

## Article

# Comparison of Consuming Habits on Organic Food—Is It the Same? Hungary Versus China

Yue Wu <sup>1,\*</sup>  and Katalin Takács-György <sup>2</sup>

<sup>1</sup> Doctoral School on Safety and Security Sciences, Óbuda University, H-1081 Budapest, Hungary

<sup>2</sup> Keleti Faculty of Business and Management, Department of Business Development and Infocommunications, Óbuda University, H-1084 Budapest, Hungary; takacsnegyorgy.katalin@kgk.uni-obuda.hu

\* Correspondence: wuyue.budapest@gmail.com; Tel.: +36-308986723

**Abstract:** Organic food, a name for healthy food and sustainable or green food consumption, has become popular worldwide. Especially due to the COVID-19 pandemic, the demand for healthy food is increasing worldwide. In order to better understand consumer behavior toward organic food between different countries in different adoption stages of organic food and provide valuable information for industrial practitioners and researchers. We conducted a comparative study between Hungary and China. The organic food market is well developed in Hungary, while the market is starting to be popular in China. What factors can affect consumers buying organic food in Hungary and China? And what can be an efficient marketing tool for consumers to buy organic food in Hungary and China? The English and Chinese version surveys were conducted from 374 Chinese respondents and 207 Hungarian respondents by convenient sampling methods from March 2021 to April 2021, and the data were analyzed by SPSS software for correlation analysis. The statistical analysis results concluded that personal characteristics influence consumer behavior in Hungary and China, such as age, education level, occupation, living area scale, income, and gender. The dominant reason for Hungarian and Chinese respondents to buy organic food is food safety and health and environmentally friendly. And the reason for them to refuse organic food purchases is the high price, which is different from the previous study in Hungary. The most welcomed organic food product is organic fruits and organic vegetables in Hungary and China. The most efficient marketing tool for them to buy organic food is social media. And different marketing tools combination varies in Hungary and China. Hungarian respondents are more willing to buy organic food, while Chinese respondents are happier to recommend organic food to other consumers.

**Keywords:** consuming behaviors; organic food; correlation analysis; marketing tools



**Citation:** Wu, Y.; Takács-György, K. Comparison of Consuming Habits on Organic Food—Is It the Same? Hungary Versus China. *Sustainability* **2022**, *14*, 7800. <https://doi.org/10.3390/su14137800>

Academic Editor: Rosa Maria Fanelli

Received: 1 April 2022

Accepted: 14 June 2022

Published: 27 June 2022

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



**Copyright:** © 2022 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

Food is an essential topic for the market and among people. To supply proper and needed food products for human needs is an important process that will promote product development, motivate economies, and feed human needs in time. With increased buying ability, health awareness, and a high-speed lifestyle, healthy and nutritional food style [1] is the main topic, especially for young working people. Moreover, more organic farming land will bring more proficiency [2], and environmentally friendly farming trends. At the same time, in 2020, the COVID-19 pandemic spread out worldwide, speeding up this food style shaping [3]. And it was already proved by many works of literature that this massive global pandemic profoundly influenced the customers' buying behavior, and the changes in buying behavior will last in the future. Organic food is regarded as a buying behavior for the belief in healthy life, good taste in products, the welfare of production animals, and a friendly environment.

What is the future of organic food? To know the organic food market trend, it is crucial to understand consumer behavior toward organic food. However, to better understand

consumer behavior, we need to get validation from different countries [4]. In this research, we mainly focused on two countries in different stages of adopting organic food products, Hungary and China. Based on the mature experience with organic food, high technology in industrial manufacturing, and increasing living conditions in Hungary, the future of organic food is relatively bright and positive. Even China has lower organic food development than most developed countries [5]. There is still a vast potential market for organic food in China due to the rapid economic growth, huge population, and enormous arable lands. The survey was structured by three main aspects to understand how consumer behavior is influenced and the future of organic food in Hungary and China, such as the basic personal profile (age, education level, occupation, living area scale, income and gender), consumption habits, the reason to buy and refuse organic food, and the efficient marketing tools affecting purchasing toward organic food. The valuable study findings will provide opportunities to industrial practitioners and researchers to understand themselves and each other better regarding organic food. We also tried to find proper and efficient marketing tools that can promise consumers integration into a sustainable economy, such as organic food consumption [6], which can help improve the organic food market as a sustainable consumption in Hungary and China or other countries.

## 2. Review of Literature

The value of conducting this comparative research to know the future of organic food in Hungary and China derives from the changes in food demand in the whole world. It shows there should be a bright future for organic food. However, we have to validate this thought from massive literature. We can not predict the future of organic food in Hungary and China without analyzing the status of organic food in these two countries. In this part, we summarized the massive literature about the changes in food demand worldwide and the organic food status in Hungary and China.

### 2.1. The Changes in Food Demand All over the World

With the pressure of increasing population [7,8], the rapid development of urbanization [9–11], climate change [9,12–14], natural disasters [15–19], the food insecurity emphasized, and the demand for food increased, and the food consumption pattern changed.

It is estimated that the global population can be 9.1 billion in 2050, while the rapid increase in food prices results in a vast number of hungry and malnourished people worldwide [20,21]. Between 2005 and 2050, the food demand will increase by 59 percent to 98 percent with the growth of the population [22]. The reason for hunger and malnutrition is expensive food prices and continuous natural disasters, wars [21], population growth, and poverty. The BRICS countries' population can reach almost half of the global population in 2050, which means potential agricultural labor force and potential economic opportunities [23]. People need to be offered enough food and a healthy diet in a safe nation and state. According to the report from FAO, the world population keeps growing, and the income is also increasing, people's diet needs are also changing. People are getting aware of environmentally sustainable and healthier diets. In 2015, the UN announced the 2030 Agenda for Sustainable Development, an action guide for the international community to 2030, which aims to end poverty and hunger. There is three-dimensional sustainability: economic, social, and environmental. And the 2030 agenda offers a vision that food and agriculture are the heart of sustainability development [24]. Food security requires food and agriculture sustainability. How to achieve sustainable food and agriculture development is everyone's duty on this planet for the current and next generations. Organic food is the most successful green food, and organic farming is one of the sustainable agriculture production management systems [25–27].

The demand for food is the quantity and high quality. More nutritional, more fresh [28], and more healthy food [1] are becoming needed among consumers. A survey conducted in 2017 revealed that customers were more willing to buy products with increased nutritional value [29]. Review the influential worldwide pandemic or historical crisis, the events

2002-04 SARS outbreak, the 2011 Christchurch earthquake, 2017 Hurricane Irma, and the COVID-19 outbreak in China negatively impact global economies. So far, COVID-19 has played the most harmful role worldwide, and it is changing people's buying behavior significantly [2,29–31]. Before, buying organic food was just a behavior among the middle class, but nowadays, the pandemic promotes the popularity of this thought to the more common class. Among the survey from 5000 customers in Australia, China, India, Indonesia, Japan, South Korea and Thailand, starting that they paid more attention to health during this time, and more than 75% of people wanted to strengthen their health by doing exercises eating healthy. Even though the price volatility and future income uncertainty remain amid the COVID-19 pandemic, consumers will shift to buy more nutritious and sustainable food. This change in buying behavior has already lasted more than three weeks. It is said that a habit will be formed in three weeks. People are adapted to a new lifestyle and food habits during the long period of the COVID pandemic.

It is common for most countries that the demand for food is not only food adequate food supply but also more nutritional, fresh, and healthy food.

