

Article

Consumer Attitudes as Part of Lifestyle in the COVID-19 Emergency

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Abstract: The pandemic brought significant changes to the functioning of society. This article examines the opinion of consumers in south-eastern Poland on lifestyle elements such as shopping preferences, physical activity, holiday preferences and others, against the background of the COVID-19 situation. The aim of this study was to identify the relationship between selected components included in the lifestyle of society in the context of the COVID-19 emergency situation. The research was conducted from 9 November 2020 to 17 January 2021. In order to identify the respondents' attitudes and their perception of the issues discussed in this study, a questionnaire was created containing a number of theses formulations assessed by the respondents in terms of compliance with their beliefs. The evaluation was carried out using a seven-point bipolar Likert scale with a neutral value. The study was not probabilistic, therefore the inference applies only to the studied group. A total of 737 questionnaires meeting the research assumptions were collected. The form was used to identify ecological attitudes, shopping behavior, food preferences, physical activity and tourist preferences in the COVID-19 situation in which the research was conducted. Also identified were holiday destinations in 2019 and 2020, preferred diet type, and socio-demographic background: sex, age, place of residence and approximate per capita income. The research revealed that the purchasing behavior of the respondents was a predictor of their physical activity and tourist preferences. Studies have also shown that the food preferences of the respondents are an important part of their balanced lifestyle and depend on the sex of the person. The respondents preferred an active lifestyle as a form of pro-health activity when living in the situation of COVID-19. During the COVID-19 pandemic, respondents' interest in domestic tourism also increased.

Keywords: COVID-19; purchasing attitudes; physical activity; tourist preferences; sustainable lifestyle



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1. Introduction

1.1. Environmental Attitudes and Lifestyles of People in the COVID-19 Crisis

The turn of the second and third decades of the 21st century was marked by a serious crisis related to the global spread of the SARS-CoV-2 virus [1]. The consequences of the response to the pandemic appeared in virtually all spheres of human activity and functioning. Social relations, economy and culture suffered, and people's quality of life and their mental state worsened [2–6]. Apart from new problems, the existing solutions related to job-seeking or protection of the quality of the natural environment remain unresolved. Awareness of the problems of the natural environment motivated people to change their lifestyle and diet, which in turn contributed to the emergence of many nutritional trends, incl. less waste and zero waste, comforting and atmospheric eating, as well as conscious eating or freeganism [5–9]. Another factor related to ecological aspects

are the phenomena of deconsumption and sustainable consumption [10–12]. The idea of sustainable consumption differs from the phenomenon of deconsumption in that the latter concerns mainly economic issues, while the former is concerned with the moderate purchase of goods that do not have a negative impact on the natural environment [5,8,13]. When analyzing the rationale of people following different nutritional trends and lifestyles, attention should be paid to the financial aspect. Many people may decide to change their lifestyle for the sake of savings [14–16].

The most important lifestyles of 2021 reflect increased public awareness of prioritizing health and compassion, focusing on trends related to sustainable development, which emphasize increased environmental awareness and the need for sustainable living [17,18]. This trend influences the increase in the amount of plant food consumed and the reduction of the amount of red meat consumed [16]. Sustainable development shapes not only the way of eating, but also the way of shopping, emphasizing the growth of sustainable purchasing practices and prioritizing products from local crops [11,15,16].

The COVID-19 pandemic has changed the way people live, forcing them to slow down and spend more time at home [19]. This increase in the amount of time spent at home led to a change in habits and routine [20]. The number of people undertaking self-education increased in 2021, in particular through online courses and lessons [21]. Many consumers have started to discuss the need for informed shopping driven by an incentive to buy rather than just a will to have [22]. An increasing number of consumers are reducing the number of products they buy, focusing on purchasing products that are needed or valuable [23]. Consumers prefer to buy from local small businesses rather than supermarkets, because they believe that small businesses have a lower impact on the environment [24]. The lifestyle trend of giving priority to small, independent brands is particularly popular with the younger generations [25].

The results of global studies provide quantitative evidence for the impact of the COVID-19 pandemic on lifestyle behavior and indicate both the negative impact of the pandemic on health behavior and that the pandemic also gave impetus to the improvement of many abnormal eating habits and unhealthy lifestyles among large parts of the human population [26,27]. Understanding the impact of the pandemic on lifestyle and mental well-being is critical to the increasingly observed COVID-19-related lifestyle [11,21]. The nature of COVID-19 led to dramatic changes in the daily routine, resulting in increased social isolation [6] and financial insecurity [23], as well as a change in diet [13]. The COVID-19 situation has also led many people to exhaustion, anxiety and stress, reducing interest in complex flavors. The assessment of the sensory perception of food and the pursuit of pleasure, recognized as the main motive of human behavior, differs depending on the degree of mental impoverishment [28]. This is reflected in the latest nutritional trends, which see the increase the sale of salty or sweet snacks [29].

A sedentary lifestyle and an unbalanced diet appear to be widespread in European society in the early 21st century and cast a shadow over the future of public health in the continent [20,28]. Since 2020, there has been a marked shift in food trends as families not only need to cook more at home, but many have started growing vegetables in their garden to acquire fresh produce [10]. Respect and understanding for the “farm to fork” process had renewed, and people began to waste less food [13,14].

1.2. The Influence of Mass Media and Globalization on Consumer Behavior

Lifestyle is determined by many social and individual variables. The lifestyle of individual people is shaped in the process of socialization, it has a cultural character and results from the social structures to which a given person belongs [30,31]. According to Cockerham et al. [30], people choose a certain lifestyle, but these choices are constrained by structural parameters resulting from their life situation [32,33]. The lifestyle is thus significantly correlated with the purchasing behaviors of consumers, which are determined by many economic, personal, socio-cultural and psychological dependencies [34–36]. These dependencies shape promotional activities [37], reactions to stimuli coming from the

environment, related to physical features and product attributes [28], the ability to solve problems and the ability to make the right decisions, thanks to the collection of appropriate knowledge and experience [34].

Moreover, mass media and the phenomenon of globalization play an important role in shaping the behavior of consumers in relation to trends in nutrition or in the way of spending free time [38,39]. We live in an increasingly digital world where the Internet is ubiquitous and information shapes all aspects of our lives [40]. A programmed life is a lifestyle that is driven by the ubiquitous Internet, emerging network values and increasing digital progress [41]. We are also witnessing a continual shift from a consumer society to a producer society, where creative production, creation and sharing overshadows consumption, property and materialism [42]. It is a production and sharing culture style [43]. In a rapidly changing and increasingly unsustainable world, more and more people prefer the style of resilient and proactive citizens, emphasizing helping weaker individuals and communities, especially in the face of unforeseen situations [44]. Turbulent times and a shared sense of the end of an epoch—fueled by simultaneous changes in the environment, economy, society and politics—prompts individuals and communities to seek a new goal and question the basic assumptions of a good life and a better future [45,46]. Goal-seeking is a lifestyle where people re-evaluate what is important in life, emphasizing physical activity and a balanced lifestyle [47,48].

1.3. Research Goal and Research Hypotheses

In the light of the above phenomena, there is a research problem concerning changes in the lifestyle of young people from south-eastern Poland, who were subjected to various forms of restrictions, introduced as part of preventing the spread of the viral disease. In this study, an attempt was made to identify the relationship between shopping behavior and physical activity as well as tourism preferences of respondents against the background of COVID-19. The contribution of this study is that it broadens the knowledge of lifestyle changes in the conditions of restrictions introduced in response to the pandemic among young Polish society. Therefore, the aim of the research undertaken was to identify the relationship between selected ingredients that fit into the lifestyle of the society in the context of the risk of COVID-19 disease. The following research hypotheses were formulated: H1—Shopping behavior is a predictor of physical activity and tourist preferences of the respondents; H2—Food preferences, as an essential part of a sustainable consumer lifestyle, depend on a person's sex; H3—Respondents prefer an active lifestyle as a form of pro-health activities in the context of COVID-19; H4—During the COVID-19 pandemic, respondents' interest in domestic tourism increased.

