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Changes in consumer behaviour in the food market in a crisis

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ABSTRACT

This article deals with changes in consumer behavior in the food market during a crisis. A crisis can be described as a pandemic during the COVID-19 pandemic, war conflict in Ukraine and a high inflation rate that causes increasing prices of food and other items. All of this affected consumer behaviour in terms of purchasing behaviour and preferences. Consumers changed their behaviour, and we could notice rationality and irrationality in many cases. The research involved 565 respondents in a questionnaire survey conducted in the spring of 2022. The confidence interval at the level of max determined the sample size. +-5% at the significance level α=0.95. The paper presents and examines three hypotheses directly connected with the main aim of the paper. The questionnaire survey provided a solid base for our statistical evaluation, where we used the Mann-Whitney test, Kruskal-Wallis test, Friedman test, Principal component analysis (PCA) and Divisive hierarchical cluster analysis. Research results proved that food design and packaging were among the least important factors when buying food online during a crisis, and younger consumers least avoided the Internet when buying food. Just partially accepted was proven our hypothesis that demographic characteristics (age, gender, place of residence) significantly influenced the importance of factors when buying online food in times of crisis.

Keywords: consumer behaviour, food, crisis situation, rationality and irrationality, preferences

INTRODUCTION

Understanding the purchasing patterns of consumers emerging during a crisis plays an important role in achieving the success of any business organization **[1]**. So far, the professional literature on food systems has mainly focused on the problems of adaptation to climate change but needs to pay more attention to how to solve the response of food systems to crises **[2]**. The world has experienced several health crises, such as epidemics or pandemics like Ebola, SARS, MERS, swine flu and dengue fever **[3]**. With short incubation periods and high lethality rates, Ebola, MERS, and SARS mainly shocked the food systems in certain areas where they spread **[4]**. They devastated agricultural production by damaging agricultural labour forces **[5]** and hindering other input factors **[6]**. One of the most dramatic events in recent decades was the COVID-19 pandemic. The virus spread quickly worldwide, leading to massive government interventions not seen in Western countries since the end of World War II. Retail has entered a new "abnormal state" driven by the pandemic. Personal shopping in brick-and-mortar stores was limited to buying food, fuel and drugstore goods **[7]**. The contagious disease broke out in China, quickly spreading throughout the world. Medical facilities were overwhelmed, and the government institutions of most countries declared a state of emergency in the aftermath of WHO recommendations **[8]**. In February 2020, the World Health Organization (WHO) officially named this coronavirus disease; in March of the same year, it was declared a pandemic **[9]**. COVID-19 is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) **[10]**. The pandemic has had an impact on agricultural production and poses a threat to long-term food supplies and food security **[11]**. It represents a threat, especially to countries dependent on food imports, because many food-exporting countries have limited food exports as a precaution, which has caused a shortage, especially of animal foods, in developing countries. For example, in India, supplies of rice, lentils, bananas and tomatoes fell by 25% between March 15 and May 31, 2020, compared to the same period in 2019 **[12]**. Global and labor and trade restrictions have significantly complicated mutual interactions between different members of the food

vertical and revealed its vulnerability to externalities **[13]**. The food processing sector has proven relatively stable during the pandemic, and food price increases have been minimal in most cases **[14]**. Subsequently, the world was also affected by another crisis - the war conflict in Ukraine (from February 2022) and high inflation, reflected in the high food prices. Consumers began to behave differently. The virtual online world is becoming more and more important.

Online shopping brings many advantages for every consumer; the only condition is a connection to the Internet. Today, online shopping is almost unlimited and saves time and money **[15]**. Online marketing is becoming more and more popular among marketers every year. Marketing departments are gradually changing classic marketing approaches to online marketing tools. It is understandable. Informational changes in global markets lead to declining consumer interest in traditional information channels. Many of the marketing specialists of the young generation have stopped working with classic marketing tools but have entirely switched to online marketing. The target audience is trying to reach and connect with the company's products on the Internet **[16]**. Due to the crisis, consumers have suddenly been forced to change their habits and prioritize online channels in their shopping. Also, in the grocery sector, the pandemic has driven sales strongly toward online channels **[17]**. During the crisis, grocery retail witnessed changes in collective patterns of consumer behaviour, even a radical change in demand for certain products, online shopping and home delivery services. Retail operations with essential products such as food and healthcare have faced challenges in inventory, logistics management and ensuring a clean environment due to increased demand and requirements. **[18]**. Approximately one-third of food businesses changed their marketing strategy and, due to the crisis, used the Internet store for face-to-face food delivery and online communication with customers **[19]**.

