Case study

Consumer Perceptions and Purchase Intentions towards Organic Foods: Evidence from Eastern Mediterranean Region of Türkiye

Abstract

This study aimed to investigate consumer perceptionstowards organic foods and explore the relationship between purchase intentions and socio-demographic characteristics.Between February and July 2021, we conducted an online survey in the Eastern Mediterranean Region of Türkiye, specifically in the provinces of Adana, Osmaniye, Kahramanmaraş, and Hatay. The survey included 384 randomly selected respondents within the age range of 18 to 71. Factor analysis revealed five significant factors: "Enviromental Awareness," "Attitude," "Trust," "Purchase Barrier," and "Purchase Intention." Notably, t-test result showed a significant difference in purchase intention, with female consumers exhibiting a more positive inclination. We identified organic tomato-pepper pastes and olive oil as the most consumed organic foods. Moreover, the statement "Organic foods are produced with environmentally friendly methods" received the highest average value under "Enviromental Awareness." In conclusion, this research fills a gap in the literature by providing insights into consumer perception and purchase intention toward organic foods in Türkiye. The observed gender-based differences emphasize the need for targeted marketing strategies. The popularity of specific organic products indicates market expansion opportunities. Understanding consumer preferences and market dynamics is crucial for stakeholders in the organic food industry to tailor their approaches effectively. Further research and market analysis are essential to adapt strategies and meet evolving consumer demands in the dynamic organic food market.

Keywords: Consumer Perception, Purchase Intention, Organic Food, Eastern Mediterranean Region, Türkiye

1.1. Introduction

Organic agriculture is a sustainable production system that prioritizes the well-being of soils, ecosystems, and people. It relies on ecological processes, biodiversity, and local adaptability, rather than the use of harmful inputs. This approach blends traditional farming methods with innovation and scientific knowledge to benefit the environment and promote equitable relationships, ensuring a high quality of life for all involved(Azzurra and Paola,

2009). Organic food consists of natural food products that are devoid of synthetic chemicals like fertilizers, herbicides, pesticides, antibiotics, and genetically modified organisms. Furthermore, organic food is not exposed to irradiation (Marwa and Scott, 2013; Rana and Paul, 2017).The use of chemical inputs in conventional agriculture has been linked to various health issues. In response to consumer demands for safe and healthy food, the concept of organic agriculture emerged in the mid-20th century (Şenyüz, 2019).Organic farming activities in Türkiye started in the mid-1980s when companies operating in Europe demanded organic agricultural products (dried grapes, dried figs, dried apricots, hazelnuts, legumes and cotton) from Türkiye and tried to promote this production technique. The start of organic farming activities in Türkiye started not as a result of the demands of consumers for these products as in developed countries, but in line with the demands of consumers in developed countries. The main purpose here is to increase Türkiye's exports of organic agricultural products and to enable them to enter new markets (Ataseven and Güneş, 2008).

The concept of organic food began to be used in the 1940s. Organic food includes foods produced without the use of pesticides, chemical fertilizers and synthetic vaccines, which are among the traditional methods. Consumers see organic foods as safer, healthier and more environmentally friendly than other methods used today. The health and environmental effects of pesticides, genetically modified organisms and other non-natural substances used to increase agricultural production have attracted the attention of consumers and marketers to organic foods. The organic food market has grown significantly recently and has become one of the fastest growing markets in the food industry. Organic food is often perceived as more nutritious, healthier, safer and more environmentally friendly (Jones et al., 2001; Paul and Rana, 2012; Teng and Wang, 2015).

2. Literature Review

There are various studieson consumer perceptions and purchase intention towards organic foods in the literature. For example, Voon et al. (2011) found that socio-demographic characteristics are factors that affect actual purchasing behavior. Some studies emphasize that gender affects purchasing behavior towards organic food products. Lockie et al. (2004) found that women had higher positive attitudes towards organic foods than men. Van Doorn and Verhoef (2011) stated in their study that young households prefer organic foods more. On the other hand, Dettmann and Dimitri (2007) stated that women with children and high disposable income prefer organic foods.Attitude is a psychological structure shaped by thoughts and

values towards a certain object. Attitudes serve as a key determinant of behavioral intentions. The more positive the individual's attitude towards the behavior, the morewilling to perform the behavior. Similarly, studies on organic food consumption hasstated a positive relationship between consumer attitudes and purchase intention. According to the relevant literature, attitudes towards organic food characteristics (eg, taste, health, food safety) were identified as the main factors that affect consumers' decision to consume organic foods (Al-Swidi et al., 2014; Latacz-Lohmann and Foster, 1997; Saba and Messina, 2003; Magnusson et al., 2001; Padel and Foster, 2005; Gifford and Bernard, 2006; Honkanen et al., 2006; Hjelmar, 2011; Poulston and Yiu, 2011; Wang et al., 2020).