The structure of this work is as follows: description of the research methodology; description of the results obtained and their presentation in tables and figures; discussion of the described results with the literature, conclusions; and a list of literature cited in the manuscript.

2. Materials and Methods

To achieve the set goal, the research was conducted from 9 November 2020 to 17 January 2021. Many modifiable factors that make up lifestyle were studied. The background of the research was the extraordinary conditions related to the reaction of the Polish society to the COVID-19 disease. The target population was adults ≥ 18 years of age. They were residents of south-eastern Poland, from the Podkarpacie and Lublin provinces [49]. The study area was selected due to the high quality of the natural environment, high forest cover, agricultural character of the region and relatively low average monthly remuneration of residents, compared to other parts of the country [50]. Therefore, these features were taken into account as they could affect the respondents' possibilities and preferences for spending free time.

The research was conducted by means of a diagnostic survey, in which the technique of CAWI (Computer-Assisted Web Interview) was used. Residents of the surveyed areas were

invited by providing a link to the survey form to several dozen people in both voivodships. At the same time, the invitation to the survey was posted on social media and sent to enterprises and institutions cooperating with the authors. The respondents also invited their friends who met the conditions of age and place of residence to take part in the survey. The study was partial, and participation in it was voluntary, anonymous and the respondent could stop filling in the form at any time. Out of 825 collected questionnaires, 737 reliably completed questionnaires were accepted, which met the condition of the respondent's age and residence in the voivodships surveyed.

The research tool was a survey form constructed to determine the attitudes of the respondents and their perceptions of the issues discussed. The questionnaire contained a number of statements (tested features) that were evaluated by the respondents for consistency with their beliefs. Their content was as follows: 1. *The belief that consumption should be reduced*; 2. *The belief that Poles have a consumer lifestyle*; 3. *No tendency to take stocks*; 4. *Tendency to use the sale*; 5. *Use of second-hand stores*; 6. *A tendency to share unnecessary things*; 7. *Including the content of labels while shopping*; 8. *Search for products with ecological certificates*; 9. *Using short supply chains for products*; 10. *The belief in the high quality of traditional products*; 11. *Concerns about genetically modified food*; 12. *Tendency to pay more for organic food*; 13. *The belief in regional differences and food quality*; 14. *Prefer food produced in Poland*; 15. *Systematic maintenance of physical activity*; 16. *Practicing hiking*; 17. *Practicing bicycle tourism*; 18. *Prefer individual tourism*; 19. *Preference for organized tourism*; 20. *Preferring foreign tourism*; 21. *Preferring places to stay with a meal included in the package*; 22. *Prefer local meals while traveling*; 23. *Prefer chain restaurants when traveling*; 24. *Change of tourist plans due to COVID-19*; 25. *Acceptance of compulsory vaccinations against COVID-19*.

The assessment was performed using a 7-point bipolar Likert scale with a neutral value [51]. The values on the scale are marked as follows: 1—definitely not; 2—no; 3—probably not; 4—neither yes nor no; 5—rather yes; 6—yes; 7—definitely yes.

The survey form was divided into two parts. The first one contained tested features assessed by the respondents in terms of compliance with their beliefs. This part was used to identify ecological attitudes, identify shopping behavior, preferences regarding the food consumed, physical activity, tourist preferences and the impact of COVID-19 on the change of the latter. The second part includes questions identifying places to spend holidays in 2019 and 2020, the preferred type of diet, as well as the socio-demographic background: sex of the person, age, place of residence and approximate income per person. The created form was subjected to reliability analysis, and for this purpose the Alpha Cronbach test was calculated. The test result was 0.70199, which is a satisfactory level [52].

Statistical analyses of the collected material were performed using the "Statistica" program. First, a cluster analysis was performed using the Ward method [53], which is a hierarchical clustering algorithm and all calculations required for the clustering process are performed simultaneously [53]. This method uses an ANOVA (Analysis of Variance) approach to estimate the distances between clusters. It consists of minimizing the sum of squared deviations within clusters [54]. It is an exploratory data analysis, thanks to which it is possible to group responses to tested features into logically related teams [55,56]. This analysis allows for the agglomeration of objects in groups of subsets that are relatively homogeneous internally and relatively diverse among themselves [56,57]. Basic descriptive statistics were also calculated, the structure of assessments was analyzed, the mean and standard deviations were calculated, and the Pearson correlation analysis between the selected assessments was calculated [58]. Simple regression equations were calculated using the least squares method for the relationship between the features for which the correlation coefficients were the highest. Multiple regression analyzes were also calculated [52]. In search of the dependence of the studied characteristics on sex, place of residence and income level of the respondents, the hypothesis about the lack of differences between the variables was verified using the chi-square test of independence [52].

3. Results

The study was aimed at adults, so the lowest age of the respondents was 18 years, and the oldest recorded age was 67 years. The mean age was 26.01 years and the standard deviation was 9.61 years. The median age was 21, and the interquartile range was 8 years. Thus, the subjects were adults and mostly young. In the sex structure, women prevailed—63.6%—and men constituted 36.4%.

As south-eastern Poland is mainly agricultural and there are only two larger cities—Lublin has approx. 338 thousand inhabitants and Rzeszów about 196 thousand—the study adjusted the question of the place of residence to the number of cities in the studied area. Most of the respondents lived in rural areas—57.3%. People living in cities up to 10,000 inhabitants accounted for 10.9%, those in cities of 10–40 thousand inhabitants accounted for 11.0%, while residents of cities with more than 40 thousand inhabitants accounted for 20.9% of the study group.

During the research, the minimum net salary in Poland was PLN 1920.62. In terms of income per family member, the group of up to PLN 1000 was 18.7% of respondents, PLN 1001–3000 40.6% of respondents, in the range of PLN 2001–3000 26.1% of respondents, while 14.7% of the respondents had an income above PLN 3000.

Figure 1 shows the dendrogram resulting from the cluster analysis carried out using Ward's method. Table 1 presents the structure of evaluations of individual tested features, expressed as a percentage. The tested features were ranked according to the computed cluster analysis. In contrast, Table 1 shows the structure of the tested feature scores, their means and standard deviations. Tested features were grouped in the order resulting from the cluster analysis.

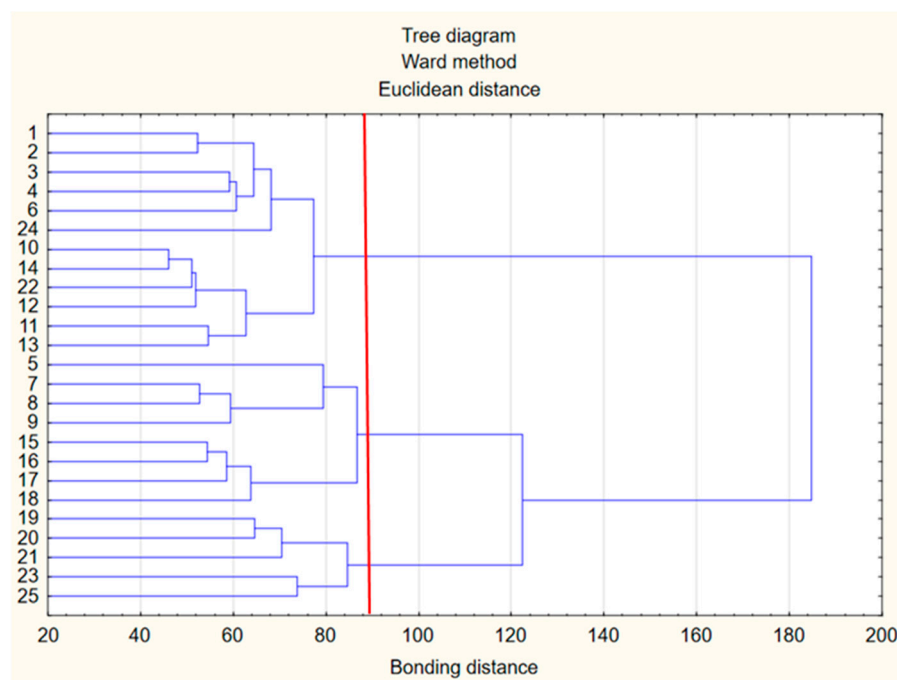


Figure 1. Cluster analysis dendrogram. Descriptions of tested features included in Research methodology.

