

Ünal, Sevtap; Deveci, F. Görgün; Yildiz, Tuğba

Article

Do We Know Organic Food Consumers? The Personal and Social Determinants of Organic Food Consumption

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Istanbul Business Research

RESEARCH ARTICLE

Do We Know Organic Food Consumers? The Personal and Social Determinants of Organic Food Consumption

Sevtap Ünal¹ , F. Görgün Deveci² , Tuğba Yıldız³

Abstract

The main aim of this study is determining which consumption motives and personal and social factors affect organic food buying decisions. Ajzen's Planned Behavior Theory (TPB) is used to explain consumers' organic food selection behaviors. In addition, the moderating role of uncertainty about organic foods and the mediating role of the price of organic foods were tested. Data were gathered via a survey of consumers of organic foods in Turkey. The research model was tested by Structural Equation Modeling (SEM) via Smart PLS3. The findings showed that consumptions motives of healthiness, easiness, mood, and convenience-price of organic foods motivate consumers to buy organic foods. In addition, environmental concern and negative emotions influence on attitudes towards organic foods and purchase intentions. On the other hand, subjective norms and self-monitoring do not influence attitudes towards organic foods and subsequent purchase intentions. Uncertainty has a moderating effect on the relationship between attitudes and purchase intentions whereas price has no mediating effect on the relationship between attitudes and purchase intentions.

Keywords

Organic food • Consumption motivations • Environmental concern • Consumption emotions

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1 Sevtap Ünal (Prof.), İzmir Katip Çelebi University, Faculty of Business Administration and Economics, Department of Business, Production Management and Marketing, İzmir, Turkey. Email: sevtap.unal@ikc.edu.tr ORCID: 0000-0002-3227-0756

2 **Corresponding author:** F. Görgün Deveci (Res. Asst.), Atatürk University, Faculty of Business Administration and Economics, Department of Business, Production Management and Marketing, Erzurum, Turkey. Email: gorgun.deveci@atauni.edu.tr ORCID: 0000-0001-8987-2478

3 Tuğba Yıldız (Prelactor), Bayburt University, Institute of Social Sciences, The Cooperative Programme, Bayburt, Turkey. Email: tugbayildiz@bayburt.edu.tr ORCID: 0000-0003-0260-0555

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Do We Know Organic Food Consumers? The Personal and Social Determinants of Organic Food Consumption

Demand for organic foods is continuously increasing as an increasing number of people wish to consume more natural foods. Organics foods are differentiated products from common conventional foods because they have distinctive characteristics (Sashi and Stern, 1995; Chryssochoidis, 2000); Yin et al., 2010. The term “organic food” refers to food products that are produced without artificial fertilizers, insecticides, synthetic hormones or artificial coloring (Fotopoulos, 1996; Chen, 2009; Shaharudin et al., 2010; Aertsens et al., 2011; Goh, 2011; Ruiz de Maya et al., 2011). Consumer interest in organic foods has increased due to the effects of pesticides on health and the environment as well as due to genetically modified organisms (GMOs), and other non-natural substances used to increase agricultural production (Teng and Lu, 2016). Consumers’ have positive attitudes toward organic foods in that they perceive them to be healthier, harmless, and less destructive to the environment than traditionally grown foods (Mondelaers et al., 2009; Daniells, 2014). On the other hand, most consumers do not have reliable information about the characteristics of organic foods and always have suspicions about the ingredients of organic foods, although they are generally considered to be reliable foods. Consumers cannot be sure of the quality of an organic product after purchase or consumption. Thus, it is vital that they trust credence goods. Consumers therefore seek trustworthy clues, such as authorized third-party certifications (for example USDA or TKB) whereas they do not trust other certifying organizations. In short, although demand for organic foods is growing, there is simultaneously doubt about organic foods ingredients and attributes. Therefore, if consumer perceptions about the characteristics of organic foods, such as credibility, can be determined, this will enable consumer attitudes towards organic food to be understood, thereby explaining organic food consumption behaviors.

Previous studies have found that, organic foods are believed to be more nourishing, healthier, and safer, with their. Safety and positive influence on human health being major reasons for purchasing them (Zanoli and Naspetti, 2002; Fotopoulos et al., 2003; Lea and Worsley, 2005; Hughner et al., 2007). Various researchers have evaluated the personal and environmental factors influencing the purchase of organic foods, including human-animal-environment centered values, and health-related variables (Hutchins and Greenhalgh, 1995; Nielsen et al, 1998; Lindeman and Väänänen, 2000; Squires et al., 2001; Harper and Makatouni, 2002; McEachern and Willock, 2004; Lea and Worsley, 2008; Hasselbach and Roosen, 2015; Tung et al., 2015).

