Customer manipulation during grocery shopping

Eva Kalinová¹, Adéla Vilímková²

¹University of Žilina, Faculty of Operation and Economics of Transport and Communications, Department of Economics ²Institute of Technology and Business in České Budějovice, School of Expertness and Valuation

Abstract

Psychological influencing is a common practice in commerce, so it is not surprising that it also happens during grocery shopping. It is important for everyone to realize whether they are shopping correctly during their daily grocery store trip. Using data on general information about the individual, household standard of living, common items when shopping and comparing selected supermarket chains, collected by CAWI (Computer Assisted Web Interviewing), we were able to penetrate the ideas of everyday customers and analyze the data mainly by induction. However, the CAWI method does not prove to be the most suitable. The results show that only some demographic factors influence the view of the price level and that despite the fact that customers are aware of most of the influencing factors, they let themselves be manipulated by them anyway. These results will serve for a greater overview of the general population regarding the psychology of purchasing, managers of individual stores and chains, as well as professionals dealing with similar issues.

Keywords: left-digit effect, prices ending in nine, food chain, trademarks, produce country of origin, psychological influence

Introduction

Price is greatly influenced by the human view of the quality of the product, which plays a big role in deciding whether customers get a product of sufficient quality in exchange for their money. This idea is confirmed by Shiv, Carmon and Ariely (2005), who argue in their work that prices exert conscious influences on product quality expectations and product performance. Which logically implies that sellers use this abundantly to their advantage,

so we can notice prices that often end in the number nine (Tripathi and Pandey, 2018). Choi et al. (2014) argue that buying a certain product is often accompanied by a sense of guilt, which can be exacerbated if it is not a necessary thing for everyday life, but a thing to satisfy one's own desire or enjoyment. This guilt is, however, often alleviated by a sense of effort to obtain the desired product or a sense of selfless behavior (Choi et al., 2014). In addition, Lee-Wingate and Corfman (2010) found that guilt is even lower when a purchase includes a promotional item in the form of a gift that the customer can give to a loved one.

At this time, this issue, influenced by the spread of Covid-19, is very relevant for both consumers and directors and managers of individual stores, as customers have the opportunity to reveal when visual influencing of themselves occurs and managers and company presidents to find out how to increase sales with minimal price adjustment.

The aim is also to determine the psychological effect of price on the customer and the practices of selected chains used to get the customer to buy the product with a focus on price. Specifically, these are the three largest competitive retail chains in the Czech Republic, which according to the Chamber of Retail Chains SOCR ČR (2020) are those chains that achieve the highest annual sales in the Czech Republic; namely Kaufland, Tesco and Lidl. To meet the aim of the paper, it is important to answer the following questions:

V1: To what extent do demographic factors affect price perception?

V2: What feelings do prices visually evoke in customers?

V3: What factors influence customers to make a purchase that customers are most aware of?

V4: Do customers prefer products with a strong designation of origin more?

V5: To what extent are customers influenced by trademarks?

Literature research

The degree of influence on customers regarding how to pay the required price is a very broad topic, which can be considered from various angles. Tripathi and Pandey (2018), who deals with the issue of nine-ending prices for green and non-green products, says that, in customers, a round price evokes a feeling of quality and the purchase of something truly exceptional, while a product with prices ending with nine feels common to cheap. This is supported, for example, by Montero-Vincente et al. (2019), who state that the segment of people who prefer quality food decide on the basis of product quality rather than price attractiveness. Lin and Wang (2017) further develop this idea by the theory of the left-digit effect, which states that the price is more favorable for customers, the lower the left digit of the price at the expense of a price ending in nine. This effect is exacerbated when it comes to a discount; the original price is shown on the price tag and a significant difference between the left digit of the original price and the left digit of the new price is visible at first glance. Hrubá and Sadílek (2021) offer us another direction of focus on how to influence the customer, stating that music, which influences our feelings, plays an important role in purchasing decisions. It is music that often causes inattention when

choosing food for a large part of the population, the other part is already so accustomed to music in their surroundings that it takes it only as a backdrop (Hrubá and Sadílek 2021). A significant element in the increase in sales is the customers' popularity of innovation and trends; all new products or limited editions according to Nazzaro et al. (2019) show a high increase in sales.

