

Article

Consumer versus Organic Products in the COVID-19 Pandemic: Opportunities and Barriers to Market Development

Magdalena Śmiglak-Krajewska ¹ and Julia Wojciechowska-Solis ^{2,*}

¹ Department of Finance and Accounting, Faculty of Economics, Poznan University of Life Sciences, Wojska Polskiego 28, 60-637 Poznan, Poland; smiglak@up.poznan.pl

² Department of Agritourism and Rural Development, Faculty of Agrobioengineering, University of Life Sciences in Lublin, Akademicka 13, 20-950 Lublin, Poland

* Correspondence: julia.wojciechowska@up.lublin.pl

Abstract: The main objective of this study was to determine the behavior of the Polish consumer of organic products during the COVID-19 pandemic and to identify preferred channels of distribution of organic products in the situation of restricted freedom of movement as well as to assess what information displayed on the labels of organic food was most important to the customer. The research was conducted on a sample of 1108 respondents with the use of CAWI technique collected in an online survey carried out in February–August 2020. To analyze the obtained results, cluster analysis, linear regression model and duplication method were used to verify the substitute channels for purchasing organic goods. The pandemic has intensified the health value of consumers when making decisions about choosing food products. Consumers are sensitive shoppers who read the content of the labels and pay attention to the ingredients of the products they buy. The price is also of significant importance for consumers; however, it is less important than, for example, the expiration date of the purchased product. With the use of PCA analysis, it was possible to identify 18 factors that could be divided into three segments: marketing, practical and sensory. The proposed factors, according to the respondents, had an effect on the purchase of organic products by Polish consumers. Regarding the preferred purchasing channels, the Internet is becoming more and more important. Almost one-quarter of the respondents confirmed that they bought organic products via the above-mentioned distribution channel. Nearly 17% of the surveyed consumers considered the Internet to be an alternative way of doing their shopping. The results obtained in the research can be used in the sector of organic food producers to design marketing strategies and to adapt their offer to the proposed four groups of purchasers of organic products: eco-activists, eco-dietitians, eco-traditionalists, eco-innovators.

Keywords: sustainable decisions; behavior and attitudes; COVID-19; organic products; opportunities and barriers; purchasing channels; sustainable consumer welfare



Citation: Śmiglak-Krajewska, M.; Wojciechowska-Solis, J. Consumer versus Organic Products in the COVID-19 Pandemic: Opportunities and Barriers to Market Development. *Energies* **2021**, *14*, 5566. <https://doi.org/10.3390/en14175566>

Academic Editor: Karolina Pawlak

Received: 29 July 2021

Accepted: 3 September 2021

Published: 6 September 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The outbreak of the COVID-19 pandemic (Corona Virus disease-2019) was undoubtedly an exceptional situation that has recently affected all aspects of the everyday life of people around the world. Many persons believe that the pandemic, while compared to the previous ones, was the cause of the most serious problems in terms of public health, economic and financial security, quality of life and food security worldwide [1–3]. To limit the spread of COVID-19, a large number of countries instructed people to stay indoors and leave their homes only when it was necessary to meet basic needs such as buying food, sudden medical emergencies, or to go to work (in the cases when the job could not be performed remotely) [4,5].

The global health crisis has definitely affected all aspects of the day-to-day life of the population, it has especially influenced the eating habits or contributed to the change

of lifestyle of a great number of people. The necessity to self-isolate and separate from the rest of the society has disrupted the habits of the consumers in terms of what they buy, in what quantities and via which channels (a place where the consumers do their shopping). Consumers have found themselves in a new situation where shopping, apart from other daily duties, had to be moved to the virtual world. In the age of COVID-19, the majority of consumers have started to prioritize their personal safety and the well-being of their families.

Following the announcement of the World Health Organization in March 2020, regarding the new coronavirus disease (COVID-19), the destructive effects of the pandemic were closely monitored around the world. The new order that was a result of the fight with the virus began, very soon, to affect the behavior and habits of people. Due to the fact that food consumption is of critical importance to humans, it became a major area of research in terms of the effects of the COVID-19 pandemic.

According to Cachero-Martínez [6], the pandemic caused by COVID-19 changed the mentality of many consumers. People have started to be more aware of the dangers that are the result of not taking care of the planet. Before the pandemic, there was a noticeable increase in collective concern for the environment and sustainability; however, COVID-19 has accelerated this process and a great number of people are determined to act in a more responsible way. In this regard, the health crisis may increase the consumption of organic food, that is, the goods that are produced with the application of environmentally friendly farming methods and the products that are processed without the use of chemical additives and preservatives.

2. Literature Review

Organic food is food produced without the use of artificial fertilizers (grown on soil which is restored only with organic fertilizers), without pesticides, growth regulators, antibiotics, hormones, and many other types of chemicals, and processed without the use of additives and chemical preservatives which are popular in the modern food industry. It is commonly believed that organic food is of better quality than food manufactured in a conventional way [7–10].

With regards to encouraging a customer to make a purchase decision, confidence in the product is essential. Trust can be a strategic advantage for the organic products industry [11] because it is a common situation that consumers lack the ability to evaluate the benefits of organic goods. Therefore, manufacturers and retailers can make use of certificates to promote confidence in their products and to stimulate the demand for organic goods. Trust in organic products has a positive impact on behavioral intentions and it is an important value when it comes to influencing those intentions [12]. Because the majority of consumers are unable to evaluate the features and benefits of the offered products, in many cases, they trust the labels and certifications [13] which, in turn, boosts purchase intention [14]. What is more, if a consumer has great confidence in a product, the person is more willing to recommend it to others [6,15]. At the level of the European Union, the principles of organic production, control, certification as well as labeling of the products of organic farming are regulated by Council Regulation (EEC) 2092/91 of 24 June 1991 on organic production of agricultural products and labeling of agricultural products and foodstuffs. Obviously, all rules of labeling food which are set out in national and Community legislation apply to labeling organic food as well, and the above-mentioned regulations provide additional details and requirements that are reserved exclusively for food that is produced with the application of organic farming practices. Food produced by manufacturers of organic products is labeled with a special type of marking. Correct labeling enables consumers to make an informed choice of organic food products. On all pre-packaged products, there should be placed the number of the certification body, e.g., PL-EKO-03, the place of manufacture, that is, “EU agriculture” or “non-EU agriculture”, as well as the organic farming logo. The use of the logo is mandatory since 1 July 2010. The above-mentioned symbols are placed on organic products to increase recognition of organic food among

consumers, regardless of the place the product comes from. The EU logo is a guarantee that organic food producers and the farmers who had supplied the raw materials meet the EU-wide requirements for organic farming. On the organic farming logo, there are 12 stars arranged in a shape of a leaf on a background of a green flag. The detailed conditions and technical rules regarding placing the logo on the labels of organic products can be found in Annex V B to Council Regulation (EEC) no. 2092/91 [16].

Displaying the logo minimizes the risk of consumer confusion as well as the likelihood of potential fraud. Thus, consumers who buy products with the EU logo can be sure that the food is not anonymous because it carries the name of the producer, the manufacturer, the packer as well as the name and/or the code of the certification body [17].

In Poland, when it comes to organic farming, the entire process of production (from farm to table) is strictly controlled by certification bodies that are acknowledged by the Minister of Agriculture. Additionally, to protect consumers against dishonest producers, the Agricultural and Food Quality Inspection (IJKHARS) conducts audits to eliminate from the market those producers who misrepresent themselves as organic food manufacturers.

In the case of organic food, the process of production is labor-intensive; therefore, the price of organic products is higher than their non-organic counterparts which are available on the market. Due to the lack of application of artificial fertilizers and other plant protection products, the yield from organic agriculture is lower than in the case of conventional one. The relations between prices of organic and conventional food are influenced by: higher costs of production of organic food, market maturity, demand–supply relations, distribution channels, and the degree of product processing [18–24]. Consumers are willing to pay a higher price for organic products provided the goods have the required certifications. For the modern consumer, not only the product itself is important but also the cycle of production and its impact on the environment and humans. Nowadays, the consumer does not want to buy anonymous food. Customers have more confidence in products that are manufactured under appropriate supervision.

Over the past several decades, the market of organic food and organic farming have been growing rapidly throughout Europe [25,26]—Figure 1.

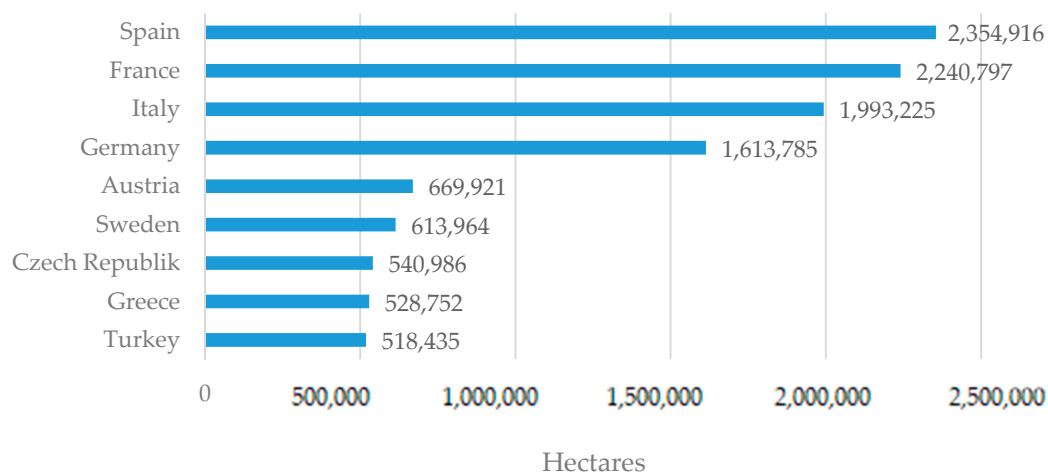


Figure 1. Countries in Europe with the most organic agricultural land 2019. Source: FiBL-AMI survey 2021, based on national data sources and Eurostat.

