The atmosphere and its impact on consumer behaviour in food stores

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Abstract
Today’s fast paced times, which brings constant changes in fashion trends, technological innovations but also transformation of lifestyle itself, forces retailers to continually adapt to these facts. Innovations and changes of this kind are more than necessary. Whether it is the need to maintain the attractiveness of the store in the competition of new operations with similar focus, or it is a necessity to implement some changes to update the technical infrastructure and reduce operation energy consumption. Functionality of retail operation has to do largely with its architectural and design solution that the customer must first reach and attract to the store, and then motivate them to purchase. Even shopping atmosphere has recently become more important. Many stores are based on the fact to have the most comfortable atmosphere that forces the customer to stay in the store as long as possible. Sellers are also trying to make from the shopping an experience. It is necessary that the customer feels in the store satisfied. Just shopping atmosphere and its control could help to higher customer satisfaction. It is therefore very important to monitor the fundamental factors that affect the atmosphere in the store. The paper deals with the examination of selected elements of the shopping atmosphere and its impact on consumers in grocery stores operating in Slovakia. Research integrates the questionnaire survey and observation in real terms of selected retail operations. Based on the findings we suggest in paper conclusion proposals concerning the adaptation of selected factors affecting the atmosphere in order to improve the overall well-being of customers and hence their satisfaction during shopping.

Keywords: customer, lighting, shopping atmosphere, smell, sound

JEL Classification: M31

1. Introduction
Meaning of Visual Merchandising in a Stores
Visual merchandising is the art and science of presenting products in the most visually appealing way. It is also “language of a store”, how a retailer communicates with its customers through product images or presentations (Kerfoot, Davies and Ward, 2006). A more sophisticated visual merchandising strategy can lead to even greater effects, achieved by directing shoppers’ attention to specific products, triggering unplanned purchases, and establishing a uniform picture of the store (Ebster & Garaus, 2011). Pegler (2011) present in the food category, the sale through real stores is still the most widely concept of selling. For most people today, the shopping is not just a business to meet the primary needs but also the possibility of spending their free time. Law, Wong and Yip (212) present, visual merchandising has come to describe not simply the means by which information about the product/services is communicated but how the message is received by the customer in a way that stimulates their senses and motivates them to buy (Iarocci, 2013). Visual merchandising is concerned with the creation of a store environment which, on the one hand, consistently represents the values of the retailer and their brand to consumers and, on the other, satisfies the needs and expectations that the consumer has of the retailer (Fernie & Fernie & Moore, 2015). According to Berčík and Horská (2015) the purpose of visual merchandising is at once
both to convey the retailer’s corporate positioning to the market and to reflect the aspirations of prospective customers.

**Store Atmosphere in Food Stores**

(Ebster & Garaus, 2011) The commercial structure in recent decades has dramatically changed, while dominant sale formats are no longer small shops but the supermarkets, hypermarkets and large shopping centers. To be succeed in the market today for commercial operations very difficult, and therefore must continuously improve and provide products with the required quality, reasonable prices, quality service and memorable atmosphere for the buyers (Spies, Hesse and Loesch, 1997). According to the Prague and Hal (2002) the result of action of the shopping environment and its quantitative (number, size, volume) and qualitative (layout, organization, appearance) characters on the senses. According Zamazalová (2008) shopping atmosphere can have a big impact on how customers perceive the retail unit and may also decide which units you choose. (Bhalla & Anuraag, 2010) The choosing of a particular retail chain is subject to certain stimuli that elicit the consumer’s thinking kind of emotion. Ebster and Garaus (2011) presents, the incentives are perceived by the customer through the various senses. (Summers & Hebert, 2001) being examined in our contribution as sight (light), hearing (sound) and smell (smell in the shop). Lamb, Hair and McDaniel (2009) define; lighting can also have an important effect on store atmosphere. Horská & Berčík (2014) Consumers often are afraid to shop after dark in many areas and prefer strong lighting for safety. Store atmosphere has usually been included as a component of store image, along with other physical in-store variables, than it has been conceptualized as a single attribute, often with some vague single dimensionality such as “good” atmosphere. The last, store atmosphere has been studied as one factor influencing the consumer’s general decision to patronize the store, but no detailed investigation has been made of how store atmosphere affects shopping behavior within the store (Donovan, Rossiter, Marcoolyn, Nesdale, 1994).