Environmental and ecological considerations can significantly influence consumer attitudes and behaviors towards eco-friendly products (Lin and Chang, 2012).In a study conducted by Nemcsicsne´ Zso´ka (2005) mentions five dimensions to understand environmental awareness. These; environmental knowledge, environmental values, environmental attitudes, willingness to act and actual action. These factors have a great influence on human behavior. Hamm and Gronefeld (2004) reveals that consumers are inclined to choose environmentally friendly products due to their reduced environmental impact. D'Amico et al. (2016) found that consumers are willing to buy more organic wine by paying a higher price. These consumers can often relate the impact of their purchasing behavior to environmental and ecological systems. Furthermore, Zepeda and Deal (2009) stated that consumers generally consider environmental awareness and animal welfare when purchasing green products. One of the main problems of the 21st century is the problem of environmental sustainability. It can be said that organic foods are the representation of environmental sustainability in discussions on food production. It also integrates consumers' health and food safety concerns (Hoppe et al., 2013). Buying environmentally friendly products cannot be separated from consumers' knowledge of the environment and ecology, and from organic food knowledge. Therefore, awareness and knowledge about organically produced foods are important in consumers' purchasing decisions (Singh and Verma, 2017).Gan et al. (2008) stated in their research that a high price has an effect on the purchasing behavior of consumers. They found that the higher price had a negative impact on consumers' purchase intention toward organic food. It has been determined that low price sensitivity of consumers positively affects green purchasing behavior (Aertsens et al., 2011). Lee and Yun (2015) confirmed in a study they conducted in the USA that organic food prices have a negative impact on consumer behavior.In addition, Radman (2005) stated that some consumer groups have a more positive attitude towards organic food and are willing to pay

higher prices.In contrast, Smith and Paladino (2010) revealed the role of price in organic food purchase and the results show that price does not have a significant effect on organic food purchase intention.

Availability plays a pivotal role in both driving and hindering the consumption of organic food. Paul and Rana (2012) mentioned that it is a primary motivator for purchasing organic products, while simultaneously acting as a barrier. Young et al. (2010) found that the limited availability of organic items negatively influences consumer attitudes and buying habits. Consumers tend to favor easily accessible green products, and they are often deterred by the need to invest significant time in searching for such items. Therefore, consumer trust in the organic food market is a sensitive issue because consumers cannot confirm whether a product is organic even after consumption. The importance of trust inorganic food, as well as sellers and their certifications, has a major impact on consumers' behaviors (Janssen and Hamm, 2012; Teng and Wang, 2015). Previous research has shown that consumers are more likely to pay for the superior quality and taste of organic foods, as well as for their certified "safety" (Jones et al., 2001; Paul and Rana, 2012; Teng and Wang, 2015).

This study aims to assess consumer perceptions and purchase intentions towards organic foods in the Eastern Mediterranean Region of Türkiye, particularly in Adana, Osmaniye,Kahramanmaraş, and Hatay provinces. Additionally, our study included the following specific research questions:

1) What is the relationship between consumers' socio-demographic characteristics and their purchase intention towards organic food?

2) What are the prevailing perceptions of consumers towards organic food?

3) How frequently do consumers purchase organic food products and which ones?

4) Which sources of information do they rely on when making decisions about organic food?

5)Which organic foods are predominantly purchased by female and male consumers?

3. Material and Method

3.1. Data Collection

The data for this research was gathered via an online survey utilizing Google Forms between February and June 2021. We randomly selected 384 respondents from specific regions within the provinces of Adana (Çukurova and Seyhan), Osmaniye (Center), Kahramanmaraş (Dulkadiroğlu and Onikisubat), and Hatay (Antakya) in the East Mediterranean Region of Türkiye.

In order to reach the maximum sample in the research area, the P and Q values were taken into account as 0.50. Accordingly, the number of samples for the research was determined as 384 at 95% significance level and 5% margin of error (Churchill, 1995).

