AROMA MARKETING AS A TOOL TO INCREASE TURNOVER IN A CHOSEN BUSINESS ENTITY

Jakub Berčík, Roderik Virágh, Zdenka Kádeková, Tatiana Duchoňová

ABSTRACT

The paper deals with the evaluation of the effectiveness of the application of aroma marketing describing a few possibilities of using aromatization in practice. Nowadays, many sophisticated tools are used in marketing and consumer behavior, such as sensory marketing and sensory perception. The following is the term of marketing communication and its division into the above-the-line and below-the-line communication, sales promotion, and in-store communication. The paper also focused on the new trends in the place of sale and aroma marketing. The subject of the practical part is the use of the aroma in the food store. An important part consists of a characteristic of the alliance, questionnaire survey, comparison of achieved sales volume and sales before placing the aroma diffuser, and while it was placed in the grocery store. The article aims to find out how the coffee aroma in the store influenced consumer decision-making and stimulated them to impulsive purchase and consequent influence on the company turnover. Concerning the results of our observation and questionnaire survey, we formulate suggestions and recommendations for the business operation and practice. The whole research was made in the grocery store “Môj obchod”.

Keywords: aroma; aroma marketing; marketing communication; Môj obchod; sensory marketing

INTRODUCTION

The use of scent in retail and sales, in general, is astonishing. Scent’s main role is to make the customer feel comfortable, happy and put them at ease so they will spend more time in the store, spend more money and ultimately make them more likely to return. The type of scent that is used depends on what is being sold, who it is being sold to etc (American Marketing Association, 2020).

Nowadays consumer behavior has an increasing role in launching products on the market (Džupina, Hodinková and Kiková, 2016). Although the brand has a huge impact on the consumer’s purchasing decision, it is closely related to the product placement in the stores because the final purchase decision by the consumer is made in the store or point of sale (Košičiarová, 2013). The fact is that the environment is the most powerful influence when making the final purchase decision (Doric, Primorac and Kozina, 2016).

Aroma marketing dynamically increases commercial results, creates the setting for a pleasant stay in private and public areas, and enhances consumer response, loyalty, and trust in the brand (E2 Aroma, 2020).

The human senses act as an extraordinary source of information processing and generating (Krishna and Schwarz, 2014). They must be perceived to help understand consumer processes, in which individual behavior and decision-making are important factors. Sensory marketing is an innovative marketing strategy to stimulate the customer’s relationship with the brand, which promotes a lasting emotional connection that optimizes brand loyalty (Hussain, 2019).

Appealing to customers’ sense of smell creates sales opportunities by putting them in the buying mood (Abassi, 2016). According to Pajonk and Plevová (2015), aroma marketing is a series of events in which aromas can encourage customers to buy goods and services and increase the activity of employees. Several authors deal with the placement of products in the store and their impact on the customer (Zajác et al., 2015; Kozelová et al., 2013).

The set up of the store is perceived by the consumer through all his sense organs. This form of perception can be defined as the process by which customers organize, obtain, and select the necessary information from the environment (Berčík et al., 2016).

People constantly use the senses to create and renew impressions of the stimuli around them, and these impressions are stored and processed, leading to the creation of the meaning of the stimuli. This can further help them to make decisions. It is considered important to understand the behavior of the senses during consumer decision making (Krishna and Schwarz, 2014). The challenge for marketers is to explore, understand and
stimulate all five senses of consumers, which can lead to a shift in the behavior of consumers who have a direct impact on turnover, profits, and market share (Hussain, 2019).

The senses help to understand the things going on around us by recalling the information from the memories. Our sensor systems constantly encode, acquire, and reconstruct information. Our social background and cultural differences affect the way our senses connect with our memories. This type of information is important for organizations in developing their marketing strategies for sensory challenges in brand communication (Nghiêm-Phù, 2017).

Erdil explained the application mechanism of sensory marketing: it creates stimulation based on external environmental factors that can appeal to the senses of consumers. These external environmental factors affect not only the emotions of consumers, but also the evaluation of products or brands, so these factors may ultimately affect the intentions and behavior of customers when shopping (Erdil, 2015).

When selling, as well as when buying, all 5 senses are needed – sight, hearing, smell, taste, and touch (Krishna and Schwarz, 2014).

Colors have also a meaning, but in any country or culture, it can have an opposite meaning. Some countries can be very sensitive to the color chosen from a marketing point of view, so it is necessary to choose the color according to the country of operation (Horská, Palúková and Gálová, 2018).

Zachar (2011) emphasizes that hearing is one of the most used senses, although its potential in marketing communication is not so much used. Approximately 12% of the human perception of the environment is occupied by hearing, another 50% are unknowingly accepted.

Over time, fragrances become among the basic elements of the image of the work environment. Nowadays, it is not considered exceptional that companies or various institutions have a specific scent that makes them recognizable. Fragrances, in addition to inducing a feeling of freshness and purity, also perform another function and that is to induce a feeling of holidays, customs, and traditions (Pajonk and Plevová, 2015).

Although the receptors sensitive to a particular chemical are scattered haphazardly in the nose, their axons find their way to the same target cells in the olfactory bulb, in a way that chemicals of similar smell excite neighboring areas, and chemicals of different smell excite more separated areas (Uchida et al., 2000).

The olfactory bulb sends axons to the olfactory area of the cerebral cortex. A complex substance, such as food, activates a scattered population of cells (Lin, Shea and Katz, 2006; Rennaker et al., 2007).

Hultén, Broweus and van Dijk (2009) consider taste to be one of the most obvious senses that one perceives. On the tongue and even in the throat, a person has taste buds, which are otherwise called taste receptors, through which we can recognize individual tastes. The combination of taste and other senses creates a taste experience, such as smell and taste, sound, and taste.

Lišková (2014) in her publication states that touch is the oldest of all five senses. It is unique in the fact that unlike other human senses, which have a specific place on the human body – eyes, ears, mouth, nose, only the touch is perceived by the skin all over the human body. The hands and tongue are the most sensitive to touch, the other parts prove a different degree of sensitivity. For a trader to choose a business environment, it is necessary also to think about the touch, because both are closely related. In our opinion, smell is the most important sense that affects the customer when buying and therefore we pay more attention to it in the submitted paper.

Erenkol and Merve (2015) emphasize that almost 75% of the feelings that occur during a day are regulated by odors. Aroma directly affects the limbic system, which controls feelings and memory segments in the brain. The odor is of emotional significance to humans, on average one can recognize up to 10,000 scents, and 65% of the fragrances that man has felt in the past are stored in the brain for up to one year (Krishna, 2010).