The above is enhanced by: the increasing prosperity of societies, the growing awareness of consumers with regard to the quality and safety of food plus the impact of organic food on human health [27]. The demand for organic food is mainly driven by the trends in consumer behavior which are the result of the increased awareness of customers and their focus on quality. The quality of organic food is the key reason for its competitive advantage over conventional food [28,29]). It is estimated that the value of the global organic food market was approximately EUR 106 billion in 2019. The largest producers of

organic food are the USA (EUR 44.7 billion), Germany (EUR 12 billion), and France (EUR 11.3 billion). In 2019, France recorded the largest increase in sales of BIO-certified products and it amounted to 13%. The residents of Denmark are those who spend the greatest amount of money on “ECO” food per capita. In 2019, the ratio was EUR 344 while the European average was EUR 55. According to the data of the Research Institute of Organic Agriculture, the average resident of Poland spends EUR 8 per year on organic food (it is less than 1/10th of the EU average). The European organic food market is worth EUR 45 billion. Europe and the United States account for nearly 90% of the global demand for bio-based products. The European organic food market is worth EUR 45 billion [30].

According to the Nielsen report, the coronavirus pandemic has not inhibited the demand for organic products in Poland, on the contrary—consumers are more eager to buy the products which are labeled with the “eco- leaf” than in the same period last year. During the pandemic, customers tend to opt for certified products, often from local suppliers. The value of the “ECO” industry in the last 12 months was estimated to be PLN 709 million which was an increase of 20% compared to the previous year. Sadly, organic products still constitute only 0.5% of the entire shopping basket of an average consumer [31].

One of the key factors that motivate a consumer to purchase organic products is the state of environmental awareness of that person. According to Poskrobko, environmental awareness is related to social awareness because it is part of it and it can be understood as the state of knowledge about ways and instruments that are applied to control the exploitation and protection of the natural environment [32]. There are five basic factors that influence the development of consumer environmental awareness, i.e., sense of personal insecurity, sense of own responsibility for the state of the natural environment; the level of knowledge, sense of health security and readiness to build personal self-restraints [33,34].

The sense of personal danger has a crucial impact on shaping the emotional attitudes of consumers towards environmental protection. The more strongly consumers feel personally affected by environmental problems, the more possible it is that they will be guided by the ecological criteria while making their purchasing decisions.

A sense of being responsible for the environment is inextricably linked to the belief in the long-term effectiveness of the response of individual consumers to the needs of the natural surroundings. Consumers with lower levels of environmental awareness shift the responsibility for the state of the natural surroundings to various entities such as the state, enterprises or political and social institutions [35].

Another component of ecological awareness is the level of ecological knowledge of individual persons which is the sum of information about ecological problems, elements of the natural environment and the correlations between the above that the persons have registered in their memory. The level of knowledge and general environmental awareness are the basis for the formation of pro-environmental motivation of consumer behavior, a psychological mechanism. Ecological values that are recognized and highly estimated by an individual person become factors that prompt the consumer to engage in pro-environmental actions [36].

Regarding the scale of personal ability to build self-restraint and make sacrifices, those are also important components of ecological awareness, and in some cases, those are decisive factors that awaken the environmental consciousness of the consumers. Self-imposed restraints result in, for example, a willingness to pay higher prices for organic products.

Pro-ecological behavior of consumers is determined not only by environmental awareness but also by economic factors. One of the above is income, which combined with a price, forms the basis for making consumption decisions [37].

Information and marketing are also of great importance. Consumer attention is drawn to a specific product and details are provided regarding its benefits, what is more, the customer is able to identify the company and its environmentally friendly products and activities.

The increased interest of consumers in organic food is caused by the fact that people are more often looking for food of high quality, purchased locally from trustworthy and reliable

producers and suppliers. Consumers are interested in production methods, food safety, ways of preparing and storing products, they carefully analyze nutritional and health values of food, they avoid preservatives and allergens. Consumers, concerned about the natural environment and health (their own, their family's, the public's) are interested in the origin of the product and information regarding environmental contamination (e.g., pollution due to the use of agrochemicals, chemical residues, soil and water contamination), presence of antibiotics used in animal husbandry, wasted food [38,39]. Responsible consumers (that constitute a specific form of social capital) change their habits and behavior, evaluate food and choose products that are: fresh, authentic, low-processed, not anonymous, local, clean, with a short and simple list of ingredients, natural and tasty [40]. More and more people become aware of the correlation between their own actions and other spheres of social and economic life, they also begin to realize that by choosing certain organic products they not only contribute to the nature and level of domestic production but also to the economic condition of enterprises and the state of the natural environment [24]. Consumers, with their deliberate actions and choices, more and more often shift from the selfish approach to satisfy only their own needs and they start focusing on implementing the assumptions of the society [41].

The impact of the pandemic situation on consumers' attitudes towards health issues is also significant. During the COVID-19 pandemic, trends indicate increased consumer interest in healthier food products. Maintaining a healthy diet and lifestyle during the COVID-19 pandemic is important to fighting viral infections and maintaining mental health and well-being. A proper and balanced diet provides you with enough nutrients to support a healthy immune system against respiratory infections such as coronavirus infection [42,43].

The objective of this study was to determine the behavior of the Polish consumer of organic products during the COVID-19 pandemic, to assess what distribution channels were chosen by the purchaser of organic products in the situation of restricted freedom of movement and what elements of the labels placed on organic food were important to the consumer.

Therefore, this study proposes the following research questions:

RQ1: Are there any statistical differences or similarities among the factors influencing the willingness to buy organic products in the four proposed groups of consumers?

RQ2: How important is the information on the labels for the consumer?

RQ3: What places to buy organic food were preferred by the consumer during the pandemic?

RQ4: What organic foods was most preferred by the consumer during a pandemic?

3. Materials and Methods

In the study, a diagnostic survey was used along with a questionnaire designed by the author of the research. The study was conducted over the period from February 2020 to August 2020. The questionnaire was composed of 20 research questions and additional questions to identify the sociodemographic characteristics of the respondents (Appendix A contains the questions used for the analysis presented in this article). One of the objectives of the research was to determine the importance of consumption of organic products among Polish consumers during the pandemic and to assess the changes in behavior of customers in the organic food market (whether the changes are positive or negative from the point of view of the development of the market). The conducted study helped to identify the motives that are of key importance for a consumer who decides to purchase organic products. It was determined which characteristics of organic products were most valuable for the consumer during the pandemic. Due to the difficulty to reach the respondents, it was decided to resign from conducting the survey in the form of personal interviews and opt for the survey performed with the use of computer tools. The baseline study was conducted with the use of a questionnaire method based on the availability of respondents with the application of CAWI technique (Computer Assisted Web Interview). The qualifying factor for respondents was their declaration that during the

pandemic they purchased products that were labeled as organic. The questionnaire was composed of three sections: socio-demographic data, knowledge about organic products (ways of labeling the products and health benefits) and willingness to consume organic food (motives and barriers with regards to consumption). In the prepared questionnaire, mainly nominal and ordinal, five- and seven-point rating scales were used. It was decided to opt for a Likert scale because it enables to perform mathematical calculations with the use of variables measured on an interval scale. The measuring scales were validated in accordance with applicable regulations. The purchase frequency was measured on a scale of 1–5 and the numbers were assigned to the possible answers of the respondents as follows: 1—“I buy several times a year”; 2—“I buy several times every six months”; 3—“I buy less often than once a month”; 4—“I buy several times a month”; and 5—“I buy several times a week”. A total of 1865 adult residents of Poland were surveyed. 1108 correctly completed questionnaires were accepted for the analysis (which is 0.0028 of the country’s total population). Table 1 presents the distribution of the research sample. Women constitute 52.26% of the study subjects, which is slightly more than in the general population of Poland (51.64% in 2020) [44]. To determine the size of the sample, the size of the entire local population was taken into account and in the case of statistical inference concerning the fractional coefficient a confidence level of 0.95 and an accuracy of 3% were adopted. The preliminary analysis of the data was performed to assess the validity of the measuring tool and to conduct an internal compliance analysis of the scales with the α -Cronbach method. In the conducted studies, the Cronbach’s α score ranged from 0.70 to 0.90, which proved internal consistency and reliability of the scales. The statistical analysis was supported by Statistica 13.1 PL software which includes descriptive statistics, k-means clustering, factor analysis and purchase duplication analysis.

The proposed model, which outlines the correlation of preferred purchase channels for organic products and the imposed restrictions during the pandemic, includes eight variables.

3.1. Description of the Sample

Consumers who purchase organic products are referred to as ‘green consumers’. It is a heterogeneous group when it comes to the motives of the customers for purchasing organic products. The consumers can be divided as follows [45]:

- Consumers who demonstrate common sense, whose environmental behavior is based on reliable information and is driven by a desire to gain prestige;
- Self-oriented consumers whose motives to purchase organic products are related to taking care of their own health and the well-being of their families;
- Organic fanatics who consider only organic products to be valuable.

To characterize the profile of consumers of organic products, the authors of this study used the types of green consumers which are listed in the works of Dauget [46] and Żakowska-Biemans and Gutkowska [47]:

Eco-activists—well-informed, involved in pro-environmental activities on grounds of health and natural environment reasons. N = 270, which is 24.37% of the analyzed sample; Eco-dietitians—who purchase organic products to prevent or treat diseases. N = 319, which is 28.79% of the studied population;

Eco-traditionalists—who value taste, authenticity and tradition. N = 361, which is 32.58% of the studied population;

Eco-innovators—who are driven by various types of motives including both taste properties of food and concerns for the natural environment. N = 158, which is 14.26% of the study population.

