Nudging Technique In Retail: Increasing Consumer Consumption

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ABSTRACT

Changes in consumer behaviour, coupled with shifting purchasing habits, have led to a new setting, one in which the retailers are seeking novel means of keeping potential consumers inside their stores for the maximum duration possible. This prolonged time span contributes to the increased frequency of impulsive actions, thus resulting in greater customer spending. Impulsive buyers are the most crucial target audience for retailers, for they are purely driven by emotion, making decisions without prior preparation or information gathering. Through the grasp of psychological science, behavioural and cognitive functioning, it is possible to discern the factors that make specific retailers and their stores more appealing than others. The main purpose of this paper is to point out a relatively new concept and a technique, called “nudging”, and to showcase the methods of gaining new customers through its utilisation within the Croatian retail market. The nudging technique is not a forceful one, opting to employ imperceptible and subtle means, such as playing certain music, utilising carefully selected scents, colours and lighting within the store, which all serve to improve consumer perception and satisfaction. The retailer can stand out from the competition, precisely by using nudging, which intertwines sensory perception and other psychological factors, incorporating them in the overall store design. For this particular purpose, a survey was conducted among Croatian customers, which examined the presence of specific nudging techniques in retail, as well as their effects on the consumer behaviour. The research results concluded that the Croatian retailers do indeed utilise some nudging techniques which, although perceived by their customers are ultimately left unaware of the impact they have on their respective decision-making process and behaviour.

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1. Introduction

The fact that human behaviour is quite interesting, unpredictable, highly individualistic, and at times seemingly mysterious and unfathomable represents a challenge for researchers; scientists, psychologists, anthropologists and others, motivating them to continuously study, analyse and discover new insights into the thought processes of people, consumers included (Milić, 2018, 64). It has been proven that behind every human action and decision there is an underlying impetus (Thaler and Sunstein, 2008, 84). The goal of retailers and the very purpose of their existence shows itself to be largely in attaining the highest possible income, and in order to achieve this, they, on a daily basis,
face a specific target audience and competition environment (Kovačević, 2003, 84). By introducing psychological incentives, i.e. nudging, into their business practices, the retailers manage to stand out from the competition, entering the struggle of gaining as many customers as possible. Consumers are unaware that specific information, concerning their environment, impacts their behaviour (Kopić, et al, 2013, 31), and if awareness does exist, they allow emotions to prevail and are thus guided by them (Milas, 2007, 11). In other words, consumers unknowingly reach a purchasing decision when nudged, encouraged by the retailers. The aim of this paper is to examine a relatively new concept and technique, called “nudging” and to present the examples of the most effective incentives, applicable within the global business environment, as well as to showcase the guidelines for their proper selection, in accordance with both the target audience’s needs and the characteristics endemic to a particular retail business branch. Therefore, the paper starts with the conceptual definition of nudging, as supported by the previous research findings (Kahenman, Slovic and Tversky, 1982, 48-68), as well as the introductions of relevant sections of behavioural and cognitive psychology, without which consumer behaviour would prove to be incomprehensible. Due to the constant shifts within the retail business, namely the changes originated by retailers and consumers alike, the emphasis is on the stores’ numerous characteristics - the colour, scent, music employed and lighting utilised within the store – all the factors gathered via a questionnaire, with the ultimate goal of determining the prevalence of nudging practices in Croatia, and thus establishing the level of both the retail market’s improvement and the current developmental stage. In conclusion, the thesis of the paper is presented, along with its limitations and future research suggestions.