The pleasant smell released into the air keeps the buyer in the store longer, besides it has a positive effect on his desire for a product or service and at the same time increases his willingness to invest more money when buying (Paluchová, Berčík and Neomániová, 2016).

Smells and odors characterize products, determine their specificity and uniqueness. The products usually have their characteristic odor, based on which they can be distinguished from others. According to different scents, an image is created not only of individual products but also of employees, for example. Managers or traders often suffer from the appropriate choice of perfumes, which they consider to be part of their expression and overall image (Pajonk and Plevová, 2015).

According to Štibinger (2012), each person also interprets the aroma in their unique way. It is proven that two people will never feel the same, even though it is the same chemical substance. It is also remarkable that 80% of what we perceive as taste passes through the olfactory sense.

The use of aromas can be included in the basic communication functions of the seller – customer (Vysekalová, 2012; Abe, 2005).

According to Lindström (2009), it can be said that in the connection between research and the use of aroma to improve the economic situation, a new division was born, which we classify under sensory marketing and even higher under neuromarketing creating a new term “Scent marketing” (Štefániková et al., 2020).

Jurášková and Horňák (2012) define that scent marketing is perceived as a form of sensory marketing that focuses on activating one particular sense, which is the smell. To have a positive effect, it uses aromatizers or diffusers (which release odors into the environment) to its advantage. The meaning of this marketing is considered not only to spray a pleasant scent into the sales area but also to use them in the store. The pleasant smell released into the air keeps the buyer in the store longer, besides it has a positive effect on his desire for a product or service and at the same time increases his willingness to invest more money when buying (Paluchová, Berčík and Neomániová, 2016).

Smells and odors characterize products, determine their specificity and uniqueness. The products usually have their characteristic odor, based on which they can be distinguished from others. According to different scents, an image is created not only of individual products but also of employees, for example. Managers or traders often suffer from the appropriate choice of perfumes, which they consider to be part of their expression and overall image (Pajonk and Plevová, 2015).

According to Štibinger (2012), each person also interprets the aroma in their unique way. It is proven that two people will never feel the same, even though it is the same chemical substance. It is also remarkable that 80% of what we perceive as taste passes through the olfactory sense.

The use of aromas can be included in the basic communication functions of the seller – customer (Vysekalová, 2012; Abe, 2005).

According to Lindström (2009), it can be said that in the connection between research and the use of aroma to improve the economic situation, a new division was born, which we classify under sensory marketing and even higher under neuromarketing creating a new term “Scent marketing” (Štefániková et al., 2020).

Jurášková and Horňák (2012) define that scent marketing is perceived as a form of sensory marketing that focuses on activating one particular sense, which is the smell. To have a positive effect, it uses aromatizers or diffusers (which release odors into the environment) to its advantage. The meaning of this marketing is considered not only to spray a pleasant scent into the sales area but also to use them in the store. The pleasant smell released into the air keeps the buyer in the store longer, besides it has a positive effect on his desire for a product or service and at the same time increases his willingness to invest more money when buying (Paluchová, Berčík and Neomániová, 2016).

Smells and odors characterize products, determine their specificity and uniqueness. The products usually have their characteristic odor, based on which they can be distinguished from others. According to different scents, an image is created not only of individual products but also of employees, for example. Managers or traders often suffer from the appropriate choice of perfumes, which they consider to be part of their expression and overall image (Pajonk and Plevová, 2015).

According to Štibinger (2012), each person also interprets the aroma in their unique way. It is proven that two people will never feel the same, even though it is the same chemical substance. It is also remarkable that 80% of what we perceive as taste passes through the olfactory sense.

The use of aromas can be included in the basic communication functions of the seller – customer (Vysekalová, 2012; Abe, 2005).

According to Lindström (2009), it can be said that in the connection between research and the use of aroma to improve the economic situation, a new division was born, which we classify under sensory marketing and even higher under neuromarketing creating a new term “Scent marketing” (Štefániková et al., 2020).

Jurášková and Horňák (2012) define that scent marketing is perceived as a form of sensory marketing that focuses on activating one particular sense, which is the smell. To have a positive effect, it uses aromatizers or diffusers (which release odors into the environment) to its advantage. The meaning of this marketing is considered not only to spray a pleasant scent into the sales area but also to use them in the store. The pleasant smell released into the air keeps the buyer in the store longer, besides it has a positive effect on his desire for a product or service and at the same time increases his willingness to invest more money when buying (Paluchová, Berčík and Neomániová, 2016).

Smells and odors characterize products, determine their specificity and uniqueness. The products usually have their characteristic odor, based on which they can be distinguished from others. According to different scents, an image is created not only of individual products but also of employees, for example. Managers or traders often suffer from the appropriate choice of perfumes, which they consider to be part of their expression and overall image (Pajonk and Plevová, 2015).

According to Štibinger (2012), each person also interprets the aroma in their unique way. It is proven that two people will never feel the same, even though it is the same chemical substance. It is also remarkable that 80% of what we perceive as taste passes through the olfactory sense.

The use of aromas can be included in the basic communication functions of the seller – customer (Vysekalová, 2012; Abe, 2005).

According to Lindström (2009), it can be said that in the connection between research and the use of aroma to improve the economic situation, a new division was born, which we classify under sensory marketing and even higher under neuromarketing creating a new term “Scent marketing” (Štefániková et al., 2020).

Jurášková and Horňák (2012) define that scent marketing is perceived as a form of sensory marketing that focuses on activating one particular sense, which is the smell. To have a positive effect, it uses aromatizers or diffusers (which release odors into the environment) to its advantage. The meaning of this marketing is considered not only to spray a pleasant scent into the sales area but also to use them in the store. The pleasant smell released into the air keeps the buyer in the store longer, besides it has a positive effect on his desire for a product or service and at the same time increases his willingness to invest more money when buying (Paluchová, Berčík and Neomániová, 2016).

Smells and odors characterize products, determine their specificity and uniqueness. The products usually have their characteristic odor, based on which they can be distinguished from others. According to different scents, an image is created not only of individual products but also of employees, for example. Managers or traders often suffer from the appropriate choice of perfumes, which they consider to be part of their expression and overall image (Pajonk and Plevová, 2015).

Scientific hypothesis

We have set the following research assumptions for our research:

Assumption 1: We assume that the customers will perceive individual factors differently before using the aroma diffuser.
Assumption 2: We assume that the feelings of the store atmosphere before and after using the aroma diffuser are different.
Assumption 3: We assume there is a difference between the impression of smell in the store before and after using the aroma diffuser.
Assumption 4: We assume that the significance of the smell after using the aroma diffuser is more important.
Hypotheses $H_0$ and $H_1$ were created for each assumption, which was verified by using the statistical tests. Hypothesis $H_0$ states that there is no difference between the indicators, hypothesis $H_1$ states that there is a difference between the indicators. The results of the hypotheses are given in the results of the work.