Table 1. Characteristics of the sample.

Variable	Category	Frequency (N)	Percentage (%)
Gender	Male (M)	529	47.74
	Female (F)	579	52.26
Age	<25	324	29.24
	26–40	247	22.29
	41–55	311	28.06
	>56	226	20.41
Place of residence	Rural areas (rural communes)	437	39.44
	Towns of up to 30,000 inhabitants (urban–rural communes)	199	17.96
	Towns more than 30,000 inhabitants (towns)	472	42.60
Level of formal education	Primary	355	32.04
	Secondary	408	36.82
	University	345	31.14
Consumer segments *	Eco-activists	270	24.37
	Eco-dietitians	319	28.79
	Eco-traditionalists	361	32.58
	Eco-innovators	158	14.26

Source: own research, N = 1108; * for sector names see Dauget [46].

3.2. Analysis of Motives for Choosing Organic Products According to the Types of Consumers of Organic Goods

The analysis of the reliability of the statements of the consumers of organic products regarding their preference of choosing organic products was performed with the use of Cronbach's alpha coefficient. The obtained score of Cronbach's alpha coefficient was 0.8, which confirmed the correctness of the selection of questions for factor analysis. Before segmentation of consumers into four groups, their motives for making a purchase decision were divided into three groups according to the features that are taken into account by the customer (Table 2).

The factors obtained in PCA analysis explained 46.74% of the total variation. The qualification for individual factors was based on a minimum value of factor loading estimated at 0.5, with factor adequacy to meet the requirements of factor analysis tested with the use of the Kaiser–Mayer–Olkin coefficient ranged from 0 to 1. The value indicating the collective correlation of the variables was 0.84, which clearly confirmed the logic of the application of the variable reduction method (for the researcher to perform subsequent activities, the coefficient should reach a value above 0.5). The identified factors, presented in Table 2, were used for cluster analysis (segmentation).

Table 2. Analysis of the main factors (PCA) that influence the choice of organic products by consumers.

Motives	Marketing Features Related to Sales Segment 1	Practical Features Segment 2	Sensory and Associative Features Segment 3
Opinion about the manufacturer	0.758		
Place of sale/purchase	0.721		
Certification marks	0.717		
Information labels	0.702		
Brand	0.692		
Type of packaging	0.688		
Expiration date		0.768	
Preferences of the consumer		0.756	
Ingredients of the product		0.722	
Price		0.696	
Freshness of products		0.680	
Availability of products		0.612	
Appearance			0.670
Taste			0.664
Flavor			0.620
Memories associated with childhood			0.592
Health awareness			0.586
Social awareness			0.560
Explained variance in %	12.64	22.87	11.23

Source: own calculations.

With the application of cluster analysis, segments of consumers were determined internally and, at the same time, groups of consumers according to different motives while choosing organic products (Table 3). Segmentation of consumers was conducted in two stages. First, cluster analysis was performed with the use of hierarchical methods. Then, k-means clustering method was applied to identify consumer segments. For k-means clustering, mean values of individual segments were used. K-means clustering method allowed to define four types of consumers referred to as follows: Eco-activists (type 1), Eco-dietitians (type 2), Eco-traditionalists (type 3), Eco-innovators (type 4).

Table 3. Characteristics of consumer segments based on three sets of classifying variables.

Motives	Eco-Activists (Type 1)	Eco-Dietitians (Type 2)	Eco-Traditionalists (Type 3)	Eco-Innovators (Type 4)	p-Value
Marketing features (Segment 1)	4.28 ^a	3.46 ^b	2.88 ^c	4.48 ^a	<0.000
Practical features (Segment 2)	4.02 ^a	4.12 ^a	3.96 ^b	3.72 ^b	<0.000
Sensory features (Segment 3)	3.86 ^b	4.06 ^a	3.72 ^b	2.96 ^c	<0.000

Source: own calculations. Different superscripts indicate significantly different means after the performance of Waller–Duncan post hoc ANOVA test (t-statistic multiple comparison test; Bayesian approach).

The analysis of the motives of choosing organic products by selected types of consumers shows that eco-activists pay more attention to marketing and practical features rather than to sensory features. Eco-dietitians, when deciding to buy organic products, take into account practical features first while paying slightly less attention to sensory features. A similar distribution of importance of the features of organic products can be noticed in the case of eco-traditionalists, however, the obtained values are lower. Sensory characteristics are of the least importance to the eco-innovator consumer type. A comparison of the groups of consumers showed that the most informed customers of organic products are eco-activists and eco-dietitians who are able to notice all benefits of organic products, which is reflected in the obtained values. Eco-activists and eco-innovators pay the most attention to marketing features and the least on sensory features, whereas eco-

dietitians and eco-traditionalists pay the most attention to practical features and the least on marketing features. It should be mentioned that the research was conducted during the COVID-19 pandemic, at a time when the society began to look for food of high nutritional values—which, in the opinion of the consumer, were the reflection of better well-being, lack of preservatives, stronger body, and a way of supporting local food markets that found themselves in a difficult situation in terms of sales.

4. Results

The pattern of consumer behavior has changed since the beginning of the pandemic. The society started to appreciate products that are associated with a healthy lifestyle and people take more care about the well-being of their families. Table 4 illustrates how the respondents rated the factors that influenced their decision to choose the “eco” lifestyle. Factors such as “taking care of the well-being of a family”, “family traditions”, and “natural values” were most important compared to the other factors that were proposed in the research questionnaire. “Taking care of the health of own family” was highly valued by the respondents who were classified as eco-traditionalists, the above-mentioned factor was also very important for eco-dietitians. Such factors as “professional commitment” and, consequently, a lack of time as well as an active lifestyle received high ratings from the respondents who choose organic products. Polish society is characterized by a high level of pro-ecological awareness (a high level of education that begins at the pre-school stage and is continued at subsequent stages plus a strong emphasis on ecology by social campaigns) that is why the factor ‘environmental awareness’ at the time of the pandemic did not receive high compliance scored compared to other values as that factor had already been considered to be obvious. While analyzing the values within the groups of the respondents, it can be noticed that for eco-activists the impulse to consume organic products was: “professional commitment/lack of time”, “family traditions”, “family well-being”—according to those consumers organic products were the combination of such values as a high level of quality or special flavor associated with childhood and with family traditions. Eco-dietitians appreciated, first of all, the health benefits, that is, the manufacturing process performed without the use of chemicals as well as the higher level of nutrients which, according to the opinion of the respondents, are the features of organic products. “Family traditions” and “natural qualities” were also recognized by the above-mentioned group of respondents. Similar factors were selected by the respondents in the group of eco-traditionalists. The situation was different in the case of eco-innovators. In this group, the main factor while choosing organic products was “professional commitment”; this is the group of consumers to whom the food market owes much of its innovation, eco-innovators can also be called modern gourmets. Due to lack of time, consumers in this group are willing to try different offers of the market such as ready-to-eat meals made from organic products, they support restaurants with their menu based exclusively on organic products, etc. Being physically active appears to be one of the main factors for eco-innovators. As was in the case of the previously mentioned groups, also for eco-innovators “family traditions” and “natural qualities” are very important factors that motivated the consumers to change their lifestyle and become advocates of organic products.

Table 4. Factors that prompted consumers to turn to organic products.

Factor	Mean	Eco-Activists (Type 1)	Eco-Dietitians (Type 2)	Eco-Traditionalists (Type 3)	Eco-Innovators (Type 4)	<i>p</i> -Value
Family well-being	3.48	3.97 ^a	3.37 ^b	3.24 ^b	3.42 ^b	<0.000 *
Family traditions	4.17	4.02 ^a	3.98 ^b	4.60 ^a	3.86 ^b	<0.000 *
Taking care of own health and family health	4.31	3.94 ^b	4.57 ^a	4.67 ^a	3.60 ^b	<0.000 *
Professional commitment/lack of time	3.94	4.67 ^a	3.87 ^b	3.34 ^b	4.20 ^b	<0.000 *
Natural values	4.02	3.91 ^a	3.95 ^b	4.32 ^a	3.64 ^c	<0.000 *
Environmental awareness	3.31	3.55 ^b	3.55 ^b	3.16 ^c	3.24 ^{bc}	<0.000 *
Being physically active	3.68	3.86 ^a	3.64 ^b	3.48 ^c	3.89 ^a	<0.000 *

Note: * level of significant difference at $p < 0.050$. Different superscripts indicate significantly different means following the ANOVA post hoc Waller–Duncan test. Source: own calculations.

Table 5 presents the opinion of the respondents on the importance of the information that can be found on the labels of products. All information on the labels of organic products are important to consumers (weighted average value is above 4). In the first place, a consumer pays attention to the list of ingredients of the product and the expiration date, the price of the product is only in the third position. It is worth repeating that organic products are more expensive than conventional ones. Consumers who choose to buy organic products are aware of the fact that the price of this food segment is higher and it only proves that there are some other factors that are more important to the customers. The factor “certifications confirming the origin of the product” received the lowest scores from the respondents. In this category alone, the lowest scores were given by eco-traditionalists and eco-innovators. Eco-activists are consumers who attach more importance to information confirming the origin of a product and producer data compared to other groups.

Table 5. Importance of information displayed on the labels of organic products.