The following formula;

$$\boldsymbol{n = \left(\frac{Z_{x/2}}{d}\right)^2 P.Q}$$

P: Positive probability (50%)
Q: 1-P Negative probability (50%)
$Z_{x/2}$:Confidence interval (95%, table value 1.96)
d: Margin of error (5%)

$$n = \left(\frac{1.96}{0.05}\right)^2 0.50 * 0.50$$

3.2. The Study Area

In the study area within Türkiye, Adana is the sixth most populous city with 2,258,718 people as per 2020 TÜİK data. It covers 13,844 km², with a population density of 160 people per km², and holds significance in agriculture, trade, and mineral resources. Kahramanmaraş, designated a metropolitan city in 2012, is known for its unique ice cream and cultural heritage. It spans 14,346 km², with a population of 1,168,163 in 2020. Hatay, located on the Mediterranean coast, shares borders with Syria and holds a population of 1,628,894 in a 5,600 km² area. Osmaniye, situated in the eastern Mediterranean Region, is bordered by Hatay, Adana, and Kahramanmaraş. It covers 3,279.9 km² with a population of 548,556 in 2020 (MoEU, 2020a, 2020b, 2020c).We have chosen these cities for the study due to their rich culinary traditions, unique consumption habits, and distinctive gastronomic culture. Figure 1 displays a map of Türkiye, showing the study area.

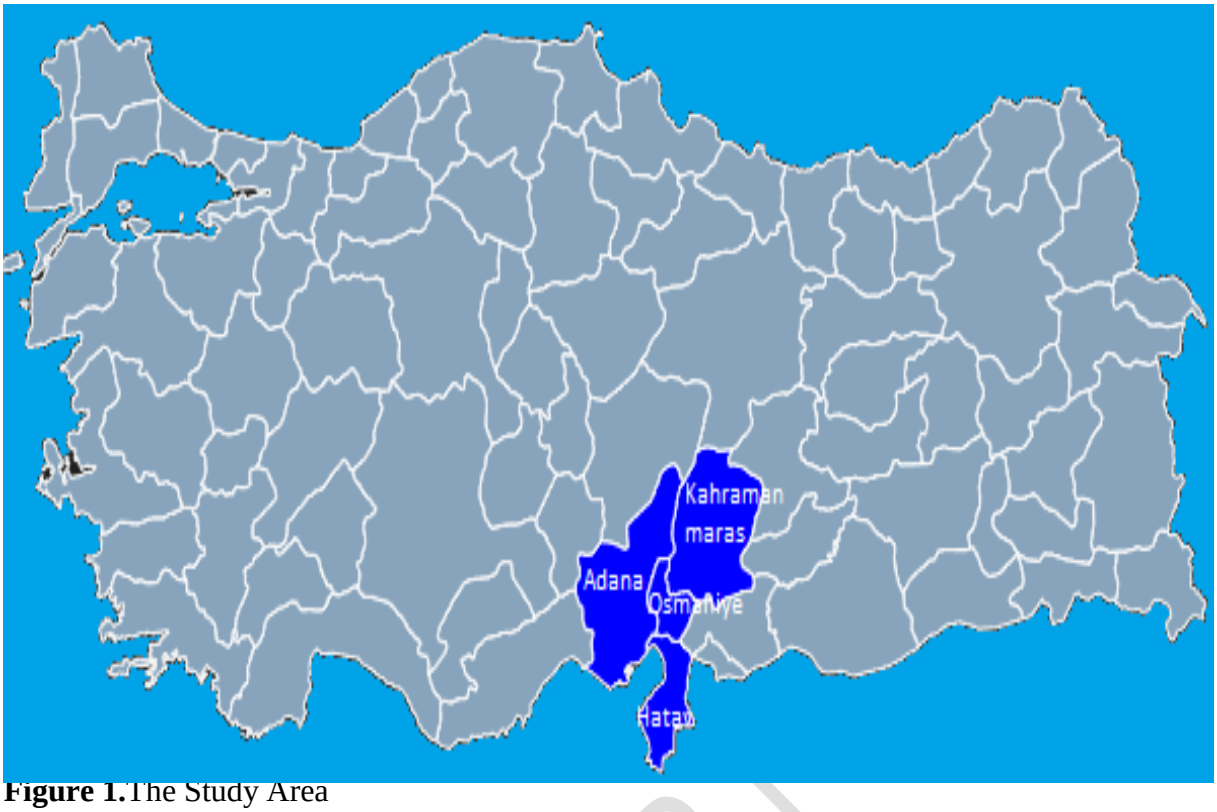

Figure 1. The Study Area

The socio-demographic characteristics of the consumers participating in the research are shown in Table 1. According to table, 52.1% of the consumers were women, 47.9% were men, 37.8% were single, and 63.3% were between the ages of 18-35. Also, it was determined that 21% of the consumers were high school graduates, 50.8% were university graduates and 21.9% have master's or doctorate degrees.