MATERIAL AND METHODOLOGY
Before researching real conditions, the influence of selected coffee aromas was tested in laboratory conditions using electroencephalography (16-channel mobile device from Emotiv EPOC). The subject of the test was four coffee aromas, the aim of which was to determine their effect on the emotional response (valence) (Table 1).

We decided to test the difference in emotions (valence) also by the statistical test which proved the significant differences in the emotions of participants tested the aroma of “Coffee” flavor and “Coffee House”, “Cappuccino” as well as “Coffee and Cake”. Conversely, differences have not been confirmed between the aromas of “Coffee House”, “Cappuccino” and “Coffee and Cake”, which may be since these are sweeter aromas (Table 2).

The subject of the testing were aromas: “Coffee House”, “Cappuccino”, “Coffee and Cake” and “Coffee” for which we assumed the best influence on the sale of “TO GO” goods. Conscious evaluations were performed on a scale of 1 to 10, (where 10 meant the best evaluation) immediately after smelling the given sample.

METRO Cash & Carry offers marketing cooperation, which is based on a unified identity for small sellers with mixed goods, through the store chain called “Môj obchod”. This project was established in 2012 and already in September 2013, the number of participating stores climbed to 100. There are currently up to 530 established “Môj obchod” stores in Slovakia and a network of stores operating abroad, in the Czech Republic under the name “Môj obchod” and in Poland under the name “Odido”. More than 70 independent owners manage these stores and provide food and miscellaneous goods throughout the Slovak Republic. Behind this success is the fact that doing business in the alliance benefits suppliers, customers, and also consumers.

For our research was chosen the store “Môj obchod”, located in the small village of Červenik on Hollého Street since 2014. The premises of this store are located in a relatively new apartment building on the ground floor, with a barrier-free entrance. The village Červenik has about 1700 inhabitants and there are two food stores situated relatively close to each other. “Môj obchod” store is mostly visited by the inhabitants of the village, which is dominated by regular customers who make their regular purchases here.

### Table 1 Effect of Four Coffee Aromas on Emotional Response.

<table>
<thead>
<tr>
<th></th>
<th>Coffee House</th>
<th>Cappuccino</th>
<th>Coffee and Cake</th>
<th>Coffee (pure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valence (polarity of emotions)</td>
<td>0.015</td>
<td>0.014</td>
<td>0.021</td>
<td>-0.01</td>
</tr>
<tr>
<td>Conscious evaluation</td>
<td>8.09</td>
<td>7.61</td>
<td>8.79</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Note: Source: Results of the research.

### Table 2 Wilcoxon Paired Test – Comparison of the Valence of Individual Aromas.

<table>
<thead>
<tr>
<th></th>
<th>Coffee House</th>
<th>Cappuccino</th>
<th>Coffee and Cake</th>
<th>Coffee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee</td>
<td>$H_0$</td>
<td>$H_1$</td>
<td>$H_1$</td>
<td></td>
</tr>
<tr>
<td>Coffe and Cake</td>
<td>$H_0$</td>
<td>$H_0$</td>
<td>$H_0$</td>
<td></td>
</tr>
<tr>
<td>Cappuccino</td>
<td>$H_0$</td>
<td>$H_0$</td>
<td>$H_0$</td>
<td></td>
</tr>
<tr>
<td>Cappuccino (pure)</td>
<td>$H_0$</td>
<td>$H_0$</td>
<td>$H_0$</td>
<td></td>
</tr>
</tbody>
</table>

Note: $H_0$ – they are the same = there is no difference; $H_1$ – they are different = there is a difference; Level of significance $\alpha = 0.01$. Source: Results of the research.

At the entrance to the store, there is a large cold counter with a selection of fresh meat products and cheeses, the store also offers bakery products, sweets, fruits, vegetables, various dairy products, soft drinks, drugstore, alcoholic beverages, and tobacco products. Customers can also buy draft wines or fresh desserts here. In this store, the assortment is different and according to the owner, tobacco products are sold the most. The owner strives to keep these foods attractive and encourages the people to shop mainly because of the proven quality. The store has been reconstructed several times since its inception and has undergone various changes.

Our research took place in the store “Môj obchod – Potraviny u Linajov”.

Figure 1 shows an overview of the annual turnovers of the chosen “Môj obchod” store within the years 2016 to 2019. In 2016, the “Môj obchod” store was in operation for the third year with an annual turnover of 505,428 €. The store profits every year and its sales almost always grow significantly. In 2017, they rose to 571,222 €, but the owner had higher aims, so in 2018 introduced the sale of fresh meat to the store with a trained butcher. That year, sales rose rapidly to 635,165 €. Despite higher sales, this meat sale lasted only seven months and the owner decided to cancel these services from the store due to the high costs. The year 2019 showed lower sales due to the abolition of the butcher's shop, but the store continues to profit with a turnover of 609,987 €.

We researched in this store in two phases. The first phase without using the aroma diffuser; the second phase with its use. During both phases, a questionnaire survey was realized.
We researched in the two phases in the store “Môj obchod – Potraviny u Linajov“ The first phase without using the aroma diffuser; the second phase with its use. During both phases, a questionnaire survey was realized. The first phase – a questionnaire survey took place two weeks from March 1, 2020, to March 14, 2020. We placed 30 questionnaires in the store, which the salesmen offered to customers who had already made their purchase in this store. We contacted another 30 respondents again directly in the store after making the purchase and provided them with a tablet for filling in the form electronically using Google forms. In these weeks we managed to reach all 60 respondents. The questionnaire consisted of five classification questions (gender, age, monthly income, residence, and economic activity) and twelve factual questions, which were mostly related to the aroma of marketing and shopping feelings. In the questions, we asked the respondents how often they visit the store and how much time they spent in it, what influences them as much as possible when shopping and whether they are used to buying “TO GO” goods.

In the second phase – the questionnaire survey took place in a selected store using the aroma diffuser. We chose the “Cappuccino” aroma since it is most related to the types of coffee sold in the store and we assumed that it can evoke in the customers the feeling and wish to taste this product.

