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THE USE OF CONSUMER NEUROSCIENCE IN AROMA MARKETING OF A SERVICE COMPANY

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ABSTRACT

In today's highly competitive era, it is becoming increasingly difficult for businesses to attract and keep customers. Modern marketing strategies focused on examining customer behavior, and possibilities of the business sector in influencing them are becoming increasingly beneficial. Consumer neuroscience has great potential here, as it reveals internal consumer preferences by using innovative techniques. Human senses play an important role in affecting these preferences, and smell has the greatest potential to influence customers subconsciously, and thus support the sale of products, keep customers in the store longer, or build a brand. Aroma marketing is the continuously developing field of consumer neuroscience. The paper aims to examine the use of consumer neuroscience in aroma marketing of a service company. After theoretical analysis, we carried out practical research aimed at examining the impact of aroma marketing in a selected service company – Sport Café in Nitra – to increase the sales of a particular product, and its real impact on the economic indicators of this company through the use of consumer neuroscience tools and questionnaire survey. In aromatization, choosing the right aroma is of the utmost importance, therefore in our research, this selection was done in the Laboratory of Consumer Studies at the Faculty of Economics and Management, SUA in Nitra. The research was carried out through conscious and unconscious testing of selected aromas by a randomly chosen sample of customers. Conscious testing included using a questionnaire method and unconscious testing was done using a face-reading device that provides an objective assessment of emotions based on facial expressions. The choice of aroma was followed by testing in real conditions, by diffusing the aroma in the café. Based on the collected data, we confirmed the positive impact of aromatization on coffee sales. In conclusion, we present some recommendations for service companies, focused mainly on cafés, with emphasis on the importance of aromatization for attracting and keeping customers and improving profitability.

Keywords: consumer neuroscience; aroma marketing; service company; aroma; Sport Café

INTRODUCTION

The current era is characterized by intensifying competition of business environments and entities. It is becoming increasingly difficult to attract as well as keep customers. It is why new strategies and approaches are increasingly spreading in the marketing environment, which focuses on examining consumer behavior and the possibilities of influencing it positively by enterprises. To understand what guides consumers' steps and behavior during shopping in a world of advertisement overload, traditional marketing tools seem to be still less effective, because the majority of people´s thoughts are in the subconscious mind and consumers mostly do not choose products rationally. The trend nowadays is the communication simultaneously oriented on several human senses, which is represented by the modern field of consumer neuroscience, or neuromarketing, which is using neuroscience to reveal subconscious consumer decision-making processes **(Berčík et al., 2018; NMSBA, n. d.; Genco, Pohlmann and Steidl, 2013)**.

Consumer neuroscience refers to the measurement of physiological and neural signals to gain insight into the customers' motivations, preferences, and decisions, which can help improve creative advertising, product development, pricing, and other marketing areas **(HBR, 2020)**. By this, marketers learn why consumers make the decisions they do, and what parts of the brain are motivating them to do so.

Neuromarketing is focusing on understanding the thoughts and behavior of consumers to "transfer insights from neurology to research in consumer behavior by applying neuroscientific methods to marketing relevant problems" **(Miljković and Alčaković, 2010)**. Therefore, it is an interdisciplinary field that combines aspects of neuroscience, psychology, and marketing. It represents a marketing strategy that is connected to the subconscious, emotional aspect of the customer and it then wants to create a strong bond with the customer and the product **(Karmarkar, 2011)**. The goal is to study how the brain is physiologically affected by advertising and marketing

strategies, and how to improve their effectiveness. Therefore, "neuromarketing studies are focusing on obtaining objective information about the inner workings of the brains of consumers" **(Miljković and Alčaković, 2010)**.

According to **Labská, Tajtáková and Foret (2009)**, the general goal of marketing communication is to influence buyer behavior Every business entity wants to present its products and services in a way that strengthens customers' interest in buying them.

We agree with **Kulynych (2002)** that neuromarketing focuses on measuring the proper functioning of marketing in practice, and it is based on the realistic understanding of how the customer's brain works. So, neuromarketing can be understood as a new era of marketing that seeks the direct impact of marketing incentives on customer and consumer responses at the time of purchasing decision-making **(Ferguson, 2009)**. Neuromarketing, as a scientific discipline using advanced methods, brings a new perspective on consumer shopping behavior. This significantly affects the subsequent creation of marketing strategies and integrated marketing communication in all its areas. Looking into the minds of customers, finding out and researching what they react or do not react to, is the subject of many discussions **(Púchovský and Kohoutová, 2015)**. Predicting customer behavior is of great importance to marketers and the business environment as then they can offer the customer what he wants.