The analysis of the clusters in the “binding distance to the binding stages” part showed an increase in the distance above $y = 87$. This value is the cut-off point of the dendrogram, which allowed for the separation of three clusters.

In the first cluster, all tested features were assessed very positively. For most of them, the highest percentage of respondents assessed the level “definitely yes” (Table 1). This included issues related to: pro-ecological attitude, food preferences, positive consumer behavior and the tested feature related to changes in vacation plans caused by restrictions related to COVID-19. When analyzing individual agglomerations, it can be concluded that the awareness of the need to limit consumption was associated with the perception

of the attitude of consumerism (tested features 1 and 2). They were related to tested features 3, 4 and 6 relating to positive consumer attitudes. There was a direct link between the tested features relating to high-quality food produced with traditional methods and the preferences of Polish products (tested features 10 and 14). This agglomeration was associated with the tendency to look for local dishes while traveling and the tendency to bear slightly higher costs of high-quality food. Separately, at the lowest level, the tested feature expressing a negative attitude towards genetically modified food (tested feature 11) was related to the tested feature that the location of its origin had an impact on health (tested feature 13). These tested features were positively assessed by over half of the respondents (Table 1).

Table 1. Assessment structure of tested features, mean ($\bar{x}$) and standard deviation (SD) presented in the order resulting from the cluster analysis.

Tested Features	Percentage Structure of Grades ^							$\bar{x}$	SD
	1	2	3	4	5	6	7		
Cluster 1									
1. The belief that consumption should be reduced.	3.0	3.7	10.7	19.9	24.4	18.9	19.4	4.93	1.55
2. The belief that Poles have a consumer lifestyle.	1.9	5.7	12.3	14.9	25.1	23.2	16.8	4.93	1.54
3. No tendency to take stocks.	2.2	6.4	10.7	10.0	23.3	25.4	22.0	5.10	1.61
4. Tendency to use the sale.	3.4	3.9	5.8	11.9	17.8	24.0	33.1	5.41	1.63
6. A tendency to share unnecessary things.	4.6	7.3	12.2	10.7	18.0	18.7	28.4	5.00	1.82
24. Change of tourist plans due to COVID-19.	5.7	4.5	5.8	7.7	10.2	17.5	48.6	5.59	1.84
10. The belief in the high quality of traditional products.	0.3	1.1	3.3	9.6	17.0	25.4	43.4	5.92	1.23
14. Prefer food produced in Poland.	1.6	3.4	6.0	17.2	18.3	22.8	30.7	5.38	1.51
22. Prefer local meals while traveling.	1.8	3.5	6.5	14.0	20.5	28.1	25.6	5.35	1.48
12. Tendency to pay more for organic food.	3.3	3.4	8.7	14.7	23.2	21.0	25.8	5.17	1.59
11. Concerns about genetically modified food.	4.6	6.1	9.0	20.8	17.4	16.7	25.5	4.92	1.74
13. The belief in regional differences and food quality.	5.7	8.3	13.6	16.7	17.5	18.0	20.2	4.67	1.80
Cluster 2									
5. Use of second-hand stores.	19.9	12.9	11.5	13.3	12.8	14.1	15.5	3.90	2.12
7. Including the content of labels while shopping.	9.2	11.1	14.9	11.3	18.2	15.6	19.7	4.44	1.95
8. Search for products with ecological certificates.	15.5	15.1	16.4	17.0	17.5	10.4	8.1	3.70	1.84
9. Using short supply chains for products.	6.2	14.9	18.3	19.9	18.5	13.0	9.1	4.05	1.69
15. Systematic maintenance of physical activity.	5.7	9.8	10.6	16.8	18.7	20.1	18.3	4.67	1.79
16. Practicing hiking.	8.0	11.5	14.9	13.2	20.4	16.0	16.0	4.38	1.86
17. Practicing bicycle tourism.	14.5	14.5	12.6	12.2	16.4	15.2	14.5	4.05	2.02
18. Prefer individual tourism.	9.2	10.6	13.6	17.6	20.9	15.2	12.9	4.28	1.82
Cluster 3									
19. Preference for organized tourism.	26.6	18.9	15.3	14.4	9.6	9.4	5.8	3.13	1.88
20. Preferring foreign tourism.	12.2	12.1	11.9	24.7	11.9	12.6	14.5	4.08	1.91
21. Preferring places to stay with a meal included in the package.	10.4	11.8	11.9	13.8	15.9	14.9	21.2	4.42	2.00
23. Prefer chain restaurants when traveling.	24.6	18.2	15.1	17.1	11.3	7.7	6.1	3.20	1.85
25. Acceptance of compulsory vaccinations against COVID-19.	41.8	10.0	9.1	16.0	7.5	6.1	9.5	2.94	2.07

[^]—grades on a 7-point Likert scale, where 1—definitely not, and 7—definitely yes.

In the second cluster, the ratings were more varied, the ratings “yes” prevailed. The focus was on the tested features relating to: purchasing behavior, physical activity and preferences of individual tourism. The tested features relating to the systematic maintenance of physical activity, including hiking, and checking product labels while shopping, received the most positive opinions in this cluster.

In the third cluster, negative assessments of tested features prevailed, relating to: preferences for organized tourism, foreign holidays and nutrition in chain restaurants, and the obligation to vaccinate against SARS-CoV-2. The only tested feature with a predominance of positive opinions in this cluster was related to the search for vacation venues offering meals in a package.

When analyzing the average results for each of the examined features included in Table 1, it should be emphasized that the value of 4 in the Likert scale used meant a neutral

assessment. Thus, the calculated mean scores higher than 4 indicate a positive evaluation given by the respondents. The highest mean score (5.92) was calculated for the tested feature referring to the belief that food produced with traditional methods is of higher value than industrially produced food. At the same time, it was the tested feature supported by the highest percentage of respondents (85.8%). This means that the respondents are convinced of the high quality of traditional food. A slightly lower mean (5.59) was calculated for the tested feature related to changes in vacation decisions caused by turbulence related to COVID-19. In total, 76.3% of respondents confirmed that their vacation plans had changed due to the situation caused by the SARS-CoV-2 virus. Consequently, COVID-19 has caused a significant impact on the way holidays are spent by the respondents.

The lowest mean score (2.94) was calculated for the tested feature related to the obligation to vaccinate against COVID-19. In this case, 60.9% of people were against such an idea, while only 23.1% of respondents supported it. The tested features whose average scores were lower than 4 also included the preference for organized tourism and the preference for food in chain restaurants, e.g., McDonald's, KFC, Subway, etc., during travel. Low average ratings were also obtained by tested feature relating to buying in second-hand stores and preferring products with ecological certificates when shopping.

Basically, based on Table 1, it can be concluded that the respondents showed understanding for the need to limit consumption, presented a rational purchasing attitude without creating excessive stocks, showed a tendency to share unused products, appreciated high-quality food and were willing to incur slightly higher costs. At the same time, systematic physical activity was declared by 57.1% of the respondents, and 49% preferred individual tourism.