Table 1. Socio-Demographic characteristics

City	**n**	**%**
Adana	184	48.0
Kahramanmaraş	95	24.7
Hatay	55	14.3
Osmaniye	50	13.0
Total	384	100.00
Gender		
Female	200	52.1
Male	184	47.9
Total	384	100.00
Marital Status		
Married	239	62.2
Single	145	37.8
Total	384	100.00
Education		
Primary Education	24	6.3
High School	81	21.0
University Degree	195	50.8
Master's or PhD Degree	84	21.9
Total	384	100.0
Job		
Private Sector	125	32.6
Government Employee	174	45.3
Retired	24	6.3
Student	21	5.5
Unemployed	40	10.3
Total	384	100.00
Age		

18-35	243	63.3
36-53	112	29.1
54-71	29	7.6
Total	384	100.00
Income		
Under 2.825 TL	59	15.4
Between 2.826-4.000 TL	91	23.7
Between 4.001-6.000TL	114	29.7
6.000 TL +	120	31.2
Total	384	100.00
Household Size		
1	41	10.7
2	56	14.6
3	106	27.6
4	100	26.0
5+	81	21.1
Total	384	100.0

3.3. Questionnaire development and the scale

The questionnaire was structured into distinct sections. The first part involved collecting socio-demographic information from respondents to contextualize the study. Following that, an introduction to the concept of organic food was provided to ensure a common understanding among respondents. The second part of the questionnaire focused on exploring consumer behavior and information sources related to organic foods. This included investigating purchase frequency for specific organic foods and identifying the preferred places for purchasing, as presented in Tables 2, 3, and 4. Additionally, the questionnaire incorporated various statements to gauge consumers' perceptions toward organic foods. These statements were developed by previous studies (Doll and Torkzadeh, 1988; Siegrist, 2000;Gil et al., 2000; Lockie et al., 2004; Krystallis and Chryssohoidis, 2005; Chen, 2007; Teng and Wang, 2015; Torres-Ruiz et al., 2018) and supported by relevant literature. Respondents provided their responses to these statements using a 5-point Likert Scale (1=Strongly disagree; 5=Strongly agree). The scale encompassed five key areas: Trust, Enviromental Awareness, Attitude, Purchase intention, and Purchase Barrier.

3.4. Statistical Analyses

The data collected were applied to a range of analytical techniques within SPSS, including Factor analysis, t-tests, One Way ANOVA, Kruskal Wallis and Tamhane T2 tests. Factor analysis, a method of analysis, was utilized to summarize the data more meaningfully by exploring the relationships between variables and uncovering underlying links (Nakip, 2006). To determine significant mean differences between two groups, the t-test, a widely utilized statistical technique, was employed. The null hypothesis posited that the means of the two groups were equal, while the alternative hypothesis suggested a statistical difference between them (Whitley, 2002;Sundaram et al., 2014). For comparing relationships among

more than two groups, the analysis of variance (ANOVA) statistical method was used, providing valuable insights into these differences (St and Wold, 1989).

4. Results

Table 2 shows the percentages representing the most used sources of information about organic foods by consumers. The top sources include internet and social media (60.9%), TV (49.2%), close friends or relatives (46.1%), and newspapers, magazines, and books (45.6%). On the other hand, scientific meetings were the least utilized source, accounting for only 18.5%.

Table 2. Sources of information

Information Source	**n**	**%**
Internet-social media	234	60.9
Tv	189	49.2
Close friends or relatives	177	46.1
Newspapers, magazines and books	175	45.6
Scientists (Doctor, Dietitian etc.)	146	38.0
Product promotion advertisements	141	36.7
Scientific publications (Thesis, Research Articles etc.)	108	28.1
Scientific meetings (Conference, Congress etc.)	71	18.5

Note: Multiple sources chosen

Table 3 shows the organic food product purchased by consumers and their frequency of purchase. According to the table, the most preferred organic food products are always (5), organic pastes and olive oils.This trend is confirmed in Table 4, where women purchase these products slightly more often than men. At the same time, organic baby foods were rated as the least purchased among both men and women.