The importance of neuromarketing potential is underlined by the finding that about 95% of thoughts occurred in the subconscious mind cannot be measured by traditional research methods **(Marketing-Schools, 2012)**, whereas these thoughts greatly influence emotions, and decision-making thus begins before all the provided information is obtained **(Genco, Pohlmann and Steidl, 2013)**. Neuromarketing using various techniques, such as those used in medicine and psychology, tries to identify consumer preferences more accurately. It is a more detailed examination of the economic behavior of consumers. Besides, it is also used in the development, creation, and placement of products on the market **(Berčík et al, 2016)**. Neuromarketing uses brain imaging, scanning, and other brain activity measurement technologies to measure the response to a specific product, packaging, advertisement, etc. **(Neuroscience marketing, 2019)**. Phan states that it uses these medical technologies to determine consumer reactions to those particular marketing elements **(Phan, 2010)**.

We recognize several technologies here. **Berčík et al. (2016)** divide research tools and neuromarketing techniques into two basic categories. Each approach captures a different type of signal:

Neuroimaging measurements – devices measuring brain responses under the influence of marketing stimuli. The two most important for scanning the brain are *fMRI* (functional magnetic resonance imaging) and *EEG* (electroencephalogram). However, they are expensive, and fMRI is also too large. FMRI uses strong magnetic fields to monitor changes in blood flow across the brain. It examines brain functions through a three-dimensional display of the brain. EEG reads brain-cell activity using sensors placed on the subject's scalp **(HBR, 2020)**. When a stimulus is applied, the neurons create electric currents that create brain waves, and the device displays them as curves. It measures attention, engagement/boredom, excitement, cognition, memory coding, or emotional valence. These tools are used, for example, to test new products, advertisements, product placement on shelves and identify customer needs **(Púchovský and Kohoutová, 2015)**.

Biometric measurements – tools measuring the physiological proxies for brain activity. They tend to be more affordable and easier to use. These include:

Eye tracker can measure attention (via the eyes' fixation points) and arousal (via pupil dilation). It allows us to examine consumer behavior by the point of gaze, how long it lasts, and also the motion of the eye. It measures the intensity and frequency of gaze.

Face reader is about facial-expression coding as it reads muscles in the face. It measures emotional responses through the face and represents an automatized facial expression analysis software that provides an objective assessment of emotions. It is fast, flexible, objective, and easy to use.

Heart rate variability (HRV) is a physiological marker of how we experience and regulate our emotions. It represents the number of seconds that pass between one heartbeat and the next, which is called the interbeat interval **(Aldo, 2014)**.

Galvanic skin response (GSR) analyses changes in the sweat gland activity of the skin when the vegetative nervous system is activated. It measures emotional arousal and can distinguish between real excitement and noise, but it is not able to distinguish between positive excitement and stress **(Púchovský and Kohoutová, 2015; HBR, 2020)**.

Aroma marketing

In this field, sensory marketing has an increasing role. It involves communication with consumers through sight, hearing, smell, touch, and taste to influence perceptions, judgments, and behaviors of consumers through their senses to create a pleasant environment, so that the customer increases the purchase time at a particular place **(Krishna, 2012; Jiménez-Marín, Bellido-Pérez and López-Cortés, 2019; Bilek, Vietoris and Ilko, 2016; Tauferova et al. 2015)**.

We can say that the nose is one of the most sensitive and emotional senses with a great ability to associate certain aromas with specific situations. Neuromarketing related studies affirm that 75% of our emotions experienced during the day are related to aromas, and humans can distinguish around 10,000 different aromas **(Bell, 2006; Minsky, Fahey and Fabrigas, 2018; Jiménez-Marín, 2016; Erenkol, 2015)**. They also strongly influence buying behavior. As several types of research indicate, while humans are only able to remember 50% of the things they have seen after three months, in the case of aromas it is up to 65% after one year **(Mukherjee, 2015)**. Thus, aroma marketing has big potential in marketing and can be utilized in the business environment and services.

Aroma marketing has still not been fully discovered yet, however, it can play an enormous role in supporting shopping processes and human behavior, since smell has an advantage over other senses, because it can stimulate human emotions immediately. Using aromas, marketers can create a connection with customers at a deeper emotional level and provide them an unforgettable experience.