Factor	Mean	Eco-Activists (Type 1)	Eco-Dietitians (Type 2)	Eco-Traditionalists (Type 3)	Eco-Innovators (Type 4)	<i>p</i> -Value
Price	4.44	4.72 ^a	4.58 ^b	4.26 ^c	4.08 ^d	<0.000 *
Product ingredients	4.64	4.67 ^a	4.78 ^a	4.64 ^a	4.32 ^b	<0.000 *
Expiration date	4.48	4.82 ^a	4.56 ^b	4.30 ^c	4.14 ^d	<0.000 *
Certifications confirming the origin of the product (certified labels)	4.09	4.58 ^a	4.26 ^b	3.68 ^d	3.86 ^c	<0.000 *
Manufacturer	4.43	4.68 ^a	4.38 ^b	4.28 ^b	4.45 ^a	<0.000 *

Note: * level of significant difference at $p < 0.050$. Different superscripts indicate significantly different means following the ANOVA post hoc Waller–Duncan test. Source: own calculations.

To determine whether the changes in the behavior of consumers caused by the outbreak of the COVID-19 pandemic influenced the preferences of the customers regarding their choice of purchase channels while buying organic products, the respondents were asked to rate the following statement: “My habits have changed during the COVID-19 pandemic and presently, I prefer such purchase channels as A, B, C, D, E, F, G, H” (the suggested answers were coded according to a five-point scale and were used as dependent variables in the regression analysis) (Table 6). With the use of linear regression analyses, the authors of this study wanted to discover and explain the correlation between the independent and the dependent variables. It can be assumed that the proposed model, which includes eight variables, describes the phenomenon under study very well—i.e., the correlation between the changes in the preference of the shopping channels and the restrictions imposed as a result of the current pandemic. The coefficient of determination R^2 is

0.384, which means that the model explains the correlation between the variables in 38.4%. The variables in the model are statistically significant at $p < 0.050$.

Table 6. Linear regression analysis for variables describing the impact of the COVID-19 pandemic on the preference of a place where the consumers did their shopping for the entire sample $n = 1108$.

Factor	Estimate β	Standard Error	p -Value
On the farmer's organic farm (A)	0.179	0.028	<0.000 *
Producers' Stores (B)	0.142	0.019	0.004 *
Markets, bazaars (C)	0.215	0.035	<0.000 *
Fairs, stalls (D)	0.162	0.032	<0.000 *
Festivals of organic producers (E)	0.194	0.042	0.017 *
Specialized organic stores (F)	0.298	0.017	<0.000 *
Large distribution networks (G)	0.276	0.023	<0.000 *
Internet (H)	0.264	0.022	<0.000 *
F-statistic of the model		F(10.257) = 1.945	
Constant		4.528	
Random component (SE)		3.627	
Coefficient of determination (R^2)		0.384	

Note: * level of significant difference at $p < 0.050$. Source: own calculations.

The combination of variables presented in Table 6 shows the predicted influence of the restrictions introduced due to the COVID-19 pandemic on the choice of purchase channels by the consumers of organic products in general (no division into groups), all eight variables had a significant impact on the predicted pattern. The values β are as follows: the greatest factor that indicates which independent variable has the largest influence on the dependent variable is the channel "Specialized organic stores" (F) followed by "Large distribution networks" (G) then "Internet" (H), "Market and bazaars" (C), and next "Festivals of organic producers" (E), "The farmer's organic farm" (A), and finally "Producers' stores" (B). The selection of the above-mentioned variables in the model of preference of shopping channels during the pandemic can be explained by the current situation which is related to the restrictions that were imposed on both purchasers and business owners. The stores that offered food were not closed; however, most of them were located in shopping malls (which were subject to the restrictions and were closed); the decline in popularity of some shopping channels was also caused by the enforced ban on movement of people. Consumers had to deal with this specific situation by, for example, choosing different channels to purchase organic products. The regression equation is

$$Y = 4.528 + 0.179A + 0.142B + 0.215C + 0.162D + 0.194E + 0.298F + 0.276G + 0.264H \pm 3.627$$

An average consumer usually uses several channels to purchase their favorite products. Despite the opportunity to change their preferred shopping channels, the consumers used the substitute channels to the best of their ability. To determine the substitute channels that were used to buy organic products, purchase duplication analysis was used. The duplication of purchase analysis was originally developed by Ehrenberg [48]. It was initially used to analyze the consumption patterns of different brands. Later on, this method was also applied to analyze the shopping channels that are used interchangeably by consumers. Based on the research literature on the methodology of the purchase duplication analysis, the authors of this study applied the method to examine the channels that are used to purchase organic products for all consumers in general, not dividing the customers into groups as is it is suggested in the methodology (Table 7).

Table 7. Duplication of purchase channels among the consumers of organic products, total n = 1108.

Purchase Channel	Total	A.	B.	C.	D.	E.	F.	G.	H.
A. On the farmer's organic farm	18.24		16.58	31.32	11.28	32.16	36.42	24.42	17.78
B. Producers' stores	14.64	30.88		26.06	28.26	26.04	24.48	28.46	16.60
C. Markets, bazaars	25.18	24.46	11.32		29.32	24.62	36.18	24.52	14.82
D. Fairs, stalls	15.72	16.42	22.46	22.32		30.12	27.16	16.37	10.28
E. Festivals of organic producers	22.85	23.84	23.16	32.16	31.32		34.26	20.22	8.38
F. Specialized organic stores	32.26	18.16	28.22	26.36	25.46	22.64		14.62	22.44
G. Large distribution networks	26.64	21.12	14.26	18.22	14.02	10.64	32.46		28.46
H. Internet	25.44	20.22	21.32	30.36	18.32	17.28	29.48	21.84	
Average Duplication		22.16	19.62	26.69	22.57	23.36	31.49	21.49	16.97

Note: Total—the proportion of respondents reporting using a given purchase channel. Duplication can be averaged across purchase channels. The respondents could indicate at least three channels. Source: Our own analysis based on the study materials.

The data in Table 7, in the A–H columns, show the percentage of consumers in the given purchase channel row who also used the purchase channels listed in the columns. For example, 30.88% of consumers who use channel B (manufacturer's stores) bought organic products via channel A (at the organic farm). Additionally, more than 30% of consumers who prefer to buy products directly from organic farms also bought organic food via channel C (on markets, bazaars). It should be noted that consumers of organic products are well-informed and they use all possible shopping channels. The development of infrastructure, globalization, and technological security are the reason that channel H (the Internet) is the most popular one among nearly 17% of consumers of organic products. The majority of the respondents who use "Specialized ecological stores" use channel H as well. For the whole survey sample, the most popular shopping channels are "Specialized organic stores", "Traditional markets and bazaars" as well as festivals of organic products (the events that take place between June and September). The presented model of the possibilities of switching to different purchase channels shows the changes of preferences of consumers due to the restrictions related to the outbreak of the COVID-19 pandemic. It should be noted that "the Internet" as a shopping channel has become more popular during the pandemic despite the public's distrust towards that channel in the previous years; the suppliers who made it possible to do shopping via the Internet gained new customers. Organic products can be called niche products (they have their loyal customers) and they are sold in the stores that have met the sanitary requirements imposed by the government or they are available in the shops that offer alternative purchase/delivery options. The popularity of festivals and fairs has not decreased during the pandemic due to the fact that the restrictions were lifted up in the period over which the events were organized, plus they were held in the open air.

Table 8 presents the results of the evaluation of selected organic products by Polish consumers. Eco-activists differed from the others in their priority on fresh vegetables and fruits. A difference between eco-dietitians and eco-traditionalists can be seen in how they have prioritized vegetables and fruits vs. meat products. It should be noted that cereal products (including bread), cow's milk and its derivatives (cottage cheese, cheese, yoghurt, kefir), as well as organic eggs are quite highly valued by the respondents. Goat's milk and its derivatives are the least preferred products according to the respondents. Even though goat's milk was not highly prioritized, it was quite high on the priorities of eco-innovators. Having analyzed the preferences of consumers within each of the specified groups, it can be noted that eco-activists are more likely to buy products that are derivatives of milk from cows, cereal products as well as organic vegetables and fruits. Eco-dietitians prefer grain products, eggs from organic farms and cow's milk derivatives. Eco-traditionalists choose cereal products, eggs and cow's milk derivatives out of all products offered by the organic market. Eco-innovators, similarly to eco-dietitians and eco-traditionalists, prefer grain products, eggs, and cow's milk derivatives. Potatoes were proposed for evaluation as a separate item in the questionnaire due to their preferable in Polish cuisine. That item

was slightly more highly valued by eco-innovators. Regarding honey, it occupies a high position on the shopping list of eco-traditionalists. Organic beverages, other than milk, are preferable among eco-activists which is due to the fact that this group of respondents has more knowledge about organic operations and they are more aware of whether the plants that are used to manufacture the drinks come from organic production.

Table 8. Evaluation of selected organic products.

Factor	Mean	Eco-Activists (Type 1)	Eco-Dietitians (Type 2)	Eco-Traditionalists (Type 3)	Eco-Innovators (Type 4)	<i>p</i> -Value
Fresh vegetables, fruits and their products	3.54	3.84 ^a	3.34 ^c	3.68 ^b	3.12 ^c	<0.000 *
Cereal products	4.39	4.02 ^c	4.38 ^b	4.64 ^a	4.46 ^b	<0.000 *
Potatoes (sweet potatoes)	3.04	3.14 ^a	3.09 ^a	2.86 ^b	3.16 ^a	0.006 *
Cow's milk and its products	4.16	4.08 ^b	4.18 ^a	4.28 ^a	3.98 ^b	<0.000 *
Goat's milk and its products	2.66	2.45 ^c	2.28 ^d	2.88 ^b	3.28 ^a	0.011 *
Eggs	4.07	3.30 ^d	4.24 ^b	4.48 ^a	4.08 ^b	<0.000 *
Honey	3.02	2.91 ^c	3.08 ^b	3.28 ^b	2.47 ^d	0.002 *
Beverages other than milk	3.41	3.59 ^b	3.32 ^b	3.42 ^b	3.26 ^c	0.170
Pork meat and its products	3.64	3.71 ^a	3.92 ^a	3.52 ^b	3.24 ^c	0.049 *

Note: * level of significant difference at $p < 0.050$. Different superscripts indicate significantly different means following the ANOVA post hoc Waller–Duncan test. Source: own calculations.