## 2.2. The General Review of the Organic Food Market in Hungary and China

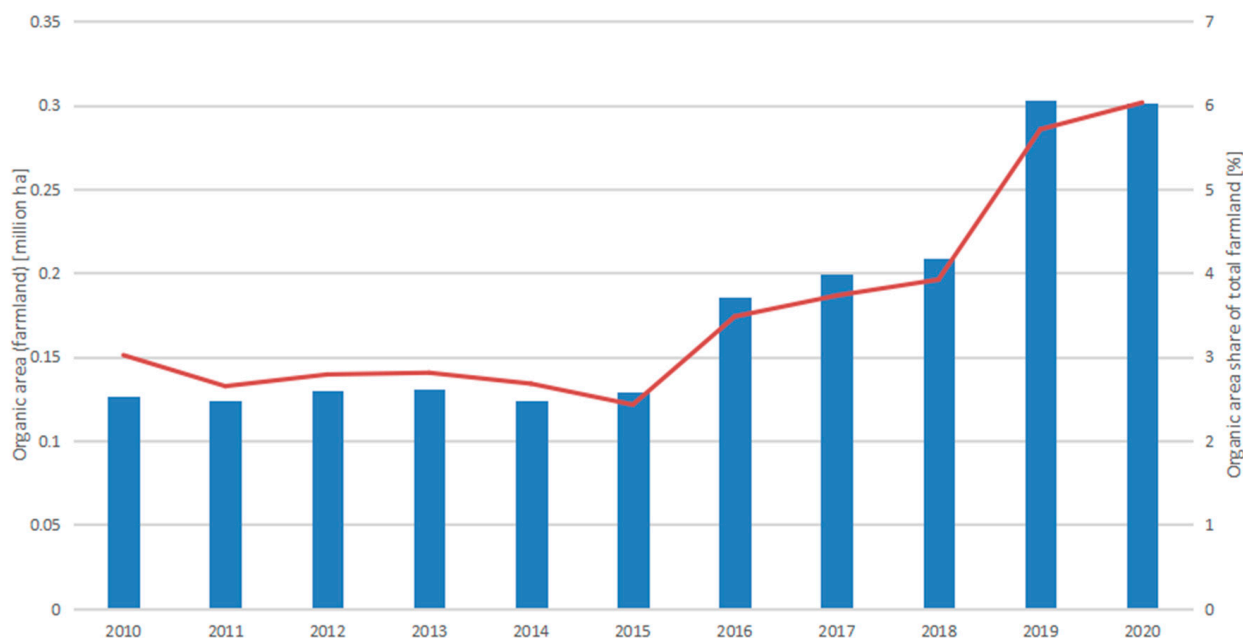
A well-developed organic food market gets influenced by local consumers' awareness of this food product and its market development basis [32,33]. The development and level of organic food are higher in Hungary than in China. Nowadays, the demand for organic food globally, including in Hungary and China, is increasing. In some developing countries with an intensive population, especially in China and other Asian countries, the government protects the plants. It improves agro-food amounts by relying on modern industrial methods heavily by synthetic chemicals to control the pests, weeds, and diseases [34]. At the same time, many chemical pesticides are harmful to the environment, vegetables, and fruits [35]. In organic food, genetically modified organisms and antibiotics are prohibited, and fertilizer is avoided.

### 2.2.1. The Organic Food Market in Hungary

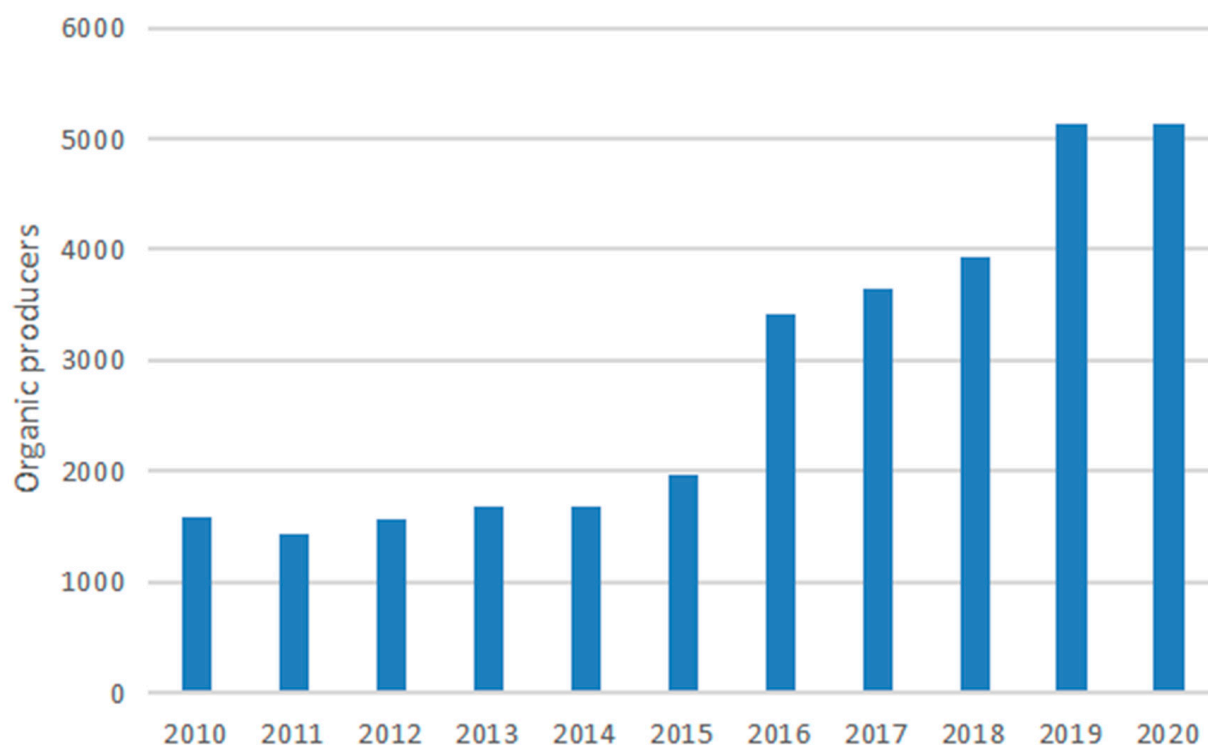
The organic market was founded in Hungary in 1980, which mainly contains arable crops, perennial crops, vegetables, and a tiny amount of organic animal husbandry [36]. According to the development paths of the local food system in Hungary, Hungarian people started to have a strong interest in local food and organic food in 2010 [37]. This new consuming trend also motivated some groups and universities to research. The number of organic farmers is also increasing due to the growing organic market [37]. The most common reasons organic consumers buy organic food products are focusing on the healthy, environmentally friendly, ethical awareness, and sustainable lifestyle, not the price or the appearance of the products and the brand [6,38]. The preliminary determination to purchase organic food is food safety, not Hungary's income, education, and gender [39].

Hungary is one of the largest areas to convert the land to organic farmland in Europe, which has fully converted organic farming land and large amounts of under converted land. Hungary had 199,684 hectares of organic agricultural land, and the ratio of total farmland is 4.3% in 2017 [40]. Organic farmland grew faster than decades ago but slower than the market, which means the demand for organic food products is growing more positively than its supply. The rate and yields of organic food farming land increased year by year, and the indexes reached double yield within ten years. The continuous growth of organic farming land results from the rapid demand and industry development. The organic farmland, organic area shares of total farmland, organic producers, and organic retail sales in Hungary are increasing year by year [35]. Figure 1 explains the data from 2010 to 2020, the development of the organic area, and its shares of total farmland. The leap in organic farmland happened between 2015 (0.129 million ha, 2.43%) and 2016 (0.186 million ha, 3.48%), and the growth kept increasing. By 2020, the organic farmland is 0.3101 million ha, and the percentage of total farmland is 6.03%. Figure 2 shows the increasing changes of organic food producers were 1577 in 2010 and 5128 in 2020. There is no big change in

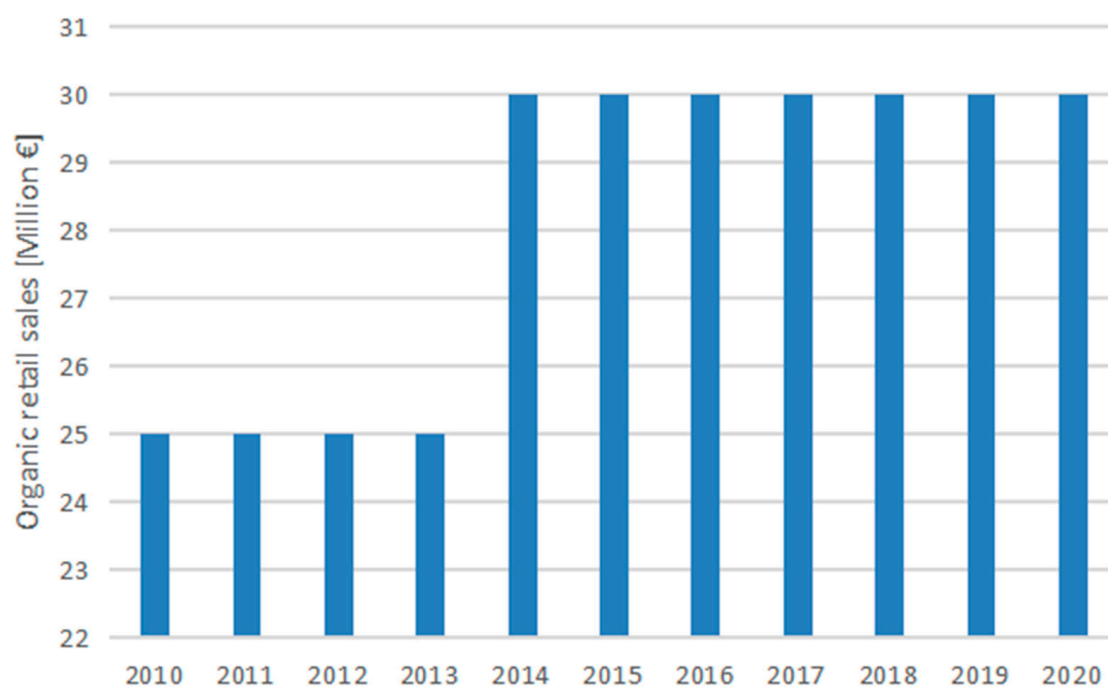
organic retail sales per year from 2010 to 2020 as Figure 3 explains. The organic retail sales were 25 million euros in 2010, 2011, 2012, and 2013. And it was 30 million euros from 2014 to 2020. Hungary has good experience in the organic food market, and it continues this way [35]. In a word, Hungary has a well-developed organic food market, but the market is still showing a positive tendency.