2. Data and Methods

In order to obtain information about the perceptions of the atmosphere in terms of retail lighting, sound and smell operation as an important factor in the selection of retail stores managing in Slovakia, we realized a questionnaire survey with random buyers. The sample consisted of 120 respondents, while 6 questionnaires had to be excluded on grounds of incorrect fillings, which means that the sample was reduced to 114 respondents. The exact structure of the sample is shown in Table 1.

<table>
<thead>
<tr>
<th>Gender/ Age</th>
<th>18 - 24 years</th>
<th>25 - 49 years</th>
<th>50 - 64 years</th>
<th>65 and more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>18</td>
<td>21</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Women</td>
<td>28</td>
<td>23</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Together</td>
<td>46</td>
<td>44</td>
<td>17</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: own research

The research was conducted in stores mostly in western Slovakia in different sales formats (small food store, supermarket, hypermarket and discount). Subsequently, the 43 stores of different formats always made the same purchase of five items (1 pc milk, 1 pc of white wine, 1 pc of bread, 2 pc of chocolate, 5 pc of apple) in order to measure the time needed for shopping. The processing of collected primary data was done with descriptive (frequency, percentiles, average) and inductive (Chi-square test contingency square) statistics. Rimarčík (2015) presents this test verifies that the differences may be actual and expected frequencies.
only random (variables are independent) or are too large to be merely accidental (there is no relationship between variables).

The hypotheses in this test are following:

- **H0**: Quantities are independent.
- **H1**: Quantities depend.

In the paper two assumptions have been determined and verified:

- We assume that there is a relationship between gender and preferred stores with more pleasant atmosphere.
- We assume that there is a relationship between age and preferred stores with more pleasant atmosphere.

### 3. Results and Discussion

According to Kotler (2007) each store gives a certain feeling, one store is crowded, second is charming, and third is luxury and fourth boring. Therefore, every business must have a coherent atmosphere to match the target market and encourage consumers to shop. In the current issue of the visual attractiveness of the retail chain belongs the inherently lighting of stores. Appropriately selected type, color and intensity of light have an impact not only on the attractiveness of the sale itself, but it can positively or negatively affect the mood of buyers. Furthermore lighting can visually separate each department stores (especially in larger commercial formats) or shape the way the display of goods in the store. For example, Štětka (2015) states that the interpretation would be used halogen lamps in order to raise attention and desire for goods in interpretation. It should also be ensured that the lighting was not weakening, so the emergence of a negative feeling of darkness. While lighting helps the image of retail, but must take into account economic considerations in terms of energy savings. Appropriately selected type, color and intensity of light have an impact not only on the attractiveness of the sale itself, but it can positively or negatively affect the mood of buyers. Furthermore lighting can visually separate each department stores (especially in larger commercial formats) or shape the way the display of goods in the store. For example, Štětka (2015) states that the shop window would be used halogen lamps in order to raise attention and desire for goods in interpretation. It should also be ensured that the lighting was not weakening, so the emergence of a negative feeling of darkness. While lighting helps the image of retail, but must take into account economic considerations in terms of energy savings. The sound system is another major factor in sensory marketing, which creates the overall atmosphere in the shop. Its stimulus is perceived through the senses, a hearing. This factor of atmosphere could just as light and scent to influence customer experience in store visits. According to Štětka (2015), the store can reduce perception of waiting time by cash desk, to distract customers to create the image of business operation. The use of music helps the customer to satisfy, thus slowing down and thus spend more time in the shop and forget the rush. According Vysekalová et. al. (2011), the music plays in any commercial operations must be selected to suit the tastes of most customers. Musical preferences are based on age, education, social and economic status in society. According to Franěk (2002) may be poorly chosen background music to the customer to send a signal that he found himself in a place where it does not. The most common musical background in Slovakia is pop and rock. In a business environment background music composed of these genres that can override annoying traffic, however, if the customer is not focusing directly on the listening, it does not register, says Mikula. An important factor influencing customer behavior in the commercial operations inherently includes the fragrance in the store. The pleasant smell can keep the customer in the store longer, can positively influence their desire for their product and customers are even polls by then willing to pay more, says Boťanská (2015). In connection with the scent, however, care must be taken in the correct functioning of retail space ventilation via air
conditioning. If we were to appoint other factors that could be considered to be factors constituting the overall atmosphere of the shop, an essential part of it was the overall retail climate under which we mean air temperature.