1. Literature overview

Thaler and Sunstein (2008, 6) define the concept of ‘nudging’ as any aspect of the choice architecture system that modifies people’s behaviour in a predictable way, without prohibiting any options (decisions) or resulting in significant changes of the economic incentives. The concept of nudging, behaviourism, and cognitive psychology are all closely intertwined. Behavioural economics, among other things, deals with the study of human economic behaviour and the means of their modification (Cartwright, 2011, 3-4), while cognitive psychology is a science that studies human mental processes, exploring learning strategies and perception (Sternberg, 2005, 2). Behavioural theory shows that emotions and various other factors influence the people’s decision making processes, causing them to behave in unpredictable and irrational ways (Lukavac and Zelić, 2018, 4). The central nervous system exhibits several distinct characteristics, preferring: a) novelties; b) straight, sharp lines and angles; c) patterns occurring in nature; as well as, d) it prioritises the sense of sight above all others (Pradeep, 2010). Moreover, there exists numerous scientific findings with regard to impulsive shopping, dealing with both its scope and importance (Mihić and Kursan, 2010; Kesić, 2006; Tendai and Chinpuza, 2009). An impulsive reaction is an uncontrolled, sudden, temperamental, customers’ response to a challenge or unexpected influx of information. Rook and Hock (1985, 23-27) identified five distinct characteristics that differentiate impulsive and non-impulsive purchasing, namely a) a feeling of sudden and spontaneous desire to act; b) temporary loss of control; c) psychological conflict and struggle; d) reduced ability of cognitive assessment; e) spending, regardless of the consequences. The research shows that women are more impulsive when buying symbolic goods and items with which they can express their own character, while men exhibit impulsive purchasing patterns when acquiring leisure products, thus showcasing their activities and independence (Mihić and Kursan, 2010, 7-28). Tendai and Chinpuza (2010, 102-108) point out the following characteristics of the sales premises - image, interior, lighting, music, colour, sales staff, furniture arrangement in the store, cleanliness, temperature – as the key factors influencing psychological motivation. The colour of the store represents an important marketing tool, one with a significant impact on the consumer purchasing behaviour, so much so that this sole factor is responsible for 85% of all the purchases done (Kumar,
According to Pavlek (2004, 82), through the effective use of fragrances, companies have the opportunity to connect with customers on an emotional level - to set the mood, promote the products, or position the brand. Research shows that the use of “strategic fragrances” results in consumers staying in stores longer, buying more, and leaving with a better impression of the quality of both the services and products (Bridges, Fowler, 2020, 151). Music affects the physiological functioning of an individual. It guides the rhythm of a person’s breathing, affects muscle tension, blood pressure and motor functions. Stimulating music raises the excitation levels, while soothing and quiet music encourages relaxation (ZAMP, 2003, 2). Another study showed that slower and softer music has a positive effect on the trader's income, as consumers tend to stay longer and buy more (Ivanov, 2012). Lighting is an extremely important determinant within the shopping environment. It helps the potential consumer to spot the product and increases the customer’s time spent within the store, with the intense, directional lighting strongly recommended for the sales area, for it facilitates impulsive shopping (Charles, David, 1994, 117-125). In addition to the aforementioned psychological incentives, other means of motivating purchasing behaviour in customers can be found in the literature, such as directing the customers to the product, utilising the arrows placed on the floor, positioning the products in the consumer’s path, placing the small products next to the cash register, placing the shopping baskets in the middle of the store, featuring the last-minute sales, placing the items with a low rate of sales next to the store’s entrance, or the selection of a more varied offer (Parmar, 2018; Mulholland, 2019; Thaler, Sunstein, 2008; Docrat, 2007, 64-67).

2. Factors of retail space design, as a means of creating psychological motivators

The influence of situational factors on consumer purchasing decision-making has been extensively investigated in the recent years, with the confirmation of existing situational and non-situational factors influencing the purchasing decision (Zhuang et al., 2005, 18). According to Belko (1975 in Kesić 2006, 11) there are 5 variable segments that can be regarded as situational factors: a) physical environment; b) social environment; c) time of purchase; d) a goal-driven consumer behaviour; e) current mental state. In the following chapters, the paper focuses on the store’s physical environment, which encompasses the geographical area, decoration, sounds/music, lighting, scents, signs, design, product layout, colours, etc. (Kesić, 2006,13).

2.1. Colour

The colour red improves the viewer's mood, has a profound excitation effect and speeds up the heart rate (Cherry, 2020). That is precisely the reason why it is most often utilised during discounts and promotions; at a period when the retailers need to highlight promotions and attract consumers to the store (Khan, 2018). According to M. Reynolds (2019) both yellow and orange have a stimulating effect, engendering happiness and joy, and are, simultaneously - quite noticeable. The dominant yellow colour palette is suitable for stores selling toys, children's equipment, etc. Orange is an appetite-enhancing colour, so it is convenient in restaurants and food stores. The green colour relaxes people, soothes and engenders a sense of tranquillity. This colour is useful for shops that sell flowers, as well as the healthy food stores, pharmacies, or when environmental protection needs have to be accentuated (Burst, 2014). According to Ferreira (2019), blue is the colour of serenity, it has a calming effect on the human body, in essence, it is the red’s opposite, it is passive and encourages concentration. It is recommended for it to be used in financial agencies, banks and insurance companies, for it binds the buyer and the trader with a sense of trust. White is the colour of purity, freshness and the new beginnings; as such, it is used in children’s supplies stores, retro stores and galleries (Mouton-Brissse, 2018). When it comes to men, they most often prefer blue, green, and black, while women most often prefer blue, purple and green (Burst, 2014).
2.2. Scent