The smell is one of our most primal and deeply rooted senses and it functions as our chemical alert system. With all other senses, the person thinks before he responds, but with aroma, the brain responds before humans think **(Vlahos, 2007; Aroma Marketing, 2020)**. The smell can create direct reactions to marketing stimuli as it is most closely related to emotional reactions. The smell is the only sense directly connected with the limbic system, which controls memory and emotions. Humans react emotionally to some aroma even before they can identify it. This has a subconscious effect on their behavior and consequently on a company. Customers affected by the nice smell in the store stay 44% time longer than they would without the pleasant aroma **(Conick, 2017)** and this significantly increases the impact of aroma marketing on the store's profit.

However, smell perception varies, and it involves many factors, including individual preferences. Therefore, the most important is to find those aromas that will attract as many potential consumers as possible **(Virkkunen, 2015)**. By this, aroma marketing becomes an essential part of marketing communication **(Sikela, 2015)**. According to the studies and above-mentioned knowledge, our smell is the strongest sense about memory, finding that we are 100 times more likely to remember something that we smell in comparison with something that we see, hear, or touch **(Vlahos, 2007)**. All senses evoke memories, but smell evokes more emotional ones **(Nadányiová, 2017)**. The positive results about the use of aroma in a business environment suggest "that customer satisfaction can be increased through thoughtful manipulation of ambient stimuli" **(Bradford and Desrochers, 2010)**.

Aroma marketing is more than just diffusing a pleasant aroma in a space. It is the art of combining the brand – a company identity with aroma, and thus highlighting the brand and ensuring that it is differentiated from the competition. It is not only about the induction of impulsive consumer shopping behavior, but also about the support of the company's image, as well as identification or recognizability of the communicated product, service, and company **(Füziková and Madleňák, 2017)**. The right application of aroma contributes in particular to a positive evaluation of the company by customers, to a better perception of the company's products and services, and to the fact that customers subconsciously tend to return to the companies that use aroma marketing **(ScentAir, 2020)**. Businesses thus often have their aroma – the so-called aroma logo – mixed following the overall image of the brand and its environment. When shopping, the customer does not think about the aroma, but if one comes to the store and smells it, they automatically remember the brand without seeing its logo. Aroma branding aims to create an immediate association with the brand when smelling it so that it expands brand recognition which can also attract new customers, but especially strengthen the brand image, increase customer satisfaction and sales, create a brand association, build a relationship with the brand, induce a positive perception of products, services, and staff, as well as extend the customer's time spent in the store and increase their spending patterns **(Spectrio, 2020; Air/Aroma, 2020; Berčík et al., 2016; Paluchová, Berčík and Neomániová, 2016; Cartwright, 2014)**.

Applying the right aroma also helps to improve the mood not only among customers but also among employees, and tends to make customers more generous **(Jurášková and Horňák, 2012)**. We agree that special emphasis should be placed on selecting the appropriate aroma because selecting one that does not suit the product/service or if its intensity is adjusted incorrectly, may have the opposite effect **(Bradford and Desrochers, 2010)**. Therefore, an important task for market specialists and store owners is to find the right aroma and the right intensity, and it is necessary to examine it before its implementation, to avoid these problems and mistakes **(Berčík et al., 2017)**.

Scientific hypothesis

To examine the use of neuroscience in aroma marketing of a selected service company, it is essential to examine the importance and potential of the use of neuromarketing in aroma marketing of restaurants/cafés. As we mentioned above, the use of aroma can significantly positively influence consumer behavior, increase the productivity of employees and, last but not least, create positive and long-term emotions associated with the brand. When entering any sales space, including a café, the first impression is very important. It decides on whether the customer will feel pleasant, thus the use of aromatization with a suitably selected scent is even more important.

The service company selected for our research was the Sport Café in Nitra, where we tested aroma marketing and its influence on the marketability of coffee as our selected product, and ultimately its effect on the economic indicators of the company using consumer neuroscience tools. For this purpose, we also set an assumption that when using aromatization, the sales of coffee are higher than without it, which we verified with our research.

MATERIAL AND METHODOLOGY

The research, originating from theoretical analysis, was focused on a selected service company and on examining aroma marketing through the use of consumer neuroscience tools as well as a questionnaire survey. The research was carried out in the laboratory and also in real conditions, at the Sport Café located in Nitra in the City Hall building. After testing in a laboratory, and the aroma was chosen for testing in real conditions, through which we verified the defined assumption that aromatization used in a selected café increases coffee sales.

For the research, the sales of coffee types were monitored in the selected company in February (between February 1, 2020, and February 14, 2020): in the morning, in the afternoon, and total for the whole day.