The chi-square test of independence was used to test the relationship between nominal characteristics such as sex, place of residence and income level, and the purchasing behavior, physical activity and purchasing preferences of the respondents. The chi-square test of independence was used to verify the null hypothesis of the lack of differences between the studied groups. The results of the performed calculations are presented in Table 2.

Table 2. The results of the chi square test concerning the differences between the variables depending on the sex, place of residence and income level of the respondents.

Tested Feature	Sex	Place of Residence	Income Level
03. No tendency to take stocks.	no differences	no differences	no differences
04. Tendency to use the sale.	differences exist	no differences	no differences
05. Use of second-hand stores.	differences exist	no differences	differences exist
06. A tendency to share unnecessary things.	differences exist	no differences	differences exist
07. Including the content of labels while shopping.	differences exist	differences exist	no differences
08. Search for products with ecological certificates.	differences exist	no differences	no differences
09. Using short supply chains for products.	no differences	no differences	no differences
10. The belief in the high quality of traditional products.	no differences	differences exist	no differences
11. Concerns about genetically modified food.	differences exist	differences exist	no differences
12. Tendency to pay more for organic food.	no differences	no differences	no differences
13. The belief in regional differences and food quality.	differences exist	no differences	no differences
14. Prefer food produced in Poland.	no differences	no differences	no differences
15. Systematic maintenance of physical activity	differences exist	differences exist	no differences
16. Practicing hiking.	differences exist	differences exist	no differences
17. Practicing bicycle tourism.	no differences	no differences	no differences
18. Prefer individual tourism.	differences exist	no differences	no differences
19. Preference for organized tourism.	no differences	no differences	no differences
20. Preferring foreign tourism.	no differences	differences exist	differences exist
21. Preferring places to stay with a meal included in the package.	no differences	no differences	no differences
22. Prefer local meals while traveling.	no differences	differences exist	no differences
23. Prefer chain restaurants when traveling.	no differences	no differences	no differences
24. Change of tourist plans due to COVID-19.	no differences	no differences	no differences
25. Acceptance of compulsory vaccinations against COVID-19.	no differences	differences exist	differences exist

The data in Table 2 shows that the sex of the respondents was important in many of the issues studied. Among other things, pay differentiated the purchasing behavior and physical activity. Tourist preferences were independent of sex with the exception of hiking

and individual tourism. In the case of individual tourism preferences, depending on sex, the independence test was as follows: ($\chi^2(6) = 16.8, p = 0.010$), for hiking ($\chi^2(6) = 18.9, p = 0.004$), and for systematic physical activity ($\chi^2(6) = 13.0, p = 0.042$). The perception of the quality of traditional food and the fear of genetically modified food varied depending on the size of the place of residence. There were also differences in tourism preferences and the acceptance of compulsory vaccinations against COVID-19. Acceptance of the obligation to vaccinate against COVID-19 varied depending on the size of the place of residence ($\chi^2(18) = 31.6, p = 0.025$) and the income level ($\chi^2(18) = 33.2, p = 0.016$). On the other hand, the level of income did not differentiate the perception of most of the studied features, with the exception of the use of second-hand shops, the tendency to share unnecessary things, the preference of organized tourism and the acceptance of the vaccination obligation. Differences in the perception of the studied issues depending on the sex of the respondents are presented using categorized charts (Figures 2 and 3).

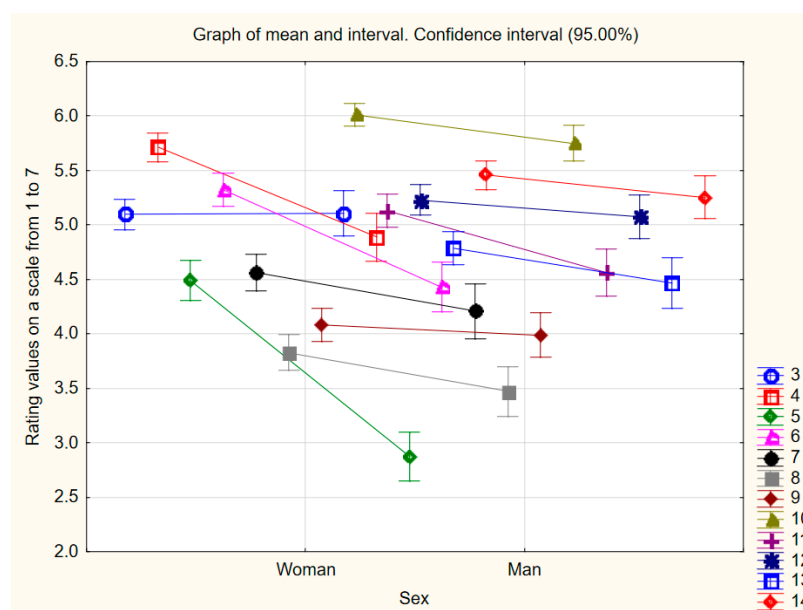


Figure 2. Average assessments of tested features concerning the purchasing behavior of food, depending on the sex of the respondents. Descriptions of tested features are included in research methodology.

When analyzing the purchasing behavior of respondents of both sexes, it was found that they declare that they make purchases on an ongoing basis, without stockpiling, at a similar level, even in the situation of limited access to retail outlets (tested feature 3). On the other hand, women are more likely to wait for discounts and promotions of well-known brands' products (tested feature 4), make second-hand purchases (tested feature 5) and share unnecessary things (tested feature 6). Basically, women appreciated the issues of food quality (tested feature 10–14) and thoughtful shopping (tested feature 3–9). Similarly, women, more than men, appreciated food from Poland (Figure 2).

With regard to the identification of lifestyle elements related to physical activity and tourist preferences depending on the sex of the respondents, the results are presented in Figure 3.

It is worth emphasizing that men declared greater physical activity than women (tested feature 15). On the other hand, women showed a greater preference for individual tourism (tested feature 18) and hiking (tested feature 16) than men. Women also showed higher openness than men to looking for local food during the trip. The tested feature was assessed to be the lowest related to compulsory vaccinations against COVID-19; in this case, women expressed stronger opposition.

In order to verify the hypotheses, Pearson's correlation was analyzed in search of a relationship between the assessments of tested features. The results are presented in Table 3. The correlation coefficient is a measure of the relationship between two variables and ranges from -1 to $+1$. These values should be interpreted in two ways. The modulus of the number informs about the strength of the relationship between the variables, while the “+” sign determines that the direction is directly proportional, and the “−” sign—inversely proportional [52]. Linear regression equations for all significant correlation coefficients were determined using the least squares method. The linear regression coefficients, calculated according to the formula $y = a + bx$ [52], are presented in Table 4, which also includes the coefficients of determination r^2 .

