

Profiling Organic Food Consumers in Turkey

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Abstract

The purpose of this study is to determine consumers' motives for organic food choice, satisfaction with the offer of organic food products in Turkey, a country with a discrepancy between relatively high domestic organic food production volumes and low domestic organic food consumption levels. The paper is based on results of a cross-sectional questionnaire from a sample of 354 Turkish organic food consumers. The findings reveal five major organic food consumption motives, characterized as affective, ethical, perceived value of product, safety, and perceived value of market offer. Further, the results display that different consumption motivations underlie monthly spending on organic food products. Monthly spending on organic food products is explained by affective, ethical, and perceived value of market offer motives, as well as by presence of a child in household, and for how long organic food is being consumed. Due to cultural variations that exist among countries in consumption habits and motives in the organic food market, the findings of the current research bring important insights to manufacturers and retailers engaged in organic food market.

Keywords: Organic Food, Consumer Behavior, Motives, Satisfaction

1. Introduction

The global organic food market has experienced significant growth in market value over the past decade (Sawyer, Kerr and Hobbs, 2008). According to the International Federation of Organic Agriculture Movements (IFOAM), the global sales of organic food have increased by 43% in three years between 2002 and 2005. And for the period spanning 2005-2009, global organic food market generated total revenues of \$60 billion in 2009, representing a compound annual growth rate of 14.6%.

The dietary behavior of the consumers has become increasingly selective with an increased willingness to purchase organic products in the last decade (Vindigni, Janssen and Jager, 2002; Wier and Caiverley, 2002; Pellegrini and Farinello, 2009). Consumer demand for food is diversified and includes a wide range of attributes. From a marketing perspective it is important to understand why consumers consume organic food, what motives they have, and how they consume organic food (Vindigni, Janssen and Jager, 2002). Fair-trade, genetic modifications, environmental features

and human rights are examples of aspects of food production that have become of concern to organic food consumers.

The standards of living, education level, and age characteristics influence consumers' awareness of and knowledge about organic production and consumption. Many scholars consider the consumption of organic products to be part of a more general tendency to consume quality food associated with marked concerns for the environment, health, safety, and the naturalness of food stuffs (Pellegrini and Farinello, 2009). The growing attention paid by consumers to organic food and environmental safety has been highlighted in recent years. This has been due to an increasing concern with life quality, and in particular to an interest in the health and quality of the food (Bucherer, Paul and Demeritt, 2006; Chang and Zepeda, 2005; Gil, Gracia and Sanchez, 2000; Kortbech-Olesen, 2002; Lea and Worsley, 2005; Magnusson et al., 2003; Padel and Foster, 2005; Pellegrini and Farinello, 2009; Vindigni et al., 2002; Zander and Hamm, 2009), and the growing demand for pesticide and chemical residue free food (Childs and Polyzees, 1997; Fotopoulos and Krystallis, 2002).

Consumer demand as well as availability of organic food products domestically in Turkey has been growing in the last decade due to an increased global trend of healthy living. The Research Institute of Organic Agriculture (FiBL) states that with more than 250 different organic food products, Turkey is the 33rd country in terms of fields cultivated to organic agriculture, and the 16th country in terms of organic production in the world (Ipek and Cil, 2010).

Several studies have already addressed organic product consumption and production (Ataseven and Güneş, 2008; Yanmaz, 2005), attitudes towards organic food (Akin et al., 2010; Sarıkaya, 2007), knowledge of the term 'organic', and

willingness to buy organic products (Akgüngör and Kumuk, 1998; Akgüngör et al., 2001; Akgüngör, Miran and Abay, 2007; Armağan and Özdoğan, 2005; Mehmetoğlu and Demirkol, 2007; Mutlu, 2007; Şener and Hazer, 2008) in Turkey. However existing literature is not sufficient to understand the consumer profile and the market dynamics since the potential demand for organic products in Turkey promises to spread widely in the future.