During this period, a target sample of 8 respondents visiting the café was selected. The test was carried out on this sample, aiming at deciding which aromas are suitable for the café, to select the most suitable one for the subsequent aromatization of the café space. The test was performed in the Laboratory of Consumer Studies at the Faculty of Economics and Management SUA in Nitra and the sample of respondents involved 4 men and 4 women.

During the testing in laboratory conditions, in addition to traditional feedback, unconscious feedback was also obtained by monitoring visible changes in mimic muscles and dilation of eye pupils using facial biometrics. We were

interested in the conscious and unconscious preferences of the respondents and their emotional responses. Therefore, laboratory testing was performed in two ways – conscious perceptions testing (through a questionnaire) and unconscious perceptions testing (through face reader):

- Conscious and unconscious testing of blind samples was carried out simultaneously. 7 types of coffee aromas were tested – 1. Coffee Pure, 2. Coffee and Cake, 3. Cappuccino Cocoa, 4. Sugared Almonds, 5. Cappuccino, 6. Cappuccino Amaretto, 7. Coffee House. After smelling the sample for at least 10 seconds, the respondents evaluated their conscious preference, which they expressed in an electronic questionnaire form.
- At the same time, their emotional feedback was monitored through a facial biometric tool – it was the testing of unconscious (implicit) reactions using a face-reading device. Respondents sat behind the table and while testing each aroma, they were looking into the camera that captured and evaluated their unconscious reactions using automated software, based on their facial expressions (see Figure 1).

Subsequently, we carried out the testing in real conditions, when based on the results obtained from laboratory testing, we aromatized the space of the café for 2 weeks, from February 29, 2020, to March 13, 2020. Based on laboratory tests, the Coffee House aroma was used for aromatization. We placed the aroma streamer device in the café, away from the door and the ventilation. Using the Reima mobile app, we connected to the device via Bluetooth and set the aroma release interval and its intensity.

After testing, we processed the results of coffee sales during aromatization and compared them with the research period before aromatization. After evaluating the results, we formulated conclusions and recommendations for practice.

Emotional feedback was monitored using the somatic biometric method Facereader 7 from the Dutch company Noldus, which identifies the emotional feedback (valence, excitement) of the respondents with maximum accuracy based on observable changes in mimic muscles and recognizes basic micro-emotions (happy, sad, angry, disgusted, surprised, neutral).

During the test, it was also necessary to check the air quality in the room, which was monitored by the Air Quality data logger device, which enables the real-time display of values of basic air quality parameters such as CO_2, temperature, humidity, volatile substances VOC, and dust particles.

Statistical analysis

The data obtained from the measurements were synchronized and correlated in Observer XT 10 by Noldus. This program allows to synchronize structured and unstructured data from different devices and at the same time to create their variables during the implementation of experiments. Processing was carried out in the Matlab R2019a and Microsoft Excel 2010 program environments.

Descriptive and inductive statistic methods were used to process the primary data. As part of inductive statistics, we used the Mann-Whitney U test (one-sided) to verify our hypothesis. It is a test of the agreement of two mean values for independent files (parametric equivalent).

RESULTS AND DISCUSSION

Aromas can create lasting memories, eliminate stress, and support the creation of emotions. Thanks to an appropriately chosen aroma in the store, the seller can influence the behavior of customers, who then can evaluate the company more positively, tend to subconsciously return to these spaces, perceive the higher quality of products and spend more time there. Hence, we focused our research on verifying the assumption that the aroma implemented within the store will increase coffee sales. Our research about the use of consumer neuroscience in aroma marketing of a service company was carried out first in the laboratory and subsequently in real conditions.

In the laboratory, we tested the conscious and unconscious reactions of the eight chosen respondents (who are visitors of the café) to the 7 selected aromas associated with coffee. The first part of the testing consisted of a conscious response to the tested aromas while completing a questionnaire. The results here showed that respondents liked Aroma 7 (Coffee House) the most (see Figure 2).

In the second part of the laboratory testing, the unconscious reactions of the respondents to the choice of aromas were examined and recorded using the Facereader device, where we found out that our respondents perceived Aroma 5 (Cappuccino), the most positively. The most negatively perceived aroma here was Aroma 7 (Coffee House), as seen in Figure 3.

During the test, we were checking the air quality in the room using the Air Quality data logger device. We focused primarily on CO_2 concentration, as it can affect human preferences the fastest. Attributes should be up to the CO_2 level of 700ppm (see Figure 4).