5. Discussion

This research work was mainly aimed to assess the behavior of consumers in the market of organic products during the COVID-19 pandemic. The results show that, in the current situation, the most important values for the consumers are those related to health and they are the factors that determine the way the customers do their shopping. With regard to the consumption of organic food, i.e., produced on farms that operate according to the principles of organic farming, without the use of chemicals, the main motives for people to buy organic products are as follows: health-related, i.e., taking care of own health and the well-being of a family; sustainability—organic farming is safe for the natural environmental; future-related—a desire to preserve the natural environment in a good state for future generations; material-quality-related—consumers can afford to buy better quality and more expensive food (a society becomes richer) [49]. As shown by this study, “Taking care of the health of own family” was highly valued by the respondents who were classified as eco-traditionalists and eco-dietitians. Such factors as “professional commitment” received high ratings from the respondents who choose organic products. While analyzing the values within the groups of the respondents, it can be noticed that for eco-activists the impulse to consume organic products was: “professional commitment/lack of time”, “family traditions”, and “family well-being”. Eco-dietitians appreciated, first of all, the health benefits. “Family traditions” and “natural qualities” were also recognized by the above-mentioned group of respondents. Similar factors were selected by the respondents in the group of eco-traditionalists. The situation was different in the case of eco-innovators. In this group, the main factor while choosing organic products was “professional commitment”. Being physically active appears to be one of the main factors for eco-innovators. As was in the case of the previously mentioned groups, also for eco-innovators “family traditions” and “natural qualities” are very important factors that motivated the consumers to change their lifestyle and become advocates of organic products. All groups of respondents agreed on the validity of the information contained in the labels of organic products. The respondents indicated the most popular channels for purchasing organic products. The most popular among them are “Specialized organic stores”, “Large distribution networks”, and “Internet”. During the pandemic, consumers were most likely to buy cereal products

(including bread), cow's milk and its derivatives (cottage cheese, cheese, yoghurt, kefir), as well as organic eggs.

Cichocka and Grabiński [49] as well as Szatan [50], in their research, also refer to the division of consumers of organic food into following groups: consumers guided by common sense, whose behavior is based on reliable information and a desire to gain prestige; self-oriented consumers, for whom the main motive for purchase organic products is related to their own health and the well-being of their families; and organic fanatics who claim that only organic products are valuable. For this reason, actions are initiated to protect the natural environment and consumers give up consumption of certain products. A similar division was applied by the authors of this study: eco-activists—well-informed, undertaking ecological activities to protect their health and the natural environment; eco-traditionalists, who value the flavor of the food, authenticity and tradition; eco-dietitians, who use organic food to prevent or treat some diseases; eco-innovators—various motives, starting from taste and flavor to concerns for the environment.

The basic conditions for the development of the organic food market are public awareness, availability of products, and prosperity of the society. More and more consumers pay attention to what they buy, to the way the products are manufactured, and to the impact of the production process on the natural environment. Therefore, the demand and supply of organic products continue to grow and the prices of the goods are becoming more affordable for Polish consumers. Similar results were obtained by Güney and Sangün [51] in their study that was conducted in Turkey; the authors confirmed the thesis that the preferences of consumers are shifting towards organic products. According to Aschemann-Witzel and Zielke [52], the price is one of the barriers that prevent the increase in demand for products in the organic food market. In Switzerland, consumers are reluctant to buy organic food at high prices and prefer domestic products [53]. In Germany, the most important factors that influence the purchase of organic products are price, availability of the goods, and quality [54]. There is no doubt that a farmer on an organic farm has to spend more time on manual work what often translates into the necessity to invest more money. Furthermore, a large amount of raw materials is sold abroad where they are processed or packaged and are shipped back to Poland as a final product. At each of the above-mentioned stages, the profit margin increases [55]. There are many factors that contribute to the fact that the price of organic food is higher. Consumers need to know and understand why they pay more for organic products. They need to be aware of the way in which organic farming contributes to environmental protection, sustainability, and animal welfare [56]. According to this study, the respondents also pointed out price as an element of practical motives that should be carefully analyzed. During the COVID-19 pandemic, for the consumers who claimed to be eco-consumers, the price was not an obstacle because they have already had experience with the organic market. In this study, the price was considered to be an informative element that customers paid attention to during shopping. Similar results were obtained by Bryła [57], who analyzed a profile of a consumer who reads information that is placed on the labels while doing shopping.

The pandemic was the reason for huge changes to the food supply chain. Barma et al. [58], show changes in preferred purchasing channels among consumers, which caused transformations in supply strategies of business units. The market of organic food keeps growing and nowadays, instead of looking for those products only in e.g., specialized outlets, it is possible to buy them in local stores, supermarkets, at marketplaces or they can be ordered via an online platform that provides access to offers of manufacturers of organic goods [59]. There was a substitution analysis of the purchase channels for organic products conducted [48,60,61] which showed that there is a shift in consumer preferences regarding the place of shopping from popular stores that are located in shopping malls, or from specially organized events such as market fairs towards offers posted on online platforms, shopping in smaller markets or via distribution networks. During the pandemic, in the majority of the cases, manufacturers of organic products did not have much choice and they had to immediately focus on operating the channels via which they could reach

the consumer directly plus they had to offer safe, contactless delivery options [62]. The above has resulted in changing patterns of consumer demand and it was an opportunity to introduce new, innovative distribution methods and logistics practices. Comparing the results of this study to the outcomes presented in the research performed before the COVID-19 pandemic by Bryła [63] and Wojciechowska-Solis and Barska [64], changes can be noticed that have occurred in the behavior of consumers with regards to choosing a purchase channel. First of all, “the Internet” has gained more users—the percentage of persons who claim that they use this particular channel has doubled compared to the results obtained before the pandemic. According to the studies conducted by Essoussi and Zahaf [65] and Zepeda and Deal [66], there is lack of trust in organic products that are purchased from places other than specialized stores or directly from organic farms (in those cases, the consumer has a 100% guarantee of the origin of the product) [67,68]. Nearly one-fifth of the consumers reported that they used to purchase products directly from organic farms and almost one-third of the customers used to buy goods from specialized stores, unfortunately, compared to the results of the research conducted before the pandemic, consumers who preferred the above-mentioned channels had to seek alternative ways of doing shopping due to the restrictions and travel limitations.

Consumer interest in healthy food contributes to the development of the organic food market as the customers believe that organic food improves their health [69,70]. Various studies have shown that health-conscious people are more likely to buy organic food. People who buy organic food for health reasons often claim that “Those products are healthier than conventional ones”, and 34% of the respondents in one of the conducted surveys have stated that they wanted to avoid toxic, unhealthy substances in their food [71, 72]. Similar results are presented in the study performed by Chakrabarti [73], Prada et al. [74], according to which the respondents prefer organic products because of their better health value while compared to conventional food. Consumers believe that organic food is healthy and therefore they are more willing to buy it [75]. The factors related to health influence the purchase preferences and behavior of consumers [76]. Runowski [77] also points out that the basic motive for buying eco-food is taking care of one’s own health and the well-being of a family while the flavor of food and concern for the natural environment are considered to be less important. The above is also supported by the results of the research conducted by Cichočka [78], Żakowska-Biemans and Gutkowska [47], Ditlevsen et al. [79], and Rana and Paul [80]. The research of the above-listed authors confirms the validity of the hypothesis that despite the changes in the behavior of consumers the factors related to health are most important. Taking care of health is undoubtedly an important qualitative change in the contemporary consumption model. The results of the study conducted by the authors of this article confirm that the main motive for buying organic products for Polish consumers is the health aspect followed by family traditions and the naturalness of those goods. The above is also pointed out in the study of Hidalgo-Baz et al. [81] and Yormirzoev et al. [82], who proved that the naturalness of organic products is also one of the leading motives for purchasing and consuming organic products.

An important issue is shaping eco-awareness which is a knowledge of eco-labels; consumers are often exposed to marketing activities of entrepreneurs who describe their products as environmentally friendly while they do not have any qualities of eco-food. The reason for the above is the more and more popular trend to buy healthy, organic food over the recent years, and, consequently, some producers are confident that selling “ECO” products will bring greater profit [19]. Organic food must be approved by certain institutions before the government-certified labels can be displayed on the products; the above is one of the ways in which the government controls organic food and sets standards that distinguish the products from conventional food [83]. Well-informed consumption requires education and knowledge. Many consumers rely on partial information while evaluating the quality of organic food and they are not fully able to determine its authenticity. They are willing to trust the participants in the organic food chain and the government. The presence or absence of a certified organic sticker influences the way the consumer approaches the

food [84] because organic labels provide information and assure consumers that they can trust the product [85]. Meanwhile, there are many new—or potentially new—organic consumers who do not look for specific organic brands. They look for organic substances instead. Those customers do not try to perform any research to find out which organic brands are more ethical or more sustainable. They simply look for an organic label, a clear and simple sticker [86] that contains the necessary information. Labeling organic food is a mechanism introduced by the governments to ensure the quality of organic products [87]. The presence of a certified organic label has a positive impact on the attitude of consumers and positively influences their purchasing behavior [88,89]. Chalamon and Nabec [90], in their analyses, identify the reasons for reading labels by consumers and list four types of motives for studying the information that is placed on the stickers. The researchers point out that the label should present the information in such a way that the consumers are confident in their choice.