In the following part, we focus on the results of our own primary research, which was conducted at the end of 2015 on a sample of 120 respondents, mostly from western Slovakia. From the results of the questionnaire survey shows (Figure 1 and Figure 2), the respondents perceive the atmosphere in food stores regarding selected elements (lighting, sound, smell) very positively in 84 %, just 76 % of them has the effect of these elements by their shopping. However, we expect that this percentage is even higher, since the individual elements we often perceive only unconsciously.

**Figure 1 The perception of atmosphere in food stores in terms of lighting, sound and smells**

![Figure 1](image1)

Source: own survey

The effects of store environmental elements could be complex. In the context of retail store, atmosphere refers to aesthetics or ambiance of the store. The atmosphere cues such as color, music, lighting, smell, crowding, windows display and storefront reflect the store atmosphere and play an important role in shoppers’ perception and evaluation of the store at large. While many of these elements influence shoppers’ behavior through their effects on shoppers’ emotion, cognition and physiological state, some of these elements could elicit more direct response from shoppers with very little impact on their thinking, feeling or body comfort.

**Figure 2 The influence of the atmosphere in food store (lighting, sound, aroma or quality of air) on consumer behavior**

![Figure 2](image2)

Source: own survey
The atmosphere in food stores has an influence in the following of lighting, sound, aroma or quality of air on more than 76 %. 13 % respondents assume that the atmosphere doesn’t influence on them and just 11 % cannot judge it. Recognizing the significant impact of store environment on consumer behavior, retailers devote considerable resources to store design and merchandise presentation activities. The pleasant environments encouraged consumer to stay longer in the selling environment and to make unplanned purchase. In addition to assessing the views of respondents we have also focused on the analysis of pre-established hypotheses. At the first hypothesis, we assumed that there is a relationship between the gender of the respondent and preferred stores with more pleasant atmosphere. The difference in preference of gender is shown graphically in Figure 3.

**Figure 3 The relationship between gender and preferred stores with more pleasant atmosphere**

<table>
<thead>
<tr>
<th>65 and more</th>
<th>50 - 64</th>
<th>25 - 49</th>
<th>18 - 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>44</td>
<td>41</td>
<td>13</td>
</tr>
<tr>
<td>no</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: own survey

This dependence was verified using the Chi-square test of independence at a significance level of 0.05, with the hypothesis about the dependence of those attributes confirmed. Also, we wanted to verify whether related to age of the respondents favoring stores to see much better atmosphere (Figure 4). In this case, depending on the attributes of the hypothesis test for the significance level of 0.05 using Chi-square test confirmed.

**Figure 4 The dependence between age and preferred stores with most pleasant atmosphere**

<table>
<thead>
<tr>
<th>yes</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>men</td>
<td>44</td>
</tr>
<tr>
<td>women</td>
<td>57</td>
</tr>
</tbody>
</table>

Source: own survey

Based on the evaluation of the overall impression of the individual elements (sound, lighting, scent) shopping atmosphere (Figure 5) can be seen that the most positive, assessment on the basis of average values of lighting. Here it must be observed that the evaluation interviewed was largely differed as evidenced by the rather broad ranges. On the contrary, based on the average of the responses received it indicates that air quality and flavor in these stores the majority of respondents assessed as less pleasant.
Figure 5 Assessments of the overall impression of the individual elements (sound, lighting, smell)

4. Conclusion

A strong competitive environment is forcing all businesses to differentiate themselves from the competition and thus place them in the minds of its customers unmistakably. In the case of commercial operations is to serve the actual shopping atmosphere. To create it contributes various elements of which we in this paper focused on lighting, sound and smell in the food shop. The right combination of these elements can attract customers and, at best, causing him to be selected to recurring operations, which is the goal of any business unit. Even though we live in the age of the Internet in a variety of foods in-store purchases, it became the dominant form, and therefore review and continuous improvement of the various visual elements is justified. This is not about aesthetics but also economic, as ever. Correctly chosen lighting outlets can bring considerable energy savings. In addition to an appraisal of the attractiveness of retail today also contribute to a number of new technologies that will be the subject of our further research. The respondents perceive the atmosphere in food stores regarding selected elements (lighting, sound, smell) very positively in 84 %, just 76 % of them has the effect of these elements by their shopping. The atmosphere in food stores has an influence in the following of lighting, sound, aroma or quality of air on more than 76 %. 13 % respondents assume that the atmosphere doesn´t influence on them and just 11 % cannot judge it. Depending on the attributes of the hypothesis test for the significance level of 0.05 using Chi-square test confirmed, there is relationship between gender and preferred stores with more pleasant atmosphere. The most positive assessment on the basis of average values is lighting.

Acknowledgements

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