A survey with “Cappuccino” canned coffee – the aroma was held within the two weeks from March 15, 2020, to March 28, 2020. This phase of the survey was carried out in the same way as it was without the use of aroma with the help of shop assistants, who were given 30 pieces of printed questionnaires and by using the tablet, we obtained another 30 completed forms from the addressed respondents directly in the store. The questionnaire was identical to the one provided in the first two weeks. Together, we received the full number of responses from respondents in 60 forms.

Then we made several comparisons:

1) Comparison of sales volume and turnover of canned coffee. At this stage, we focused on whether there were changes before and during using the aroma in the store and we compared the individual periods by using a graphic representation and the table. We assume that the results we achieved in our research are largely influenced by the occurrence of Covid-19. People do not feel as comfortable in the store as under normal circumstances and also have to wear face masks, which reduce the intensity of the aroma.

2) Comparison of sales volume and turnover of selected confectionery. In selected periods before and during using the aroma in the store, we focused on observing changes in this segment of food, because the used aroma may also affect the sales of these products. We have shown these changes graphically and also in a table.

3) Monitoring the average values of purchases in the period when the aroma diffuser was not installed in the store and comparing them with the average values in the second stage of testing when the coffee aroma was used in the store. We focused on whether the application of the aroma caused changes in the final values of customer purchases. The receipts provided to us by our customers after their purchase also helped us in this evaluation.

The aroma diffuser “Aroma Streamer 650” was used to carry out the research. This device works with the principle of nebulization. A smooth and micro-fine nebulization of exclusive perfume compositions provides a quick aromatization of areas up to 100 m². It contains the integrated multi-function timer, which allowed us to set its operation every single day of testing.

“Cappuccino” aroma was sprayed into the air every four minutes for only 60 seconds. Of the three possible levels of setting the device, it was set to the second level.

The device was set from Monday to Saturday every day in the following time intervals – first mood: from 09:00 am to 11:00 am second mood: from 2:00 pm to 4:00 pm, third mood: from 5:00 pm to 7:00 pm. On Sunday, we changed the device a bit because customers are in the store mostly from 9:30 am to 3:00 pm. The device was set as follows – first mood: from 9:00 am to 11:30 am second mood: from 12:30 pm to 2:00 pm, third mood: from 3:00 pm to 5:00 pm. Used device: Aroma Streamer 650

Used software: MS Excell 2016

Statistical analysis

We used the following statistical methods to process the obtained data: Mann Whitney test, also called the Wilcoxon two-sample test – we compare the medians of two samples independent of each other. This test gives us the answer to the question of whether the difference between the medians (order of averages) of the two groups is statistically significant or only random. If the difference is significant (p <0.05), it means that there is a relationship between the sequence variable and the binary variable (group). The values of the characteristics can be calculated using the following relations (1, 2):

\[ U_1 = m \times n + \frac{m(m+1)}{2} - T_1 \]  \hspace{1cm} (1)

\[ U_2 = m \times n + \frac{n(n+1)}{2} - T_2 \]  \hspace{1cm} (2)

The relation (3) applies here:

\[ U_1 + U_2 = m \times n \]  \hspace{1cm} (3)

which is used to control the calculation.

We reject the null hypothesis at the level of significance \( \alpha \) in the case if \( U_0 \leq U_c \), where \( U_c \) are critical values of the Wilcoxon two-sample test.

If the possibility \( m \geq 30 \) and \( n \geq 20 \) occurs, then the test value will have the following form (4):

\[ U = \frac{U_0}{\sqrt{\frac{m+n}{12} \times m \times n}} \]  \hspace{1cm} (4)

The alternative hypothesis is accepted if \( |U| \geq U_c \).

Friedman’s test is a non-parametric alternative to repeated measures of ANOVA, where the assumption of normality is not acceptable. It is most often used in the case of an ordinal dependent variable. With this test, we verified whether the level of the specified character depends or does not depend on the change of conditions. It has the following form (5):
\[ F = \left( \frac{12}{n(k+1)} \sum_{j=1}^{k} R_j^2 \right) - 3n(k+1) \]  

(5)

Where:
- \( n \) – number of respondents;
- \( k \) – number of responses;
- \( R_j \) – order of individual sample files.

\( H_0: \) The values have the same level and there are no statistically significant differences.

\( H_1: \) The values do not have the same level and there are statistically significant differences.

We reject the hypothesis if \( F > x^2 \).

Nemenyi method – is based on the Kruskal-Wallis method on the one-way classification. The critical value is calculated by using the formula (6):

\[ r_{aKN} = q_{0.5} \sqrt{\frac{K(K+1)}{6N}} \]  

(6)

Test of agreement of two differences (7,8)

\( H_0: \pi_1 = \pi_2 \)

\( H_1: \pi_1 \neq \pi_2 \)

\( \pi \) average – average proportion; \( \delta (\pi_1 + \pi_2) \) - selection error of the share difference; has an \( N(0,1) \) distribution.

\[ \pi \text{ average} = \frac{(n_1 \times p_1 + n_2 \times p_2)}{n_1 + n_2} \]  

(7)

\[ \sigma_{(\pi_1-\pi_2)^2} = \sqrt{p \times (1-p) \times \left( \frac{1}{n_1} + \frac{1}{n_2} \right)} \]  

(8)

\[ \text{TCH} = \frac{\pi_1 - \pi_2}{\sigma} \]

\[ \text{KH} = \text{NORMSINV}(1-\text{ALFA}) \]

\( \text{TCH} < \text{KH} : H_0 \) is accepted

\( \text{TCH} > \text{KH} : H_0 \) is rejected

RESULTS AND DISCUSSION

A survey of customer behavior before using the aroma diffuser in the chosen store

The survey involved 60 respondents, of which 35 were women and 25 men. According to the provided data, we can state that the selected store is mostly visited by women, up to 58% and 42% of visitors are men. After an interview with the employees of the store, we found out, that mainly women go to the store to buy the food for the entire family.

The differences between the individual age categories are not significant, i.e., all age categories over 18 years of age go to the store, approximately evenly. Total 16 respondents (27%) were from 26 to 33 years of age, 14 respondents (23%) from 42 to 59 years and 13 respondents (20%) over 60 years old followed by 10 respondents (17%) aged from 34 to 41 years. The smallest group of respondents was created by 8 people (13%) from 18 to 25 years of age.

According to economic activity, the largest share of the respondents is employed - up to 22 people (37%). The second-largest group of respondents (13) were pensioners (22%). Furthermore, there are two groups with the same number of participants (6) representing a 10% share, namely students and mothers on maternity leave. The following smaller group consisted of 5 entrepreneurs (8%) Two groups with the same number of respondents, three working in the state sphere, and three unemployed with a 5% share. In the last place are 2 self-employed persons with a share of 3%.