Cole et al. (2008) brought about knowledge of brand loyalty and stereotypes, the main idea is that the younger generation is influenced by the older generation, whose decisions are related to age and experience, but despite these facts, the younger generation likes different sorts of products. Brand loyalty is mainly influenced by the factor of what sort of product it is. Kos Skubic, Erjavec and Klopčič (2018) state that people prefer country of origin and brand for meat products, while for dairy products they look mainly at prices. However, Balogh et al. (2016) claim that the designation of quality and origin plays an important role in all foods but depends on the attractiveness of the quality certificate and the authentic ingredients.

The attention of customers and their awareness is proportionally dependent on several variables. People who devote themselves to healthy nutrition and healthy lifestyles show a better orientation in the quality of products, which is supported by reading labels (Saba et al., 2019). Anić, Rajh and Rajh (2014), however, claim that it is also to some extent influenced by demographic variables, as confirmed by Sadílek (2019), who divided customers into three groups, unconscious customers who number half of the subjects, customers searching for quality products, who make up 24% and ultimately customers impulsive, based on their shopping behavior, which is based on the level of education, gender, income and the size and integrity of their family. We will use a questionnaire survey to collect information, as this style of information collection is considered to be the most ideal way to collect large amounts of information (Saunders, Lewis and Thornhill, 2019).

Methods and Data

To answer question V1, it will be necessary to obtain as much demographic information about the respondents as possible. Specifically, it will be necessary to know the age, gender, marital status, number of children in the household and whether they consider prices to be reasonable and affordable, too high or too low. When asking V2, it will be important to find out if they prefer round prices, prices ending in nine, and their perception about the left digit. In the case of V3, it will be necessary to find out which influencing factors the respondents notice when shopping. Among the factors interviewed will be the appearance of the price tags, namely their color, size, location in relation to the goods and the layout and size of the price tag text. Another factor is radio, both targeted music, which is supposed to put customers in a pleasant mood, and the ever-returning discounts and promotions, which are often part of the television advertising block and in advertisements placed on websites, and are also all written in a leaflet, which the vast majority of people receive in their mailbox and is also available in the store itself and online. The distribution of goods is closely related to the stock of goods, because usually cost-effective goods are placed in prominent places, but we can see that the most expensive goods are at eye level and the cheapest goods are located at the bottom of the shelves. The last examined factor will be at first glance random texts around the store such as: bargain offer, price bomb,... which are of course purposefully placed. In the V4 question, it will be crucial to find out whether customers automatically choose goods that have a prominently stated designation of origin or whether they look past the first visual impression and look more specifically at all products and their origin, despite the fact that it will keep them in the store longer and if the country of origin is important to them. The last question, V5, focuses on whether customers also make decisions based on trademarks. It will therefore be important to find out whether they are willing to pay extra for such products. Therefore, whether they prefer quality over price or vice versa. As part of the summary of questions, it will be necessary to find out in which of the chains mentioned in the introduction it is most pleasant for customers to shop.

We will obtain all the necessary information by means of a questionnaire survey, which will be carried out using the CAWI method, the tool of which is a web questionnaire. Nazzaro et al. (2019) and Baregheh et al. (2012). The aim of the questionnaire survey will be to obtain all the information to answer the questions from the introduction. The filling out of the structured questionnaire will take place anonymously and online.

Due to the qualitative nature of the data, the main method for data evaluation will be the induction method, which will be used in all answers to research questions and will be supplemented by synthesis, comparative and relational methods.

Results

The questionnaire survey was filled out by 155 respondents, of which 116 were women, 38 were men and one respondent who chose to include themselves into the group "other". Graph 1 showing the age composition of the interviewed group. It is clear from this graph that the most numerous age group were respondents aged 18-25, namely 124 respondents, 6 respondents were from the groups <18 years old, 26-35 years and 36-45 years, 10 respondents were from the age group 46-55 and the least numerous group, 3 persons, were respondents >55 years of age. Of the total number of respondents, 81 are single, 54 in a relationship, 15 married and 5 divorced. 50 respondents live in one household with children, of which 32 with only one child, 15 with two children, 1 with three children and 2 with four or more children and 105 respondents live in one household without children. Regarding the level of food prices, 83 respondents responded that they were too high and 72 respondents that they were reasonable and none of the respondents thought that prices were too low.