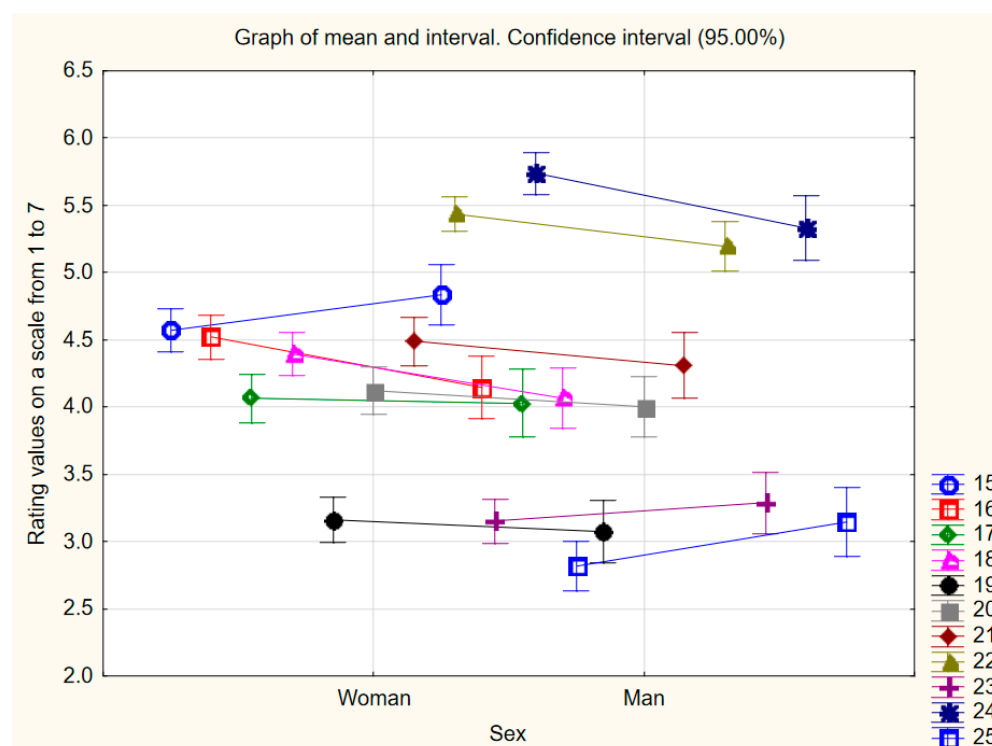


Figure 3. Average ratings of tested features concerning physical activity and tourist preferences, depending on the respondents' sex. Descriptions of tested features are included in research methodology.

Table 3. Pearson's correlation coefficients (r) between the assessments of tested features relating to physical activity and tourism preferences, and the assessments of tested features relating to shopping behavior and food preferences.

Tested Features ^	15	16	17	18	19	20	21	22	23	24	25
3	0.071	0.053	0.033	0.061	−0.003	−0.027	−0.012	0.127 **	−0.128 **	0.035	0.044
4	−0.005	0.077 *	0.055	0.088 *	−0.034	−0.023	0.009	0.124 **	−0.012	0.185 **	0.019
5	0.005	0.109 **	0.018	0.164 **	0.034	−0.011	0.002	0.081 *	−0.029	0.092 *	−0.038
6	0.105 **	0.165 **	0.086 *	0.178 **	0.023	0.011	0.020	0.157 **	−0.087 *	0.185 **	−0.037
7	0.226 **	0.221 **	0.088 *	0.145 **	0.049	−0.040	0.009	0.195 **	−0.195 **	0.087 *	0.049
8	0.190 **	0.231 **	0.139 **	0.171 **	0.091 *	−0.027	0.075 *	0.221 **	−0.170 **	0.100 **	0.081 *
9	0.199 **	0.280 **	0.212 **	0.192 **	0.085 *	−0.126 **	0.132 **	0.207 **	−0.128 **	0.057	−0.015
10	0.006	0.107 **	0.049	0.146 **	−0.025	−0.091 *	−0.003	0.181 **	−0.178 **	0.060	−0.116 **
11	−0.021	0.051	0.009	0.076 *	0.026	−0.098 **	0.099 **	0.059	−0.075 *	0.007	−0.208 **
12	0.030	0.162 **	0.028	0.178 **	0.060	−0.040	0.024	0.228 **	−0.193 **	0.091 *	−0.001
13	0.066	0.153 **	0.148 **	0.132 **	0.083 *	−0.078 *	0.121 **	0.172 **	−0.060	0.036	−0.086 *
14	0.097 **	0.155 **	0.157 **	0.182 **	−0.031	−0.181 **	0.033	0.246 **	−0.131 **	0.058	−0.122 **

Statistically significant correlation coefficients: *— p -value < 0.05 ; **— p -value < 0.01 . ^—Descriptions of tested features are included in the chapter of research methodology.

Table 4. Linear regression coefficients (b) of the explained variables and the predictors, as well as the coefficient of determinations (r^2), constant values (a) and p values.

The Predictor	Regression Coefficient "b"	Constant Value "a"	Coefficient of Determination r^2	p Value
Feature explained—15. Systematic maintenance of physical activity.				
6. A tendency to share unnecessary things.	0.10342	4.1492	0.0111	0.004 **
7. Including the content of labels while shopping.	0.20723	3.7470	0.0511	<0.001 **
8. Search for products with ecological certificates.	0.18468	3.9831	0.0361	<0.001 **
9. Using short supply chains for products.	0.21088	3.8124	0.0397	<0.001 **
14. Prefer food produced in Poland.	0.11527	4.0458	0.0095	0.008 **
Feature explained—16. Practicing hiking.				
4. Tendency to use the sale.	0.08789	3.9083	0.0059	0.037 *
50. Use of second-hand stores.	0.09576	4.0103	0.0119	0.003 **
6. A tendency to share unnecessary things.	0.16880	3.5402	0.0272	<0.001 **
7. Including the content of labels while shopping.	0.21064	3.4497	0.0488	<0.001 **
8. Search for products with ecological certificates.	0.23319	3.5215	0.0532	<0.001 **
9. Using short supply chains for products.	0.30858	3.1346	0.0786	<0.001 **
10. The belief in the high quality of traditional products.	0.16228	3.4237	0.0115	0.004 **
12. Tendency to pay more for organic food.	0.19019	3.4000	0.0264	<0.001 **
13. The belief in regional differences and food quality.	0.15810	3.6456	0.0234	<0.001 **
14. Prefer food produced in Poland.	0.19103	3.3557	0.0240	<0.001 **
Feature explained—17. Practicing bicycle tourism.				
6. A tendency to share unnecessary things.	0.09540	3.5747	0.0074	0.020 *
7. Including the content of labels while shopping.	0.09093	3.6482	0.0077	0.017 *
8. Search for products with ecological certificates.	0.15251	3.4875	0.0193	<0.001 **
9. Using short supply chains for products.	0.25312	3.0267	0.0449	<0.001 **
13. The belief in regional differences and food quality.	0.16655	3.2737	0.0220	<0.001 **
14. Prefer food produced in Poland.	0.20988	2.9218	0.0246	<0.001 **
Feature explained—18. Prefer individual tourism.				
4. Tendency to use the sale.	0.09764	3.7470	0.0077	0.017 *
5. Use of second-hand stores.	0.14014	3.7286	0.0269	<0.001 **
6. A tendency to share unnecessary things.	0.17694	3.3910	0.0315	<0.001 **
7. Including the content of labels while shopping.	0.13441	3.6793	0.0209	<0.001 **
8. Search for products with ecological certificates.	0.16798	3.6541	0.0291	<0.001 **
9. Using short supply chains for products.	0.20618	3.4407	0.0370	<0.001 **
10. The belief in the high quality of traditional products.	0.21450	3.0062	0.0212	<0.001 **
11. Concerns about genetically modified food.	0.07945	3.8843	0.0058	0.038 *
12. Tendency to pay more for organic food.	0.20246	3.2280	0.0315	<0.001 **
13. The belief in regional differences and food quality.	0.13245	3.6569	0.0173	<0.001 **
14. Prefer food produced in Poland.	0.21811	3.1014	0.0330	<0.001 **
Feature explained—19. Preference for organized tourism.				
8. Search for products with ecological certificates.	0.0893	2.7858	0.0083	0.013 *
9. Using short supply chains for products.	0.09398	2.7498	0.0071	0.022 *
13. The belief in regional differences and food quality.	0.08678	2.7250	0.0069	0.024 *
Feature explained—20. Preferring foreign tourism.				
9. Using short supply chains for products.	−0.1416	4.6535	0.0158	0.001 **
10. The belief in the high quality of traditional products.	−0.1405	4.9117	0.0083	0.014 *
11. Concerns about genetically modified food.	−0.1075	4.6092	0.0097	0.008 **
13. The belief in regional differences and food quality.	−0.0821	4.4637	0.0060	0.035 *
14. Prefer food produced in Poland.	−0.2284	5.3092	0.0329	<0.001 **
Feature explained—21. Preferring places to stay with a meal included in the package.				
8. Search for products with ecological certificates.	0.08116	4.1232	0.0056	0.043 *
9. Using short supply chains for products.	0.15674	3.7887	0.0175	<0.001 **
11. Concerns about genetically modified food.	0.11407	3.8618	0.0098	0.007 **
13. The belief in regional differences and food quality.	0.13451	3.7951	0.0146	0.001 **

Table 4. Cont.