Motive for this research is the fact that organic food market in Turkey has the potential for an intensified growth in the next few years. The objectives of the study, therefore, are threefold. The first aim is to examine consumers' organic food choice motives that exert influences upon their attitudes toward organic food in Turkey. The second is to examine the organic food consumption behavior. Lastly, satisfaction of organic food consumers with the offer of organic food products in the domestic market is assessed.

2. Organic Food Market in Turkey

About 90% of the organic agricultural products in Turkey are destined for export (Demirkol et al., 2003; IGEME, 2009). While farmers initiated organic agriculture in most of the European countries and the USA, in Turkey organic agriculture is introduced by foreign companies. In other words in Turkey the structure of the organic agriculture is demand-based (Demiryürek, 2004).

The export of organic agricultural products began with dried fruit in the early 80s and has since expanded to include fresh fruit and vegetables, nuts, oils, cotton, and spices. Germany, Netherlands, France, Switzerland, UK and the USA are recently the major export markets (Rehber and Turhan, 2002). The Turkish Government, to increase agricultural exports, and to adopt the EU definition of organic agriculture, issued its own legislation. This regulation, named "Regulation concerning the

production vegetal and livestock products by organic methods” was prepared in compliance with the EU regulation and was amended in 1995. With the regulation, organic agricultural production started to increase (Özbilge, 2007), and Turkey became a country producing around 250 products with organic standards (Akın et al., 2010; Ipek and Cil, 2010).

Turkey has many farms that have been producing organic ‘by default’ since their foundation. This is especially the case for the smallest farms in the most distant regions. But the official share of land occupied by organic cultivation in Turkey is only % 0.8 (EC, 2006). This makes Turkey the 33rd biggest organic food producer in the world. The share of land occupied by organic cultivation has steadily grown over the last years with increasing health awareness in the domestic and international markets, and it is expected to rise to % 8 in 2020 (Demiryürek and Bozoğlu, 2007).

Recently only 10% of the organic agricultural products produced in Turkey are consumed domestically (IGEME, 2009). In that sense, Turkey is far beyond countries such as Argentina and Italy, which have domestic consumption of % 15 and % 57, respectively (Ataseven and Güneş, 2008). While the important part of production is being exported, development of consumers’ consciousness is increasing the domestic demand. Accordingly, the number of farmers engaged in organic agriculture is increasing. In the domestic market, organic food products are sold through several different channels. These are organic wet markets, supermarkets, organic specialty stores, natural food stores, small food stores, and Internet based stores. Although domestic demand is at its infancy, interest in organic food products is growing due to changing lifestyles and increasing health awareness.

3. Consumer Demand

A variety of academic studies attempted to provide demographic profiles of organic

consumers (Dettmann and Dimitri, 2010; Govindasamy et al., 2001; Hartman Group, 2002, 2006; Zepeda, Chang and Leviten-Reid, 2006; Thompson and Kidwell, 1998). Education and income were consistently found significant factors in organic food consumption (Dettmann and Dimitri, 2010). Most studies characterized organic consumers as affluent (Byrne, Toensmeyer, German, and Muller, 1991; Wang and Sun, 2003), and well-educated (Richter et al., 2000; Thompson, 1998; Govindasamy, DeCongelio, Italia, Barbour and Anderson, 2001).

Younger consumers with smaller households are most likely to purchase organic produce (Govindasamy et al., 2001; Wang and Sun, 2003). Households with children under 18 are more likely to buy organic products (Thompson and Kidwell, 1998). Research also suggested that females are more informed about food issues, and consume more organic food than men do (Govindasamy and Italia, 1999). That is partly because women are more concerned about risks associated with food (Davidson and Freudenburg, 1996).

Besides the influence of demographics, consumers may buy organic products for a wide variety of reasons. These may include the perceived effect of organics on the environment, taste, sustainability, prestige, exclusiveness, support of local farmers, lifestyle, animal welfare, worker safety, nutritional content, and reduced exposure to pesticides and herbicides (Hall, 2008).

3.1 Motives for buying organic food

Major motives related to organic food choice at the individual level are previously studied in various settings. People are found to consume organic products with a wide variety of motives. Most discourse surrounding organics has traditionally revolved around being 'environmentally conscious' and 'being green' (Barry, 2004).