The unexpected outbreak of the crisis had a global impact on health, the economy and humanity worldwide. The closure of retail establishments had an impact on changing consumer behaviour. Many consumers who shopped offline due to the outbreak of the pandemic have started shopping online. Not only the way of shopping is changing, but also the way of thinking. Online shopping is focused on basic products, but offline shopping is still preferred when buying groceries **[20]**. Many government institutions worldwide have implemented quarantine measures to limit the spread of the virus, forcing people to stay home and leave the house only to buy medicine, food, or work if working from home was impossible. These restrictions led to changes in consumer behaviour when buying food. These include rediscovering the home kitchen, shopping from small and local vendors, and shopping for groceries online **[21]**. A few years ago, food delivery was an insignificant topic. This was only changed by the anti-pandemic measures in 2020 and 2021, which forced many companies to reconsider their previous attitude towards digitization and business.

Home delivery of food gave many people a sense of relative safety, as they could avoid long queues at shops and thus limit the risk of contracting the coronavirus **[22]**. Strict hygiene measures were applied in supermarkets, food stores, and grocery stores as a result of the COVID-19 pandemic situation **[23]**.

Various measures caused by the COVID-19 pandemic have caused changes in consumer behaviour. There was an increase in purchases of food and alcohol and, consequently, their increased consumption. Screen time has increased with working and studying from home **[24]**. Consumers' grocery shopping behaviour has undergone significant changes since the outbreak of the COVID-19 coronavirus at the beginning of 2020. The immediate threat of COVID-19 hitting the cities encouraged panic buying behaviour, leading to food stocks being sold out **[25]**. The measures introduced after the outbreak of the COVID-19 pandemic led to significant changes in consumer behaviour in the food market. These were primarily larger volumes of certain types of food, panic buying and the rise of online grocery shopping. They consider stockpiling as panic buying, which can be rational and irrational **[26]**.

Scientific hypothesis

The main goal of the research was to determine changes in consumer behaviour in the food market in a crisis situation. In the presented research, the results would answer various questions about the given issue. In order to reach the given aim, the following scientific hypothesis was stated.

1. Food design and packaging are among the least important factors when buying food online during a crisis.
2. Younger consumers least avoid the Internet when buying food.
3. Demographic characteristics (age, gender, place of residence) significantly influence the importance of factors when buying food via the Internet in times of crisis.

MATERIAL AND METHODOLOGY

Research Sample

The research population is represented by 449,230 residents of productive age (15-64 years) living in the Nitra Region. The research involved 565 respondents in a questionnaire survey conducted in the spring of 2022. The confidence interval at the level of max determined the sample size. +-5% at the significance level α=0.95. The majority of respondents were women (72%) compared to representatives of the male gender (28%). He considers the above a sufficient ratio, considering that in CEE countries, women mostly take care of household purchases **[27]**. In the first step, we excluded some respondents with no online shopping experience (6.73%). The age and gender structure of this part of the respondents are presented below (Figures 1-3).

Moreover, as is clear from the graphic display, there are no significant differences between the gender ($p=0.028$), but from the point of view of age categories, it is clear that the smallest proportion of respondents who do not shop online can be found in the youngest generation ($p<0.001$).