Ivory and spice scent notes may indicate prosperity, as well as luxury. Floral notes and vanilla scent work best in the women’s clothing stores, while rustic, woody scents work well in men’s clothing stores (Air Scent, 2019). Research has found that the lavender scent can reduce the symptoms of depression and anxiety and increase inspiration. For all its benefits, though, it also has a side-effect of reducing attention (Inside Retail, 2019). The clean, fresh and soft scent of cotton is coveted by the clothing retailers, for it enhances the natural scent of new clothes (Ambius, 2015). Earthy and vibrant, the scent of white pine and birch encapsulates the essence of winter and the joy of Christmas (Spangenberg, Grohmann, & Sprott, 2005, 3). Specialty food and kitchenware stores particularly utilise the scents of vanilla, nutmeg, honey, caramel, coffee, and chocolate, because of their powerful connection to food and the ability to create a pleasant environment (Peterson, 2014).

2.3. Music

Ramsey & Ramsey (2010) and Rubright (2016) advise that, when choosing music in retail, it is important to: a) play music that is legal; b) match the music with the brand; c) not to play the music according to one’s own preferences and tastes; d) maintain a balance with a variety of songs; e) make the most of the sound system present (by reproducing the advertising messages, information regarding sales, promotions, etc.). Finding the best background music for a retail store isn’t just about choosing the right songs; it’s also about choosing music with the right tempo, volume, genre and messaging.

2.4. Lighting

Experimental research shows out that the cool lighting colours within stores are preferable to the warm ones (Soomro, Kaimkhani, Iqbal, 2017, 24). There exist three distinct types of lighting conditions, a uniform, ambient and accent lighting (Ufford, 2017). Levison (2020) points out that dim lighting encourages impulsive behaviour, making the customer more likely to exhibit creativeness. It is advisable to utilise it in the dessert sections, top restaurants, luxury stores, creative spaces and return counters. A bright lighting will contribute to the purchase of practical products, which are purchased carefully, under the influence of other customers. It can be used in health food stores or departments, restaurants, stores specializing in home and space decoration, offices, etc.

3. Research methodology

Due to the fact that the concept of nudging is still insufficiently researched within this particular geographic area, a survey was conducted, in the period ranging from the 3rd of September, 2020, to the 18th of September, 2020, with the aim of establishing the extent of technique utilisation by the retailers, as well as determining the overall familiarity level of Croatian customers with regard to it. The survey included 113 respondents/consumers. In order to reach the target segment of respondents, the survey was sent to various differing geographical locations, to people who varied in both age and gender, with the ultimate goal of assuring an unbiased sample, one capable of representing the entire population of Croatia.

The survey was created utilising Google Forms and included 12 questions, of which 4 dealt with the respondents’ demographic characteristics, while the other 8 dealt with the nudging practices in retail. All the questions were multiple choice questions, with the respondents required to provide the answers to all of them. Indeed, the replies, obtained from all the subjects were full and complete. The survey was chosen as the most feasible means of conducting this particular research, because merely utilizing the observational methods could not yield the subject’s responses and guarantee feedback on the store characteristics, such as volume, lighting, or the colors employed, particularly due to the fact that certain store elements would invariably result in people vacating the store area. The survey was
distributed via selected social networks (Facebook, Instagram, WhatsApp, Viber), utilising the snowball sampling technique.