Consumers buying for environmental reasons do so for the values and beliefs, peace

of mind, simplicity, and for the community (Hall, 2008).

Health concern is recently found to be the primary motive to buy organic food (Zanoli et al., 2004, Magnusson et al., 2003, Lea and Worsley, 2005). Consumers buy organic food for health reasons because they are naturally produced, contain no additives, pesticides, herbicides, and hormones (Hall, 2008; Miele and Parisi, 2001; Naspetti, 2001). According Chen (2009) health consciousness is the main determinant on enhancing the positive attitude toward organic foods. There are other factors connected with organic food consumption, such as the dimension of taste (Padel and Foster, 2005; Zanoli and Naspetti, 2002) and the desire to try new food products (Govindasamy and Italia, 1990). Finally, there are ethical motives, which range from environmental and animal protection to political and economic issues, such as the search for a sustainable agricultural and food market (Chang and Zepeda, 2005; Zanoli and Naspetti, 2002).

Despite the fact that health concern is a leading motive to buy organic food there are studies that underline cross-cultural differences in the hierarchy of motives to buy organic food. For example, taste is found to be the main motive to buy organic food in Italy and Sweden (Zanoli and Naspetti, 2002; Magnusson et al., 2001). In Northern Europe (e.g. Denmark and Germany) consumers attach more value to animal rights and animal welfare issues (e.g. appropriate husbandry, animals can move free, animal welfare), whereas in other countries (e.g. Italy, Austria and France) consumers rarely put animal welfare among their food concerns (Alvensleben, 2001; Miele and Parisi, 2001; Naspetti, 2001; Zanoli and Naspetti, 2002; Wier et al., 2008). Chryssohoidis and Krystallis (2005) reported in their study that for Greek consumers environmental care is not a relevant motive for organic food consumption, whereas Sarikaya reports just the opposite for Turkish consumers (Sarikaya, 2007).

Due to cultural variations in consumption habits and motives in the organic food market, country specific consumption dynamics remain a significant area of study. The growing domestic organic market with increasing fields cultivated for organic agriculture and increasing export makes Turkey important location for organic production and consumption. In the current study we seek to add more insight to the domestic organic food consumption in Turkey, a country with a discrepancy between relatively high domestic organic food production volumes and low domestic organic food consumption levels. We profile organic food consumers, and explain their motives in purchasing organic food. We also explore the consumer satisfaction on various consumption criteria.

4. Methodology

4.1 Data collection and participants

The data for the current study were collected by a structured self-administered questionnaire with a convenience sample of organic food consumers in Turkey. The survey instrument was pilot tested before the actual fieldwork, which ran between April and June 2011. Data was collected from organic food consumers located in five major cities of Turkey, namely, İstanbul, Ankara, İzmir, Antalya, and Samsun.

Organic food consumers were reached in organic wet markets, specialty stores and supermarkets. Data was collected from a total of 368 organic food consumers.

Following the removal of submissions with missing data, and minors, 354 participants (71.2% females) remained in the main analysis. When the demographics of the sample are considered, the majority of the participants are middle-aged, highly educated and belong to middle- and upper middle-income groups. Singles are observed less frequently. 66.7 % of the participants had at least one child. The mean age of the participants was 39.9 years, ranging between 20 and 65 (Std.dev. = 11.24

years). A total of 83.3% of the participants were highly educated, where 63% were university graduates, and 20.3% were postgraduates. Detailed demographic information of the participants is reported in Table 1.