Table 3. Respondents' frequency of purchasing organic food

Organic Foods	**Never (1)**		**Rarely (2)**		**Sometimes (3)**		**Usually (4)**		**Always (5)**		**Mean**	**S.D.**
	n	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**		
Organic Pastes (Tomato-Pepper)	24	6.3	13	3.4	43	11.1	116	30.2	188	49	4.12	1.135
Organic Olive Oil	21	5.5	15	3.9	47	12.2	120	31.3	181	47.1	4.11	1.111
Organic Pomegranate Sour, Grape Molasses	24	6.3	29	7.6	42	10.9	116	30.2	173	45	4.00	1.195
Organic Honey	24	6.3	23	6	72	18.8	131	34	134	34.9	3.85	1.149
Organic Milk and Dairy Products	30	7.8	22	5.7	57	14.8	151	39.3	124	32.4	3.83	1.173
Organic Jam	43	11.2	28	7.3	53	13.8	98	25.5	162	42.2	3.80	1.351
Organic Egg	29	7.5	23	6	74	19.3	141	36.7	117	30.5	3.77	1.168
Organic Dried Fruits and Vegetables	31	8.1	30	7.8	83	21.6	148	38.5	92	24	3.63	1.165
Organic Meat and Meat Products	42	10.9	24	6.3	78	20.3	147	38.3	93	24.2	3.59	1.230
Organic Fruits and Vegetables	33	8.6	27	7	84	21.9	162	42.2	78	20.3	3.58	1.151
Organic Bread and Bakery Products	44	11.5	47	12.1	99	25.8	120	31.3	74	19.3	3.35	1.244
Organic Legumes (Lentils, Beansetc.)	45	11.7	64	16.7	69	18	137	35.6	69	18	3.32	1.271
Organic Cereals (Wheat, Oats, Rice, Rye etc.)	38	9.9	65	17	98	25.5	121	31.5	62	16.1	3.27	1.207
Organic Fruit Juices	114	29.7	37	9.6	76	19.8	76	19.8	81	21.1	2.93	1.525
Organic Baby Foods	172	44.8	39	10.2	42	10.9	56	14.6	75	19.5	2.54	1.617

Note: Multiple sources chosen

Table 4. The most consumed organic foods according to the gender of the respondents

	Variables	**Gender**	**N**	**Mean**	**Std. Dev.**	**t Test**	
						t	**p**
Most consumed organic	Organic Fruits and Vegetables	Female	200	3.71	1.064	2.260	0.024*
		Male	184	3.45	1.227		

foods	Organic Milk and Dairy Products	Female	200	3.92	1.109	1.649	0.100
		Male	184	3.72	1.234		
	Organic Meat and Meat Products	Female	200	3.64	1.228	0.898	0.370
		Male	184	3.53	1.232		
	Organic Egg	Female	200	3.87	1.144	1.831	0.068
		Male	184	3.65	1.187		
	Organic Dried Fruits and Vegetables	Female	200	3.82	1.079	3.468	0.001*
		Male	184	3.41	1.221		
	Organic Bread and Bakery Products	Female	200	3.47	1.248	2.039	0.042*
		Male	184	3.21	1.230		
	Organic Cereals	Female	200	3.38	1.176	1.854	0.065
		Male	184	3.15	1.232		
	Organic Legumes	Female	200	3.47	1.248	2.507	0.013*
		Male	184	3.15	1.278		
	Organic Olive Oil	Female	200	4.29	0.974	3.321	0.001*
		Male	184	3.91	1.216		
	Organic Pastes	Female	200	4.25	1.039	2.218	0.027*
		Male	184	3.99	1.219		
	Organic Honey	Female	200	3.97	1.065	2.068	0.039*
		Male	184	3.73	1.225		
	Organic Jam	Female	200	4.03	1.240	3.497	0.001*
		Male	184	3.55	1.425		
	Organic Pomegranate Sour, Grape Molasses	Female	200	4.16	1.123	2.713	0.007*
		Male	184	3.83	1.250		
	Organic Baby Foods	Female	200	2.60	1.698	0.770	0.442
		Male	184	2.47	1.525		
	Organic Fruit Juices	Female	200	3.14	1.504	2.843	0.005*
		Male	184	2.70	1.520		