**Figure 1.** The development of the organic area in million hectares and the organic area shares of total farmland [%] in Hungary from 2010 to 2020. Source: Statistics.FiBL.org, 2021.



**Figure 2.** The development of the number of the organic producers in Hungary from 2010 to 2020. Source: Statistics.FiBL.org, 2021.



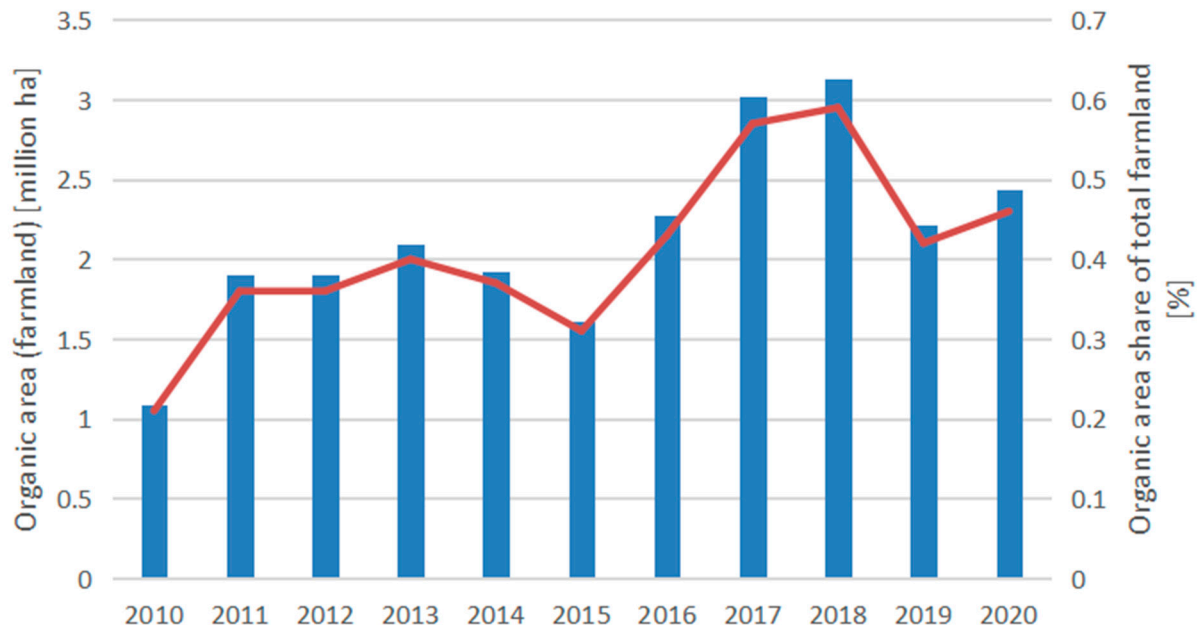
**Figure 3.** The development of the organic retail sales in a million euros in Hungary from 2010 to 2020. Source: Statistics.FiBL.org, 2021.

#### 2.2.2. The Organic Food Market in China

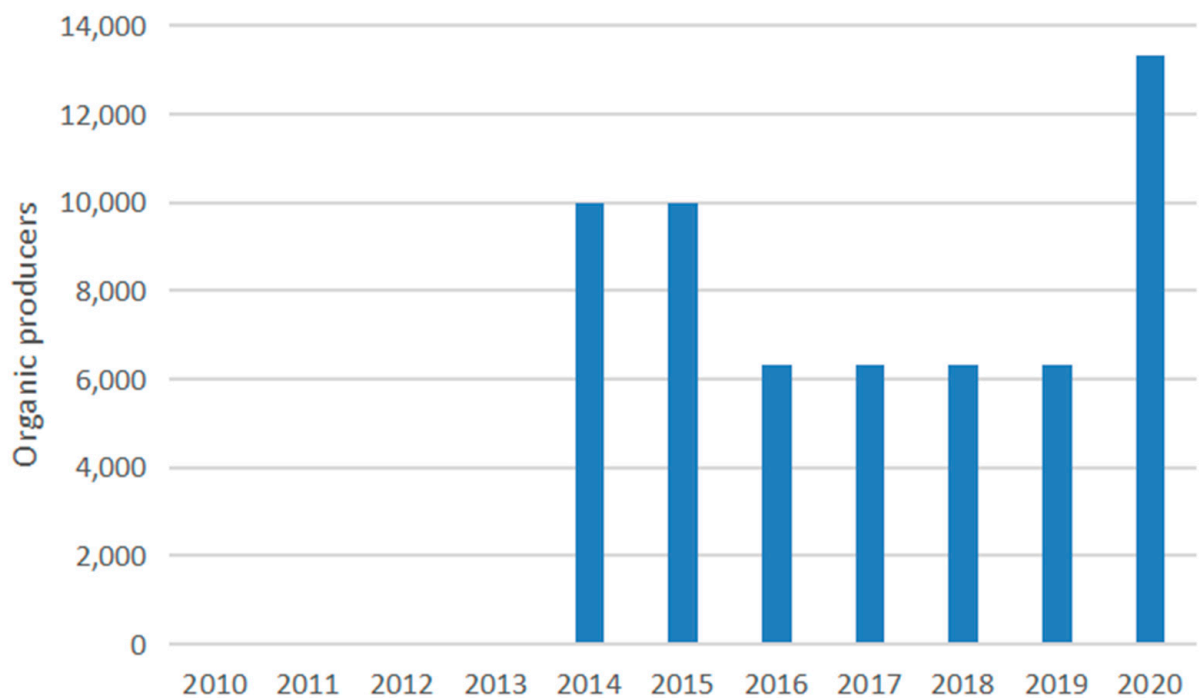
The organic market grows slower in China than in Hungary [41]. It started to be accepted by consumers in 2012 as the fast development of the social economy and the changes in consumption structure. Organic farming requires a high level of knowledge, unlike conventional agriculture requiring chemical and capital investment [42]. In China, the character of an organic farm is smallholder-oriented, and the average farm size is no more than 0.5 hectares per household [42]. Unlike the Hungarian organic consumers focusing on food safety and health, the determining factors for Chinese organic food consumers to buy organic food are the price and income [43], after is food safety, and environmentally friendly [44]. Differ from the systematic and reliable organic food data collection in Hungary. The data about organic food is incomplete in Asian countries. The organic market channels are specific organic food stores, conventional channels, and retailers, similar to Hungarian organic food channels [42]. Chinese provincial and central governments cooperate in highlighting organic production as its stringent traceability measures and record-keeping and prohibition of chemicals that meet the worldwide trade requirements for food safety with primary companies to carry out the organic conversion projects.

To better understand the comparison of organic food market development in Hungary and China, we also explained the data on the organic area, organic area shares of total farmland, organic producers, and organic retail sales in China [35] since 2010 to 2020. But the readers should bear in mind that we can only see the trend of the organic food market from the mentioned data for each country separately. It is not feasible to compare each index data from country to country. At the same time, we want to highlight another fact that the data source and data availability are more available in Hungary relatively [35] because the organic food market is more developed in Hungary [35,41]. The organic farming land was only 1.09 million hectares in 2010, while the growth rate was more than double digit in 2020 with 2.435 million hectares, and the share of organic farmland among total farmland changed from 0.21% to 0.46%, as Figure 4 clarified. The number of organic producers has increased by more than 3000 from 2014 (9990) to 2020 (13,318) (Figure 5). Unfortunately, the data of organic producers are missing before 2014. The number of organic producers decreased between 2016 to 2019, but it increased in 2020 again. Even though the number of organic producers decreased from 2016 to 2019, organic retail sales always keep growing

year by year (Figure 6). Especially in 2013, the organic retail sales reached 2430 euros from 790 euros in 2012. This change results from the rapid development of e-commerce in China, such as Tao Bao. People have more convenient opportunities to buy products and sell their products everywhere, even in other countries [35]. Therefore, China's domestic organic market is small but growing [30,42].