Table 1: Demographic Characteristics of the Participants

Sex	Frequency	Percentage	Income	Frequency	Percentage
Female	202	71.2	0-600 TL	0	0
Male	102	28.8	601-1200 TL	6	1.7
			1201-2000 TL	16	4.5
			2001-3000 TL	24	6.8
			3001-5000 TL	145	41
			+5.000 TL	163	46
<i>Total</i>	<i>354</i>	<i>100</i>	<i>Total</i>	<i>354</i>	<i>100</i>
Marital Status			Education		
Married	246	69.5	Pri.&High Sch.	59	16.7
Single	108	30.5	Undergrad.	223	63
			Post-Graduate	72	20.3
<i>Total</i>	<i>354</i>	<i>100</i>	<i>Total</i>	<i>354</i>	<i>100</i>

4.2. Measures

This study utilized a cross-sectional design comprising several self-report measures. The structured questionnaire contained organic food consumption behavior, organic food consumption motives, attitudes towards organic food, consumer reference points, and consumer satisfaction. Questions that measure demographic information were also included.

Organic food consumption behavior was operationalized by constructing items that ask participants to report how often they buy organic food, types of organic food they buy, and the location of purchase on 7 point Likert scales (1 = never, 7 = always). Participants were also asked to report on average how much they spend monthly for their organic food purchases.

Organic food consumption motives were operationalized by constructing items drawn from a variety of sources (e.g. Wier and Calverley, 2002; Cerjak et al., 2010;

Sarikaya, 2007). Additional items were gathered through a focus group of thirty-two organic food consumers to refine the unique motives of consumption. A pilot study on twenty-six motive items was conducted to eliminate ambiguous. The final construct consisted of twenty-one motive statements.

Respondents were asked how likely they were to buy organic food for the specified motive from 1 (*very unlikely*) to 7 (*very likely*). In a previous study, Sarikaya (2007) uncovered four motive factors specific to organic food consumption: responsibility, trust, value, and utility. Instead of four factors distracted by Sarikaya (2007), this study resulted in five factors (see Table 2).

Consumer reference point was operationalized by constructing items asking participants to report how likely they are influenced by each possible reference point in their organic food consumption decisions on a five point scale (1 = very unlikely to 5 = very likely).

Consumer satisfaction was measured by constructing items that ask participants to report how much they are satisfied by each possible criteria (e.g., price, product assortment) in their organic food consumption on a five-point scale (1 = very dissatisfied to 5 = very satisfied).

Demographics Personal data such as age, gender, marital status, number of children, ages of children (if any), education and monthly income were assessed.

5. Results

All analyses were performed using the SPSS 18 statistical program. Factor analysis extracted factors related to motives of organic food consumption. The factor analysis used a principal component solution and a varimax rotation to find variable groupings, and specified the retention of factors with eigen values greater than 1.0. This resulted in a total of five factors. Pearson product-moment correlations (with

pair-wise exclusion of missing cases) and multiple regression analysis were used. To assess the relative predictive value of the various independent variables (i.e., consumption motives, age, gender), they were entered into separate multiple regression analysis with monthly expenditure on organic food consumption as the dependent variables.

5.1 Consumption Motives

To explore what kind of motives organic food consumers have, a principal component analysis with a Varimax rotation was run to determine the potential groups of twenty-one items. Four items with extremely low communalities and items that failed to load on any factors were removed. The analysis extracted five factors with eigen values above 1.0, accounting for 71.92 % of the total variance ($KMO = .769$, $\chi^2 = 3082.599$, $df = 136$, $p < .000$) (see Table 2). Factors are characterized as ‘affective’, ‘ethical’, ‘perceived value of product’, ‘safety’ and ‘perceived value of market offer’.

The first factor is the ‘affective’ motive, which reflected the consumption of organic food products with the motivation of belonging to a group, where the group members are ecologically conscious. The reliability of five items as indicated by Chronbach’s alpha was high at .863. Need for a group affiliation, appears to be a significant motive for organic food consumption, to our knowledge has never been reported in prior literature in organic food consumption. But, Roitner-Schobesberger et al (2008) found that the attraction of new and fashionable products as an important consumption motive. Chrysohoidis and Krystallis (2005) also found a significant relation between the importance Greek consumers attached to ‘self-respect’ and the consumption of organic fresh food. Our results included consumption of a prestigious, popular product and the feeling unique within this factor.