Regarding the monthly income, the largest group of 26 respondents (44%), have a monthly income of up to 580 €. The second-largest group of 15 respondents (25%), had a monthly income from 581 € to 1,000 €. 11 respondents (18%) declared their monthly income between 1,001 € and 1,500 €. The last smallest group of 8 respondents (13%) had a monthly income of more than 1,501 €.

The chosen store is located on the ground floor of a block of flats in the countryside, which means that the majority of respondents (total 53, representing 88% share) come from the countryside. The other 7 respondents (12%) stated they live in the city and had to travel to visit the store. The majority of respondents visit the store several times a week (total 38, representing 63% share). As a result, people who get used to shopping in this store like to come back and make their regular smaller purchases here. Another group of customers visits the store several times a month (total of 15 respondents, representing 25% share). 6 respondents visit the store occasionally, which represents a 10% share.

Only 1 person visits the store every day (1.7%).

When asked how much time they spend in the store, 36 respondents (60%) answered in the range of from 9 to 15 minutes. The second group consists of 21 respondents who spend less time in the store for up to 8 minutes. These respondents have a 35% share. The smallest group of respondents who spend more than 16 minutes in the store is 5% and consists of 3 people out of 60 respondents.

On average, customers stay in the store for a short time to buy and do not stay there arbitrarily. This may be because nothing in the store attracts them enough to spend there more time. The shop without any better experience for which they would stay in the store longer, which could be managed through implementing a certain level of marketing in the store.

Subsequently, the respondents had to determine the feelings of the atmosphere in the store on a five-point scale. The store was rated neutral by 20% of the surveyed customers and the largest percentage received a pleasant rating, up to 46.7%.

30% of respondents indicated the possibility of “very pleasant” feelings from the store, which may well affect our final research with the introduction of flavoring.

Anderson (2014) and Vlahos (2007) argue that the term “aroma marketing” can be used to set the mood, promote products or brand position (Meng-Hsien, Cross and Childers, 2018).
**Figure 1** Overview of the Annual Turnover of the Chosen “Môj obchod” Store within the years 2016 to 2019 (in €). Note: Source: Finstat, 2020.

**Figure 2** Factors Influencing the Purchase of Canned Coffee According to Importance. Note: Source: Results of the research.

**Figure 3** Factors Influencing the Purchase of Canned Coffee According to Importance after Using Aroma Diffuser. Note: Source: Results of the research.
For the research of the increase in turnover, it was subsequently necessary to identify what average price is the customer willing to pay at the local store. As it is a smaller store, people usually make smaller purchases for households, and the obtained values are also related to this fact. 22 respondents (36.7%) buy their goods in the amount of 11 € to 20 €. The second most common group of purchases is up to 10 €, as stated by 20 respondents (33.3%). Furthermore, the purchase from 21 € to 50 € proved 18 respondents (30%). Customers state that their regular purchases in this store are usually not above the level of 50 €. We can assume that customers are willing to spend more when shopping in larger supermarkets, where they have a wider choice of goods in larger quantities and go to the selected store earlier for the goods they consume daily and replenish it.

Even before using the aroma diffuser, there is a certain smell in the store, e.g. the smell of fresh-baked pastries. To choose the correct aroma is not always as easy as it may seem at first glance. If we want to support sales of confectionery, it is not enough to add a chocolate aroma (Vysekalová, 2014).

According to Gobe (2010), the smell of a product creates a characteristic feature and can be easily identified by the customer. If the product is “pleasant-smelling”, it looks positive and provides a space for a favorable identity. Every single smell plays a different role. For example, peppermint and lemon can boost alertness and energy; cedar and lavender can reduce tension.

Thus, the largest group of respondents (total 32, representing 53.3%) stated that they felt a “pleasant smell” at the entrance. 21 respondents (35%) stated that they consider the smell to be “very pleasant”. Another 7 (11.7%) respondents felt a “neutral smell” at the grade. We can state that customers chose the most “pleasant” smell most often due to the natural scents that were carried by the store.

We also asked about other aromas to which the seller should appeal the most, which is sales support for both sales and sales staff (Přikrylová and Jahodová, 2010).

Respondents could mark several answers to a given question. Based on the obtained data, the seller should pay the most attention to the visual side of the store and goods. The sense of sight was marked by up to 43 respondents (71.7%), the second sense that should be pointed out was the smell, which was marked 39 times (65%). Taste and hearing took 20% share and customers pay the least attention to the tactile sense (only 3.3%). The visual side of the store is the most important factor for customers when buying it. Respondents could assign degrees of importance to individual factors. All factors available to them for selection are listed in Figure 2.

The most important factor that would affect them when buying was the price, which was indicated by up to 48.3% of respondents. They consider quality to be the second most important factor with 30% a share. This is followed by the popularity of the brand 16.7%, then the smell of 6.7%, and the origin was indicated by only 1.7% of respondents. In the least important area, there was an origin with a significant value of 25%. From the above data, we can say that people are most affected by price, product quality, brand popularity, and smell. The least important factor for customers has become the origin of the product.

We then focused only on canned coffee and which factors influence customers when buying it. Respondents could assign degrees of importance to individual factors. All factors available to them for selection are listed in Figure 2. The most important factor that would affect them when buying was the price, which was indicated by up to 48.3% of respondents. They consider quality to be the second most important factor with a 30% share. This is followed by the popularity of the brand 16.7%, then the smell 6.7%, and the origin was indicated by only 1.7% of respondents. In the least important area, there was an origin with a significant value of 25%. From the above data can be concluded that people are most affected by price, product quality, brand popularity, and smell. The least important factor for customers has become the origin of the product.

For verification, we also used research assumption 1, where we assumed that before using the aroma diffuser, the customers will perceive individual factors differently. To verify this assumption, we used the Friedman test with Nemenyi pairwise comparison method. We verified the assumption of a selected sample of respondents. The value of the test characteristic (0.05) is higher than the critical value (0.001), therefore we can state that the customers rated the individual factors differently before using the aroma diffuser. However, up to 78% of customers said they did not buy canned coffee.

A survey of customer behavior after using the aroma diffuser in the chosen store

At this stage of the survey, the chosen store is visited mostly by the customers aged 42 to 59 (total 19 respondents, 32%), followed by the second group of 15 respondents (25%) from 26 to 33 years. Furthermore, there are 12 respondents (20%) over the age of 60 and 9 respondents (15%) from a group of 34 to 41 years old. The smallest group of 5 respondents (8%) are people aged from 18 to 25 years. There are only small differences in this study compared to the first stage of the survey.
Figure 4 Volume of Sales and Turnover of Canned Coffee Before and After Using the Aroma Diffuser (in €). Note: Source: Results of the research.