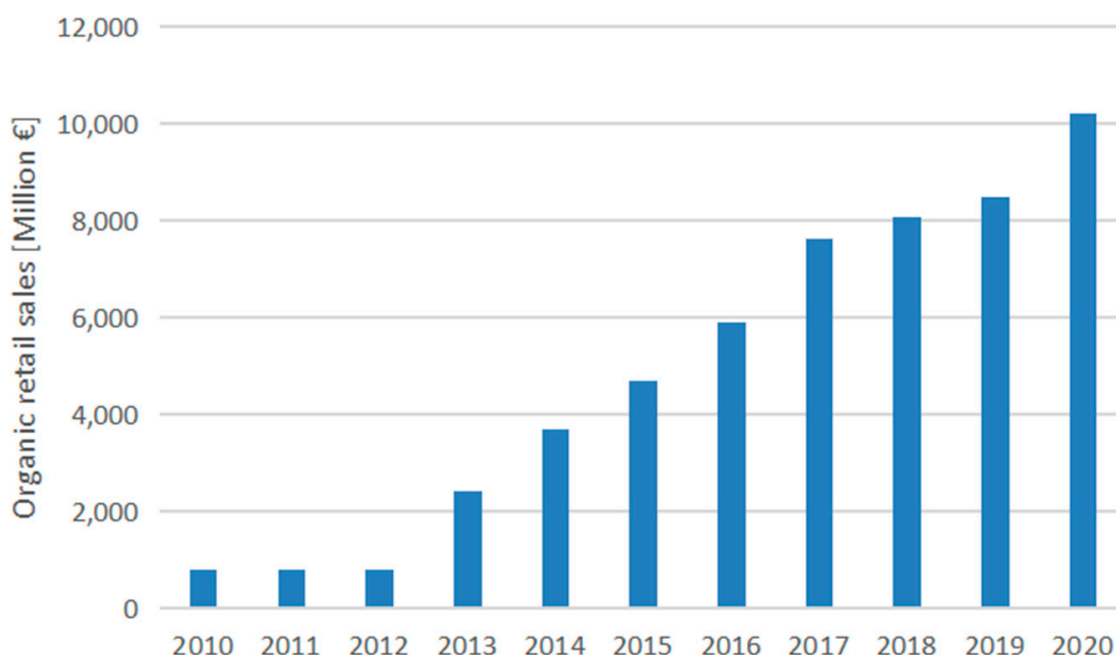


**Figure 4.** The development of the organic area in million hectares and the organic area shares of total farmland [%] in China from 2010 to 2020. Source: Statistics.FiBL.org, 2021.



**Figure 5.** The development of the number of the organic producers in China from 2010 to 2020. Source: Statistics.FiBL.org, 2021.





**Figure 6.** The development of the organic retail sales in a million euros in China from 2010 to 2020. Source: Statistics.FiBL.org, 2021.

### 2.3. Hypothesis

The research hypotheses were proved in the literature mentioned above.

**H1.** *Personal characteristics [45–48] can influence consumers' buying willingness and their attitude toward recommending to others about organic food in Hungary and China in the future. Gender has significant variance on it. Consumers who are elder, have higher education, have a longer-term occupation, have a larger living area, and have higher income have the highest willingness to buy organic food and the highest enthusiasm to recommend it to others in Hungary and China.*

**H2.** *Different marketing tools or different marketing tools combination has a different level of variance in consumers' buying willingness and recommendation attitude toward organic food in Hungary and China [49,50].*

**H3.** *The awareness of organic food among Hungarian consumers is higher than Chinese consumers, as the organic market started in Hungary and the market is developed well. China's market in organic food was founded later and only been active in the last decades. The demand for organic food is higher among Hungarian respondents than Chinese respondents. But the demand is high both in Hungary and China [6,45,51].*

This research was conducted between two countries, Hungary as the developed organic food market and China as the emerging organic food market, which can provide suggestions for the future organic food market and bridge the experience of the organic food market in Hungary and China. So far, there is less literature comparing the developed organic food market and the emerging organic food market. The comparison knowledge about buying behavior of organic food in Hungary and China and the changes caused by the COVID-19 pandemic, and the correlation relationship between organic food consumption behaviors and personal characteristics and marketing tools will be discussed. In the end, the prediction of the future of organic food market will be concluded.

### 3. Materials and Methods

The time-stamped data, secondary literature, and some official surveys based on authorial announcers were used to analyze the organic food market in Hungary and China.

The primary research is a comparative study between Hungary and China, and these two countries are in different stages of adopting organic food products. Because a better understanding of consumers' behavior requires investigation in different countries [4]. In Hungary, the organic food market is relatively more developed compared to China, and organic food was introduced to the market earlier in Hungary. While China's economy is better than Hungary's overall, China's organic food market has been emerging in recent decades. Besides, there is enough population for us to conduct the research [51]. Based on the comparison study, we tried to make Hungary and China engage in organic food trade with each other to understand themselves and each other regarding the organic food market and provide constructive information to each other at an early age for better development of organic food market in two countries [52]. In the primary research, a questionnaire was used, and a convenient online sampling technique was used to collect the data. And the questionnaire was conducted in two languages, Chinese and Hungarian. Due to the COVID-19 pandemic, the questionnaire promise the available data collection without time, space, and financial limitation. And the data can be easily analyzed as all the respondents see the same questions [53,54]. Spass software analysis was used to analyze the large data set with different formats from the questionnaire efficiently and adequately [55,56].

Hungary is a developing and high-income country located in Central Europe with a 9.769 million population. Most of the consumers in this survey country are metropolitan consumers. China is a developing country with a 1.398 billion population, and the GDP has been increasing fast in recent decades. But the consumption of organic food is not widespread yet, and it is growing slower than in Hungary. Hence, based on the growing income and popularity of organic food and the different consumption development levels in these two survey areas, it was useful to study consumers' buying willingness and habits toward organic food. There is much useful information gained from the 581 respondents. Based on the difference in population and agricultural areas from the sampling countries, 374 respondents are from China, and 207 of them are from Hungary. The online questionnaire structured by a professional Chinese questionnaire website Wen Juan Xing was built based on some reliable literature [14,18,25]. There were 16 questions relating to the consumers' buying wiliness and habits toward organic food. All the respondents could edit their idea on the specific questions. Descriptive statistics were used to analyze the primary data, and the data were analyzed by SPSS software.

The measurements of variables and the scales used to measure variables were created by the above-mentioned literature. The age of the respondents is classified into five groups on average, from younger than 20 years old to older than 50 years old. The education level of respondents is displayed as secondary school, high school, college, bachelor's degree, master's degree, Ph.D., or higher. Occupation term is marked from a student, employed, unemployed, self-employed, working while studying, and retired. Respondents' living area was recorded according to the population as an enormous city, big city, middle city or capital or big town, small town, smaller town, or rural settlements and not given category. Respondents' monthly income is classified into four groups less than 300 euros, 301–500 euros, 501–700, and more than 700 euros. Food habits are defined into three groups, vegetarian, non-vegetarian, and does not matter. The extent of consumers' buying willingness was assessed as six dimensions, which is a 6-point scale anchored, such as "1" means never buy it, "2" means against to buy it and "3" means not like to buy it, "4" means not refuse it, "5" means like to buy it, "6" means very glad to buy it. The passion for consumers to recommend organic food products to their friends and relatives is assessed as five dimensions, which was a 5-point scale anchored at "1" indicates strongly against, "2" indicates not against, "3" indicates not sure, "4" indicates glad to recommend, "5" indicates strongly recommend.

Due to the sampling method, the sample cannot be considered representative but gives a good base to discover the research questions.



#### 4. Results

Based on the survey, we can understand consumers' buying behaviors on organic food better from the comparative study between 207 Hungarian respondents and 374 Chinese respondents. The basic characteristics of the sample and the reason why respondents are interested or not in organic food were analyzed respectively in Hungary and China. Besides, we investigated the most efficient marketing tools on organic food consumption in the surveyed countries.

##### 4.1. Characteristics of the Sample

The respondents from Hungary are mainly living in the capital city, Budapest. Among the 374 Chinese respondents who are living in China, most of them are from a developing region, Inner Mongolia (55.34%). And the some of them are from developed provinces, like Bei Jing, Shang Hai, Guang Dong, etc., and the respondents are 69 (18.45%). The total population of Hungary in 2021 amounted to 9730 thousand [57], and the Chinese population amounted to around 1.41 billion people in 2021 [58]. In this part, we talk about the respondents' basic profile in 2021 survey and their percentage among total respondents and total national population in 2021. It is worth mentioning that the percentage of the total national population demonstrated in the table can help understand how the sampling data reflect the whole countries' organic food consuming habits.

Below Table 1 is about the Chinese and Hungarian respondents' basic profiles, such as age, gender, education, occupation term, living area, monthly income and food habits. Most respondents' education levels are bachelor's or master's, the same in Hungary and China. The peak age is between 21 and 30 years old, demonstrating the same in China and Hungary. The ratio of females is a little bit higher than males in the two sampling countries, and there is no significant difference in result analysis. The dominant education data is that the questionnaire was mainly spread among students. Among the Chinese respondents, employed and students are taking the most part, while the main Hungarian respondents are students, as the author's network and limitation to investigate are the young generation in China and mainly students in Hungary. Since the population and economy differ in China from Hungary, the living area of respondents is more complicated among Chinese respondents than in Hungarian respondents. Respondents' monthly income is relatively more stable than the Chinese respondents. The main food habit is non-vegetarian among both Hungarian and Chinese respondents. However, it is still noticed that a few respondents are vegetarian or do not clarify their food habits.