The second factor is the 'ethical' motive ($\alpha = .836$). It included three items explaining the motivation to protect the environment, nature, and to care about working conditions of the agriculture labor. As literature suggested (e.g. Cerjak et al., 2010; Chang and Zepeda, 2005; Zander and Hamm, 2009), we also found Turkish consumers to have ethical concerns in buying organic food. Schlegelmilch et al. (1996) indicated that the increase in environmental consciousness has had profound impact on consumer behavior. Accordingly, protecting the environment, animal and labor welfare appeared to be important motives for Turkish consumers. Zander and Hamm (2009) revealed that environmental protection and animal welfare are two important motives in their cross-country research. In another research by Tsakiridou et al. (2008), care for the environment was a significant motive for buying organic food for Greek consumers. Similar results were also observed in Croatia and Slovenia (Cerjak et al., 2010). Interestingly, Baker et al. (2004) revealed that UK consumers made no connection between organic food consumption and care for the environment, while German consumers did make this connection.

The third factor is named as 'perceived value of the product'. It consisted of three items illustrating certain product related attributes such as taste, variety, and nutrition. Cronbach's alpha was .786. Several researches reported the importance of taste, nutrition, and product assortment (e.g. Roitner-Schobesberger et al., 2008; Stobbelaar et al., 2007; Zanolli and Naspetti, 2002). Roitner-Schobesberger et al. (2008) reported search for tastier products in Thailand consumers. For Dutch consumers, taste appeared as the most important motive for buying organic food products (Stobbelaar et al., 2007). Zanolli and Naspetti (2002) displayed that, Italian organic food consumers search for good, tasty, and nourishing products.

The fourth factor appears as the ‘safety’ motive ($\alpha = .731$). It contained three items indicating the need for consuming safe and quality organic products. It is shown that organic food consumers in many other countries care about the quality and safety related issues in consuming organic food (e.g. Brown et al., 2009; Cerjak et al., 2010). For instance, Brown et al. (2009) reported that in France quality was the most frequently stated consumption motivation. Safety of organic products compared to other food was one of the most important motives for respondents in Bosnia (Cerjak et al., 2010). Health concern was often found to be the most important factor motivating organic food purchase (e.g. Fotopoulos and Krystallis, 2002). Krystallis and Chryssohoidis (2005) indicated that quality and security play an important role in defining willing to pay for most organic food categories.

The last factor in our analysis is ‘perceived value of market offer’. It contained three items that explain consumer perceptions on a list of marketing tools such as price, location, and information concerning the production process. Chronbach’s alpha was moderately high at .704. Reputation of store, and certification process-related information have been highlighted for understanding the adaptation process in the category (Chakrabarti and Baisya, 2007). Price on the other hand, is cited as one of the major reason for not purchasing organic food (Fotopoulos and Krystallis, 2002).

Table 2: Factor analysis of Organic Food Consumption Motives

	FACTORS					Mean	SD
	1	2	3	4	5		
Affective							
Prestige	.867					2.11	1.42
Group Affiliation	.852					2.58	1.71
Popularity	.822					2.85	1.77
Feeling Unique	.802					2.40	1.63
Sympathy of close others	.616					2.03	1.53
Ethical							

Animal welfare	.860			3.06	1.88
Protection of Nature and Environment	.799			4.24	1.76
Safety of Agriculture Workers	.758			2.96	1.74
Perceived value of product					
Taste	.756			5.04	1.61
Product Assortment	.750			3.68	1.49
Nutrition Value	.647			5.99	1.09
Safety					
Being chemical free		.801		6.53	.83
Quality		.679		5.60	1.25
Being Natural		.679		6.18	.88
Perceived value of marketing offer					
Prices			.750	2.76	1.21
Sales Locations			.714	3.47	1.71
Availability of information on production			.690	4.42	2.00
Eigenvalue	4.82	3.07	1.93	1.29	1.12
Cronbach alpha (α)	.863	.836	.786	.731	.704
Variance explained (%)	28.38	18.04	11.37	7.56	6.57
Kaiser Meyer Olkin (KMO)	.769				
Total Variance explained	% 71.92				
Bartlett Test χ^2	3082.599 (df = 136, p < .000)				