Based on the results of laboratory testing, we placed an aromatizing unit directly in the selected café. However, the results from laboratory testing were contradictory. The Coffee House aroma was perceived most positively during conscious testing, but it was also evaluated most negatively by unconscious testing. There can be several reasons for this. One option is that the aroma was too intense, which had an immediate strong effect on the olfactory organ and the facial expression could therefore seem negative. But ultimately, it had a positive effect on the smell. It is not always possible to obtain an explicit result when examining unconscious feedback, as the process may be affected and distorted by various side factors. In real conditions, we, therefore, decided to deploy and test the Coffee House aroma that was most positively evaluated in conscious testing and this was implemented in the Sport Café. For the aromatization, we used the aroma streamer unit placed in the company. Using Bluetooth, the aroma release interval was set on the device, which was daily from 11:00 to 20:00, and the intensity was set at level 7.

We then compared the coffee sales before the aromatization with the sales of coffee during the aromatization. The results are presented in Table 1 and Table 2, which contain the date of recording, the number of coffees sold in the morning and the afternoon, and then the total sum of coffees sold. The types of sold coffees were: 1. Turkish coffee; 2. Espresso, 3. Decaffeinated coffee; 4. Viennese coffee; 5. Latte Macchiato; 6. Cappuccino; 7. Iced coffee.

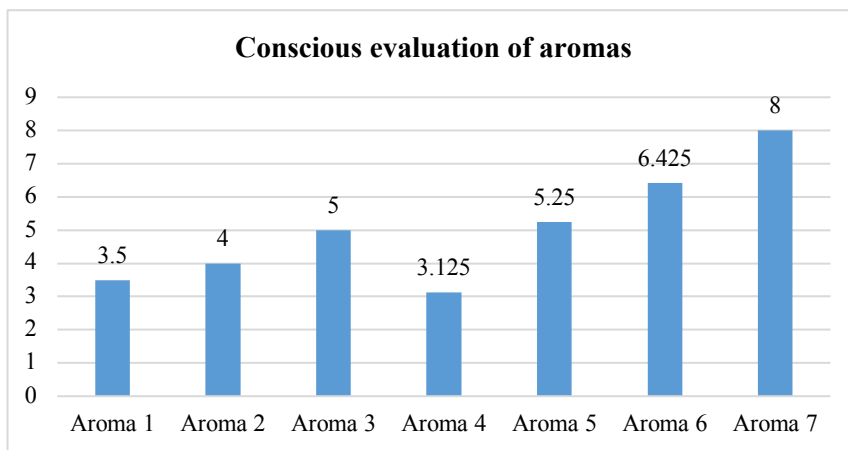**Figure 1** Testing in laboratory conditions. Note: Source: Own evaluation, 2020.

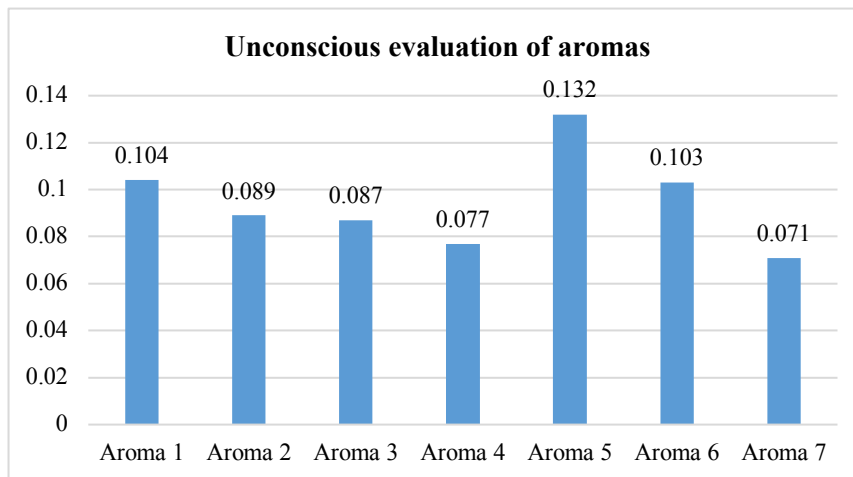**Figure 2** Conscious evaluation of aromas. Note: Source: Own evaluation, 2020.