Consumers’ organic food buying behavior has been studied by from various theoretical perspectives. Ajzen’s The Theory of Planned Behavior Theory (TPB) was mostly used to determine consumers’ food selection behaviors. (e.g., Chen, 2007; Verdurme and Viaene, 2003; Bredahl, 2001) while the. TPB is useful for explaining a wide range of individual behaviors and intentions (Lee et al., 2014), including consumption of organic products

(Gracia and De Magistris, 2007; Gotschi et al., 2007; Lee et al., 2014; Zagata, 2012). TPB explains a wide range of human behaviors based on behavioral intentions (BI), which is the central stage of the TPB. It is determined by three motivational factors: (1) the attitude of the person to participate in the behavior; (2) the degree of social pressure felt by the person concerned with the behavior (subjective norm); and (3) the degree of individual controllability of the behavior (perceived behavioral control [PBC]) (Lee et al., 2015). This study adopted the, TPB to investigate consumers intentions to purchase organic foods.

Literature Review and Research Hypotheses

Organic Food Consumption Motivations

Motivation is the driving force within individuals that compels them to act. If a consumer is motivated, she or he is ready to act or engage in a goal-oriented activity. Motivation is an inner state of arousal with triggered energy directed to achieving a goal (Schiffman et al., 2010: 88). Motivation therefore precedes behavior and directs it in a specific direction by initiating, guiding, and maintaining goal-oriented behaviors. To understand consumer behavior requires understanding the motives that drive the behavior. As mentioned before, several studies have investigated consumer attitudes towards organic foods and subsequent buying behavior (Roininen et al., 1999; Makatouni, 2002; Zanolli and Naspetti, 2002; Fotopoulos et al., 2003; Lea and Worsley, 2005; Padel, et al., 2005; Vermeir and Verbeke, 2006; Lea and Worsley, 2008); Darsono et al., 2018.

Consumer food choice behavior is a complex process that is influenced by many factors, such as consumer-related issues (mood, personality, lifestyle), food-related issues (sensory characteristics of taste, odor, texture, etc.; price, healthiness), and social-cultural factors (ethical-environmental concern) (Prescott et al., 2002; Eertmans et al., 2005; Wądołowska et al., 2008; Honkanen and Frewer, 2009; Machín et al., 2014).

Asraf Mohd-Any et al., (2014) claim that food choice motives are affected by both external (life source and influencers) and internal (personal system) factors. Internal values include personal value negotiation and habits. Price, sensory delights, convenience, health, and quality are also important factors choosing organic foods, while emotions also influence consumer decisions. External factors, such as social norms, the economic situation, social roles, physical surroundings, and people's previous experiences, influence organic food choices. In sum, many researchers agree that food choices are determined by three main groups of factors. These are;

- Product-related factors (taste, aroma, packaging, convenience, nutrient content, etc.)
- Person-related factors (age, gender, personality, experience, satiety, hunger, etc.),
- Environment-related factors (price, income, traditions, beliefs, norms, fashion, society, etc.) (Wądołowska et al., 2008; Oellingrath et al., 2013).

Regarding the motives that mostly drive consumers to buy organic foods several factors have been identified, such as health, and safety (Fotopoulos et al., 2003; Hughner et al. 2007; Cerjak et al. 2010; Hamzaoui-Essoussi and Zahaf, 2012; Shafie and Rennie, 2012; Truong et al., 2012; Çabuk et al., 2014; Wee et al., 2014; Pham et al., 2018; Lian and Yoong, 2019), naturalness, and appearance (Yiridoe et al. 2005; Winter and Davis, 2006).

Lockie and colleagues (2002) developed a scale to measure consumer motives to buy organic foods, which was used by Steptoe et al. (1995) as the Food Choice Questionnaire (FCQ), which aims to determine the relative importance of different factors on consumers from different populations (Machín et al., 2014:314). Their aim was to develop a comprehensive measure to define green consumer groups. This scale has been widely used to measure organic food consumption behaviors, showing that health, sensory characteristics, naturalness of food, and environmental protection issues are the most important organic food consumption motives (Lockie et al., 2004; Chen, 2007; Honkanen and Frewer, 2009; Żakowska -Biemans and Renko, 2011; Januszevska et al., 2011; Roos et al., 2012; Dowd and Burke, 2013; Schleenbecker and Hamm, 2013; Hasselbach and Roosen, 2015; Lee et al., 2015; Sautron et al., 2015; Wang et al., 2015; Hsu et al., 2016; Teng and Lu, 2016).

Several studies have found that health concern is a primary motivational factor for buying organic food (Lockie et al. 2002; Magnusson et al. 2003; Ureña et al., 2007; de Magistris and Gracia, 2008; Pohjanheimo et al., 2010; Januszevska et al., 2011; Vyth et al., 2012; Dowd and Burke, 2013; Russell et al., 2015; Hilverda et al., 2016; Bryla, 2016).; Asif et al., 2018; Goetzke et al., 2014; Eisinger-Watzl et al., 2015; Hansen et al., 2018). Health motivation indicates the individual's determination to live healthily (Mardon et al., 2015). Health is one of the most significant factors underlying organic food purchasing due to increasing health consciousness, consumer focus on food safety and quality, and avoidance of harmful additives and chemicals (Wier and Calverley, 2002).