Table 1. Demographic characteristics of the respondents

<table>
<thead>
<tr>
<th>Sex</th>
<th>Male</th>
<th>33.6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>66.4%</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0-20</td>
<td>4.4%</td>
</tr>
<tr>
<td></td>
<td>21-40</td>
<td>72.6%</td>
</tr>
<tr>
<td></td>
<td>41-60</td>
<td>20.4%</td>
</tr>
<tr>
<td></td>
<td>61+</td>
<td>2.7%</td>
</tr>
<tr>
<td>Employment status</td>
<td>High schooler</td>
<td>4.4%</td>
</tr>
<tr>
<td></td>
<td>College / university student</td>
<td>28.3%</td>
</tr>
<tr>
<td></td>
<td>Employed</td>
<td>62.8%</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>0.9%</td>
</tr>
<tr>
<td></td>
<td>Retired</td>
<td>3.5%</td>
</tr>
<tr>
<td>Monthly income</td>
<td>Up to 3000 kn</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>3001 – 5000 kn</td>
<td>18.6%</td>
</tr>
<tr>
<td></td>
<td>5001 – 8000 kn</td>
<td>33.6%</td>
</tr>
<tr>
<td></td>
<td>More than 8000 kn</td>
<td>19.5%</td>
</tr>
<tr>
<td></td>
<td>No income of their own</td>
<td>13.3%</td>
</tr>
</tbody>
</table>

*Source: authors*

Table 1 showcases the demographic characteristics of the 113 respondents, who participated in the survey. The respondents are predominately female (66.4%), between 21 and 40 years of age (72.6%), employed (62.8%) and with a monthly income ranging from 5001.00 to 8000.00 kn (33.6%).

4. Research results and discussion

Table 2 showcases the music which, while shopping, elicits the highest degree of enjoyment for the various age groups. There is a noticeable high percentage of preference for quieter music, of a slower rhythm, for all the age groups surveyed. 40% of the respondents within the age range of up to 20 years, preferred quieter music, of a slower rhythm. This type of music was also preferred by those within the age range between 21 to 40 years (42.68%), between 41 and 60 years it was 73.91% and for those older than 61, 67% preferred quieter music, of a slower rhythm. These results confirmed the previous findings, which concluded that customers stay longer and purchase more within a store utilising a slower, quieter music (Ivanov, 2012).

Table 2. Respondents’ preferences regarding the rhythm and volume of music within the retail space, with regard to their age

<table>
<thead>
<tr>
<th></th>
<th>0-20</th>
<th>21-40</th>
<th>41-60</th>
<th>61+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loud music, increased tempo</td>
<td>40.00%</td>
<td>15.85%</td>
<td></td>
<td></td>
<td>13.27%</td>
</tr>
<tr>
<td>Depending on my mood</td>
<td>36.59%</td>
<td>17.39%</td>
<td>33.33%</td>
<td></td>
<td>30.97%</td>
</tr>
<tr>
<td>Quieter music, lower tempo</td>
<td>40.00%</td>
<td>42.68%</td>
<td>73.91%</td>
<td>66.67%</td>
<td>49.56%</td>
</tr>
<tr>
<td>I prefer the silence within the store</td>
<td>20.00%</td>
<td>4.88%</td>
<td>8.70%</td>
<td></td>
<td>6.19%</td>
</tr>
</tbody>
</table>

*Source: authors*

Table 3 showcases the respondents’ choices with regard to the visual characteristics of the retail spaces. The highest percentage of respondents, 41.59%, opted for decorating the store utilising warm
colours (shades of red, orange, yellow and light green). It is interesting to note that the results of this survey do not confirm the previous research results of females preferring blue, purple and green (cold colours), nor that the males prefer blue, black and green (Burst, 2014), since a percentage of 31.58% indicates that males also prefer warm colours. Additionally, the percentages between people preferring warm colours (41.59%) clashes with the reported 28.32% of people who espouse not caring / not paying attention to retail décor coloring. This essentially confirms the fact that consumers are unaware of the nudging effects. Nevertheless, the research has confirmed that warm colours encourage action and it is therefore desirable to use them in conventional stores, for the respondents tend to feel more comfortable in those particular settings.

**Table 3.** Retail decor as a respondent's preference, with regard to sex

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Utilising cold colours</strong></td>
<td>21.05%</td>
<td>28.00%</td>
<td>25.66%</td>
</tr>
<tr>
<td><em>I don't care and I don't pay attention to that</em></td>
<td>36.84%</td>
<td>24.00%</td>
<td><strong>28.32%</strong></td>
</tr>
<tr>
<td><strong>Colorful tones</strong></td>
<td>10.53%</td>
<td>1.33%</td>
<td>4.42%</td>
</tr>
<tr>
<td><strong>Utilising warm colours</strong></td>
<td><strong>31.58%</strong></td>
<td><strong>46.67%</strong></td>
<td><strong>41.59%</strong></td>
</tr>
<tr>
<td>Total</td>
<td>100.00%</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

*Source: authors*

Table 3 showcases the respondents’ choices, with regard to the lighting characteristics. Most respondents, 46.9%, prefer uniform and strong lighting, followed by an option of dim lighting, with the products accentuated (38.9%), while 14.2% of the respondents report not paying attention to the lighting within the retail space. These results did not confirm previous research findings, which found that ambient lighting; dimmed lighting, with the products accentuated, has the greatest positive effect on the retailers’ profits (Levison, 2020). Nevertheless, the majority of respondents (76.11%) expressed a willingness to remain in the store and browse, despite the unsatisfactory lighting conditions.