Figure 3 Unconscious (implicit) evaluation of aromas. Note: Source: Own evaluation, 2020.
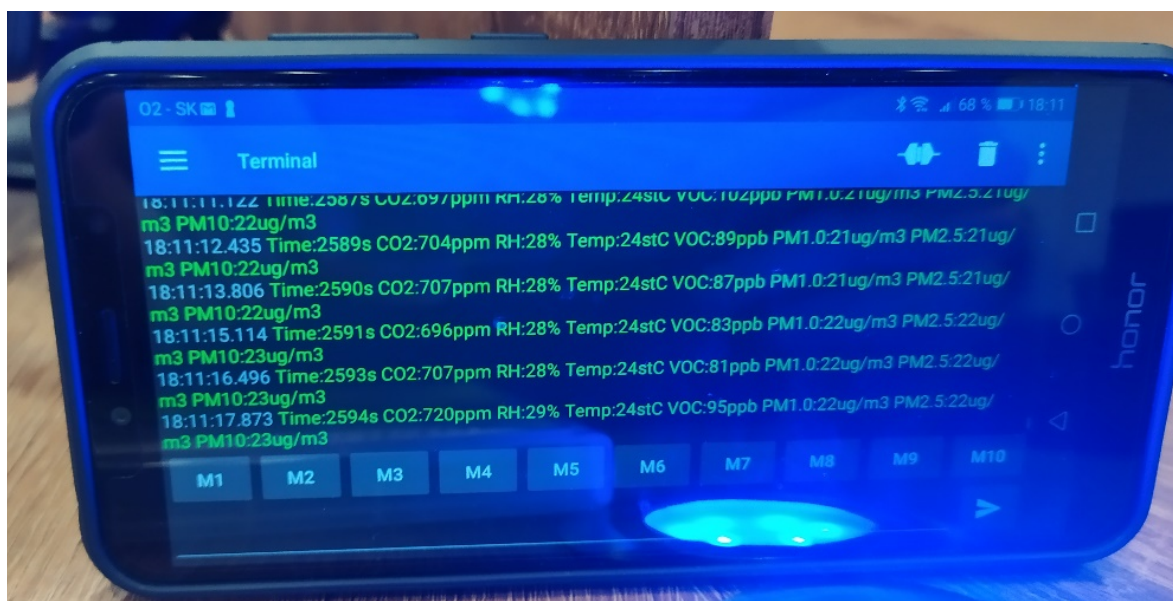
Figure 4 Air quality measurement. Note: Source: Own evaluation, 2020.

Table 1 Number of coffees sold in the period without aromatization.

Date	Morning							Afternoon							SUM
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
1.2. SAT	0	4	2	1	3	6	0	0	4	1	0	2	4	0	27
2.2. SUN	1	3	0	2	3	4	0	0	2	1	0	1	3	0	20
3.2. MON	0	2	0	1	0	3	0	0	2	0	0	0	2	0	10
4.2. TUE	1	2	0	2	1	3	0	1	1	0	0	0	1	0	12
5.2. WED	0	3	0	2	1	4	0	0	1	0	1	0	2	0	14
6.2. THU	0	4	0	2	0	4	0	0	1	0	0	1	3	0	15
7.2. FRI	0	3	0	1	1	4	0	1	1	0	1	1	2	0	15
8.2. SAT	0	5	0	2	3	6	0	0	4	0	2	2	6	0	30
9.2. SUN	0	5	0	1	1	5	1	0	3	0	2	1	3	0	22
10.2. MON	0	3	0	1	1	4	0	0	1	0	0	0	2	0	12
11.2. TUE	0	2	0	2	2	2	0	0	2	0	0	0	2	0	12
12.2. WED	2	3	0	0	1	3	0	0	2	1	0	0	2	0	14
13.2. THU	2	3	1	0	0	2	0	0	2	1	0	1	2	1	15
14.2. FRI	2	5	1	0	0	6	0	0	2	0	0	1	3	2	22
SUM	8	47	4	17	17	56	1	2	28	4	6	10	37	3	240

Note: Source: Own evaluation, 2020.

Table 2 Number of coffees sold in the period with aromatization.