Further, Analysis of Variance (ANOVA) statistics are conducted to explore mean differences in organic food consumption motives among gender and education groups. Gender is found to have a main effect on ‘affective’ and ‘safety’ motives, such that female respondents reported to consume organic food products more than male respondents with the motive of being affiliated with the organic food consumer community, and consuming safe food products ($F(1,352) = 18.69, p < .001$; $F(1,352) = 9.806, p < .01$, respectively). Education is also found to have a main effect on ‘protection’ and ‘perceived value of market offer’ motives, such that well-educated respondents reported to consume organic food products more than less-educated respondents with the motives of protecting the environment, nature and labor and consuming high value market offer ($F(1,352) = 68.221, p < .001$; $F(1,352) = 5.36, p = .021$, respectively).

Singles consume organic food less than married with the motive of ethical concerns ($F(1,352) = 9.578, p < .01$). Respondents with children consume organic foods more than respondents with no children with the motive to protect the environment, nature and labor ($F(1,352) = 17.309, p < .00$). Having a child is found to have no effect on other motives of organic food consumption.

Age is negatively correlated with the 'ethical' and 'affective' motives of organic food consumption. Such that, as age increases respondents consume organic food products less with the motives of protecting the environment, nature and labor, and to get affiliated with a group of organic conscious consumers ($r = -.12, p = .024$; $r = -.116, p = .028$). Age is also correlated positively with attitude towards organic food ($r = .116, p = .028$), how long respondents consume organic food ($r = .429, p < .01$), and the average amount of money spent monthly on organic food ($r = .301, p < .01$).

5.2 Organic Food Consumption

Data on characteristics of purchasing organic food behavior is presented in Table 3. Most respondents have been buying organic food products for two or more years (77.4 %). The average amount of money spent on organic food consumption is 360 Turkish Lira. And the frequency of organic food purchase is higher for egg, vegetables and fruits, respectively. The preference for egg was also reported by Armagan and Ozdogan (2005) previously. Their results displayed that 70 % of the organic food consumers prefer ecological production methods for egg. Our results further revealed that organic meat and prepared food are found to be very rarely consumed. Organic food consumers prefer more frequently the wet markets and super markets as the point of purchase. Consumption through Internet is found to have a very low preference. Information presented in media is the main point of reference for organic food consumers, which was followed by doctors and close others.

Table 3: Organic Food Consumption

Duration of organic food consumption ($\mu = 33$ months, Std. Dev. =17.55)	Less than 2 years	22.6	
	For 2 and more years	77.4	
Monthly expense on organic food products ($\mu = 360$ TL, Std. Dev. = 225.84)	Less than 360 TL	50.8	
	360 TL and more	49.2	
		Mean	Std. Dev.
Frequency of buying organic food products	Egg	5.31	1.61
	Vegetables	5.29	1.40
	Fruit	5.17	1.41
	Dry Food	3.81	1.86
	Diary Products	3.75	1.87
	Beverages	3.38	1.86
	Meat	2.18	1.64
	Ready Meals	1.95	1.36
Location of organic food purchases	Wet Markets	5.16	2.05
	Supermarkets	3.68	1.77
	Local markets	3.29	2.15
	Specialty stores	2.12	1.65
	Groceries and small markets	1.95	1.52
	Internet	1.47	1.26
Point of reference for organic food consumption	News on media	4.79	1.90
	Doctors	3.55	2.01
	Close others	3.32	1.92
	Advertisements	2.02	1.36
	Sports Centers	1.60	1.32

Findings of the current study revealed similar findings with Cerjak et al (2010). Such that, frequency of purchase is found to be related to experience ($r = .21$, $p < .01$). The longer the experience is the more one purchases organic food. Respondents who have been buying organic food for more than two years spend more on organic food products than respondents who have been buying organic food less than two years ($F(1,352) = 19.68$, $p < .01$).

