shopping malls in all around the world gives the ability to researchers, to search a variety of issues related to environment or to search a specific element of shopping mall’s environment, beyond the limits of this paper.
References


Appendix

Table 1: Reliability and Validity

<table>
<thead>
<tr>
<th>Scales</th>
<th>Cronbach’s A</th>
<th>K-M-O</th>
<th>Barlett’s Test</th>
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<tbody>
<tr>
<td></td>
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<td>X2</td>
</tr>
<tr>
<td>Physical Environment Quality Factors</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Ambient Conditions (5 items)</td>
<td>0.701</td>
<td>0.699</td>
<td>205,907</td>
</tr>
<tr>
<td>Facility Design (2 items)</td>
<td>0.735</td>
<td>0.500</td>
<td>86,432</td>
</tr>
<tr>
<td>Visitors Emotions (6 items)</td>
<td>0.870</td>
<td>0.852</td>
<td>666,767</td>
</tr>
<tr>
<td>Perceived Satisfaction (2 items)</td>
<td>0.867</td>
<td>0.500</td>
<td>183,119</td>
</tr>
<tr>
<td>Perceived Loyalty (5 items)</td>
<td>0.870</td>
<td>0.803</td>
<td>660,790</td>
</tr>
</tbody>
</table>
Figure I: Paper’s Model

- Ambient Conditions
- Design Facilities
- Social Factors (not included)

Physical Environment Quality

Customer Emotions (Emotional Response)

H₂: \( b_1 = 0.394 \)
\( b_2 = 0.206 \)
\( R^2 = 0.311 \)

H₁: \( b_1 = 0.116 \)
\( R^2 = 0.327 \)

H₃: \( b = 0.859 \)
\( R^2 = 0.523 \)

Customer Satisfaction (behaviour)

H₄: \( b = 0.729 \)
\( R^2 = 0.428 \)

Customer Loyalty (behaviour)