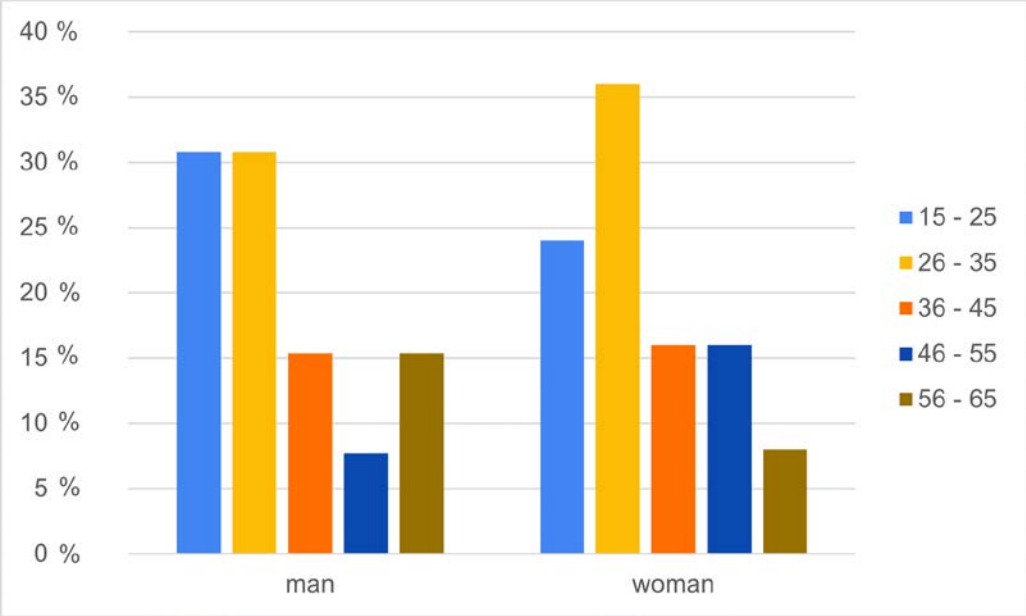

Figure 1 Age and gender structure of respondents.

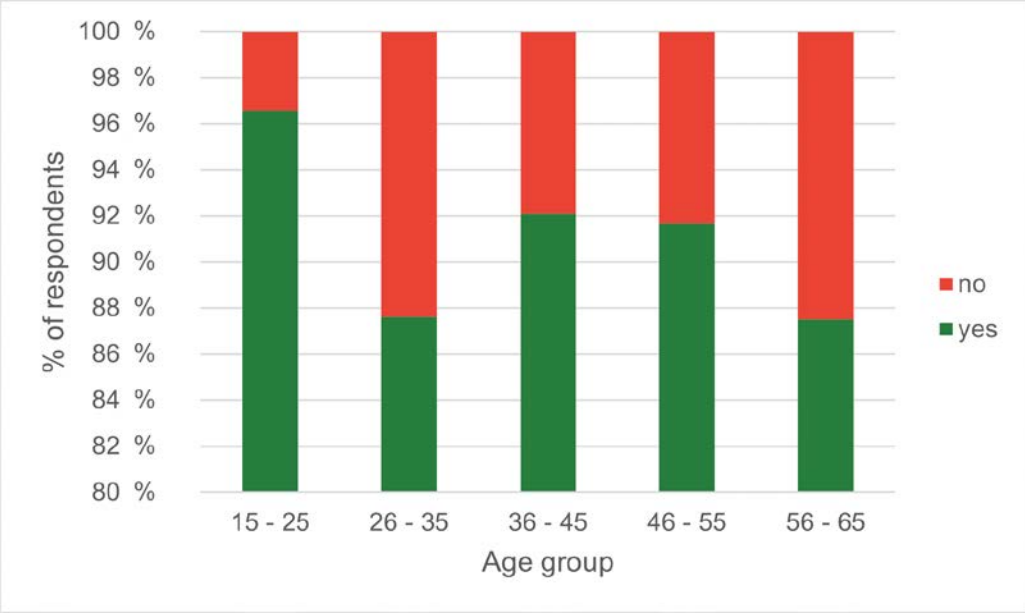

Figure 2 Respondents divided by age group.