**Table 4.** Respondents' reactions to the intensity and characteristics of lighting within the retail space

<table>
<thead>
<tr>
<th>The store lighting is too bright or too dark, what will I do?</th>
<th>I'll vacate the store</th>
<th>I'll remain in the store and browse</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strong and uniform lighting</strong></td>
<td>14,16%</td>
<td>32,74%</td>
<td><strong>46,90%</strong></td>
</tr>
<tr>
<td><em>I don't pay attention to the lighting inside the store</em></td>
<td>0,0%</td>
<td>14,16%</td>
<td><strong>14,16%</strong></td>
</tr>
<tr>
<td><strong>Dim lighting, with the products accentuated</strong></td>
<td>9,73%</td>
<td>29,20%</td>
<td><strong>38,94%</strong></td>
</tr>
<tr>
<td>Total</td>
<td><strong>23,89%</strong></td>
<td><strong>76,11%</strong></td>
<td><strong>100,00%</strong></td>
</tr>
</tbody>
</table>

*Source: authors*

With the next survey question, the respondent decides between remaining in the store or vacating the premises, with regard to the specific circumstances. Graph 5 shows both the respondents’ preference and behaviour, within the context of a particular situation. One notes that, while inadequate music can be ignored, with the customer continuing with the shopping experience, the situation regarding smell is quite the opposite (out of the 113 respondents, 88 will leave the store if the smell is repulsive). With regard to inadequate lighting and colours utilised, the customer will remain in the store and continue
browsing. However, this does not mean that purchasing behaviour will occur. The respondents’ answers to all of the questions accentuate the dire need for careful retail space design, one with the aim of avoiding the unfavourable outcome of the customer vacating the store.

Graph 1. The survey results: the behaviour of respondents in a particular situation

![Graph showing respondents' actions with regard to store conditions]

Source: authors

5. Conclusion

Since the world and the people in it are continuously changing, this will impact both their shopping habits, as well as, the retailers they come in contact with. Marketers should utilise a variety of methods in order to bring the product as close to the consumers’ focus as possible. All the methods discussed in this paper, from the carts used, the store characteristics employed, to the various promotional efforts, are aimed at accomplishing the goal of increasing the retailers’ revenue. The aim of this study was to examine the utilisation level of the psychological incentives employed by the retailer, to determine the extent to which the consumers are aware of them, and establish the overall impact they have on the consumer. The survey, conducted among Croatian consumers, showed that consumers do notice the presence of nudging techniques employed, but remain unaware as how they influence their purchasing decisions and behaviour. Croatian consumers prefer warm colours utilised within a retail environment, a uniform lighting and quiet music, of slower rhythm, played (which proved to be effective regardless of the customer’s age). An important factor is the use of fragrances, for it has been shown that the Croatian customers are extremely sensitive to them, unwilling to give a second chance to a retailer whose store has deemed to smell unpleasantly. A repulsive odour drives the consumers out of the store, thus leading to a reduced time spent inside the sales area, which is in stark contrast to the retailers’ goals. Nudging techniques are extremely impactful for the Croatia’s retail market, but the characteristics of this particular business still showcases great growth, development and research potential.

The paper further examines the relatively new methods of gaining customers and the means and strategies aimed at extending the duration consumers spend within a particular store. However, although the study gathered useful insights on Croatian consumers’ preferences with regard to retail space characteristics, there also exist certain limitations that must be taken into account when attempting future research. Firstly, the sampling method used can be improved upon. The study was conducted with 113 respondents, with the percentage of male and female respondents being unequal,
75 women and 38 men, which may have affected the data collected. Also, using a sample larger than the 113 respondents surveyed could yield in different results. Secondly, the research was not conducted in a specific store environment and therefore, it might have been difficult for the respondents to imagine themselves within a specific retail space, characterised by certain music, colours, lighting and smell, thus indicating at the possibility of obtaining different data if the research was to be conducted within a laboratory or an on-site retail store.

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