Note: *p<0.05

The rating scales of negatively worded items were reversed, and items with markedly skewed distributions were excluded from the analysis. Following this procedure, a final set of 23 statements was selected for data analysis. To categorize the statements into distinct subsets, a factor analysis was conducted using the Principal Component Analysis method with Varimax Rotation (Beardsworth et al., 1999).Before proceeding with the factor analysis, the appropriateness of the data was evaluated using the Kaiser-Mayer-Olin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. The KMO measure yielded a value of 0.909, surpassing the suggested cutoff of 0.60, signifying the adequacy of the sample size for factor analysis (Hair et al., 1995; Tabachnick and Fidell, 2001; Oroian et al., 2017). Additionally, Bartlett's test of sphericity was highly significant (χ^2=4853.877, p=0.000), indicating that the interitem correlations were sufficiently large for principal component analysis. These statistical measures collectively supported the factorability of the data (Tabachnick and Fidell, 2001). Furthermore, the Cronbach's alpha coefficient was calculated to be 0.901, exceeding the threshold value of 0.70, indicating satisfactory scale reliability

(Nunnally, 1978). Upon completion of the factor analysis, the initial scale of 23 items was reduced to 5 factors. The first factor, "Purchase Intention (PI)," accounted for 16.114% of the total variance, followed by the second factor, "Enviromental Awareness," explaining 15.934% of the total variance. The third factor, "Attitude," accounted for 13.739% of the total variance, while the fourth factor, "Trust," explained 11.953% of the total variance. Lastly, the fifth factor, "Purchase Barrier," explained 6.411% of the total variance. In total, these 5 factors accounted for 64.152% of the total variance (Table 5).

Table 5. Factor analysis and descriptive statistics results of the scale

Names and Statements	**Mean**	**Std. Dev.**	**Factor Loading**	**Variance Explained %**
PURCHASE INTENTION (PI)				
PI1. If I believe that organic food is produced by organic farming methods, I would buy more	4.34	0.992	0.712	
PI2. If I could find organic food more easily where I shop, I would buy more	4.36	1.010	0.700	
PI3. If I knew more about organic foods and their logos, I would buy more	3.93	1.147	0.667	
PI4. I can support local farmers by buying organic food	4.42	0.866	0.639	16.114
PI5. I can support organic and sustainable agriculture by buying organic food	4.31	0.943	0.625	
PI6.I can protect natural resources for future generations by buying organic food	4.29	0.955	0.600	
PI7. If organic food was cheaper, I would buy more	4.48	0.912	0.560	
PI8. I am willing to buy organic foods despite their higher prices	3.96	1.188	0.461	
ENVIRONMENTAL AWARNESS (EA)				
EA1. Organic foods are produced using environmentally friendly methods	4.70	0.589	0.823	
EA2. Organic foods do not contain Genetically Modified Organism	4.24	0.989	0.795	15.934
EA3. Organic foods are produced without harming animals	4.60	0.775	0.740	
EA4. Organic foods do not contain chemical residues	4.17	1.050	0.714	
ATTITUDE (ATT)				
ATT1. Organic foods are fresher than conventional foods	4.14	0.986	0.742	
ATT2. Organic foods taste better than conventional foods	4.34	0.883	0.682	
ATT3. Organic foods are completely natural products	4.47	0.791	0.609	13.739
ATT4. Organic foods are good for health	4.62	0.671	0.594	
ATT5. Organic foods are completely safe	4.43	0.812	0.589	
ATT6. Organic foods are higher quality than conventional foods	4.31	0.953	0.532	
TRUST (TRU)				
TRU1. I trust the information that organic labeling provides	3.90	1.041	0.726	
TRU2. I have doubts about the safety of organic food (-)	2.86	1.318	-0.682	11.953
TRU3.I trust organizations that certify organic food and certified organic food sellers	3.90	1.066	0.666	
PURCHASE BARRIER (PB)				
PB1. Organic foods are more expensive than conventional foods	4.16	0.989	0.677	6.411
PB2. More difficult to find organic foods in the stores where I usually shop	4.47	0.781	0.626	
KMO: 0.909 x^2**:** 4853.877; **p:** 0.000				
Cronbachs'Alpha:0.901				
Total Variance Explained: 64.152%				

Notes: 1=Strongly disagree, 2=Disagree, 3=Slightly agree, 4=Agree, 5=Strongly agree; (-)=Negative statement. This statement were recoded with reversed values before final data analysis.

Prior to conducting the t-test and One Way ANOVA analyses, we computed the mean of the "Purchase Intention (PI)" factor and subsequently examined its relationship with the demographic profiles of the participants.Table 6represents t-test results to determine whether consumers' purchase intention for organic foods differ significantly in terms of their gender and marital status. It was found that there was a significant difference between intention to buy of consumers for organic foods and their gender ($p<0.05$), and female consumers' (4.362) purchase intention is founded to more positive than male consumers (4.152). On the other hand, there was no significant difference ($p>0.05$) between the marital status of consumers and their purchase intention for organic foods.