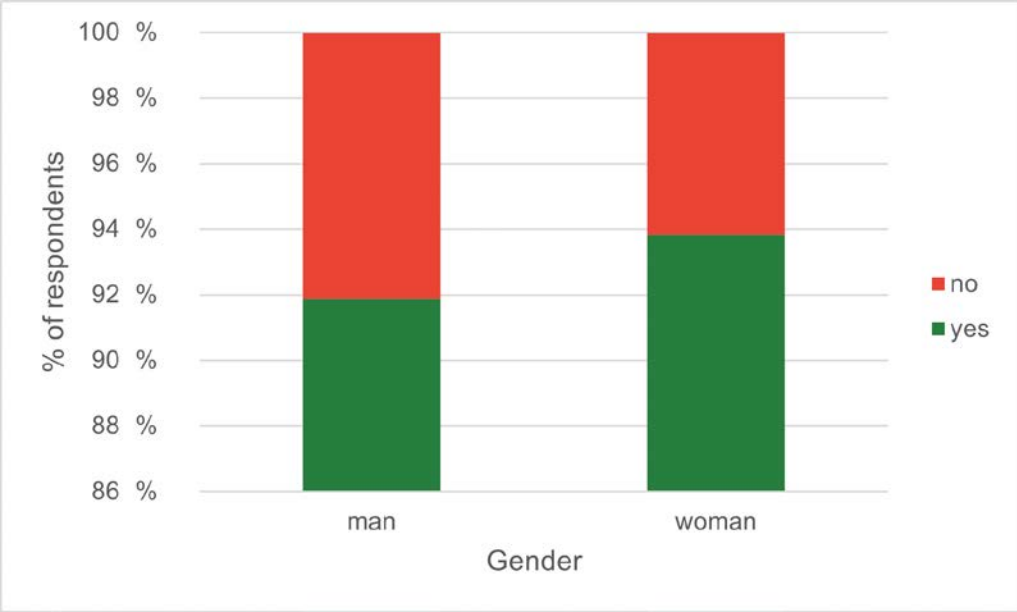

Figure 3 Respondents divided by gender.

Statistical Analysis

Based on the character of our research and above mention research sample, we decided to use the questionnaire survey to collect all relevant data, representing a base for our statistical evaluation. In order to achieve the appropriate results, the Mann-Whitney test, Kruskal-Wallis test, Friedman test, Principal component analysis (PCA) and Divisive hierarchical cluster analysis were used.

The Mann-Whitney test is a statistical method used to compare two independent groups of samples to see if there is a statistically significant difference between their distributions. This test is a non-parametric alternative to the t-test based on the normal data distribution. The Mann-Whitney test is also called the U test or the Wilcox test and is based on comparing the ranks of values.

The Kruskal-Wallis test is a statistical method used to compare three or more independent groups of samples unless the samples are normally distributed. The purpose of the test is to determine whether there is a statistically significant difference between the distributions of these groups. The Kruskal-Wallis test is a non-parametric alternative to the one-factor ANOVA test, which assumes a normal data distribution. The test is based on comparing the order of values of individual groups and calculating a statistical measure called the H-standardized statistical test.

The Friedman test is a statistical method used to compare multiple continuous groups of samples. This test is used when the data are not normally distributed, and the samples are measured in the same units. The purpose of the test is to determine whether there is a statistically significant difference between the distributions of these groups. The Nemenyi method is a post-hoc analysis method used to compare pairs of groups in the Friedman test. This method identifies statistically significant differences between groups and allows you to determine which group pairs differ.

Principal component analysis (PCA) is a statistical method that reduces the dimensions and obtains new independent variables (principal components) from the original variables. This method is often used in data analysis and visualization.

Divisive hierarchical cluster analysis is a method of data analysis that starts with one large cluster containing all observations and gradually divides it into smaller clusters based on the similarity between them. In this methodology, we will use the Euclidean distance to measure the similarity between observations.

RESULTS AND DISCUSSION

In order to aim at purchase factors that shape consumer decision-making, respondents were asked to rate the importance of the following factors on a scale from 1 to 5: food price, food quality, food freshness, food packaging, food design, country of origin of food, brand food and food delivery area. These factors were selected based on previous research and their potential impact on food purchasing decisions in times of crisis. We used principal component analysis (PCA) to process the obtained data (Figure 4).

Our analysis showed that the first two principal components explain more than 70% of the variability in the factors important in food purchasing in times of crisis. The first principal component includes all factors except food

design and packaging, which were included in the second principal component. This indicates that these two factors have a different influence on the respondents' decision-making when purchasing food in times of crisis.