Literature generally reported that women hold more positive attitudes towards organic food than men (Bryne et al., 1991; Cerjak et al., 2010), and more women compared to men are organic food consumers. The current study reveals no gender effect on attitudes towards organic food products ($F(1,352) = 2.673$, $p = .103$) and on the average monthly spending on organic food products ($F(1,352) = 1.232$, $p = .368$). But, women are found to buy organic food longer than men ($F(1, 352) = 5.211$, $p =$

.023). Women are also found to buy organic eggs and dry food more than men do ($F(1,352) = 4.854, p = .028$ ($F(1, 352) = 4.12, p = .043$, respectively). They prefer specialty stores and super markets for organic food consumption more than men do ($F(1, 352) = 13.31, p < .001$; $F(1, 352) = 9.938, p = .002$, respectively).

Contradictory results were reported by previous research on the effects on education on organic food consumption (Byrne et al., 1991; Cunningham, 2002; Thompson and Kidwell, 1998). In terms of education, the current study displays no main effect on how long respondents consume organic food products and on the amount of monthly spending on organic foods ($F(1, 352) = .054, p = .816$; $F(1, 352) = .013, p = .91$, respectively). While well-educated tend to consume more organic meat, dairy products, egg, dry food, prepared food, and beverages, no effect of education is found on consumption of organic vegetables and fruits ($F(1, 352) = .366, p = .546$; $F(1, 352) = .001, p = .986$, respectively). Well-educated consumers use Internet and specialty stores more than less-educated consumers for their organic food purchases ($F(1, 352) = 7.23, p < .01$; $F(1, 352) = 23.337, p < .001$, respectively). Conversely, less-educated consumers prefer to buy organic food from local markets more than well-educated consumers do ($F(1, 352) = 23.524, p < .001$).

Earlier studies found that families with children are more likely to buy organic products (Riefer and Hamm, 2008; Thompson and Kidwell, 1998). In line with this previous result, existence of a child in the household seems to make a difference both on how long participants consume organic food and on amount of monthly spending on organic food. Families with children spend more on organic food ($F(1, 352) = 88.832, p < .001$) and buy organic food longer than families that do not have a child ($F(1, 352) = 5.42, p = .02$). Families with a child purchase all organic food products

(egg, meat, vegetables, fruits, beverages, dairy and dry food) more frequently than families with no child.

Factors found to hinder organic food choice are high price, limited availability, and satisfaction with conventional food, lack of trust and lack of perceived value (Fotopoulos and Krystallis, 2002). For the current context of organic food consumption, consumers report low level of satisfaction with product prices. Conversely, they report the highest level of satisfaction with product quality, followed by sales service quality (see Table 4).

Table 4: Consumer Satisfaction Criteria

	Mean	Std. Dev.
Quality	4.84	1.13
Sales Service	3.99	1.51
Convenience	3.95	1.37
Product Assortment	3.95	1.22
Prices	2.67	1.21

Multiple regression analysis was carried out to explain monthly spending on organic food. Pearson correlations, regression coefficients and F-statistics are reported in Table 5. Multi-collinearity checks are assessed by the variance inflation factor (VIF). A total of 36.3% of the variance in monthly spending on organic food is significantly explained by the variables remaining in the model; duration of organic food consumption, child in household and affective, ethical, perceived value of market offers as consumption motives.

The regression results in display that different consumption motivations underlie monthly spending on organic food products. Monthly spending on organic food products is explained significantly by the motives of ‘affective’ ($\beta = .147$), ‘ethical’ ($\beta = -.132$), and ‘perceived value of market offer’ ($\beta = .245$), as well as presence of children in household ($\beta = .373$), and how long the organic food products are consumed ($\beta = .165$).

Table 5: Regression Analysis: Monthly spending on Organic Food Products (OFP).