With regard to organic products, it should be noted that products made from cow's milk have become more popular among organic food consumers, this is confirmed by this research in Poland. Researchers in the Czech Republic obtained similar results. [71]. To sum up, when it comes to the offer of organic products, Schäufele and Janssen [91] argue that organic production is reasonable in the case of goods that are available on a wide scale—when a lot of consumers are familiar with the products, otherwise a product remains a niche product, for a small group of customers [92,93], an example of such products sold in the Polish market during the pandemic could be organic goat milk and its derivatives. The manufacturers had to change distribution channels to reach the consumer during the period of the pandemic-related restrictions.

6. Conclusions

6.1. Implications for Policy-Makers

This research is an exploratory study and aims to identify and describe segments of purchasers of organic food, to assess the motives for buying organic products during the time of the pandemic, to specify the shopping channels and the importance of information on labels as well as to emphasize that only a product certified by a governmental institution ensures the trust of the consumer. The results of this study have an impact on research conducted in the field of organic food marketing. Although there has been a significant number of studies conducted so far to identify different segments of consumers of organic food, only a few of them aimed to examine the segments of the organic food market in the context of countries where the organic food markets are in the development stage [94–96]. It is important to note that the current pandemic has caused significant changes not only in the behavior of consumers. Enterprises had to adapt to the changes as well—the businesses had to make adjustments to their existing marketing strategies to stay in the market. This research is undoubtedly valuable for the sector that produces organic food, it makes it easier for the manufacturers to design their marketing policies and adjust their sales channels accordingly. Therefore, this study is a supplement to the current insufficient knowledge about the present situation in the organic food market.

6.2. Research Limitations

The organic food market is different depending on the country, geographic area, agricultural policy, and the amount of public attention [97,98]. Due to the potential loophole which is a common case in any research on behavior, the obtained results should be treated with caution. The choice of the research method (CAWI) was dictated by fairly low costs and the benefits in the context of the study objectives as well as the limitation of direct access to the respondent—a reduced possibility to contact the respondents due to the restrictions introduced because of the pandemic. The term 'organic' can be understood as having an organic food certificate/logo/brand but some respondents could have approached the term more broadly and might have focused on the method of production itself rather than on its formal recognition.

6.3. Suggestions for Future Research Directions

There are many possible reasons why positive attitudes to organic food do not always translate into purchasing those products. Despite the public awareness of the health benefits, it may be the aforementioned high price of organic food, unavailability of organic products, lack of trust of consumers when it comes to the credibility of organic food certificates and advertising campaigns. Without further research, empirical works are subject to speculations. Marketing research and sensory analysis have been treated as two separate disciplines so far. The results of this research suggest that there is a need for a deeper analysis to understand the behavior of consumers regarding choosing their food; the manufacturers, to develop products and to attract purchasers should design marketing strategies by combining them with sensory analysis. Therefore, further actions need to be taken to promote sustainable food production, distribution, and consumption of organic food, providing information and knowledge to the public with regard to practical principles and ways for consumers to identify organic food, including the national and local origin of those products.

Author Contributions: Conceptualization, J.W.-S. and M.Ś.-K.; methodology, J.W.-S. and M.Ś.-K.; software, J.W.-S. and M.Ś.-K.; validation, J.W.-S. and M.Ś.-K.; formal analysis, J.W.-S. and M.Ś.-K.; investigation, J.W.-S. and M.Ś.-K.; resources, J.W.-S. and M.Ś.-K.; data curation, J.W.-S. and M.Ś.-K.; writing—original draft preparation, J.W.-S. and M.Ś.-K.; writing—review and editing, J.W.-S. and M.Ś.-K.; visualization, J.W.-S. and M.Ś.-K.; supervision, J.W.-S. and M.Ś.-K.; project administration, J.W.-S. and M.Ś.-K.; funding acquisition, J.W.-S. and M.Ś.-K. All authors have read and agreed to the published version of the manuscript.

Funding: This paper was funded by the Faculty of Economics, Poznań University of Life Science.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data presented in this study are available on request from the corresponding author.

Acknowledgments: This study was funded by the projects: Consumer behavior relevant to the quality of life of the rural population—University of Life Sciences in Lublin.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Questionary questions:

1. Gender:

- Male
- Female

2. Age:

- <25
- 26–40
- 41–55
- >56

3. Place of residence:

- Rural areas (rural communes)
- Towns of up to 30,000 inhabitants (urban–rural communes)
- Towns more than 30,000 inhabitants (towns)

4. Level of formal education:

- Primary
- Secondary
- University

5. Consumer segments:

- Eco-activists—well-informed, involved in pro-environmental activities on grounds of health and natural environment reasons
- Eco-dietitians—who purchase organic products to prevent or treat diseases
- Eco-traditionalists—who value taste, authenticity and tradition
- Eco-innovators—who are driven by various types of motives including both taste properties of food and concerns for the natural environment

6. Please rate on a scale of 1 to 5 what made you start buying organic products:

- Family well-being
- Family traditions
- Taking care of own health and family health
- Professional commitment/lack of time
- Natural values
- Environmental awareness
- Being physically active

7. Please rate on a scale of 1 to 5 the importance of selected information that is included on the product label:

- Price
- Product ingredients
- Expiration date
- Certifications confirming the origin of the product (certified labels)
- Manufacturer

8. Please select up to 3 preferred purchase channels and mark with numbers 1,2,3 in order of priority:

- On the farmer's organic farm
- Producers' Stores
- Markets, bazaars
- Fairs, stalls
- Festivals of organic producers
- Specialized Organic Stores
- Large distribution networks
- Internet

9. Please rate your shopping preferences on a scale of 1 to 5 below for selected groups of organic products:

- Fresh vegetables, fruits and their products
- Cereal products
- Potatoes (sweet potatoes)
- Cow's milk and its products
- Goat's milk and its products
- Eggs
- Honey
- Beverages other than milk
- Pork meat and its products

References

1. WHO. *Coronavirus Disease (COVID-19) Pandemic*; WHO: Geneva, Switzerland, 2020; Available online: <https://www.who.int/> (accessed on 22 January 2021).
2. Borsellino, V.; Kaliji, S.A.; Schimmenti, E. COVID-19 drives consumer behaviour and agro-food markets towards healthier and more sustainable patterns. *Sustainability* **2020**, *12*, 8366. [CrossRef]
3. Severo, E.A.; Ferro De Guimarães, J.C.; Dellarmelin, M.L. Impact of the COVID-19 pandemic on environmental awareness, sustainable consumption and social responsibility: Evidence from generations in Brazil and Portugal. *J. Clean. Prod.* **2021**, *286*, 124947. [CrossRef] [PubMed]