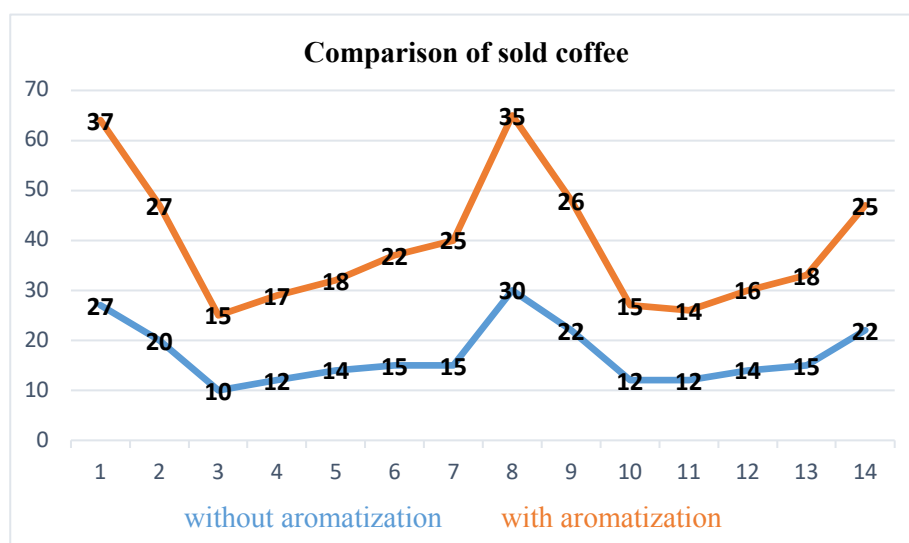| Date	Morning							Afternoon							SUM
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
29.2. SAT	2	5	2	1	3	7	0	2	5	1	1	2	6	0	37
1.3. SUN	1	3	0	2	4	5	0	0	3	2	1	1	5	0	27
2.3. MON	1	3	0	1	0	5	0	1	2	0	0	0	2	0	15
3.3. TUE	2	3	0	2	1	4	0	1	2	0	0	0	2	0	17
4.3. WED	1	3	0	2	1	5	0	1	2	0	1	0	2	0	18
5.3. THU	0	4	0	2	2	4	0	1	3	0	0	1	5	0	22
6.3. FRI	2	4	0	1	1	6	0	2	3	0	1	1	4	0	25
7.3. SAT	2	6	0	3	3	6	0	1	4	0	2	2	6	0	35
8.3. SUN	0	5	0	2	2	5	1	1	3	0	2	2	3	0	26
9.3. MON	2	3	0	1	1	4	0	0	1	0	0	0	3	0	15
10.3. TUE	0	3	0	2	2	3	0	0	2	0	0	0	2	0	14
11.3. WED	2	3	0	0	1	5	0	0	2	1	0	0	2	0	16
12.3. THU	2	3	1	0	0	4	0	0	2	1	0	1	3	1	18
13.3. FRI	2	5	1	2	0	6	0	0	2	0	0	1	4	2	25
SUM	19	53	4	21	21	69	1	10	36	5	8	11	49	3	310

Note: Source: Own evaluation, 2020.

Figure 5 Comparison of sold coffee. Note: Source: Own evaluation, 2020.

In the 2 weeks before aromatization (February 1, 2020 – February 14, 2020), 240 coffees were sold in the café, from these 150 in the morning and 90 in the afternoon. Cappuccino and Espresso were sold the most, while iced coffee was sold the least – the reason might have been the season – as well as Decaffeinated coffee since it is a specific product, which customers do not seek very much in Slovakia (see Table 1).

During the 2 weeks of aromatization of the Sport Café with the Coffee House aroma (from February 29, 2020, to March 13, 2020), we recorded an increase in coffee sales by approximately 30%. Sales increased by 70 coffees, with the total number of coffees sold in this period being 310. Most coffees (188) were sold in the morning and 122 in the afternoon. The cappuccino was sold the most, then Espresso, while sales of Turkish coffee increased too (see Table 2). For a better presentation and comparison of sales, we summarized the results in Figure 5.

During our research, we successfully verified the stated assumption using a Mann-Whitney test – one-tailed (p-value of 0.015 is less than alpha 0.05, we reject A0 and accept A1), so when using aromatization, the sales of coffee were higher than without it.

Examining consumer behavior is of great interest in many research and studies in various fields, focused mostly on the goal to make the products more attractive to the consumers (see, for example, **Karmarkar, 2011; Miljković and Alčaković, 2010; Kozelová et al., 2013; Kozelová et al., 2011**). Many studies and research are focused on food and drinks where a wide range of attributes are being examined (**Vietoris et al., 2016; Zinina et al., 2019; Zajác et al., 2015**).

There are also many studies focusing on the effect of aromas on consumer behavior (see, for example, **Conick, 2017; Virkkunen, 2015; Bradford and Desrochers, 2010; Berčík et al., 2017**) and several are aimed at service companies that have similar results confirming the increase of product sales after using aromatization. There was, for example, a study carried out in a restaurant where the lavender aroma was diffused and compared to a no-aroma controlled condition. Results showed that lavender caused customers to stay longer and increased the amount of purchasing since it seemed to relax people. When relaxing, the customers ordered additional items and thus increased the amount spent (**Guéguen and Petr, 2006**). Another study was done, for example, in the Brooklyn food market NetCost which aromatized delicious smells through their aisles. After coordinating the scents with store sections, such as putting rosemary close to freshly baked bread, they saw at least a 7% sales increase. Since smell extends appetite past normal boundaries, customers were more likely to spend money (**Pulido, 2019**). Also, according to Swedish researchers, good smells can heighten the will to buy, for example, coffee or sweet rolls. In their research in front of the Stockholm café using Eyetracker (see also, **Wästlund, et al., 2010**), those participants who were exposed to the smell of chocolate chip cookies were 40% more likely to buy something in the café compared to the participants who were not exposed to the aroma. According to these researchers, café-related scents increased the intention to buy something (**Shams, 2013**). Participants who were exposed to the aroma were more willing to buy also other café products (**Shams, 2013; Stranden, 2016**).