**Table 1.** Respondents' basic profile from Hungary and China.

Category	China			Hungary		
	Frequency	Percentage (%) of Total Respondents	Percentage (10 <sup>-6</sup> %) of the Total Chinese Population	Frequency	Percentage (%) of Total Respondents	Percentage (10 <sup>-4</sup> %) of the Total Hungarian Population
≤20	18	4.81	1.27	20	9.66	2.05
21–30	233	62.3	16.52	161	77.77	16.54
31–40	16	4.28	1.13	15	7.57	1.54
41–50	75	20.5	5.31	7	7.24	0.71
>50	32	8.56	2.26	4	1.93	0.41
Total	374	100	26.52	207	100	21.27
Female	235	62.83	16.66	119	57.49	12.23
Male	135	36.1	9.57	85	41.06	8.73
Prefer not to say	4	1.07	0.28	3	1.45	0.30
Total	374	100	26.52	207	100	21.27
Secondary school	10	2.67	0.70	4	1.93	0.41
High school	21	5.61	1.48	22	10.63	2.26
College	37	9.89	2.62	19	9.18	1.95
Bachelor's degree	180	48.13	12.76	65	31.4	6.68
Master's degree	110	29.41	7.80	82	39.61	8.42

Table 1. Cont.

Category	China			Hungary		
	Frequency	Percentage (%) of Total Respondents	Percentage (10 <sup>-6</sup> %) of the Total Chinese Population	Frequency	Percentage (%) of Total Respondents	Percentage (10 <sup>-4</sup> %) of the Total Hungarian Population
Ph.D./Higher degree	16	4.28	1.13	15	7.25	1.54
Total	374	100	26.52	207	100	21.27
Student	170	45.45	12.05	150	72.46	15.41
Employed	151	40.37	10.70	20	9.66	2.05
Unemployed	13	3.48	0.92	7	3.38	0.71
Self-employed	15	4.01	1.06	11	5.31	1.13
Working while studying	12	3.21	0.85	16	7.73	1.64
Retired	13	3.48	0.92	3	1.45	0.30
Total	374	100	26.52	207	100	21.27
Enormous city	61	16.31	4.32	0	0	0
Big city	106	28.34	7.51	0	0	0
Middle city/Capital/Big town	102	27.27	7.23	146	70.53	15.00
Small town	91	24.33	6.45	39	18.84	4.00
Smaller town/rural settlements	14	3.74	0.99	7	3.38	0.71
Not given category	0	0	0	15	7.25	1.54
Total	374	100	6.52	207	100	21.27
<300	163	43.58	11.56	69	33.33	7.09
301–500	58	15.51	4.11	43	20.77	4.41
501–700	55	14.71	3.90	43	20.77	4.41
>700	98	26.2	6.95	52	25.12	5.34
Total	374	100	26.52	207	100	21.27
Vegetarian	20	5.35	1.41	25	12.08	2.56
Non-vegetarian	198	52.94	14.04	87	42.03	8.94
Does not matter to me	156	41.71	11.06	95	45.89	9.76
Total	374	100	26.52	207	100	21.27

Source: Own research, 2021.

#### 4.2. The Comparison Results of Organic Food Consuming Habits among Hungarian and Chinese Respondents

The survey is to find why consumers would like to buy and why they refuse organic food and examine the differences and similarities between Hungarian and Chinese respondents' consuming habits of organic food. It is evident that the mentioned literature also proves the reasons, but there are some new findings because of the different sampling method.

In both China and Hungary, the main factor influencing the purchase of organic food is food safety and health and environmentally friendly. Other reasons are also considered, such as the good appearance of the package, advertisement from media and recommendation from friends and relatives. The advice from friends and relatives in Hungary is considered more than in China. The high price of organic food is crucial for refusing organic food. Chinese respondents do not have the channel difficulties compared to Hungarian respondents in buying organic food, mainly because the e-commerce industry in China is very popular, and more developed than in Hungary. Hungarian respondents consider income less than Chinese respondents do. Organic fruits and organic vegetables are the most welcomed product in Hungary and China. From the data about current or ideal monthly expenditure (Euros) on organic food, it is concluded that Hungarian respondents prefer to spend more on organic food every month than Chinese respondents. Compared to Chinese respondents, Hungarian respondents like to buy organic food more than Chinese respondents, and Hungarian respondents buy organic food more often than Chinese respondents. After analyzing consumption behaviors, further research about the buying passion and channel were discussed in the following part.

This survey has six information resources or marketing tools to buy organic food products. These channels were mentioned in the cited literature [42]. The main information sources for both Chinese and Hungarian respondents are social media and advertisements. But Chinese respondents also get information from advertisements from the market, shop-

keepers, or retailers. While, Hungarian respondents also obtain information from family, friends, and relatives.

Over half of Chinese respondents do not like to buy organic food, and their passion for buying organic food is negative. Most Hungarian respondents like to buy organic food. Chinese respondents are not as positive about buying organic food as Hungarian respondents, but they are more active in recommending organic food to others.

#### 4.3. Correlation Analysis between Sample Characteristics and Willingness to Buy and Recommend Organic Products in Hungary and China

Based on the necessary analysis of samplings, further correlation analysis was conducted to test what personal characteristics and marketing tools affect consumers' buying behavior in Hungary and China. What are the similarities and differences between the two countries' consumers' buying habits of organic food products?

According to correlation analysis of the sampling statistics, the elder consumers who have higher education, longer-term occupation, bigger living places, and higher income show the highest willingness to buy organic food and recommend organic food to other consumers. It is the same in Hungary and China (Tables 2 and 3). People are increasingly paying attention to healthy and nutritional food styles in the mentioned literature. In contrast, the knowledge of organic food and the awareness of healthy food styles strengthen consumers' buying willingness of organic food and their attitude to recommend organic food to other consumers. The market for organic food is also a reason for organic food purchasing because the variety and access to organic food are more developed in bigger cities, especially in the capital city. The income limits the buying ability, so richer respondents prefer healthy but more expensive organic food. Gender has significant variance in the above aspects (Table 4).

**Table 2.** Spearman correlation analysis between personal characteristics (education, occupation, living area) and buying willingness and recommendation attitude to others about organic food in Hungary and China.

Spearman Correlation				
		education	occupation Hungary/China	living place
Buying willingness	Correlation coefficient	0.788 **/0.894 **	0.821 **/0.950 **	0.837 **/0.933 **
	<i>p</i> value	0.000/0.000	0.000/0.000	0.000/0.000
Recommendation attitude	Correlation coefficient	0.782 **/0.942 **	0.855 **/0.918 **	0.850 **/0.918 **
	<i>p</i> value	0.000/0.000	0.000/0.000	0.000/0.000

Source: Own research, 2021. \*  $p < 0.05$ , \*\*  $p < 0.01$

**Table 3.** Pearson correlation analysis between personal characteristics (age, income monthly) and buying willingness and recommendation attitude to others about organic food in Hungary and China.

Pearson Correlation			
		age Hungary/China	income monthly
Buying willingness	Correlation coefficient	0.934 **/0.992 **	0.874 **/0.955 **
	<i>p</i> value	0.000/0.000	0.000/0.000
Recommendation attitude	Correlation coefficient	0.962 **/0.975 **	0.915 **/0.950 **
	<i>p</i> value	0.000/0.000	0.000/0.000

Source: Own research, 2021. \*  $p < 0.05$ , \*\*  $p < 0.01$

**Table 4.** Variance analysis between personal characteristics (gender) and buying willingness and recommendation attitude to others about organic food in Hungary and China.

Variance Analysis						
		Gender (Average Value $\pm$ Standard Deviation)			F	p
		–3.0	Female	Male		
Hungary	Buying willingness	–3.00 $\pm$ 0.00	2.39 $\pm$ 1.29	2.64 $\pm$ 0.92	233.931	0.000 **
	Recommendation attitude	–3.00 $\pm$ 0.00	3.83 $\pm$ 1.04	3.27 $\pm$ 1.27	363.213	0.000 **
China	Buying willingness	–3.00 $\pm$ 0.00	4.39 $\pm$ 0.85	4.67 $\pm$ 1.15	1057.241	0.000 **
	Recommendation attitude	–3.00 $\pm$ 0.00	3.56 $\pm$ 0.92	3.33 $\pm$ 0.58	806.358	0.000 **

Source: Own research, 2021. \*  $p < 0.05$ , \*\*  $p < 0.01$ 

#### 4.4. Correlation Analysis between Information Resources or Marketing Tools and Willingness to Buy and Recommend Organic Products in Hungary and China

The correlation between marketing tools and buying and recommending organic food is significant in Hungary and China. Different marketing tools impact consumers' buying and recommending behavior on organic food in Hungary and China. In Table 5, different marketing tools are marked as different numbers to analyze statistics as below. The marketing tools such as commercial advertising, social media, word-of-mouth effect, print advertising, press releases, and personal selling are clarified as easier understanding concepts in the questionnaire: television advertisement, social media, like Instagram, Facebook, YouTube, etc., family, friends and relatives recommendations, market or shop advertisement, newspaper and magazines, and shop keepers or retailer. It shows that social media and print advertising significantly impact organic food buying for Hungarian consumers. The different marketing tools combination, commercial advertising and print advertising, commercial advertising and personal selling, social media and print advertising, word-of-mouth effect, and print advertising significantly affect consumers to recommend organic food to others. For Chinese consumers, the group commercial advertising and social media, commercial advertising and word-of-mouth effect, commercial advertising and print advertising, commercial advertising and personal selling have significant influence when they buy organic food. The combination of commercial advertising and personal selling significantly influences Chinese consumers to recommend organic food to other consumers (Table 6).