The Predictor	Regression Coefficient “b”	Constant Value “a”	Coefficient of Determination r^2	p Value
Feature explained—22. Prefer local meals while traveling.				
3. No tendency to take stocks.	0.11721	4.7495	0.0162	0.001 **
4. Tendency to use the sale.	0.11311	4.7352	0.0155	0.001 **
5. Use of second-hand stores.	0.05668	5.1262	0.0066	0.027 *
6. A tendency to share unnecessary things.	0.12785	4.7083	0.0248	<0.001 **
7. Including the content of labels while shopping.	0.14791	4.6913	0.0381	<0.001 **
8. Search for products with ecological certificates.	0.17756	4.6906	0.0489	<0.001 **
9. Using short supply chains for products.	0.18126	4.6135	0.0430	<0.001 **
10. The belief in the high quality of traditional products.	0.21753	4.0602	0.0328	<0.001 **
12. Tendency to pay more for organic food.	0.21146	4.2533	0.0518	<0.001 **
13. The belief in regional differences and food quality.	0.14100	4.6888	0.0295	<0.001 **
14. Prefer food produced in Poland.	0.24051	4.0528	0.0605	<0.001 **
Feature explained—23. Prefer chain restaurants when traveling.				
3. No tendency to take stocks.	−0.1475	3.9518	0.0164	<0.001 **
6. A tendency to share unnecessary things.	−0.0887	3.6431	0.0076	0.018 *
7. Including the content of labels while shopping.	−0.1844	4.0174	0.0379	<0.001 **
8. Search for products with ecological certificates.	−0.1706	3.8305	0.0289	<0.001 **
9. Using short supply chains for products.	−0.1404	3.7677	0.0165	<0.001 **
10. The belief in the high quality of traditional products.	−0.2673	4.7812	0.0317	<0.001 **
11. Concerns about genetically modified food.	−0.0799	3.5926	0.0057	0.041 *
12. Tendency to pay more for organic food.	−0.2249	4.3628	0.0374	<0.001 **
14. Prefer food produced in Poland.	−0.1605	4.0632	0.0172	<0.001 **
Feature explained—24. Change of tourist plans due to COVID-19.				
4. Tendency to use the sale.	0.20967	4.4554	0.0342	<0.001 **
5. Use of second-hand stores.	0.08004	5.2779	0.0085	0.012 *
6. A tendency to share unnecessary things.	0.18690	4.6560	0.0341	<0.001 **
7. Including the content of labels while shopping.	0.08242	5.2246	0.0076	0.018 *
8. Search for products with ecological certificates.	0.10037	5.2190	0.0101	0.006 **
12. Tendency to pay more for organic food.	0.10529	5.0455	0.0083	0.014 *
Feature explained—25. Acceptance of compulsory vaccinations against COVID-19.				
8. Search for products with ecological certificates.	0.09150	2.5978	0.0066	0.027 *
10. The belief in the high quality of traditional products.	−0.1958	4.0948	0.0135	0.002 **
11. Concerns about genetically modified food.	−0.2471	4.1526	0.0431	<0.001 **
13. The belief in regional differences and food quality.	−0.0984	3.3959	0.0073	0.020 *
14. Prefer food produced in Poland.	−0.1669	3.8344	0.0148	0.001 **

*— p -value < 0.05; **— p -value < 0.01.

The correlation analysis carried out shows that there is a relationship between physical activity (tested feature 15), hiking (tested feature 16) and cycling (tested feature 17), the preference of individual tourism (tested feature 18), and the elements of consumer attitude (tested features 6–9, tested feature 14). In this case, positive statistically significant correlation coefficients were calculated. Such results indicate the coherence of the components of lifestyle. However, it should be emphasized that the correlation coefficients indicate weak relationships, and the determined regression coefficients confirm this. In the dependencies discussed here, it is worth noting the link between the use of short supply chains (tested feature 9) with physical activity and the preferences of individual tourism among respondents (tested feature 15–18, Table 4).

It is worth emphasizing a number of positive, significant correlation coefficients calculated for the preferences of local food during the trip (tested feature 22) with positive assessments of rational purchasing behavior and food preferences (tested features 3–10, tested features 12–14). In this case, the regression lines indicate that purchasing behavior and high-quality food preferences were predictors of travel eating style. Thus, the respondents kept their lifestyle habits during their tourist trips. This logical relationship is confirmed by the negative correlation coefficients of the tested feature relating to travel preferences, chain restaurants (tested feature 23) and elements of shopping and food preferences (tested features 3, 6–12, 14). The regression coefficients presented in Table 4 also indicate

that positive perceptions of high-quality food were associated with lower preferences for eating in chain restaurants.

Noteworthy are the positive, statistically significant coefficients of correlation between the declaration of frequent supply of food directly from producers (tested feature 9) and physical activity (tested features 15–17), as well as the preference for local dishes during travel (tested feature 22). The regression coefficients calculated for these relationships (Table 4) indicate that the increase in the frequency of using short supply chains was accompanied by greater physical activity of the respondents, more frequent hiking and cycling, and a higher preference for local food during the trip. At the same time, these people did not prefer foreign travel (tested feature 20) and meals prepared in large chain restaurants (tested feature 23). This proves the respondents' trust in local and regional food.

Assessments of the impact on changes in tourist plans caused by COVID-19 (tested feature 24) were significantly, positively correlated with practical elements of purchasing behavior, such as waiting for price reductions (tested feature 4), buying used products (tested feature 5) and sharing redundant products (tested feature 6). The regression coefficients of these relationships showed, in turn, that respondents who rated the elements of rational purchasing behavior more often declared changes in their vacation plans caused by the COVID-19 pandemic (Table 4). Similar relationships were found with regard to careful product selection (tested features 7 and 8), as well as the tendency to bear higher costs of high-quality food (tested features 12). Regarding features 5 (Use of second-hand stores) and 7 (Including the content of labels while shopping), the regression coefficients were not high, indicating a small influence of the predictor on the explained feature. At the same time, the coefficients of determination were very low, which proves that this model explains the studied phenomenon to a small extent (Table 4).

It is worth emphasizing that the correlations calculated between the assessments of the tested feature regarding compulsory vaccinations against COVID-19 (tested feature 25) and lifestyle elements related to purchasing behavior and food preferences. The search for certified food (tested feature 8) was positively correlated with compulsory vaccinations (tested feature 25). This proves the trust of a certain group of respondents in formal system solutions. However, considering the number of such assessments (Table 1), these are the opinions of a minority of respondents. The determined regression line for this relationship indicates that with the increase in the tendency to seek certified products, the acceptance of compulsory vaccinations for COVID-19 increases, but the regression coefficient indicates a slight increase, and the coefficient $r^2 = 0.0066$ proves the model's negligible validity. On the other hand, the constant value $a = 2.5978$ indicates the position of the regression line in the area of negative assessments of the vaccination obligation. Negative correlations (tested feature 25) were also calculated with predictors related to the origin of food (tested feature 13, 14). These were negative correlations, and the regression equations showed a decreasing acceptance of compulsory vaccination with an increase in positive evaluations of local food. As in the example above, these models had very low coefficients of determination (Table 4).

Based on the correlation analysis (Table 3), multiple regression calculations were also performed for individual explained features. The results are shown in Table 5.

The multiple regression results in Table 5 indicate that shopping behavior and food preferences influenced, in particular, preferences for individual tourism, hiking and local meals while traveling. However, it should be emphasized that the presented models explain the population phenomena only to a small extent.