Graph 1: Age of respondents

Source: Authors.

In the visual evaluation of prices 89 respondents chose the option 149.90 and 66 respondents chose the option 150. In the second visual evaluation of prices 94 respondents chose option 198 and 61 respondents chose option 200. When deciding on the placement of price tags on goods, 103 respondents preferred price tags under goods, 10 respondents above goods and 42 respondents do not care about the placement of price tags.

Graph 2 shows a graph of respondents' relationship to music in the store, where we see that 70 do not perceive music at all, 43 do not mind, 26 like it, 9 do not like it and 7 cannot stand it. Another element examined was an announcement about discounted goods on the store radio when shopping, with 61 respondents regarding it as annoying, 28 respondents not bothered, 46 respondents do not perceive it, 17 respondents sometimes find it beneficial and 3 respondents regularly shop according to it. The questionnaire also shows that 39 respondents do not look for advertising for promotional items, 77 respondents use classic promotional leaflets in paper form, 72 respondents prefer discount leaflets in electronic form, 39 respondents have confidence in television advertising and follow it, 5 respondents follow advertising on the radio, 36 respondents follow advertising on the Internet, 8 respondents follow advertising on billboards, 4 respondents search for advertising on the store radio, 2 respondents search for advertising on public transport and the daily press. Due to the fact that the question on the sources of promotional goods was semi-structured, respondents could use the option of their own answer, this option was used by 3 respondents, one of these three answers was that the respondent follows the current price tags in the store exclusively, the second answer was only the internet in general and the last respondent answered that they look at what is discounted, but not really; it is only artificially increased in price before the discount, so the final price is standard. The survey also shows that 113 of the respondents leave shopping with goods they did not plan to buy, 20 respondents always leave only with what they had on the list and 22 respondents do not prepare a purchase list in advance. 55 respondents will add to their purchase the first thing they can get their hands on and 111 respondents will choose advantageous prices for products of the same category. Announcement signs such as price bomb, bargain offer, etc. attract 127 respondents, of which 33 respondents will automatically add goods to their purchase if it is a common item that they buy and 94 respondents will first consider whether it really is a bargain price. 28 respondents do not pay attention to these signs. For 94 respondents, the country of origin does not play a role on choosing the food product, rather their experience with individual products and their price, 44 respondents cannot be influenced at first glance for products with a clearly visible country of origin, they give other products a chance and inspect them first, and 17 respondents automatically reach for the product depicting the country of origin of their preference, as it is faster and they know where the goods come from.



Graph 2: Music on the store radio

Source: Authors.

Graph 3 shows a graphical representation of respondents' decision-making factors when shopping; 67 respondents make decisions based on the quality of product ingredients, 36 respondents prefer food with trademarks and 5 respondents buy only products with trademarks. In the visual choice between a product with a marked origin from the Czech Republic on the front and a product that did not have a marked country of origin on the front of the product, 106 respondents chose a product with a strongly visible country of origin and 49 respondents would choose a product without it. In the case of choosing between a traditional brand product without trademarks, 134 respondents chose a traditional brand product and 21 respondents chose a trademarked product.



Graph 3: Decision-making factors when shopping for food



Respondents purchasing products were asked about their willingness to pay extra for trademarked products, see Graph 4. Thirty respondents do not hesitate to pay extra for trademarked products, 60 respondents are willing to pay extra, but at the same time try to look for promotions and discounts and 42 respondents buy trademarked products only if they are comparable in price to others.



Graph 4: Willingness to pay extra for trademarks

Source: Authors.