Table 6. t-Test results on the relationship between consumers' organic food purchase intention and their gender and marital status

	Gender	N	Mean	Std. Dev.	Levene Test		t Test	
					F	p	t	p
Purchase Intention	Female	200	4.362	0.682	1.502	0.221	2.993	0.003*
	Male	184	4.152	0.686				
	Marital Status	**N**	**Mean**	**Std. Dev.**	**F**	**p**	**t**	**p**
	Married	239	4.285	0.695	0.119	0.730	0.849	0.397
	Single	145	4.223	0.686				

Note: *p<0.05

The results of the ANOVA analysis conducted to determine whether there is a significant difference between the socio-demographic characteristics of consumers and their purchase intention towards organic foods are shown in Table 7. According to results, there was no significant difference (p>0.05) between consumers' job, household size and their purchase intention to organic foods.

Table 7. One Way ANOVA test results on the relationship between consumers' purchase intention towards organic food and their socio-demographic characteristics

	Job	N	Mean	Std. Dev.	F	p
	Private Sector (a)	125	4.196	0.766		
	Government Employee (b)	174	4.315	0.612		
	Retired (c)	24	4.442	0.513	1.225	0.300
	Student (d)	21	4.193	0.724		
	Unemployed (e)	40	4.159	0.827		
	Total	384	4.261	0.691		
Purchase Intention (PI)	**Household Size**					
	1 (a)	41	4.128	0.762		
	2 (b)	56	4.332	0.744		
	3 (c)	106	4.240	0.752		
	4 (d)	100	4.255	0.617	0.681	0.606
	5+ (e)	81	4.316	0.622		
	Total	384	4.261	0.691		

The decision to use the non-parametric Kruskal-Wallis test stemmed from the observation that the distribution of the "Purchase Intention" factor toorganic foods did not display homogeneity. We founded that there was no significant difference (p>0.05) between consumers' age, income, education and their purchase intention for organic foods. On the other hand, it was determined that there was a significant difference (p<0.05) between consumers' cities of residence and their purchase intention toward organic foods. According to the results of the Tamhane T2 test, consumers living in Osmaniye have higher purchase intention than consumers living in Adana, Hatay and Kahramanmaraş (Table 8).

Table 8. Non-Parametric Kruskall Wallis test results on the relationship between consumers' purchase intentionto organic food and their socio-demographic characteristics

	City	N	Mean	Std. Dev.	Chi-Square	p	Tamhane T2
	Adana (a)	184	4.245	0.707			
	Hatay (b)	55	3.945	0.847			
	Kahramanmaraş (c)	95	4.293	0.600	23.142	0.000*	d> a, b, c

	Osmaniye (d)	50	4.610	0.385		
	Total	384	4.261	0.691		
	Age					
	18-35	243	4.252	0.751		
	36-53	112	4.283	0.555	1.064	0.587
	54-71	29	4.258	0.665		
	Total	384	4.261	0.691		
Purchase Intention (PI)	**Income**					
	Under 2.825 TL	59	4.226	0.758		
	2.826-4.000 TL	91	4.138	0.848		
	4.001-6.000TL	114	4.354	0.567	1.549	0.671
	6.000+	120	4.284	0.622		
	Total	384	4.261	0.691		
	Education					
	Primary School	24	4.218	0.885		
	High School	81	4.242	0.828		
	University	195	4.310	0.603	2.130	0.546
	Master or PhD	84	4.180	0.681		
	Total	384	4.261	0.691		

Note: *p<0.05

5. Discussion

In the age we live in, humanity faces numerous challenges, from the growing global population to the COVID-19 pandemic, frequent natural disasters like forest fires, wars, and large-scale migration. These issues emphasize the urgent need for more sustainable consumption practices, where organic food consumption can play a significant role in promoting both personal health and environmental sustainability amidst these complex global dynamics.