**Table 5.** Explanation of different marketing tools marked in survey.

1	2	3	4	5	6
Television	Social media, like Instagram, Facebook, YouTube, etc.	Family, Friends, relatives' recommendation	Advertisement from the market or shop	Newspaper and magazines	Shop keeper or retailer
Commercial advertising	Social media	Word-of-mouth effect	Print advertising	Press releases	Personal selling

Source: Own research, 2021.

**Table 6.** The influence of marketing tools on buying willingness and recommendation attitude to others about organic food in Hungary and China.

Univariate Analysis of Variance					
Hungary			China		
	p	Multiple comparisons	p	Multiple comparisons	
Buying willingness	0.013	2–4 *	$p < 0.001$	1–2 *, 1–3 *, 1–4 *, 1–6 *	
Recommendation attitude	0.044	1–4 *, 1–6 *, 2–4 *, 3–4 *	0.037	1–6 *	

Source: Own research, 2021. \*  $p < 0.05$ , \*\*  $p < 0.01$

Social media plays the main role in purchasing organic food for both Hungarian and Chinese respondents. The other marketing tools are also considered in two samples such as commercial advertising, word-of-mouth, print advertising, and personal selling. However, respondents from these two countries do not mention the press release. We cannot conclude a weak connection between press releases and purchasing willingness and recommending attitude, as we cannot see if there is less information about organic food in newspapers or magazines or if people do not consider the advertisement from newspapers and magazines. Nevertheless, with the rapid development of networks, people are tightly connected with the internet, and social media is becoming a dominant part in daily life for information acquisition.

Consumers who buy organic food more often have the highest willingness to buy organic food in the future, which is the same in both countries (Table 7). This information implies that the organic food market is not declining, but we can predict the stage of the organic food product life cycle only according to huge data analysis historically. This finding gives us a positive development of organic food in the future. At the same time, there is potential to extend the organic food market by those consumers who are highly willing to recommend organic food to others.

**Table 7.** The influence of currently buying frequency on buying willingness in the future about organic food in Hungary and China.

Spearman Correlation			
Buying willingness in future	organic food	buying frequency currently Hungary/China	
		Correlation coefficient	0.789 **/0.904
		<i>p</i> value	0.000/0.000

Source: Own research, 2021. \*  $p < 0.05$ , \*\*  $p < 0.01$

## 5. Discussion

It is essential to analyze consumer behaviors for industrial practitioners and researchers. In this comparative study, we tried to better understand consumer behavior toward organic food products [4] by comparing Hungary, and China (Hungary and China are in different stages of adopting organic food products) engage in the organic food trade. The organic food market is relatively more developed in Hungary than in China [2,31,38], and organic food was introduced to the market earlier in Hungary [36]. While China's economy is better than Hungary's overall, China's organic food market has been emerging in recent decades. We also provide valuable study findings and constructive information to industrial practitioners and researchers at an early stage to help them understand themselves and each other regarding the organic food market for better development of the organic food market in the two countries. And finding proper and efficient marketing tools promises consumers integration into a sustainable economy, such as organic food consumption [6]. Based on the primary research statistics analysis, we found some similarities and differences in consuming organic food between Hungarian and Chinese respondents. This research result cannot represent the typical purchasing behavior accurately due to the limitations of the research sampling, but as a reasonable practice, it can give future researchers or food enterprises suggestive directions or ideas.

### 5.1. Implications

Both Chinese and Hungarian respondents like to buy organic food [34,37,59]. In both China and Hungary, the main factors influencing the purchase of organic food are food safety and health and environmentally friendly [3,6,29,34,38,44,59–62]. More research validation from different countries can better understand consumers' behavior [4]. These findings between Hungary and China align with the research in the last five years worldwide [1], Germany [61,63], Czech Republic [62,63], Slovakia [63], and Poland [3,59]. Other

reasons are also considered, such as the good appearance of the package, advertisements from the media, and recommendations from friends and relatives [38]. Apparently, the advice from friends and relatives in Hungary is considered more than in China. The high price of organic food is crucial reason for Chinese respondents refuse organic food. Chinese respondents do not have the channel difficulties compared to Hungarian respondents in buying organic food, mainly because the e-commerce industry [35] in China is very popular, and there are more developed technologies than in Hungary. Apparently, income affects less to Hungarian respondents. Price influences more on purchasing organic food than the consumers' income, approved to Aschemann-Witzel and Zielke [64]. The demand for organic food is high among Hungarian [35] and Chinese. Personal characteristics and marketing tools or combinations can influence consumers' buying willingness and attitude to recommend organic food to others in Hungary and China. But the impact of the combination of marketing tools for respondents to buy organic food varies from two countries. The respondents who are elder, have higher education, have a longer-term occupation, live in bigger areas, and have higher-income show the highest willingness to buy organic food and recommend organic food to other consumers in Hungary and China. Gender has significant variance in the above aspects. In this age of social networks phenomenon, social media is the main data resource for consumers to share attitudes and experiences [1]. Social media is the main marketing tool for both Hungarian and Chinese [65] respondents to make a purchase decision. Hungarian respondents get more influence from print advertising, while for Chinese respondents is commercial advertising. Besides, the willingness to buy organic food and recommend organic food to other consumers differentiate between the two countries. The difference can be ignorable because it still shows a promising future for the organic food market. Hungarian respondents showed higher interest in buying organic food, while Chinese respondents were more willing to recommend organic food to other consumers.

Most of the results can also be proved by previous literature, while some results are based on the particularity of this primary research. The summary of hypotheses confirmation based on the descriptive survey result is shown below in Table 8. The new finding is that price and income are also considered when Hungarian respondents buy organic food compared to previous literature. However, this is the result of our research limitation. According to the hypotheses and the findings, we confirmed the hypotheses. For example, respondents' personal characteristics (gender, age, education, occupation, living area, income) can influence consumers' buying willingness and attitude to recommend to others about organic food in Hungary and China. Gender has a significant variance. Those consumers who are elder, have higher education, have a longer-term occupation, have a larger living area, and have higher income have the highest willingness to buy organic food and the highest enthusiasm to recommend it to others in Hungary and China. Both Hungarian and Chinese respondents' buying willingness and recommendation attitude toward organic food can be influenced by different marketing tools and the combination of marketing tools. The organic market started in Hungary, and the market is developed well. China's market in organic food was founded later and only been active in the last decades, but it keeps growing [30,42]. The awareness of organic food among Hungarian consumers is higher than Chinese consumers. Even though the demand for organic food is higher among Hungarian respondents than Chinese respondents, the demand is still high in both countries.



**Table 8.** Proving or rejecting the hypotheses of the research.

Research Hypothesis	The Research Result Justified the Hypothesis
H1: Personal characteristics can influence consumers' buying willingness and attitude to recommend to others about organic food in Hungary and China in the future. Gender has a significant variance. Those consumers who are elder, have higher education, have a longer-term occupation, have a larger living area, and have higher income have the highest willingness to buy organic food and the highest enthusiasm to recommend it to others in Hungary and China.	Yes
H2: Different marketing tools or different marketing tools combination has a different level of variance in consumers' buying willingness and recommendation attitude toward organic food in Hungary and China.	Yes
H3: The awareness of organic food among Hungarian consumers is higher than Chinese consumers, as the organic market started in Hungary and the market is developed well. China's market in organic food was founded later and only been active in the last decades. The demand for organic food is higher among Hungarian respondents than Chinese respondents. But the demand is high both in Hungary and China.	Yes

Source: Own research, 2021.

### 5.2. Limitations and Further Research

Although we got the expected results from this comparative research between Hungary and China, this research still has some limitations. In our primary research, the Chinese respondents are generally from different cities. But the final statistics showed the majority of Chinese respondents are from Inner Mongolia, which is a developing region, because of our research limitation. And we generally investigate the available respondents, so the age distribution of the research respondents is not accurate. Future research can be conducted further based on this research from two points: specify the investigation area or specify the investigation age.

China has a huge population and many cities with diverse development levels. Section 4.1 explained that the ratio of respondents among the whole national population could implicate how this factor reflects the society of organic food consumption behavior. From the Table 1, we have to admit the sampling from China has two shortages: the amount is not big enough to reflect the whole society, and the data result cannot represent the whole population in China because the development of different cities varies from different locations in China, which can influence consumers' buying ability and habits. The survey respondents are from the countries generally, not the exact location, which means the research data ignored the difference between different cities. The dominant respondents in this research are from Inner Mongolia, a developing city in China. But there are also some respondents from diverse developing cities. Based on this research, the respondents source limited the generalizability of the study findings in the whole country [44], so the future researcher can mainly focus on one region or city or compare organic food consumption habits between different development level cities in China.