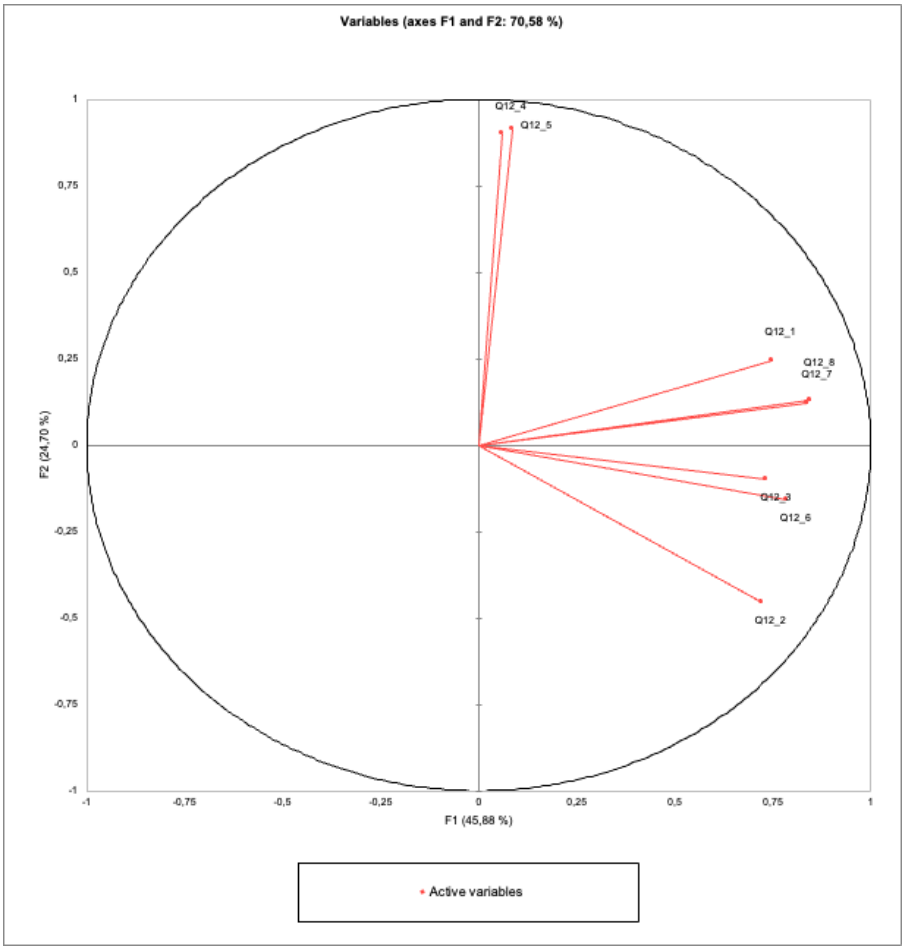

Figure 4 Principal component analysis (PCA).

Further analysis confirmed that the factors included in the second component, i.e., food design and food packaging, are the least important for the respondents. The Friedman test confirmed this result, in which we achieved a statistically significant result ($p < 0.001$). This finding suggests that respondents in our study considered food design and food packaging to be less important factors in food purchasing decisions during a crisis.

Table 1 Hierarchical cluster analysis of respondents.

Sample	Frequency	Sum of ranks	Mean of ranks	Groups		
Q12_5	527	1,169.000	2.218	A		
Q12_4	527	1,227.000	2.328	A		
Q12_7	527	2,617.000	4.966		B	
Q12_6	527	2,634.500	4.999		B	
Q12_2	527	2,712.000	5.146		B	C
Q12_8	527	2,757.500	5.232		B	C
Q12_3	527	2,923.500	5.547			C
Q12_1	527	2,931.500	5.563			C

Note: Statistical significance of differences between factors ranking (A, B, C). Q12_1 price of food, Q12_2 food quality, Q12_3 food freshness, Q12_4 food packaging, Q12_5 food design, Q12_6 food country of origin, Q12_7 food brand, Q12_8 food delivery area.

Subsequently, using hierarchical cluster analysis (Table 1), we classified the respondents into three categories (clusters), which can be characterized as follows:

Cluster 1 (least numerous cluster, n = 42):

This cluster consists of respondents who rate both factors, i.e., food design and packaging, as less important than others. This cluster represents a minority of respondents and indicates that for them, the price and quality of food are significantly more important when deciding to buy food in times of crisis.

Cluster 2 (n = 233):

This cluster consists of respondents who rate factors related to food design as more important and, conversely, the second group of factors, i.e., factors related to food packaging, as less important than other respondents. This cluster represents a substantial part of the respondents and indicates that food design has a greater,more significant influence on food purchasing decisions in times of crisis.

Cluster 3 (the most numerous cluster, n = 252):

This cluster consists of respondents who rate factors related to food design as less important as the first group of factors, i.e., factors related to price and food delivery area, are for them more important than for other respondents.

Table 2 presents the difference in assessing individual partial purchase factors based on basic demographic indicators, i.e., gender, age and place of residence of the respondents.

When we focus on the difference in the assessment of individual partial purchase factors based on basic demographic indicators, i.e., gender, age and place of residence of the respondents, we reach the following conclusions (Table 2) - differences can be seen in the factor price of food (Q12_1), which is evaluated differently among respondents in terms of their gender and place of residence. Food packaging (Q12_4) and food design (Q12_5) are evaluated differently among respondents according to age and place of residence.