6. Discussion and Conclusions

Predictors Dependent Variable		How long organic food products are consumed	F1: Affective	F2: Ethical	F3: Perceived value of product	F4: Safety	F5: Perceived value of market offer	Age	Attitude towards organic food products	Gender	Children in Household	F	R ²	Adjusted R ²
	Monthly Spending on OFP	r	.210**	.271**	-.116*	.246**	.116*	.266**	.301**	.083	-	-	21.02	.381
	β	.165	.208	-.132	.080	-.033	.245	.049	.044	-.057	.373			
	p	.001	.000	.013	.134	.545	.000	.371	.375	.222	.000			

With the changes in lifestyles, consumers became more and more concerned about health, nutrition, and the quality of food. The increased health and environmental consciousness is reflected in the increased interest in the consumption of organic food products. However, organic food consumption in most countries compromises only a small percentage of the entire food consumption (Wier and Caiverley, 2002). But the growing demand for organic food is expected to continue in the future.

Beyond the export-oriented growth that fueled the organic products industry in Turkey, domestic consumers are also started to respond to global trend in business, government, and civil society towards the encouragement of more sustainable forms of consumption and production. With rising disposable household income, more women in workplace, more single person households and lifestyle changes, consumption patterns have changes significantly. Increasing consumer demand for organic food products is one of these changes.

The results displayed that most Turkish organic food consumers have strong emotional motives, as well as ethical, and safety concerns in their organic food consumption preferences. Perceived value of product and the market offers stand as

other important motivations of consumers. It has been found that some socio-demographic characteristics significantly influence motives for buying organic food. Women reported to consume organic food products more with the motive of being affiliated with the organic food consumer community, and consuming safe food products. Well-educated respondents reported to consume organic food products more with the motives of protecting the environment, nature and labor and consuming high value market offer. Singles consume organic food less than married with the motive of ethical concerns. Households with children consume organic foods more with the motive to protect the environment, nature and labor.

Frequency of purchase is found to be related to experience. The longer the experience is the more one purchases organic food. Several gender differences were reported. Women were found to buy organic food longer than men. Women are found to buy organic eggs and dry food more than men do. Women prefer specialty stores and super markets for organic food consumption more.

In terms of education, the current study found no main effect on how long the respondents consume organic food products and on the average spending on organic food consumption. While well-educated tend to consume more organic meat, dairy products, egg, dry food, prepared food, and beverages, no effect of education was found on the consumption of organic vegetables and. As one might expect, well-educated participants use Internet and specialty stores more than less-educated for their organic food consumption, where less-educated prefer to buy organic food more from local markets. Families with children purchase all organic food products (egg, meat, vegetables, fruits, beverages, dairy and dry food) more frequently than the ones with no children. Only for prepared organic food category, participants with no children reported to purchase more frequently than the ones with children.

Consumers report low level of satisfaction with the product prices. Conversely, organic food consumers report the highest level of satisfaction with product quality, followed by sales service.

Results from regression analysis display that different consumption motivations underlie monthly spending on organic food products. Monthly spending on organic food products is explained significantly by 'affective', 'ethical', and 'perceived value of market offer' motives, as well as children in household, and how long the organic food products are consumed.

The domestic market for organic food products continues to grow in Turkey. Therefore, understanding the consumption dynamics can help guide organic food producers and sellers in the market. The current research gives important insights about the motives, behavior, and satisfaction of organic food consumers in Turkey. The insights from the study results should be carefully considered for systematic and professional promotion of organic food products for future domestic market expansion.

Some limitations of the study should be recognized. First, this research is a correlational and a cross-sectional study, examining only associations among measured constructs. It does not resolve the issue of whether certain consumption motives enhance organic food consumption. Such design limits causal inferences. Future research should examine different indicators of organic food consumption, such as certain personality variables (e.g. need for uniqueness, openness to change, compulsion) with multiple levels of analysis.

What motivations organic food consumers have is a broad research question. A quantitative design may not be sufficient to provide comprehensive account of a well-grounded overview of all the motives. Future research should benefit from a

combination of qualitative and quantitative designs aiming to understand civic engagement through digital means with the associated gratifications of the users. The findings of the current study require careful consideration, particularly when the findings are generalized to other settings or populations. Future research also needs to go beyond and explore different variables in different settings.

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