Figure 5 Volume of Sales of Confectionery Before and After Using the Aroma Diffuser (in pcs). Note: Source: Results of the research.

Figure 6 Turnover of Confectionery Before and After Using the Aroma Diffuser (in €). Note: Source: Results of the research.
As many as 26 respondents (43%) were from the group of employed people, which is almost half of the respondents, and compared to the previous stage of the survey, this number has increased by 6%. The second-largest group with 13 (22%) are pensioners. Groups ranging from 8% to 5% are students, mothers on maternity leave, entrepreneurs, self-employed and unemployed people.

A total of 23 respondents (38%) stated that their monthly income ranges from 581 € to 1,000 €, the increase is 13%, compared to the first stage of the survey. 22 respondents (37%) stated their monthly income is up to 580 €. Furthermore, 11 respondents (18%) reported their income is from 1,001 € to 1,500 € and the remaining 4 respondents (7%) have an income higher than 1,501 € per month.

Most customers visit the store several times a week (total 38, representing 63%). 13 customers (22%) visit the store several times a month, which is 7% more than in the first stage of the survey. Daily visit to the store was marked by 5 respondents (8%), this number also increased by 6%. Only 4 surveyed customers (7%) visit the store occasionally.

Regarding the time spent in the store, more than 38 respondents (63%) said they would stay in the store from 9 to 15 minutes. A total of 12 respondents (20%) stated that they spend more than 16 minutes on their purchase, which is 15% more than in the first stage of the survey. Due to the situation with the Covid-19 virus, people decided to visit the store with the intention of larger one-time purchases, which last significantly longer than usual. The last group consists of customers who visit the store in the interval from 1 to 8 minutes and there were 10 of them (17%).

Fragrances or aromas thus support the customer's stay in the store (Madzharov, Block and Morrin, 2015).

The change in the evaluation of the feelings from the atmosphere of the store occurred with the possibility of “unpleasant”, which was marked by 2 respondents (3%). We believe that due to the smell of cleaning and disinfecting detergents, which were used more in the store on the given days. A total of 7 respondents (12%) had “neutral” feelings about the atmosphere. The second largest group consisted of the surveyed customers who marked a “pleasant atmosphere” (Total 23, representing 38%). The most marked was “very pleasant” atmosphere in the store, by up to 28 respondents (47%), which is 14% more than before using the aroma diffuser in the store. We can assume that the used aroma had a positive effect on the senses of customers.

We also verified this factor by using Mann Whitney – a one-sided test, based on Assumption 2. We assumed that the feelings of the store atmosphere before and after using the aroma diffuser are different. The critical value was higher (0.09) than the test characteristic (0.05), which means there is no difference between the evaluation of the customer feelings before and after using the aroma diffuser in the store.

As many as 31 (52%) customers stated that they usually spend between 11 € and 20 € on their purchases, there is an increase compared to the first stage of the survey, by up to 15%. On the contrary, purchases up to 10 € fell by 2% and this answer was marked by 17 respondents (28%). Average purchase from 21 € to 50 € was marked by 11 respondents (18%) and more than 51 € spent just 1 respondent (2%). Because the Covid-19 pandemic broke out much more intensively in the second stage of testing, we can assume that people were responsible and went to the store only for things that they needed for everyday life. This could mean that the number of their purchases could rise to 20 €, which can hold food without which households cannot function normally.

The smell in the store was marked as “unpleasant” by up to 4 respondents (7%) and we can assume that it was again caused by disinfectants and cleaning detergents, which were used excessively these days. A total of 3 respondents (5%) consider the “neutral” smell in the store. The “pleasant” smell in the store was for 18 respondents (30%) and the highest share was achieved by a “very pleasant” smell, which was marked by up to 35 respondents (58%), which represents an increase of 23%. It very much depended on when the questionnaire was filled in and when the aroma was activated in the store. In the evening, the store was cleaned more intensively.

In assumption 3 was assumed there is a difference between the impression of smell in the store before and after using the aroma diffuser.

We have used again the Mann Whitney – a one-sided test. The value of the test characteristic is higher (0.05) than the critical value (0.02), therefore can be stated, that customers felt the difference after applying the aroma to the store. According to the obtained data, the seller should pay attention to the sight and visual side of the store, as up to 48 respondents (80%) marked this answer, which is 37% more than in the first stage of the survey. The second one is the smell with 31 answers (52%), marked by 13% fewer people. The taste was marked by 16 respondents (27%) and hearing by 5 respondents (8%).

The largest share among the answers which smell in the store attracted the customer the most, was the smell of fresh-baked pastries”, which was marked by up to 31 respondents (51%), this group increased by 9%. The second-largest group was created by the answers that the respondents could complete themselves. This group of responses has undergone the most significant change. The most common response is the “smell of chocolate”, which occurs up to 16 times (27%). Furthermore, it is “disinfectant or cleaning products”, which was mentioned by 5 respondents (8%) and 1 respondent (2%) stated the smell of “cappuccino”.

Aroma has a remarkable ability to make customers look around the store longer, spend more money, and return to the store more often. Emotions and memory are affected by the power of scents in very close ties. Find the right scent and you can get around rational thoughts. In-store testing shows that aroma can be the holy grail. It has the power to encourage the customer to join a new brand and remain loyal (Calvo-Porrata, Ruiz-Vega, and Lévy-Mangin, 2018).

The most marked answer when buying “TO GO” goods were that the respondents buy these goods a few times a week (total of 38 respondents, representing 64%), compared to the first stage there is an increase of 11%.

14 respondents (23%) indicated that they buy these goods only sometimes, which caused a decrease of 19%. “TO GO” goods are bought daily by 8 respondents (13%), compared to the first stage there is an increase of 8%.
**Figure 7** The total volume of sales and turnover from confectionery before and after using the aroma diffuser. Note: Source: Results of the research.

**Figure 8** Average value of purchases before and after using the aroma diffuser in €. Note: Source: Results of the research.

**Table 3** Types of selected canned coffees – their quantity (in pcs) and turnover in €.

<table>
<thead>
<tr>
<th></th>
<th>Quantity in pieces</th>
<th>Turnover in Euros</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>Nescafé</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Energy coffee</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Ice coffee Landessa</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

Note: Source: Results of the research.
As many as 45 respondents (75%) said they prefer to buy sweets. This percentage increased by 38% compared to the first stage of testing, which is more than half. We can assume that they were influenced by the sweet aroma they felt when shopping. Canned coffee and chips have a relatively equal proportion of 25 (42%) and 26 (43%) respondents. The sandwiches and baguettes were mentioned by 13 respondents (22%), and the least marked item was energy drinks, which were mentioned by 6 respondents (10%).