The study was carried out at the turn of 2020 and 2021, i.e., after the second formally identified wave of COVID-19 disease in Poland [40]. The results relating to the holiday destinations of the respondents are presented in Figure 4. Poland dominated among the preferred countries for spending their holidays. It is interesting that despite these preferences, 58.2% of respondents spent their holidays in Poland in 2019, still normal in terms of tourism. This is less than the generally preferred destinations. The main destinations for foreign trips are Spain, Croatia and Germany. The introduction of restrictions related to COVID-19 limited travel abroad and increased the percentage of people who resigned

from a holiday trip in 2020. It is worth noting that during the COVID-19 pandemic, the percentage of people spending their holidays in Poland increased from 58.2% to 68.7%, i.e., by 10.5 percentage points.

Table 5. Results of multiple regression analysis for the explained features and predictors.

Feature Explained	Predictors ^
15. Systematic maintenance of physical activity. $R^2 = 0.0755, F(5731) = 11.939, p < 0.0001$	6, 7, 8, 9, 14
16. Practicing hiking. $R^2 = 0.1237, F(10,726) = 10.248, p < 0.0001$	4, 5, 6, 7, 8, 9, 10, 12, 13, 14
17. Practicing bicycle tourism. $R^2 = 0.0638, F(6730) = 8.2917, p < 0.0001$	6, 7, 8, 9, 13, 14
18. Prefer individual tourism. $R^2 = 0.1014, F(11,725) = 7.4407, p < 0.0001$	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
19. Preference for organized tourism. $R^2 = 0.0142, F(3733) = 3.5090, p < 0.01504$	8, 9, 13
20. Preferring foreign tourism. $R^2 = 0.0448, F(5731) = 6.8540, p < 0.0001$	9, 10, 11, 13, 14
21. Preferring places to stay with a meal included in the package. $R^2 = 0.0296, F(4732) = 5.5802, p = 0.0002$	8, 9, 11, 13
22. Prefer local meals while traveling. $R^2 = 0.1337, F(11,725) = 10.172, p < 0.0001$	3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14
23. Prefer chain restaurants when traveling. $R^2 = 0.0854, F(9727) = 7.5417, p < 0.0001$	3, 6, 7, 8, 9, 10, 11, 12, 14
24. Change of tourist plans due to COVID-19. $R^2 = 0.0627, F(6730) = 8.1458, p < 0.0001$	4, 5, 6, 7, 8, 12
25. Acceptance of compulsory vaccinations against COVID-19. $R^2 = 0.0645, F(5731) = 10.077, p < 0.0001$	8, 10, 11, 13, 14

^—predictor descriptions as in Table 4.

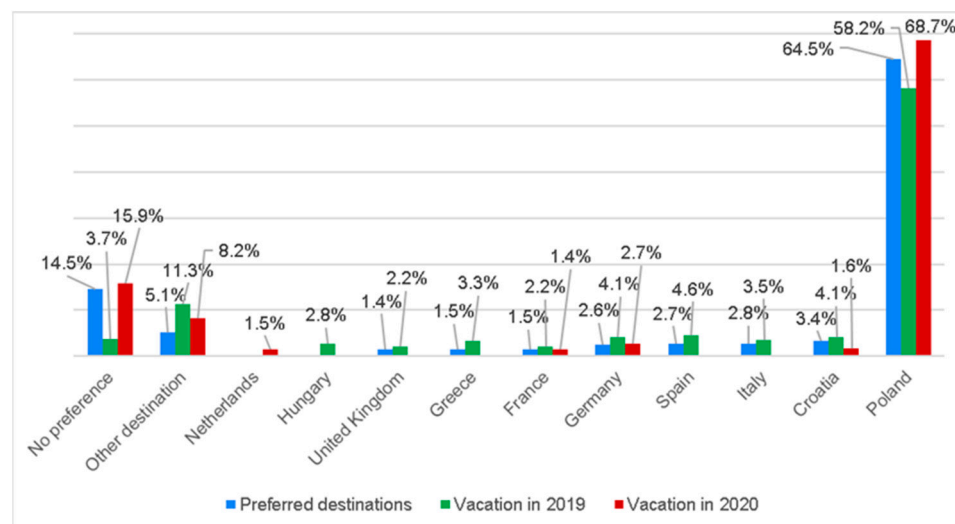


Figure 4. Preferred and implemented vacation destinations in 2019 and 2020 (pandemic period) compared to the usual destinations).

Diet and preferred cuisine are an important element of lifestyle. Figure 5 shows the structure of the cuisine preferred by the respondents.

The most numerous group were the respondents declaring their preference for Polish cuisine—37.0% of people. The 8.1% of people who prefer traditional dishes can be added to this value, due to the spatial scope of the research. Italian cuisine was also popular, with 28.2% of responses. It is worth emphasizing that 4.6% of the respondents said that they had no preferences in this regard and 1.2% of people preferred fast food. Other responses,

6.6% of responses, constituted a significant group. Among them there was, for example, Greek, Indian, organic, etc.

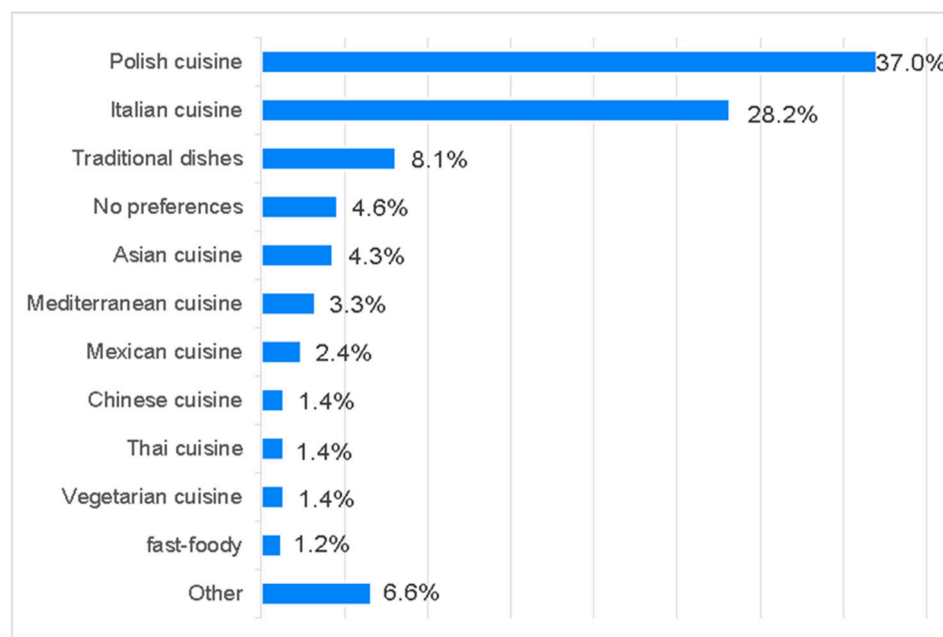


Figure 5. Cuisine preferred by respondents.

4. Discussion

Our research confirmed the research hypotheses presented in this article (H1, H2, H3, H4) and showed the relationship between physical activity, tourist preferences and elements of consumer attitudes of the respondents, but these relationships were of various nature, as shown by the calculated correlation and simple regression coefficients and the coefficients determination, as well as the calculation of the chi-square test and descriptive analyzes of the survey structure.

In the discussed regression relationships, attention should be paid to the fact that the respondents use short supply chains and, at the same time, prefer individual tourism. The research showed a number of positive, significant correlation coefficients calculated for the preferences of local food while traveling with positive assessments of rational purchasing behavior. However, it should be emphasized that the calculated coefficients indicated weak correlations (Table 3). This was confirmed by the determined linear regression equations for the strongest relationships (Table 4). Regression coefficients also indicate that purchasing behavior and preferences for high-quality food were predictors of travel eating style. The purchasing behavior and food preferences in the study group shaped the physical activity during the COVID-19 pandemic, as indicated by the results of multiple regression ($R^2 = 0.0755$, $F(5.731) = 11.939$, $p < 0.0001$) (Table 5). However, it should be emphasized that the model explains the studied phenomenon to a small extent. Thus, further research on this phenomenon will be useful (59–62).