4. Imtyaz, A.; Haleem, A.; Javaid, M. Analysing governmental response to the COVID-19 pandemic. *J. Oral Biol. Craniofacial Res.* **2020**, *10*, 504–513. [CrossRef]
5. Sandfor, A. Coronavirus: Half of Humanity Now on Lockdown as 90 Countries Call for Confinement. Available online: <https://www.euronews.com/2020/04/02/coronavirus-in-europe-spain-s-death-toll-hits-10-000-after-record-950-new-deaths-in-24-hou> (accessed on 8 June 2021).
6. Cachero-Martínez, S. Consumer Behaviour towards organic products: The moderating role of environmental concern. *J. Risk Financ. Manag.* **2020**, *13*, 330. [CrossRef]
7. Śmiechowska, M. *Standaryzacja i Certyfikacja Żywności Ekologicznej w Polsce i Unii Europejskiej [w:] Ekologia Wyrobów*; Wydawnictwo AE w Krakowie: Kraków, Polska, 2003.
8. Wawrzyniak, A.; Kwiatkowski, S.; Gronowska-Senger, A. Nitrates, nitrites and total protein content in selected vegetables from conventional and ecological cultivations. *Ann. Natl. Inst. Hyg.* **1997**, *48*, 179–186.
9. Regulation of the Minister of Health of 27 December 2000 on the List of Admissible Amounts of Additives and Other Foreign Substances Added to Foodstuffs and Stimulants, as Well as Contaminants That May Be Present in Foodstuffs and Stimulants, Journal of Laws No. 9, Item. 72. Regulation of the Minister of Health of 27 December. Available online: <http://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20010090072> (accessed on 7 February 2021).
10. Królowska-Kułas, M. Preferencje konsumentów związane ze spożywaniem żywności ekologicznej. *Zesz. Nauk. Akad. Ekon. W Krakowie* **2007**, *743*, 39–45.
11. Lindgreen, A. Trust as a valuable strategic variable in the food industry: Different types of trust and their implementation. *Br. Food J.* **2003**, *105*, 310–327. [CrossRef]
12. Liang, R. Predicting intentions to purchase organic food: The moderating effects of organic food prices. *Br. Food J.* **2016**, *118*, 183–199. [CrossRef]
13. Muñoz-Leiva, F.; Montoro-Ríos, F.; Castañeda-García, F.J. Productos de agricultura ecológica y sistemas de certificación: Perfiles de consumidor. *Distrib. Consumo* **2006**, *87*, 62–73.
14. Krystallis, A.; Chryssohoidis, G. Consumers' willingness to pay for organic food: Factors that affect it and variation per organic product type. *Br. Food J.* **2005**, *107*, 320–343. [CrossRef]
15. Taegoo, K.; Woo Gon, K.; Hong-Bumm, K. The effects of perceived justice on recovery satisfaction, trust, word-of-mouth, and revisit intention in upscale hotels. *Tour. Manag.* **2009**, *30*, 51–62. [CrossRef]
16. COUNCIL REGULATION (EEC) No 2092/91 of 24 June 1991 on Organic Production of Agricultural Products and Indications Referring Thereto on Agricultural Products and Foodstuffs, 1991R2092—EN—06.05.2006—026.001—1. Available online: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1991R2092:20060506:EN:PDF> (accessed on 22 February 2021).
17. Rusnak, J. Świadomość Konsumentcka i Ekologiczna. 2020. Available online: <https://modr.pl/promocja-i-sprzedaz-produktow-rolnictwa-ekologicznego/strona/swiadomosc-konsumentcka-i-ekologiczna> (accessed on 21 February 2021).
18. Pilarczyk, B.; Nestorowicz, R. *Marketing Ekologicznych Produktów Żywnościowych*; Wolters Kluwer Polska: Warsaw, Poland, 2010.
19. Witek, L. Wpływ ekologicznych funkcji opakowań na zachowania konsumentów. *Zesz. Nauk. Uniw. Szczecińskiego* **2011**, *662*, 759–770.
20. Łuczka-Bakuła, W.; Smoluk-Sikorska, J. Poziom cen ekologicznych owoców i warzyw a rozwój rynku żywności ekologicznej. (The organic fruit and vegetables price level and the development of organic food market). *J. Res. Appl. Agric. Eng.* **2010**, *55*, 12–14.
21. Asche, F.; Larsen, T.A.; Smith, M.D.; Sogn-Grundvåg, G.; Young, J.A. Pricing of ecolabels with retailer heterogeneity. *Food Policy* **2015**, *53*, 82–93. [CrossRef]
22. Van Loo, E.J.; Caputo, V.; Nayga Jr, R.M.; Meullenet, J.F.; Ricke, S.C. Consumers' willingness to pay for organic chicken breast: Evidence from choice experiment. *Food Qual. Prefer.* **2011**, *22*, 603–613. [CrossRef]
23. Katt, F.; Meixner, O. A systematic review of drivers influencing consumer willingness to pay for organic food. *Trends Food Sci. Technol.* **2020**, *100*, 374–388. [CrossRef]
24. Grzybowska-Brzezińska, M.; Rudzewicz, A. Environmental management systems in food processing and production as a source of product value for the customer on the organic food market. *Int. J. Bus. Perform. Manag.* **2015**, *16*, 304–320. Available online: <http://www.inderscience.com/link.php?id=68727> (accessed on 15 February 2021). [CrossRef]
25. Łuczka, W.; Kalinowski, S. Barriers to the development of organic farming: A Polish case study. *Agriculture* **2020**, *10*, 536. [CrossRef]
26. Du, S.; Bartels, J.; Reinders, M.; Sen, S. Organic consumption behavior: A social identification perspective. *Food Qual. Prefer.* **2017**, *62*, 190–198. [CrossRef]
27. Kwasek, M. *From Research on Socially Sustainable Agriculture (21). Organic Food—Legal Regulations, Control and Certification System*. Institute of Agricultural and Food Economics; National Research Institute: Warsaw, Poland, 2013.
28. Łuczka, W.; Kalinowski, S.; Shmygol, N. Organic farming support policy in a sustainable development context: A Polish case study. *Energies* **2021**, *14*, 4208. [CrossRef]
29. Kowalska, A. *Jakość i Konkurencyjność w Rolnictwie Ekologicznym*; Difin: Warsaw, Poland, 2010.
30. FiBL. The World of Organic Agriculture 2021. Available online: <https://www.organic-world.net/yearbook/yearbook-2021/pdf.html> (accessed on 1 April 2021).

31. Nielsen Report. Raport Syndykatowy. Shopper Shifts to a New Normal. 2020. Available online: <https://www.nielsen.com/pl/pl/solutions/measurement/retail/> (accessed on 5 March 2021).
32. Poskrobko, B. *Ochrona Środowiska. Problemy Społeczne, Ekonomiczne i Prawne*; Polskie Wydawnictwo Ekonomiczne: Warszawa, Polska, 2001.
33. Anderson, W.T., Jr.; Cunningham, W.H. The socially conscious consumer. *J. Mark.* **1972**, *36*, 23–31. [[CrossRef](#)]
34. Łuczka-Bakula, W. Czynniki warunkujące proekologiczne zmiany w modelu konsumpcji. *Człowiek I Przyr. Pol.* **1996**, *4*, 51.
35. Klimczyk-Bryk, M. Trendy ekologiczne a zachowania konsumentów. *Zesz. Nauk. Akad. Ekon. W Krakowie* **2010**, *540*, 94.
36. Schiffman, L.G.; Kanuk, L.L. *Consumer Behavior*; Prentice Hall: Englewood Cliffs, NJ, USA, 1987; p. 23.
37. Jansson, J.; Marell, A.; Nordlund, A. Green consumer behavior: Determinants of curtailment and eco-innovation adoption. *J. Consum. Mark.* **2010**, *27*, 358–370. Available online: <https://doi:10.1108/07363761011052396> (accessed on 3 May 2021). [[CrossRef](#)]
38. Atkins, P.J.; Bowler, I.R. *Food in Society: Economy, Culture, Geography*; Arnold: London, UK, 2000. [[CrossRef](#)]
39. Goryńska-Goldmann, E.; Gazdecki, M. Searching for and perception of information by consumers in the light of the sustainable consumption idea—On the example of food markets. *Mark. Sci. Res. Organ.* **2020**, *36*, 1–18. [[CrossRef](#)]
40. Gazdecki, M.; Goryńska-Goldmann, E.; Kiss, M.; Szakály, Z. Segmentation of food consumers based on their sustainable attitude. *Energies* **2021**, *14*, 3179. [[CrossRef](#)]
41. Kaźmierczak-Piwko, L. Influence of consumer products ecolabelling on environmental awareness increasing. *Syst. Support. Prod. Eng.* **2017**, *6*, 122–128.
42. Mayasari, N.R.; Ho, D.K.N.; Lundy, D.J.; Skalny, A.V.; Tinkov, A.A.; Teng, I.-C.; Wu, M.-C.; Faradina, A.; Mohammed, A.Z.M.; Park, J.M.; et al. Impacts of the COVID-19 pandemic on food security and diet-related lifestyle behaviors: An analytical study of Google trends-based query volumes. *Nutrients* **2020**, *12*, 3103. [[CrossRef](#)]
43. Dietz, W.; Santos-Burgoa, C. Obesity and its implications for COVID-19 mortality. *Obesity* **2020**, *28*, 1005. [[CrossRef](#)]
44. Rocznik Demograficzny. 2021. Available online: <https://stat.gov.pl/obszary-tematyczne/roczniki-statystyczne/roczniki-statystyczne/rocznik-demograficzny-2021,3,15.html> (accessed on 17 August 2021).
45. Klimczyk-Bryl, M. The process of building consumers’ ecological awareness. *Zesz. Nauk. AE Krakow* **2015**, *543*, 95–103.
46. Dauget, P. The client our master—profiles of “bio” consumers. In *Ecological Farming. From Producer to Consumer*; Soltysiak, U., Ed.; Ekoland Association: Warsaw, Poland, 1995; p. 178.
47. Zakowska-Biemans, S.; Gutkowska, K. *Rynek Żywności Ekologicznej w Polsce iw krajach Unii Europejskiej*; Wydawnictwo SGGW: Warsaw, Poland, 2003.
48. Ehrenberg, A. *Repeat Buying: Theory and Applications*; Oxford University Press; Charles-Griffin: London, UK, 1988; ISBN 0-85264-287-3.
49. Cichocka, I.; Grabiński, T. Psychograficzno-Motywacyjna charakterystyka polskiego konsumenta żywności ekologicznej. *Żywność. Nauka. Technol. Jakość* **2009**, *5*, 107–118.
50. Szatan, M. Społeczne uwarunkowania rozumienia pojęcia produkt ekologiczny. *Ann. Univ. Mariae Curie-Skłodowska* **2013**, *38*, 103–111. [[CrossRef](#)]
51. Güney, O.I.; Sangün, L. How COVID-19 affects individuals’ food consumption behaviour: A consumer survey on attitudes and habits in Turkey. *Br. Food J.* **2021**. ahead-of-print. [[CrossRef](#)]
52. Aschemann-Witzel, J.; Zielke, S. Can’t buy me green? A review of consumer perceptions of and behavior toward the price of organic food. *J. Consum. Aff.* **2017**, *51*, 211–251. [[CrossRef](#)]
53. Götze, F.; Mann, S.; Ferjani, A.; Kohler, A.; Heckelei, T. Explaining market shares of organic food: Evidence from Swiss household data. *Br. Food J.* **2016**, *118*, 931–945. [[CrossRef](#)]
54. Buder, F.; Feldmann, C.; Hamm, U. Why regular buyers of organic food still buy many conventional products: Product-specific purchase barriers for organic food consumers. *Br. Food J.* **2014**, *116*, 390–404. [[CrossRef](#)]
55. Ladwein, R.; Sánchez Romero, A.M. The role of trust in the relationship between consumers, producers and relationships between consumers, producers and retailers of organic food: A sector-based approach. *J. Retail. Consum. Serv.* **2021**, *60*, 102508. [[CrossRef](#)]
56. Śmiglak-Krajewska, M.; Wojciechowska-Solis, J.; Viti, D. Consumers’ purchasing intentions on the legume market as evidence of sustainable behaviour. *Agriculture* **2020**, *10*, 424. [[CrossRef](#)]
57. Bryła, P. Who reads food labels? Selected predictors of consumer interest in front-of-package and back-of-package labels during and after the purchase. *Nutrients* **2020**, *12*, 2605. [[CrossRef](#)]
58. Barman, A.; Das, R.; Kanti De, P. Impact of Covid-19 in food supply chain: Disruption and recovery strategy. *Curr. Res. Behav. Sci.* **2021**, *2*, 100017. [[CrossRef](#)]
59. Barska, A.; Wojciechowska-Solis, J. E-consumers and local food products: A perspective for developing online shopping for local goods in Poland. *Sustainability* **2020**, *12*, 4958. [[CrossRef](#)]
60. Lees, G.; Wright, M. Does the duplication of viewing law apply to radio listening? *Eur. J. Mark.* **2013**, *47*, 674–685. [[CrossRef](#)]
61. Dawes, J.G. Testing the robustness of brand partitions identified from purchase duplication analysis. *J. Mark. Manag.* **2016**, *32*, 695–715. [[CrossRef](#)]
62. Marusak, A.; Sadeghiamirshahidi, N.; Krejci, C.C.; Mittal, A.; Beckwith, S.; Cantu, J.; Morris, M.; Grimm, J. Resilient regional food supply chains and rethinking the way forward: Key take away from the Covid-19 pandemic. *Agric. Syst.* **2021**, *190*, 103101. [[CrossRef](#)]
63. Bryła, P. Organic food online shopping in Poland. *Br. Food J.* **2018**, *120*, 1015–1027. [[CrossRef](#)]