Organic food consumption habits can be significantly different for different age levels. And in this survey, the purchase reason for Hungarian respondents on organic food is not only the food safety and environmentally friendly as the literature mentioned, but also the price and income, which were not found in the literature. Because the main Hungarian respondents are students with a limited budget, this finding indicates that future research about organic food consumption habits should focus on respondents of different ages in Hungary. Further research can suggest the organic food market in Hungary or other countries with a similar feature.

Future researchers can narrow the investigation area in China and focus on the different age levels in Hungary and China regarding organic food consuming habits.

## 6. Conclusions

Hungary and China are in different stages of adopting the organic food market. As a relatively new food style, organic food shows increasing growth in Hungary and China. Even the organic food market in Hungary is more developed than in China. There are some similarities and differences between organic food consumption behavior in Hungary and China. For example, those respondents who are elder, have higher education, have a longer-term occupation, live in bigger areas, and have higher-income show the highest willingness to buy organic food and recommend organic food to other consumers in Hungary and China. Gender has significant variance in the above aspects. The most welcomed organic food products are organic fruits and organic vegetables in Hungary and China. The dominant reasons to buy organic food among Hungarian and Chinese are food safety and health and environmentally friendly. However, Hungarian and Chinese respondents refuse to purchase organic food mainly because of the high price. And low income is the lightly influential reason. Social media's most efficient marketing tool for organic food consumption in Hungary and China. While for Chinese respondents, the following efficient marketing tool is commercial advertising, and for Hungarian respondents is print advertising. Hungarian respondents are more willing to buy organic food, while Chinese respondents are happier to recommend organic food to other consumers. Due to the sampling limitations, the organic food research in a specific city and specific age group is left for future researchers.

**Author Contributions:** Supervision, K.T.-G.; Writing—original draft, Y.W. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** Ethical review and approval were waived for this study due to the anonymous questionnaire without any personal information from all the respondents.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data will be made available on request from the corresponding author.

**Acknowledgments:** Both authors of this research would kindly say thanks to Obuda University, Budapest (Hungary) which highly supported the publication of this work. As the first author of this research, I would also like to express my thanks to all the supporters, especially Tokhirmalik Lukmonov, who was supporting me during the whole writing process.

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

## References

1. Pilař, L.; Stanislavská, L.K.; Rojik, S.; Kvasnička, R.; Poláková, J.; Gresham, G. Customer Experience with Organic Food: Global View. *Emir. J. Food Agric.* **2018**, *30*, 918–926. [\[CrossRef\]](#)
2. Djokoto, J.G.; Pomeyie, P. Productivity of Organic and Conventional Agriculture—A Common Technology Analysis. *Stud. Agric. Econ.* **2018**, *120*, 150–156. [\[CrossRef\]](#)
3. 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. [\[CrossRef\]](#)
4. Steenkamp, J.E.M.; Baumgartner, H. Assessing Measurement Invariance in Cross-National Consumer Research. *J. Consum. Res.* **1998**, *25*, 78–107. [\[CrossRef\]](#)
5. Shafie, F.A.; Rennie, D. Consumer Perceptions Towards Organic Food. *Procedia-Soc. Behav. Sci.* **2012**, *49*, 360–367. [\[CrossRef\]](#)
6. Fogarassy, C.; Nagy-Pércsi, K.; Ajibade, S.; Gyuricza, C.; Ymeri, P. Relations between Circular Economic “Principles” and Organic Food Purchasing Behavior in Hungary. *Agronomy* **2020**, *10*, 616. [\[CrossRef\]](#)
7. UN/DESA Policy Brief #102: Population, Food Security, Nutrition and Sustainable Development | Department of Economic and Social Affairs. Available online: <https://www.un.org/development/desa/dpad/publication/un-desa-policy-brief-102-population-food-security-nutrition-and-sustainable-development/> (accessed on 7 May 2022).
8. Population Growth and the Food Crisis. Available online: <https://www.fao.org/3/u3550t/u3550t02.htm> (accessed on 7 May 2022).
9. Pandey, B.; Reba, M.; Joshi, P.K.; Seto, K.C. Urbanization and Food Consumption in India. *Sci. Rep.* **2020**, *10*, 17241. [\[CrossRef\]](#)
10. Satterthwaite, D.; McGranahan, G.; Tacoli, C. Urbanization and Its Implications for Food and Farming. *Phil. Trans. R. Soc. B* **2010**, *365*, 2809–2820. [\[CrossRef\]](#)

11. FSN Forum (FAO); Agricultural Development Economics. *Division Urbanization, Rural Transformation and Implications for Food Security—Online Consultation on the Background Document to the CFS Forum*; FAO: Rome, Italy, 2016; p. 10.
12. Hasegawa, T.; Fujimori, S.; Shin, Y.; Takahashi, K.; Masui, T.; Tanaka, A. Climate Change Impact and Adaptation Assessment on Food Consumption Utilizing a New Scenario Framework. *Environ. Sci. Technol.* **2014**, *48*, 438–445. [CrossRef]
13. James, S.J.; James, C. The Food Cold-Chain and Climate Change. *Food Res. Int.* **2010**, *43*, 1944–1956. [CrossRef]
14. FAO—News Article: Climate Change and Your Food: Ten Facts. Available online: <https://www.fao.org/news/story/en/item/356770/icode/> (accessed on 7 May 2022).
15. *The Impact of Disasters and Crises on Agriculture and Food Security: 2021*; FAO: Rome, Italy, 2021; p. 211. ISBN 978-92-5-134071-4.
16. Rasool, S.; Sa, H.; Ayman, N.; Fayaz, A.; Shubeena, S.; Thahaby, N.; Nabi, B.; Hai, A.; Ah, A. The Impact of Natural Disasters on Livestock Sector: A Review. *J. Biomed. Res. Environ. Sci.* **2021**, *2*, 669–674. [CrossRef]
17. Islam, M.M.; Ahmed, S. Effects of Natural Disaster on Food Availability, Accessibility and Consumption in Household Level of Coastal Villages. *J. Geogr. Nat. Disast.* **2017**, *7*, 1–6. [CrossRef]
18. Eftimov, T.; Popovski, G.; Petković, M.; Seljak, B.K.; Kocev, D. COVID-19 Pandemic Changes the Food Consumption Patterns. *Trends Food Sci. Technol.* **2020**, *104*, 268–272. [CrossRef] [PubMed]
19. Chenarides, L.; Grebitus, C.; Lusk, J.L.; Printezis, I. Food Consumption Behavior during the COVID-19 Pandemic. *Agribusiness* **2021**, *37*, 44–81. [CrossRef]
20. How to Feed the World—2050: High-Level Expert Forum, Rome 12–13 October 2009—Investment—World. Available online: <https://reliefweb.int/report/world/how-feed-world-2050-high-level-expert-forum-rome-12-13-oct-2009-investment> (accessed on 20 April 2022).
21. Ukraine War: World Bank Warns of “Human Catastrophe” Food Crisis. *BBC News*. 2022. Available online: <https://www.bbc.com/news/business-61171529> (accessed on 31 March 2022).
22. Valin, H.; Sands, R.D.; van der Mensbrugghe, D.; Nelson, G.C.; Ahammad, H.; Blanc, E.; Bodirsky, B.; Fujimori, S.; Hasegawa, T.; Havlik, P.; et al. The Future of Food Demand: Understanding Differences in Global Economic Models. *Agric. Econ.* **2014**, *45*, 51–67. [CrossRef]
23. Prosekov, A.Y.; Ivanova, S.A. Food Security: The Challenge of the Present. *Geoforum* **2018**, *91*, 73–77. [CrossRef]
24. Sustainable Development Goals | Food and Agriculture Organization of the United Nations. Available online: <https://www.fao.org/sustainable-development-goals/en/> (accessed on 21 April 2022).
25. Organic Agriculture: What Is Organic Agriculture? Available online: <https://www.fao.org/organicag/oa-faq/oa-faq1/en/> (accessed on 7 May 2022).
26. Organic Agriculture | FAO Regional Office for Europe and Central Asia | Food and Agriculture Organization of the United Nations. Available online: <https://www.fao.org/europe/knowledgesharing/naturalresourcesbiodiversityandgreenproduction/organicagriculture/en/> (accessed on 7 May 2022).
27. Kowalska, A.; Ratajczyk, M.; Manning, L.; Bieniek, M.; Maćik, R. “Young and Green” a Study of Consumers’ Perceptions and Reported Purchasing Behaviour towards Organic Food in Poland and the United Kingdom. *Sustainability* **2021**, *13*, 13022. [CrossRef]
28. Beranova, M.; Navratilova, M.; Broz, D. Consumer preferences and trends in the purchase of selected commodities of plant and animal production in the czech republic. *Agrar. Perspect. Xxix Trends Chall. Agrar. Sect.* **2020**, 49–57.
29. Śmiglak-Krajewska, M.; Jerzak, M.; Czerwińska-Kayzer, D.; Florek, J. The Market for Native Protein Crops as a Factor in Improving Food Security in Poland. *Sustainability* **2019**, *12*, 888.
30. Loxton, M.; Truskett, R.; Scarf, B.; Sindone, L.; Baldry, G.; Zhao, Y. Consumer Behaviour during Crises: Preliminary Research on How Coronavirus Has Manifested Consumer Panic Buying, Herd Mentality, Changing Discretionary Spending and the Role of the Media in Influencing Behaviour. *J. Risk Financ. Manag.* **2020**, *13*, 166. [CrossRef]
31. 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]
32. Grzelak, P.; Maciejczak, M. Comparison between the United States and Poland of Consumers’ Perceptions of Organic Products. *Stud. Agric. Econ.* **2013**, *115*, 47–56. [CrossRef]
33. Pacho, F.T.; Batra, M.M. Factors Influencing Consumers’ Behaviour towards Organic Food Purchase in Denmark and Tanzania. *Stud. Agric. Econ.* **2021**, *123*, 62–75. [CrossRef]
34. Yin, S.; Wu, L.; Du, L.; Chen, M. Consumers’ Purchase Intention of Organic Food in China. *J. Sci. Food Agric.* **2010**, *90*, 1361–1367. [CrossRef] [PubMed]
35. FiBL Statistics—Key Indicators. Available online: [https://statistics.fibl.org/world/key-indicators.html?tx\\_statisticdata\\_pi1%5Bcontroller%5D=Element2Item&cHash=ba0aa70d46b2bb18dca4638c75aa654e](https://statistics.fibl.org/world/key-indicators.html?tx_statisticdata_pi1%5Bcontroller%5D=Element2Item&cHash=ba0aa70d46b2bb18dca4638c75aa654e) (accessed on 19 April 2022).
36. Drexler, D.; Dezsény, Z. Organic Agriculture in Hungary—Past, Present, Future. In *The World of Organic Agriculture—Statistics and Emerging Trends 2013*; Research Institute of Organic Agriculture (FiBL); International Federation of Organic Agriculture Movements (IFOAM): Bonn, Germany, 2013; pp. 239–241.
37. Benedek, Z.; Balázs, B. Current Status and Future Prospect of Local Food Production in Hungary: A Spatial Analysis. *Eur. Plan. Stud.* **2016**, *24*, 607–624. [CrossRef]
38. Nagy-Pércsi, K.; Fogarassy, C. Important Influencing and Decision Factors in Organic Food Purchasing in Hungary. *Sustainability* **2019**, *11*, 6075. [CrossRef]