Thus, the respondents kept their lifestyle habits during their tourist trips. A logical consequence of such behavior of the respondents is that the regression coefficients indicate a positive perception of high-quality food and a lower preference for eating in chain restaurants. Some authors [59,60] suggest that an increasing number of consumers are limiting the amount of purchased products, focusing on those that are needed or valuable. According to other authors [61], a negative aspect of COVID-19 may be a significant increase in the consumption of processed food [62], which was not reported in this study. Many other authors believe that sustainability [63–65] shapes not only our diet but also the way we buy, with an emphasis on developing sustainable purchasing practices and prioritizing locally sourced products [66]. Relocation of consumer trends is also often associated with greater

demand for local products, preference for local cuisine, or leisure in the countryside [67,68]. The role of the conditions in which one can lead a specific lifestyle is also important [69,70]. The freedom to choose a certain lifestyle is sometimes limited to alternatives determined by place in the social structure or to the life situation of the consumer [71]. Moreover, numerous studies confirm that many consumers consciously prefer local small businesses, believing that this has a lower negative impact on the environment than purchasing from global retailers [72–74].

A confirmation of the conscious pro-ecological attitudes of our respondents and the credibility of the results obtained is also the fact that, in our research, more than half of the respondents expressed a negative attitude towards genetically modified food, and at the same time shared the belief that the location of food origin has an impact on human health [64,65]. The regression coefficients also indicate that the increase in the frequency of using short supply chains was accompanied by greater physical activity of the respondents, more frequent hiking and cycling, and higher preference for local food during the trip. During the COVID-19 pandemic, as many as 57.1% of the investigated respondents maintained constant physical activity (Table 1), which was associated with hiking and some elements of purchasing behavior (see cluster analysis, Figure 1). The regression equations for these dependencies showed that respondents rated the elements of rational purchasing behavior higher and more often declared also changes in their vacation plans, which were caused by the COVID-19 pandemic (Figure 4).

Shopping and travel behaviors of our respondents were related to sex (Figure 2). In the studied group of people, food preferences differed depending on the sex of the respondent. Among other things, the differences concerned the search for certified food ($\chi^2(6) = 16.6$, $p = 0.011$) or concerns about genetically modified food ($\chi^2(6) = 18.9$, $p = 0.004$). Women more willingly waited for discounts and promotion of well-known brands, made second-hand purchases and shared unnecessary things. They also paid attention to the geographical origin of the food and made conscious purchases. On the other hand, men declared greater physical activity than women (Figure 3), but women preferred individual, hiking and cycling tourism to a greater extent. The sex of the surveyed people had an impact on the shopping behavior and physical activity of the surveyed respondents from south-eastern Poland, but did not affect the tourism preferences of the surveyed people. Some studies [75] indicate that human perception is determined by his previous experience and upbringing, which largely results from the socio-economic conditions in which one lives [76]. There are also differences in lifestyle depending on a person's nationality, sex, age and place of residence, and other characteristics of the social situation [77–79]. In this study, more than half of the respondents lived mainly in rural areas and the rest in small, medium and large cities, which could also have an impact on consumer choices and behavior. According to some authors [28,42], the way of life also refers to the choices of various goods and behaviors (life choices), while life chances refer to the probability of making these choices and are related to the life situation of a given person. At the same time, age, sex or race clearly influence both the choices made, which make up the lifestyle, and the specific chances of their implementation [46].

The determined regression coefficients also indicate that with the increase in the tendency to seek certified products, the acceptance of compulsory vaccinations against COVID-19 increases, but the regression coefficient indicates a slight increase, and the coefficient $r^2 = 0.0066$ proves the model's negligible validity. Negative correlations were also calculated with predictors related to food origin. These were negative correlations, and the regression equations showed a decreasing acceptance of compulsory vaccination with an increase in positive evaluations of local food. As in the example above, these models had very low coefficients of determination. Empirical research on lifestyle [80] identifies many factors that are characteristic of this lifestyle and are not indifferent to health [81], such as nutrition and physical activity, and health care. It may be a specific way of dressing, playing sports, spending free time, choosing the right dishes or using medical care [82]. A deeper look at health behavior as an element of lifestyle allows us to

refer to the habitus [82,83]. Many human attitudes, including those related to health, result from readiness for certain behaviors, resulting from some internal imperative that is not analyzed, but almost automatically and instinctively fulfilled [84,85]. For example, food preferences are related to different social class perceptions of the body and the effects of a particular diet [86,87].

During the COVID-19 situation, the domestic tourism of the respondents increased, who also most often chose Polish cuisine, looked for local, traditional dishes, and most of all avoided fast food in chain restaurants (Figure 5). Therefore, they showed a pro-ecological approach in their nutritional trends, physical activity and way of life. Some studies by other authors [69–71] report that the COVID-19 pandemic has changed the way people live by forcing them to slow down and spend more time at home. This increase in the amount of time spent at home has led to a change in habits and routine [62]. Elements of a sustainable lifestyle, according to some authors [76], are related to the observed fashion for ecology [77]. The fashion for ecology makes us focus on reducing consumption and eliminating unnecessary travels [72].

5. Conclusions and Recommendations

The results of the conducted research confirmed all research hypotheses and allow us to present the following conclusions:

1. COVID-19 contributed to a greater interest in domestic tourism among the respondents who, during their trips, most often chose Polish cuisine, looked for local, traditional dishes and, above all, avoided “fast food” in chain restaurants. Additionally, they showed a greater ecological approach in their nutritional trends.
2. Assessments of the impact of COVID-19 on changes in travel plans were significantly, positively correlated with practical elements of purchasing behavior, such as waiting for price reductions, buying used products and providing unnecessary products. Similar relationships were found in the case of careful selection of products based on ecological labels and certificates, as well as the tendency to incur higher costs of high-quality food. However, the linear and multiple regression analysis showed weak relationships.
3. During the COVID-19 pandemic, in the studied area, the percentage of people spending their holidays in Poland increased. During their vacation, the respondents preferred traditional and organic food, at the same time limiting the use of chain restaurants, and looking for accommodation, offering traditional, regional meals in a package, prepared from native ingredients. However, the linear and multiple regression coefficients also showed weak relationships.
4. The results of the research confirmed that men declared greater physical activity than women. On the other hand, women preferred individual and hiking tourism more than men. Women were also more open than men to look for local food while traveling.
5. The purchasing behavior depended on the respondents’ gender, with women more eagerly looking for discounts and promotions of well-known brands, making second-hand purchases and sharing unnecessary items. Women also paid more attention to the geographical origin of food and appreciated its quality, emphasizing the importance of traditional, non-genetically modified foods. Although men showed greater physical activity, women placed more emphasis on individual, hiking and cycling tourism.

Recommendations that can be presented from the conducted research (despite their partial nature and low coefficients of regression and determination) allow the conclusion that people managing the purchasing process and leisure in a given region should emphasize not only the local origin of food, but also the culinary traditions of this area. This applies to products offered, both in commercial, gastronomic and tourist establishments.

However, there are some limitations that apply to this research. They were non-probabilistic and cross-sectional in nature, so there may be a need to pay additional attention

to other predictors explaining the behavior of the surveyed consumers. Future research should also take into account a wider period of time, which may indicate changes in the studied characteristics, resulting from the society getting used to extraordinary or even different, new conditions.

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Informed Consent Statement: The survey of respondents' opinions was voluntary. By completing the online survey, every person consented to participate in the survey.

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