Graph 5 shows respondents' satisfaction with individual segments in selected food chains. The first listed here are the advantageous prices, with 63 respondents satisfied with them in Kaufland stores, 19 respondents in Tesco stores and 73 respondents in Lidl stores. Regarding logical placement of goods within the sales area, 42 respondents show satisfaction with the Kaufland chain, 42 respondents with the Tesco chain and 71 respondents with the Lidl chain. As for loyalty programs, 39 respondents expressed satisfaction with the Kaufland chain, 57 respondents with the Tesco chain and 59 with the Lidl chain. As for the diversity of payment options, 33 respondents opted for the Kaufland chain, 73 respondents for the Tesco chain and 49 respondents for the Lidl chain. The highest density of assistance staff in the sales area was recorded by 42 respondents at Kaufland stores, 51 respondents selected Tesco stores and 62 respondents chose Lidl stores. The diversity and availability of goods is best met by the Kaufland chain for 60 respondents, by Tesco for 54 respondents and by Lidl for 41 respondents. Regarding the most ideal size and clarity of the payment area, Kaufland was chosen by 41 respondents, 66 respondents selected the Tesco chain and 48 respondents selected the Lidl chain.



Graph 5: Customer satisfaction in monitored chains

Source: Authors.

Discussion

We will use the information obtained by the questionnaire survey to answer the research questions that were created in the introduction:

To what extent do demographic factors affect price perception? The price is too high for a large number of customers. Its perception, in terms of demographic phenomena, is not affected by gender, but prices are too high for married customers, as well as for customers living with one or more children in the same household and those in the age group 36 and older.

What feelings do prices visually evoke in customers? For customers of food retail chains, the most positive feelings are evoked by prices that are visually much lower than their actual level. This is the effect of the left digit and the nine-ending price; regarding both crowns (CZK) and pennies. The research done Lin and Wang (2017), Patalano et al. (2021)

and Tripathi and Pandey (2018) is in line these findings. When placing price tags on shelves, they prefer them to be placed under the product.

What factors influence customers to make a purchase, that customers are most aware of? A significant element is radio in the store, the music of which respondents feel neutral to negative towards, which is closely related to the announcement of promotional items on the radio, which receives a similarly negative sentiment among customers. Customers search for discounted goods in classic paper leaflets, but also in their electronic form, and notice advertisements for promotional products on television and on the Internet. A significant and successful factor are the announcement texts and signs in stores for bargain purchases, which have a minimal negative response and a very positive effect supporting the purchase of products, customers are aware of their influence, but still buy products recklessly, which is why customers leave the store with products that they were not planning to purchase.

Do customers prefer products with a strong designation of origin? The decisive factor for most customers is the price and experience with a certain product of the given category, more than a strong designation of origin, they prefer traditional brands.

To what extent are customers influenced by trademarks? Tradition and price also prevail in the question of trademarks. But customers who prefer or search for trademarks have no problem paying extra for these products, with half of those looking for discounts and promotions.

When comparing the selection of retail supermarket chains with food products, it is best to shop at, according to customers, the Lidl chain with the highest frequency of votes across all rating points.

Conclusion

The aim of the article was to find out the opinion of customers on retail food chains in relation to prices and surrounding shopping phenomena. The goal was met and all answers to the questions were found. Nevertheless, it would be better to choose a different method of data collection than a questionnaire for the next similar research, so that psychological connections, from conducting for example a personal interview, could be evaluated more accurately.

The majority opinions regarding food prices depending on demographic factors, significant factors influencing customers when shopping, the relationship of Czech customers to trademarks and country of origin designations, which prices are more visually enticing and which chain is the best for shopping were found. This information can be used both by customers themselves to become aware of the entire shopping system, and by companies that want to target their development in the right direction.

References

ANIĆ, I., S. P. RAJH and E. RAJH, 2014. Antecedents of food-related consumer decision-making styles. *British Food Journal*, **116**(3), p. 431-450.

BALOGH, P., D. BÉKÉSI, M. GORTON, J. POPP and P. LENGYEL, 2016. Consumer willingness to pay for traditional food products. *Food Policy*, **61**, p. 176-184.

BAREGHEH, A., J. ROWLEY, S. SAMBROOK and D. DAVIES, 2012. Innovation in food sector SMEs. *Journal of Small Business and Enterprise Development*, **19**(2), p. 300-321.