Based on our findings, a clear preference emerges for specific organic food products, with organic tomato and pepper pastes, organic olive oil, organic pomegranate syrup, grape molasses, and organic jam standing out as the most favored choices among respondents. In addition, organic baby foods and organic fruit juices are at the top of the list of organic food products that are never preferred by consumers. Notably, females purchased more than male respondents.Present study also found that the respondents believe that organic food products are healthier, tastier, fresher, safer and higher quality than conventional products. These findings are consistent with previous studies (Jones et al., 2001; Brčić-Stipčević and Petljak, 2011;Paul and Rana, 2012; Teng and Wang, 2015; Šugar and Brščić, 2020). A significant part of the consumers participating in this research stated that they would buy more if the price of organic food products was more affordable. The high price of organic foods may cause consumers to choose conventional foods. Furthermore, our findings suggest that perceived higher costs and limited availability of organic foods are common purchase barriers that

respondents encounter. These findings align with the previous studies(Young et al., 2010; Paul and Rana, 2012; Aschemann-Witzel and Aagaard, 2014).Also, our findings reveal a very positive attitude among the respondents,this indicates a strong willingness to purchase organic foods despite their higher prices. In addition, we found that a significant proportion of the respondents believe that their likelihood to purchase organic food is positively influenced by two key factors: their belief in organic farming methods and their knowledge of organic foods and associated logos. This outcome aligns with prior research, which emphasizes the pivotal role of consumer knowledge and information about organic labeling in fostering trust in organic products. This trust, in turn, greatly impacts consumer attitudes and intentions to purchase organic foods, as demonstrated in previous studies (Von Alvesleben, 1997; Vermeir and Verbeke, 2006;Janssen and Hamm, 2012; Teng and Wang, 2015).Our findings also reveal that respondents express strong convictions regarding the environmentally friendly production methods, absence of genetically modified organisms, animal welfare considerations, and minimal chemical residues associated with organic foods. These findings align with previous studies (Hamm and Gronefeld, 2004; Zepeda and Deal, 2009; D'Amico et al., 2016).

In the present study, no statistically significant distinctions were detected between respondents' household size and their purchase intentions regarding organic foods. In contrast, Bravo et al. (2013) reported a significant relationship between household size and consumers' purchasing behavior toward organic food.Also, there were no statistically significant variations in purchase intention for organic foods based on respondents' education levels. In contrast, Singh and Verma (2017) identified a contrary trend, wherein highly educated consumers exhibited a higher inclination to purchase organic foods in comparison to those with lower levels of education.Our findings align with previous studies (Vecchio et al., 2016; Martins et al., 2020) by indicating a higher purchase intention for organic foods among females compared to males. We also found that a significant difference has been identified between the geographical locations of consumers and their intentions regarding organic food purchases. Notably, respondents residing in Osmaniye exhibit a more positive intention compared to those living in Adana, Hatay, and Kahramanmaras. This finding underscores the influence of regional factors on consumer preferences and suggests the need for further investigation into the reasons behind these geographical variations in functional food consumption intention.

Conclusions

In summary, our study reveals a clear consumer preference for specific organic food products, with a notable gender-based difference as females exhibit stronger inclinations towards these choices. The research also confirms consumer beliefs in the health benefits and quality of organic foods, aligning with prior studies. It emphasizes the pivotal role of affordability and clear labeling in promoting organic food consumption. Our findings underscore the importance of gender considerations, affordability, consumer trust, and education in fostering sustainable consumption practices in the organic food market.It is crucial to inform consumers about organic agriculture, its methods, processes, and the significance of organic food logos. Consumers who believe they have a good grasp of organic agriculture and food production processes are more likely to identify organic foods and develop positive perceptions towards them. Therefore, it's essential for the relevant ministries, organic food industry, certifiers, and research institutions to enhance consumer trust by providing accurate information through various channels such as tv, newspapers, magazines, websites and social media, scientific publications, seminars, and workshops. This strategic approach can prove to be an effective marketing strategy for the organic food industry.

Limitations and recommendation for further research

The primary limitation of this research stems from the data collection period, which coincided with the early stages of the Covid-19 pandemic. Conducting online surveys during this time was challenging due to the restrictions in place and the negative impact on people's psychology. Consequently, the response rate was relatively low. It's crucial to recognize that the sample is not representative of Adana, Osmaniye, Kahramanmaraş, and Hatay cities, so, the study's findings may not be generalized to both the entire population of the Eastern Mediterranean Region and Türkiye. To address this limitation, future researchers in this area should consider increasing the sample size and expanding the scope of data collection to more cities. Additionally, it's worth noting that our sample lacked diversity, especially in terms of education and income levels, as our online surveys were less effective in reaching individuals with lower education and income. To improve future research, efforts should be made to ensure a more balanced and diverse representation across various demographic groups.

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