Table 2 Differences in evaluating individual partial purchase factors based on gender, age and respondents' place of residence.

Variables	Countryside/Town	Age Older/younger	Gender Women/Men
Q12_1	C>T**	O=Y	W>M***
Q12_2	C=T	O=Y	W=M
Q12_3	C=T	O=Y	W=M
Q12_4	C>T*	Y>O**	W=M
Q12_5	C>T**	Y>O*	W=M
Q12_6	C=T	O=Y	W=M
Q12_7	C=T	O=Y	W=M
Q12_8	C=T	O=Y	W=M

Note: Q12_1 price of food, Q12_2 food quality, Q12_3 food freshness, Q12_4 food packaging, Q12_5 food design, Q12_6 food country of origin, Q12_7 food brand, Q12_8 food delivery area.

Next, we focused on the differences between individual food commodities from the point of view of their frequency of purchase. In our research, we examined 12 different food commodities. Using principal component analysis (Table 3), we successfully identified 4 foods with similar characteristics and purchase frequency. The first group is fast-moving foods, which include quickly perishable foods. This group includes meat, bakery products, vegetables and fruits, and fish and fish. These foods require more frequent purchases to prevent spoilage. The second group is products with a long shelf life, such as confectionery, frozen food and drinks. These foods have a longer shelf life and are less prone to rapid spoilage.

For this reason, the frequency of their purchase is lower. The third group is made up of vegetable oils. These foods have a specific character and are often used to prepare meals. Their purchase frequency depends on the individual required doses and use in the kitchen. The fourth group is specific foods, such as organic foods, healthy foods and tobacco products. These foods have their specific place in the market and are sought after for various reasons. Their purchase frequency differs from the remaining groups and depends on individual consumers' preferences and lifestyles.

Table 3 Analysis of main components - 4 food groups with similar characteristics and purchase frequency.

Variables	F1	F2	F3	F4
Q16_1	**0.800**	0.026	0.003	0.009
Q16_2	**0.805**	0.031	0.025	0.002
Q16_3	**0.790**	0.027	0.005	0.007
Q16_4	**0.781**	0.034	0.027	0.001
Q16_5	**0.573**	0.008	0.007	0.039
Q16_6	0.017	0.163	**0.537**	0.244
Q16_7	0.076	0.130	**0.610**	0.048
Q16_8	0.074	0.243	**0.464**	0.087
Q16_9	0.153	0.023	0.104	**0.601**
Q16_10	0.035	**0.513**	0.021	0.061
Q16_11	0.018	**0.534**	0.276	0.007
Q16_12	0.030	**0.554**	0.251	0.013

Note: Q16_1 milk and dairy products, Q16_2 bakery products, Q16_3 vegetables and fruits, Q16_4 meat and meat products, Q16_5 fish and fish products, Q16_6 confectionery, Q16_7 frozen products, Q16_8 alcoholic and non-alcoholic products, Q16_9 vegetable oils, Q16_10 tobacco products, Q16_11 nutritionally balanced foods, Q16_12 BIO foods.

Next, we focused on comparing the purchase frequency of these food commodities in online shopping. We found that fast-moving foods were the least frequently purchased online, while specific foods, especially tobacco products, were the most frequently purchased online. This difference was statistically significant, as we confirmed using the Friedman test ($p < 0.001$).

Table 4 presents the differences in the purchase frequency of individual commodities from the point of view of place of residence, age and gender. The table below presents the differences in the purchase frequency of individual commodities from the point of view of place of residence, age and gender. The research results show that the differences in the frequency of purchase of individual commodities, namely bakery products (Q16_2), vegetables and fruits (Q16_3), meat and meat products (Q16_4), confectionery (Q16_6) and vegetable oils (Q16_9) are striking depending on the age of the respondent; in the case of the commodity fish and fish products (Q16_5) they are striking in terms of gender and place of residence, and in the case of milk and dairy products (Q16_1) in terms of all three investigated demographic indicators, i.e., gender, age and place of residence.

Table 4 Differences in the purchase frequency of individual commodities from the point of view of the place of residence, age and gender.