As in the first stage of the survey, respondents had the opportunity to assess the importance of the factors that would make them buy canned coffee in the selected store. That is the factor that would motivate them the most to buy. Respondents had the opportunity to assign degrees of importance to individual factors. Most respondents stated that they consider the price to be the most important factor, up to 48.3%, and the second one is the brand popularity. The smell was marked as important by up to 61.6%, which represents a 10% increase. People consider the origin of the product to be the least important (38.3%) and the insignificant factor (35%), compared to the first survey, these percentages increased by 13% and 5%. With a value of 18.3%, the respondents described the quality, the brand popularity, and the smell as neutral. We can state that customers consider the price, brand popularity, quality, and smell to be a really important factor. These results are shown in Figure 3.

Assumption 4: We assume that the significance of the smell after using the aroma diffuser is more important.

We have used the Mann Whitney again - a one-sided test. Where we got a critical value of 0.01, which is less than the test characteristic of 0.05, which proved that customers found the smell more important after using the aroma diffuser in the store.

After using the aroma diffuser in the store, we find that sales of canned coffee increased slightly. 19 respondents (32%) stated that canned coffee is in their shopping cart and this number has increased by 10%. A total of 41 respondents (68%) stated that they did not buy canned coffee, which is 10% less than before applying the aroma. The total volume of canned coffee sales and turnover before and after using the aroma diffuser is shown in Figure 4. The sales volume before applying the aroma was 36 pieces, while after applying the aroma it was 41 cans, which means a small increase in sales and also in the comparison of turnover. Sales increased by 5 pieces together from all selected types of coffee. Before using the aroma diffuser, the turnover was 39.8 € and after using the aroma diffuser, the turnover of these goods was 45.6 €, which is an increase of 5.8 €.

We can assume that used aroma had a positive effect on sales, but not very significant. Finally, the customers combined the aroma we used with sweets. In Table 3, we described the specific types of canned coffee that were observed, namely Nescafé coffee, Energy coffee, and Iced coffee Landessa.

"TO GO" goods also include confectionery, which is why we deal with them in the submitted paper.

In the chosen two periods, we observed the volume of sales and turnover of a certain segment of goods concerning the placement of the aroma diffuser directly in the store. Based on the recording of individual items, we were able to observe changes in the volume of sales and turnover, to find out where was the largest increase in sold items.

Figure 5 shows the volume of sales of the chosen confectionery before and after using the aroma diffuser. All available and obtained data show us that the sales volume of goods on which we focused, increased during the period of applying the aroma in the store. Of all examined items, the sales of waffles increased the most, by 54 pieces, while the original sale was 52 pieces. Another big increase was the chocolates from the original 33 sold pieces to 79 pieces. Chocolate bars increased from 57 pieces to 98 pieces. Desserts also increased the volume of sales from 16 to 33 desserts. Based on the data obtained in practice, we can state that for selected types of confectionery, the aroma has a positive effect on the shopping behavior of consumers and thus helps to increase the volume of purchases.

Due to the increase in the volume of sales, the turnover from confectionery also increased. This is clearly shown in Figure 6. Turnover from sold chocolate increased the most, by up to 65.51 € and this difference is higher than the turnover from chocolate before applying aroma. The second-largest increase was in desserts, where the store earned 59.75 € more than in the first stage of our survey, followed by the waffles which turnover increased from 22.17 € to 46.65 €. The lowest increase was noticed in chocolate bars, in which turnover increased by 16.35 €.

Table 4 lists all the items on which we examined the volume of their sales and turnover. During applying the aroma, Mila waffles were sold the most, where the difference was 26 pieces. In the chocolate segment, we recorded a large increase of up to 17 pieces of Milka milk chocolate. Regarding the turnover, we recorded the most significant difference by 25 € in Milk Metro Premium chocolate. Another important item was the Tatiana chocolate candies with an increase of 19.25 €. In short, we can say that our research has yielded positive results and the use of such marketing tools is beneficial for the store.

Figure 7 shows the total volume of sales and turnover from confectionery before and after using the aroma diffuser. Without the used aroma 158 pieces of selected confectionery were sold, and during the use of the aroma, the volume of sales increased to 316 pieces. Before aromatization was turnover of confectionery 145.1 € while applying the aroma was recorded an increase of turnover to 311.19 €. Through this research, we concluded that the aroma of the store has a positive effect on the volume of sales and turnover of confectionery in this store. The volume of sales of confectionery increased by exactly half, by 158 pieces, and the turnover increased by 166.09 €.
During the survey, we also found out the average values of purchases from customers. In Figure 8 we can see the average value of the purchase before and after using the aroma diffuser. Before applying the aroma, the average value of the purchase was 11.48 €. After applying the aroma in the second stage of the survey, this average purchase value increased by 3.83 € to 15.31 €. After comparing the found values, we can state that the aroma led customers to buy the items that attracted them due to their sensory perception, and the value of the average purchase increased slightly. We can state that aroma is one of the factors that have a positive effect on shopping behavior.

Based on the results of the research, we can state that using the aroma diffuser in the store brought a clear benefit in increasing sales of either canned coffee or confectionery. However, it is necessary to handle the aroma diffuser unit wisely, because when multiple aromas are mixed, it can also bring the opposite effect. To place the aroma diffuser in the store could also be beneficial for such products that cannot produce their natural scent, for example, due to packaging, and thus increase their attractiveness to the customer. Another reason for applying the aroma is to focus on products that are selling less and thus support their sale.

Merchants are increasingly using the surrounding aroma as a strategic tool to differentiate themselves from the competition, attract customers, stimulate sales, influence moods and create an overall pleasant and unforgettable shopping experience (Madzharov, Block and Morrin, 2015; Labská, 2012; Rimkute, Moraes and Ferreira, 2016).

The use of aromas is a new generation of communication tool that measures the impact on the consumer and the impact that is created on the customer and interactivity in the store (Labská, 2012; Rimkute, Moraes and Ferreira, 2016).

Aroma marketing, or so-called Scent marketing, can be used in two areas. The first is ambient scenting, this term means filling the space with a suitable type of scent and the other area is scent branding, which can be used to create a specific scent. It identifies a brand, product, institution, company, or environment. The scent should be selected and
deployed to match and perfectly adapt to the environment and context (Naščaková and Danková, 2017; Minsky, Fahey and Fabrigas, 2018). There also exist the products that represent a characteristic feature of a particular product and the main reason for buying such a product is mainly the smell (Krishna, 2013).