39. Nasir, V.A.; Karakaya, F. Underlying Motivations of Organic Food Purchase Intentions: Underlying Motivations of Organic Food Purchase Intentions. *Agribusiness* **2014**, *30*, 290–308. [CrossRef]
40. Willer, H.; Schaack, D.; Lernoud, J. Organic Farming and Market Development in Europe and the European Union. In *The World of Organic Agriculture. Statistics and Emerging Trends 2019*; Research Institute of Organic Agriculture FiBL; IFOAM-Organics International: Bonn, Germany, 2019; p. 39.
41. Current Situation and Improvement Measures of Organic Food Development in My Country—Baidu Academic. Available online: [https://xueshu.baidu.com/usercenter/paper/show?paperid=42314ac7aea14efffdbaaecfd2eca8eb&site=xueshu\\_se](https://xueshu.baidu.com/usercenter/paper/show?paperid=42314ac7aea14efffdbaaecfd2eca8eb&site=xueshu_se) (accessed on 20 April 2022).
42. Organic Agriculture and Poverty Reduction in Asia: China and India Focus. 196. Available online: [http://www.ifad.org/evaluation/public\\_html/eksyst/doc/thematic/organic/asia.pdf](http://www.ifad.org/evaluation/public_html/eksyst/doc/thematic/organic/asia.pdf) (accessed on 31 March 2022).
43. Li, R.; Lee, H.-Y.; Lin, Y.-T.; Liu, C.-W.; Tsai, P.F. Consumers' Willingness to Pay for Organic Foods in China: Bibliometric Review for an Emerging Literature. *Int. J. Environ. Res. Public Health* **2019**, *16*, 1713. [CrossRef]
44. Liu, C.; Zheng, Y.; Cao, D. An Analysis of Factors Affecting Selection of Organic Food: Perception of Consumers in China Regarding Weak Signals. *Appetite* **2021**, *161*, 105145. [CrossRef]
45. Prentice, C.; Chen, J.; Wang, X. The Influence of Product and Personal Attributes on Organic Food Marketing. *J. Retail. Consum. Serv.* **2019**, *46*, 70–78. [CrossRef]
46. Martina, Z.; Stanislav, R.; Martin, P.; Radek, S.; Luboš, S. Methods for Categorical Data Analysis: Illustrating Consumer Behaviour with Relation to Organic Produce. In Proceedings of the 29th International Scientific Conference, Prague, Czech Republic, 16–17 September 2020; pp. 426–433.
47. Rojik, S.; Zámková, M.; Chalupová, M.; Prokop, M.; Stolín, R.; Kauzerová, L. On-Line Purchases of Organic Food in the Context of the COVID-19 Pandemic in the Czech Republic. In Proceedings of the 30th International Scientific Conference, Prague, Czech Republic, 15–16 September 2021; pp. 240–247.
48. Jebaraj, L. Purchase decision of the consumers towards instant food products. *Int. J. Bus. Adm. Res. Rev.* **2014**, *2*, 125–129.
49. Alon, S.; Sabou, J.P.; Cihelka, P.; Ganiyev, M.; Ulman, M. Everything but Social: A Study of Twitter Accounts and Social Media Management Tools. In Proceedings of the 29th International Scientific Conference, Prague, Czech Republic, 16–17 September 2020; pp. 326–336.
50. Pilař, L.; Poláková, J.; Rojik, S.; Gresham, G. What does 'safe food' mean for young customers. In *Agrarian Perspectives XXVII. Food Safety—Food Security, Proceedings of the 27th International Scientific Conference, Praha-Suchdol, Czech Republic, 19 September 2018*; Czech University of Life Sciences Prague: Praha-Suchdol, Czech Republic, 2018; pp. 236–242.
51. Gharawi, M.A.; Pardo, T.A.; Guerrero, S. Issues and Strategies for Conducting Cross-National e-Government Comparative Research. In Proceedings of the 3rd International Conference on Theory and Practice of Electronic Governance—ICEGOV '09, Bogota, Columbia, 10–13 November 2009; ACM Press: Bogota, Columbia, 2009; p. 163.
52. Klein, R. Risks and Benefits of Comparative Studies: Notes from Another Shore. *Milbank Q.* **1991**, *69*, 275–291. [CrossRef] [PubMed]
53. Aryal, S. Questionnaire Method of Data Collection. Available online: <https://microbenotes.com/questionnaire-method-of-data-collection/> (accessed on 20 April 2022).
54. Questionnaire: Definition, Examples, Design and Types | Simply Psychology. Available online: <https://www.simplypsychology.org/questionnaires.html> (accessed on 20 April 2022).
55. The Benefits of Surveys Data Using SPSS Data Analysis—Silver Lake Consulting. Available online: <https://silverlakeconsult.com/blogs/what-is-spss-and-how-does-it-benefit-survey-data-analysis/> (accessed on 20 April 2022).
56. Arkkelin, D. *Using SPSS to Understand Research and Data Analysis*; Valparaiso University: Valparaiso, IN, USA, 2014; p. 196.
57. Population of Hungary 2021. Available online: <https://www.statista.com/statistics/1127762/population-of-hungary/> (accessed on 18 May 2022).
58. China: Total Population 1980–2024. Available online: <https://www.statista.com/statistics/263765/total-population-of-china/> (accessed on 18 May 2022).
59. 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]
60. Liang, A.R.-D.; Lim, W.-M. Why Do Consumers Buy Organic Food? Results from an S-O-R Model. *Asia Pac. J. Mark. Logist.* **2020**, *33*, 394–415. [CrossRef]
61. Bartels, J.; Hoogendam, K. The Role of Social Identity and Attitudes toward Sustainability Brands in Buying Behaviors for Organic Products. *J. Brand Manag.* **2011**, *18*, 697–708. [CrossRef]
62. Zámková, M.; Rojik, S.; Pilař, L.; Chalupová, M.; Prokop, M.; Stolín, R.; Dziekański, P.; Maitah, M. Customer Preferences for Organic Agriculture Produce in the Czech Republic: 2016 and 2019. *Agriculture* **2021**, *11*, 968. [CrossRef]
63. Rojik, S.; Zámková, M.; Chalupová, M.; Pilař, L.; Prokop, M.; Stolín, R.; Malec, K.; Appiah-Kubi, S.N.K.; Maitah, M.; Dziekański, P.; et al. Pre-COVID-19 Organic Market in the European Union—Focus on the Czech, German, and Slovak Markets. *Agriculture* **2022**, *12*, 82. [CrossRef]

- 
64. 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](#)]
  65. Tariq, A.; Wang, C.; Tanveer, Y.; Akram, U.; Akram, Z. Organic Food Consumerism through Social Commerce in China. *Asia Pac. J. Mark. Logist.* **2019**, *31*, 202–222. [[CrossRef](#)]