Variables	Countryside/Town	Age	Gender
Q16_1	C>T**	O>Y*	W>M**
Q16_2	C=T	O>Y***	W=M
Q16_3	C=T	O>Y***	W=M
Q16_4	C=T	O>Y***	W=M
Q16_5	C>T*	O=Y	W>M**
Q16_6	C=T	Y<O*	W=M
Q16_7	C=T	O=Y	W=M
Q16_8	C=T	O=Y	W=M
Q16_9	C=T	O>Y***	W=M
Q16_10	C=T	O=Y	W=M
Q16_11	C=T	O=Y	W=M
Q16_12	C=T	O=Y	W=M

Note: Q16_1 milk and dairy products, Q16_2 bakery products, Q16_3 vegetables and fruits, Q16_4 meat and meat products, Q16_5 fish and fish products, Q16_6 confectionery, Q16_7 frozen products, Q16_8 alcoholic and non-alcoholic products, Q16_9 vegetable oils, Q16_10 tobacco products, Q16_11 nutritionally balanced foods, Q16_12 BIO foods.

Based on the presented results, we can conclude that our Hypothesis 1: Food design and packaging, among the least important factors when buying food online during a crisis, was accepted, and Hypothesis 2: Younger consumers least avoid the Internet when buying food. Just partially accepted was Hypothesis 3: Demographic characteristics (age, gender, place of residence) significantly influence the importance of factors when buying food via the Internet in times of crisis.

In the USA examined the behaviour of households when purchasing food during the COVID-19 pandemic on a sample of 1,370 respondents. They found three fundamental changes. The first was that the structure of spending on food changed. Expenditure on eating out was significantly reduced, caused by restrictions on restaurants, bars, etc. Secondly, the number of households that bought food online grew significantly. The third finding was that the price is not the decisive criterion for purchasing food, but its taste is **[28]**.
Similarly, a study in Germany showed that since the start of the crisis, there has been a strong boom in grocery shopping and an unprecedented increase in online grocery shopping. Existing retail chains primarily ensured this increase. There was no significant increase in new online grocers. Food retail remained unchanged regarding dominant business models and distribution mechanisms **[29]**.

During the pandemic, many people preferred a plant-based diet over an animal-based one. There was an increase in sales of plant foods and a decrease in animal meat. By increasing the consumption of plant-based food, consumers wanted to gain immunity or other health benefits; this food is also cheaper **[30]**. During the pandemic, many consumers experienced an interesting shift in eating habits. The consumption of plant-based foods, including meat alternatives, has increased significantly, which has also been reflected in the retail sales of plant-based foods in the USA **[31]**. Another survey conducted in the USA in May 2020 points to a 3% threat to food security, especially among households with children **[32]**. Due to COVID-19, consumers have suddenly been forced to change their habits and prioritize online channels in their shopping. Also, in the grocery sector, the pandemic has driven sales strongly toward online channels **[33]**. Given the increased concerns about human health, it seemed logical that consumers would buy more fresh food, but frozen and canned food products saw a significant increase in sales **[34]**. According to the survey agency, 2 must **[35]** among the most common barriers to buying food online is that people like to check food visually and sensorial, especially quality and freshness. Furthermore, it is the good availability of brick-and-mortar stores, the preference for personal purchases, or the impossibility of paying with food stamps. Moreover, last but not least, they are hindered by the number of fees for the delivery of purchases and the insufficient selection of food.

The crisis connected with the pandemic, the war conflict in Ukraine and inflation brought changes in consumer behaviour when purchasing food. The main findings indicate decreased food purchases in brick stores and an increasing preference for online shopping. The time spent in the store is shorter, but the average expenditure per purchase is higher. Despite this, the average monthly expenditure is lower **[36]**. People did not use these purchases because they perceived them as useful but because they were forced to use these services as part of the anti-pandemic measures. The most important purchase factors are the perceived usefulness of the product, ease of use of the seller's website, subjective standards and the buyer's trust in the seller. Only behind these factors is the product's price **[37]** in terms of importance.

Regarding online grocery shopping, we saw a 255% increase in households using grocery pickup and a 158% in households using grocery delivery services. These increases can be explained primarily by consumers worrying about the pandemic and feeling safer with these food shopping methods **[38]**. The pandemic has forced people to limit physical interactions, leading to a surge in online grocery shopping. Before the pandemic, up to 81% of U.S. consumers had never shopped for groceries online. This has changed significantly during the pandemic. Up to 79% of consumers bought food online **[39]**. Another study conducted in the USA points out that in 2020, compared to 2019, the purchase of food in retail stores increased by 4.8%.