It is important to search for and use new forms of marketing, as we are increasingly oversaturated with advertising and this has made the customers more immune to traditional marketing (Berčík, 2017).

CONCLUSION
The environment in which the customer is located during his purchase has an intensive effect on him and also affects sales. One of the modern tools used in commercial operations to make the products visible and also to support their sales is aroma marketing. This type of marketing deals with how aromas can stimulate human senses and emotions and purposefully change the customer's behavior and improve the shopping experience. The important thing is the representation of the senses when shopping, and the human brain often does not realize that the smell released in the store can keep the customer in the store for longer, or to cause the desire to buy the product that was not originally planned to buy.

To examine consumer behavior a questionnaire survey was conducted directly in the store where the aroma diffuser was used. Thanks to this survey, we wanted to find out to what extent customers will be affected by the aroma released into the store and whether it will affect their shopping behavior. There were no significant differences in the number of store visits and the time spent in the store during the purchase before and after using the aroma diffuser. The only change was that a few customers spent more than 16 minutes in the store applying the aroma, which was usually up to 15 minutes before using the aroma diffuser in the store. Customers stated that during applying the aroma, in addition to the staff, they were also more affected by the smell in the store. When evaluating the feelings from the atmosphere of the store before and after using the aroma diffuser, we assumed that the feelings will be evaluated differently. In addition to the questionnaire survey, we also used the Mann Whitney test. However, this test showed us that the customers did not notice the difference between the periods and perceive the atmosphere in the same way. However, we noticed that two respondents described the feelings about the store as unpleasant and we believe that this is due to excessive disinfection of the store in the evening due to the occurrence of Covid-19 and strict hygiene regulations of the Slovak government. This fact is followed by the fact that the smell in the store was described by 4 respondents as unpleasant and we think that it is also due to disinfectants. Nevertheless, customers perceive the smell in the store better after using the aroma diffuser, and this was also confirmed by the statistical Mann Whitney test. According to the obtained results, customers believe that the seller should appeal to sight, followed by smell and taste when organizing the store.

When choosing the aroma, we tried to make it as similar as possible to the aroma of cappuccino. Nevertheless, during the second stage of the survey, customers in the store smelled the most the fresh-baked pastries also the smell of chocolate. This refuted our assumption of an increase in coffee sales. We were also interested in whether customers buy "TO GO" goods. The largest group of respondents buys such goods a few times a week, mostly sweets, canned coffee, and chips. We were interested in which factor customers consider most important when buying the canned coffee. By statistical testing using the Friedman test with the Nemmenyi method, we confirmed the fact that after using the aroma diffuser in the store, the respondents consider the smell as important and significant. The survey showed us that they consider the origin of the product to be the least important factor. By using the pairwise comparison test we found that using the aroma diffuser did not affect the sales of canned coffee. This refuted our assumption that the aroma we applied to the air would mainly affect the sales of canned coffee. The highest increase in the volume of sales of confectionary during aromatization was shown in waffles, chocolates, chocolate bars, and desserts. From the obtained data, we can state that the aroma was one of the factors that strengthened sales and thus contributed favorably to the increase in sales of these food products which more than doubled. We dare to say that aroma as a marketing tool appears to be a positive tool and can bring economic prosperity in the future. We also focused our attention on whether the average value of purchases by customers has increased. According to the respondents, we concluded that the average value of the purchase increased from the original 11.48 € to 15.31 €, which may also be caused by the fact, that customers added to the cart, for example, sweets, because they were affected by used aroma in the store. We can state that customers increased the value of their purchases also due to the situation with the Covid-19 virus and increased their food stocks in households. Through aroma marketing, it is possible to build a positive relationship of an individual to a brand, product, or service. It is likely that based on the smell, the customers will keep this relationship in mind and will return to the purchase.

REFERENCES
American Marketing Association. 2020. Good Smells are Good Marketing: How to Use Scent to Your Advantage. Available at: https://www.ama.org/marketing-news-home/
Berčík, J. 2017. Is the Aroma of Stores and the Creation of a Olfactory Brand a Guarantee of Success?
Calvo-Porral, C., Ruiz-Vega, A., Lévy-Mangin, J. P. 2018. The Influence of Consumer Involvement in Wine


Finstat. 2020. Môj obchod-Potravinu u Línajov-finančné ukazovatele (Mój obchod-Potravinu u Línajov-financial indicators). (In Slovak) Available at: https://www.finstat.sk/


**Acknowledgments:**

Research has been supported by the research project APVV-17-0564 “The Use of Consumer Neuroscience and Innovative Research Solutions in Aromachology and its Application in Production, Business and Services” and VEGA 1/0570/18 “The Use of Consumer Neuroscience in the Implementation of Aromachology in Selected Sectors of the Economy” solved at the Faculty of Economics and Management of the Slovak University of Agriculture in Nitra.

**Contact address:**

*Jakub Berčík, Slovak University of Agriculture in Nitra, Faculty of Economics and Management, Department of Marketing and Trade, Tr. A. Hlinku 2, 949 76, Nitra, Slovak Republic, Tel.: +421 37 641 4145, E-mail: jakub.bercik@uniag.sk ORCID: [https://orcid.org/0000-0001-5891-4698](https://orcid.org/0000-0001-5891-4698)*

*Roderik Virágh, Slovak University of Agriculture in Nitra, Faculty of Economics and Management, Department of Informatics, Tr. A. Hlinku 2, 949 76, Nitra, Slovak Republic, Tel.: +421 37 641 4132, E-mail: roderik.viragh@uniag.sk ORCID: [https://orcid.org/0000-0003-4669-3968](https://orcid.org/0000-0003-4669-3968)*

*Zdenka Kádeková, Slovak University of Agriculture in Nitra, Faculty of Economics and Management, Department of Marketing and Trade, Tr. A. Hlinku 2, 949 76, Nitra, Slovak Republic, Tel.: +421 37 641 4171, E-mail: zdenka.kadekova@uniag.sk ORCID: [https://orcid.org/0000-0003-2814-5239](https://orcid.org/0000-0003-2814-5239)*

*Tatiana Duchonová, Slovak University of Agriculture in Nitra, Faculty of Economics and Management, Department of Marketing and Trade, Trieda A. Hlinku 2, 949 76, Nitra, Slovakia, Tel.: +421 37 641 4145, E-mail: tatiana.duchonova@uniag.sk ORCID: [https://orcid.org/0000-0002-8919-2496](https://orcid.org/0000-0002-8919-2496)*

Corresponding author: *