Chamber of Retail Chains SOCR ČR [online], 2020. Prague: SOCR ČR [accessed 2021-03-20]. Available: https://www.jsmesoucasticeska.cz/pres-320-miliard-pro-osm-retezcu/Aa

CHOI, J., Y. J. LI, P. RANGAN, P. CHATTERJEE and S. N. SINGH, 2014. The odd-ending price justification effect: The influence of price-endings on hedonic and utilitarian consumption. *Journal of the Academy of Marketing Science*, **42**(5), p. 545-557.

COLE, C., G. LAURENT, A. DROLET, J. EBERT, A. GUTCHESS, R. LAMBERT-PANDRAUD, E. MULLET, M. I. NORTON and E. PETERS, 2008. Decision making and brand choice by older consumers. *Marketing Letters*, **19**(3-4), p. 355-365.

HRUBÁ, R. and T. SADÍLEK, 2021. Lifestyle segmentation of Czech food consumers: how sustainability and listening to music correspond to consumer lifestyles. *British Food Journal,* Ahead-of-print.

KOS SKUBIC, M., K. ERJAVEC and M. KLOPČIČ, 2018. Consumer preferences regarding national and EU quality labels for cheese, ham and honey: The case of Slovenia. *British Food Journal*, **120**(3), p. 650-664.

LEE-WINGATE, S. N. and K. P. CORFMAN, 2010. A little something for me and maybe for you, too: Promotions that relieve guilt. *Marketing Letters*, **21**(4), p. 385-395.

LIN, C. and J. WANG, 2017. Distortion of price discount perceptions through the left-digit effect. *Marketing Letters*, **28**(1), p. 169.

MONTERO-VICENTE, L., B. ROIG-MERINO, J. BUITRAGO-VERA and E. SIGALAT-SIGNES, 2019. Characterisation of fresh fruit consumption in Spain based on food-related lifestyle. *British Food Journal*, **121**(12), p. 3307-3320.

NAZZARO, C., M. LERRO, M. STANCO, and G. MAROTTA, 2019. Do consumers like food product innovation? An analysis of willingness to pay for innovative food attributes. *British Food Journal*, **121**(6), p. 1413-1427.

PATALANO, A. L., K. WILLIAMS, G. WEEKS, K. KAYTON, and H. BARTH, 2021. The left digit effect in a complex judgment task: Evaluating hypothetical college applicants. *Journal of Behavioral Decision Making,* Ahead-of-print.

SABA, A., F. SINESIO, E. MONETA, C. DINNELLA, M. LAUREATI, L. TORRI, M. PEPARAIO, E. SAGGIA CIVITELLI, I. ENDRIZZI, F. GASPERI, A. BENDINI, T. GALLINA TOSCHI, S. PREDIERI, S. ABBÀ, L. BAILETTI, C. PROSERPIO, and S. SPINELLI, 2019. Measuring consumers attitudes towards health and taste and their association with food-related life-styles and preferences. *Food Quality and Preference*, **73**, p. 25-37.

SADÍLEK, T., 2019. Consumer preferences regarding food quality labels: The case of Czechia. *British Food Journal*, **121**(10), p. 2508-2523.

SAUNDERS, M., P. A. LEWIS and A. THORNHILL, 2019. *Research methods for business students*. London: Prentice Hall. 872 p.

SHIV, B., Z. CARMON and D. ARIELY, 2005. Placebo effects of marketing actions: Consumers may get what they pay for. *Journal of Marketing Research*, **42**(4), p. 383-393.

TRIPATHI, A. and N. PANDEY, 2018. Does impact of price endings differ for the non-green and green products? Role of product categories and price levels. *Journal of Consumer Marketing*, **35**(2), p. 143-156.

Contact address of the authors:

Ing. Eva Kalinová, University of Žilina, Faculty of Operation and Economics of Transport and Communications, Department of Economics, Univerzitná 8215/1, 01026 Žilina, Slovakia, e-mail: <u>kalinova@mail.vstecb.cz</u>

Adéla Vilímková, bachelor student, Institute of Technology and Business in České Budějovice, School of Expertness and Valuation, Okružní 517/10, 370 01 České Budějovice, Czech Republic, e-mail: <u>27666@mail.vstecb.cz</u>