On the contrary, food purchased in restaurants, buffets and other catering establishments decreased 19.5%. These changes result from anti-pandemic measures related to crises **[40]**. According to that **[41]**, only around 15% of consumers in Italy, Germany, and France are satisfied with their online grocery service. This supports the assumption that although the pandemic has forced consumers to use online grocery services, there is still an extensive need to improve these services. The results of a survey conducted in Russia on a sample of 1,297 respondents found these main changes in food consumption. Consumers reduced the number of purchases and bought larger quantities of food per purchase. They stocked up on non-perishable foods, bought healthier foods, cooked more at home and tried to reduce food waste **[42]**.

Similarly, a survey carried out in Finland on a sample of 2,568 respondents states that people are increasingly buying food online due to the impact of the crisis. The results indicate that the typical online food shopper is a consumer under 45 years of age with concerns about their health or the health of their loved ones. He lives in a larger household and the centres of larger cities **[43]**. Similarly, a survey carried out in Northern Ireland before the pandemic in March and April 2019 and the same period of 2020 during the pandemic recorded a significant

decrease in purchases reflected in the reduced number of completed transactions and a significant increase in the volume of the size of the shopping basket. This increase was due to a sharp increase in home food deliveries **[44]**.

In Slovakia, the authors found the following findings: Unfavorable price developments in 2022 changed the purchasing behaviour of Slovak consumers, who reduced the number of purchased goods and shopped more often. At the same time, the demand for products with lower added value and private label products increased **[45]**.

The crisis brought enormous economic uncertainty, which affected the consumers' shopping behavior and the choice of communication by companies **[46]**. It is important to add that not even during times of crisis, the behaviour of consumers is also strongly influenced by cultural, social, psychological and personality factors that influence the final consumer decisions **[47]**, however many of these decisions are irracional or based on emotions **[48]**, **[49]**.

Research **[50]** demonstrated that a high-risk perception, in the case of COVID-19 pandemic or other civil unrests, would cause the intention to buy goods that no longer follow common sense. The changes that emerged during the lockdown are persisting **[51]**.

The world has changed and never will be the same as before. Nowadays, we live in uncertain times. This is a simple way to summarize a situation that affects not only the global situation in the world but also the lives of each of us. We are facing the consequences of the ongoing war in Ukraine, migration, and the COVID-19 pandemic. Of course, there exist many issues that mark the current situation in the world, but from the point of view of marketing as well as how was changed our see of the world and the way of our think and conduct our lives, the most significant ones are those previously mentioned problems that influence our everyday lives and we will have to deal with them also in the future days. When having a closer look, we can conclude they have a huge impact not only on the economy and society but also on marketing and marketing decisions worldwide **[52]**.

CONCLUSION

The submitted paper aimed at changes in consumer behaviour in the food market in a crisis situation. The crisis can be described mostly as the COVID-19 pandemic, the war conflict in Ukraine and high inflation that causes increasing prices of food and other items. In the paper were presented and examined three hypotheses connected with the paper's main aim.

We can conclude that respondents in our study considered food design and food packaging less important factors in food purchasing decisions during a crisis and that younger consumers least avoid the Internet when buying food. We found that fast-moving foods were the least frequently purchased online, while specific foods, especially tobacco products, were the most frequently purchased online. Our research just partially proved the hypothesis that demographic characteristics (age, gender, place of residence) have a significant influence on the importance of factors when buying food via the Internet in times of crisis, as the results proved differences in the frequency of purchase of individual commodities in the crisis, namely bakery products, vegetables and fruits, meat and meat products, confectionery and vegetable oils which were depending on the age of the respondents. In the case of the commodity fish and fish products, these were striking in terms of gender and place of residence, and in the case of milk and dairy products, in terms of all three investigated demographic indicators, i.e., gender, age and place of residence.

However, our research has also some limitations. We focused just on the area of the Slovak Republic. The next limitation of our research is the fact that our research was focused only on consumer behaviour in the food market during the crisis. The solved issue might also be examined from the post-crisis period's perspective or in other areas besides the food market. We are convinced that the submitted paper creates a solid basis for further research and practical application in the food markets and consumer behavior field.

Consumer behaviour in a crisis situation shows rationality and irrationality when creating shopping behaviour preferences. The crisis taught consumers of all generations to purchase more online and behave more responsibly in many ways, as well as that life and health are the most important values.

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