64. Wojciechowska-Solis, J.; Barska, A. Exploring the preferences of consumers' organic products in aspects of sustainable consumption: The case of the Polish consumer. *Agriculture* **2021**, *11*, 138. [CrossRef]
65. Essoussi, L.H.; Zahaf, M. Decision making process of community organic food consumers: An exploratory study. *J. Consum. Mark.* **2008**, *25*, 95–104. [CrossRef]
66. Zepeda, L.; Deal, D. Organic and local food consumer behaviour: Alphabet theory. *Int. J.C.* **2009**, *33*, 697–705. [CrossRef]
67. Adams, D.C.; Salois, M.J. Local versus organic: A turn in consumer preferences and willingness to-pay. *Renew. Agric. Food Syst.* **2010**, *25*, 331–341. [CrossRef]
68. Schjøll, A. Country-of-origin preferences for organic food. *Org. Agric.* **2017**, *7*, 315–327. [CrossRef]
69. Almlı, V.L.; Asioli, D.; Rocha, C. Organic consumer choices for nutrient labels on dried strawberries among different health attitude segments in Norway, Romania, and Turkey. *Nutrients* **2019**, *11*, 2951. [CrossRef] [PubMed]
70. Bryła, P. The role of appeals to tradition in origin food marketing: A survey among Polish consumers. *Appetite* **2015**, *91*, 302–310. [CrossRef] [PubMed]
71. Zámková, M.; Prokop, M.; Stolín, R. *A Profile of the Organic Produce Consumer*. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*; Mendel University Press: Brno, Czech Republic, 2018; Volume 66, pp. 1043–1052. [CrossRef]
72. Janssen, M. Determinants of organic food purchases: Evidence from household panel data. *Food Qual. Prefer.* **2018**, *68*, 19–28. [CrossRef]
73. Chakrabarti, S. Factors influencing organic food purchase in India—Expert survey insights. *Br. Food J.* **2010**, *112*, 902–915. [CrossRef]
74. Prada, M.; Garrido, M.V.; Rodrigues, D. Lost in processing? Perceived healthfulness, taste and caloric content of whole and processed organic food. *Appetite* **2017**, *114*, 175–186. [CrossRef] [PubMed]
75. Muhammad, S.; Fathelrahman, E.; Ullah, R.U. Factors affecting consumers' willingness to pay for certified organic food products in United Arab Emirates. *J. Food Distrib. Res.* **2015**, *46*, 1–9. [CrossRef]
76. Yangui, A.; Costa-Font, M.; Gil, J.M. The effect of personality traits on consumers' preferences for extra virgin olive oil. *Food Qual. Prefer.* **2016**, *51*, 27–38. [CrossRef]
77. Runowski, H. Popyt na żywność ekologiczną. In *Marketing Produktów Ekologicznych w Północno-Wschodniej Polsce*; Metera, D., Bednarek, A., Eds.; Fundacja IUCN: Warsaw, Poland, 1999.
78. Cichocka, I. Motivations and types of consumer behavior in the eco-food market—on the example of the inhabitants of South-Eastern Poland. In *Consumer Education. Objectives, Instruments, Good Practices*; Lewicka-Strzalecka, A., Ed.; Wyższa Szkoła Przedsiębiorczości i Zarządzania im. Leona Koźmińskiego: Warsaw, Poland, 2006; pp. 80–86.
79. Ditlevsen, K.; Sandøe, P.; Lassen, J. Healthy food is nutritious, but organic food is healthy because it is pure: The negotiation of healthy food choices by Danish consumers of organic food. *Food Qual. Prefer.* **2019**, *71*, 46–53. [CrossRef]
80. Rana, J.; Paul, J. Health motive and the purchase of organic food: A meta-analytic review. *Int. J. Consum. Stud.* **2020**, *44*, 162–171. [CrossRef]
81. Hidalgo-Baz, M.; Martos-Partal, M.; González-Benito, Ó. Attitudes vs. purchase behaviors as experienced dissonance: The roles of knowledge and consumer orientations in organic market. *Front. Psychol.* **2017**, *8*, 248. [CrossRef] [PubMed]
82. Yormirzoev, M.; Tongzhe, L.; Teuber, R. Consumers' willingness to pay for organic versus all-natural milk—Does certification make a difference? *Int. J. Consum. Stud.* **2021**, *45*, 1020–1029. [CrossRef]
83. Schuldt, J.P.; Hannahan, M. When good deeds leave a bad taste: Negative inferences from ethical food claims. *Appetite* **2013**, *62*, 76–83. [CrossRef] [PubMed]
84. Meyerding, S.G.; Merz, N. Consumer preferences for organic labels in Germany using the example of apples—combining choice-based conjoint analysis and eye-tracking measurements. *J. Clean. Prod.* **2018**, *181*, 772–783. [CrossRef]
85. Janssen, M.; Hamm, U. Product labelling in the market for organic food: Consumer preferences and willingness-to-pay for different organic certification logos. *Food Qual. Prefer.* **2012**, *25*, 9–22. [CrossRef]
86. Chait, J. Who Buys Organic Food: Different Types of Consumers. *The Balance Small Business*. 2019. Available online: <https://www.thebalancesmb.com/who-buys-organic-food-different-types-of-consumers-2538042> (accessed on 23 February 2021).
87. Loebnitz, N.; Aschemann-Witzel, J. Communicating organic food quality in China: Consumer perceptions of organic products and the effect of environmental value priming. *Food Qual. Prefer.* **2016**, *50*, 102–108. [CrossRef]
88. Bauer, H.H.; Heinrich, D.; Schäfer, D.B. The effects of organic labels on global, local, and private brands: More hype than substance. *J. Bus. Res.* **2013**, *66*, 1035–1043. [CrossRef]
89. Daunfeldt, S.O.; Rudholm, N. Does shelf-labeling of organic foods increase sales? Results from a natural experiment. *J. Retail. Consum. Serv.* **2014**, *21*, 804–811. [CrossRef]
90. Chalamon, I.; Nabec, L. Why do we read on-pack nutrition information so differently? A typology of reading heuristics based on food consumption goals. *J. Consum. Aff.* **2016**, *50*, 403–429. [CrossRef]
91. Schäufele, I.; Janssen, M. How and why does the attitude-behavior gap differ between product categories of sustainable food? Analysis of Organic food purchases based on household panel data. *Front. Psychol.* **2021**, *12*, 1–13. [CrossRef]
92. Van Doorn, J.; Verhoef, P.C. Willingness to pay for organic products: Differences between virtue and vice foods. *Int. J. Res. Mark.* **2011**, *28*, 167–180. [CrossRef]
93. Łuczak, A.; Kalinowski, S. Assessing the level of the material deprivation of European Union countries. *PLoS ONE* **2020**, *15*, e0238376. [CrossRef]

94. Skreli, E.; Imami, D.; Chan-Halbrendt, C.; Canavari, M.; Zhllima, E.; Pire, E. Assessing consumer preferences and willingness to pay for organic tomatoes in Albania: A choice experiment study. *Span. J. Agric. Res.* **2017**, *15*, 1–13. [[CrossRef](#)]
95. Imami, D.; Skreli, E.; Zhllima, E.; Chan, C. Consumer attitudes towards organic food in the Western Balkans—the case of Albania. *Economia Agroalimentare. Food Econ.* **2017**, *19*, 243–257. [[CrossRef](#)]
96. Grubor, A.; Djokic, N. Organic food consumer profile in the republic of Serbia. *Br. Food J.* **2016**, *118*, 164–182. [[CrossRef](#)]
97. Willer, H.; Lernoud, J. *The World of Organic Agriculture. Statistics and Emerging Trends. Research Institute of Organic Agriculture (FiBL), Frick; Switzerland and IFOAM—Organics International: Bonn, Germany, 2018.* Available online: <https://orgprints.org/id/eprint/34669/1/WILLER-LERNOUD-2018-final-PDF-low.pdf> (accessed on 24 January 2021).
98. Rossi, R. *Facts and Figures on Organic Agriculture in the European Union; European Commission, DG Agriculture and Rural Development; Unit Economic Analysis of EU Agriculture: Brussels, Belgium, 2013.* Available online: https://ec.europa.eu/agriculture/rca/pdf/Organic_2016_web_new.pdf (accessed on 12 April 2021).