In summary, we can conclude that our study has some limitations. Only one café was examined, and the sample of customers tested was small, and there were contradictory results from laboratory testing. However, given the theoretical research that showed the effect of aromas on customers' purchasing behavior, according to the results of this study and other similar researches, we can confirm that it is beneficial for cafés and other service companies to aromatize their spaces to influence their customers and increase their expenditures. We agree with the statement, that profit is the driving factor behind marketing decisions for cafés, restaurants as well as other businesses, and manipulating aromas can be an attractive financial move as the right smell can encourage consumers to buy more than they usually would (**Pulido, 2019**).

CONCLUSION

Based on our research, we can state that the use of aroma marketing and the implementation of aromatization in a business space has great potential in the context of a positive impact on economic indicators of the company, including services companies. At the same time, the use of various consumer neuroscience tools is important for the deployment and application of aroma marketing in such companies, which can significantly help in selecting a suitable aroma, it's diffusing and setting the intensity of aromatization. Since smell is associated to a large extent with the reactions of the subconsciousness, it may differ from the conscious one, without being perceived. Therefore, it is necessary to supplement it with testing conscious reactions, to carry out several tests, and use different methods and tools for the correct implementation of aroma marketing and aromatization, to select the most suitable aroma and to achieve the greatest possible positive impact on customers.

Based on the results of our research on the use of consumer neuroscience in aroma marketing of a service company and on examining the coffee sales during the application of aroma marketing in the selected café, we conclude by formulating several proposals and recommendations that we believe could help positively increase economic indicators.

We recommend implementing aroma marketing permanently, as the aromatization of the space has contributed to increased coffee sales, confirmed by sales numbers and the statistical test. It is also a space for creating aroma branding, an opportunity to change the customer perception of the café, attract new and retain old customers using a pleasant aroma. Deploying a coffee aroma in a selected company significantly improved the economic indicators when coffee sales increased by approximately 30%. Although the costs of aromatization are not negligible, even after their implementation, the company's sales would be higher than without aromatization, based on the calculated expected financial inputs. Revenues from sold coffee in the examined period without aromatization were calculated as 480 euros per 2 weeks, while in the period of aromatization it was 620 euros per 2 weeks (according to the set prices of the company´s menu). The difference, in this case, is 140 euros more per 2 weeks. The monthly cost of an aroma is approximately 60 euros and the rent of the aromatizing unit is 20 euros, meaning the business would still be more profitable. Certainly, this can also mean that

sales will gradually increase even more in the longer period, and aromatization will attract more new customers, so we assume that economic indicators would change even more positively. Therefore, we recommend the selected company, as well as service companies in general, to aromatize their spaces, but it is necessary to expose the choice of aroma to proper in-depth testing.

We also propose including seasonal products in the menu, such as Pumpkin Latté in autumn, since adapting aromatization to this can also help to improve the economic indicators of the company. This could attract more customers and bring the company something new that differentiates it from at least part of the competition. The cost of preparing 1 Pumpkin Latte would be 1 EUR since it only requires pumpkin puree, spices, and one cup of espresso. The company could sell it for 2.50 EUR, as it would be a new and seasonal product. The price is set based on the competition that sells similar types of special coffees in Nitra.

Coffee sales could also be increased by including cakes into the menu, e.g. a cheesecake which would revive the company's range. It would be advisable to start with one or two cakes first (to offer some options due to food allergies, etc.), to find out if customers are interested in this type of product. The main purpose of selling cakes would be to increase sales of coffee (cross-selling). The costs involved are related to procuring the cake(s) and transport. Cake from Babičkina cukráreň company in Nitra with regular intake would cost 22 euros for 12 pieces, which is 1.80 euros per piece. Sport Café could sell a piece for 2.5 euros, which would make a profit of 0.70 cents per piece. The types of cakes could be selected based on a specific season and the final impression would be enhanced by the seasonally set aromatization.

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