Price is another important factor given the expense of organic foods (Żakowska-Biemans and Renko, 2011; Bryla, 2016). Aygen, 2012; Buder et al., 2014; Bryla, 2016; Aschemann-Witzel and Zielke, 2017; Nguyen et al., 2019). Although consumers are willing to purchase environmentally-friendly products, they are unwilling to pay high prices (Chang et al., 2015). Furthermore, these motivational factors are related to high-quality food intake among adult consumers (Roos et al., 2012). In addition to price, low availability and satisfaction, lack of trust, and poor perceived value prevent consumers buying organic food (Davies et al., 1995; Żakowska-Biemans and Renko, 2011; Hilverda et al., 2016; Misra and Singh, 2016). McEachern and Mc Clean (2002) find that taste is another important factor.

Consumer food choices are not just related to food-based issues; rather, many factors affect organic food choice behavior. These include sensory features, individual factors, and environmental, cultural, and social influences. Food choices also reflect personality and

lifestyles. Other important factors are altruistic motives, especially environmental protection and animal welfare. However, the relative importance of these motives may vary depending on consumer segment and culture (Honkanen and Frewer, 2009). For example, weight control, convenience, familiarity, healthiness, and natural content are important factors for European consumers (Wang et al., 2015). Sensory motives are also important factors in Europe, along with price, health, and environmental issues. Ethical and environmental motives are relatively important in organic food buying (Honkanen and Frewer, 2009). In addition, research in Europe and the USA shows that most important food choice motives among adults are taste, health, price, and convenience (Kontinen et al., 2013).

Based on this literature, the present study investigates the following motivating factors: mood, sensory appeal, convenience, natural content, health, price, weight, and familiarity. These factors are studied to test hypothesis

H1: Organic food motives influence attitudes towards organic foods.

Environmental Concern

Environmental problems are gradually increasing worldwide, including global warming, ozone layer depletion, water, noise, and light pollution, acid rain, and desertification. Environmental concern, which includes protection of the environment, has been defined as “the degree to which people are aware of problems regarding the environment and support efforts to solve them or indicate the willingness to contribute personally to their solution” (Dunlap and Jones, 2002: 482). Because environmental problems are the result of human activities, consumption, and production patterns, environmental quality depends on human knowledge, attitudes, values, and social practices (Mat Said et al., 2003).

Kinnear et al. (1974), summarize the following characteristics of consumers who are concerned about environmental matters. These environmental consumers;

- Perceive activity towards environmental pollution is excessive,
- Are open to new ideas,
- Investigate how products are produced,
- Satisfy their curiosity,
- Seeking personal security.

Today's consumers are more concerned about the environment. Due to increasing consciousness of environmental concerns, individuals have begun to prefer natural products (Thieme et al., 2015; Bertrandias and Elgaied-Gambier, 2014). This environmental concern is based on emotionally-oriented behavior, and is an important factor for making existing behavior more environmentally friendly (Wang and Myint, 2016).

Environmental concern does not just relate to the attributes of a purchase decision. Rather, it consists of consumer emotions towards many different green issues (Newton et al., 2015). Strong environmental concern makes consumers willing to purchase environmentally-friendly products (Chang et al., 2015; Franzen and Meyer, 2010). It is correlated with beliefs about humanity's ability to disrupt the natural balance, the existence of growth limits for human societies, and doubts about the right of humanity to dominate the rest of nature (Verhoef, 2005: 251). Environmental concern is the proactive intention of individuals to protect the environment (Paladino and Ng, 2013). That is, environmental concern is a socially accepted norm that affects consumer choices (Bertrandias and Elgaaid-Gambier, 2014). Kim and colleagues claim that environmental concern is related both to selfless and altruistic human values as the individual performs these behaviors of protecting the natural environment with little thought for their own benefits. In other words, attitudes toward the environment depend on the self, other people, or the biosphere (Wesley Schultz, 2001; Kim et al., 2012). Choosing organic foods shows a consumer's concern for others and the common welfare (Yadav, 2016). Generally, it refers to a persuasive attribute that represents a person's worries, concerns, likes, and dislikes about the environment (Bhatt and Bhatt, 2015: 48).

As mentioned above, environmental concern is a direct and important determinant of specific behaviors (Verhoef, 2005; Lee et al., 2015). However, Mainieri et al. (1997) argue that consumers do not change their behavior according to their environmental concerns while Bamberg (2003) found that environmental concern has no significant influence on behavioral intentions or behavior. In contrast, Kim and Choi (2005) found that environmental concern does direct affect green purchasing behavior.

Consumers' environmental concern has many consequences, such as deciding to buy certain products and services, as well as the rejection of other products and services (Bertrandias and Elgaaid-Gambier, 2014). Environmental concern is related to environmentally conscious behavior, environmental behaviors, willingness to participate in environmental activities, and paying higher prices for environmental products (Verhoef, 2005; Kim et al., 2012). Specifically, it provides a strong motive for purchasing organic food products (Chen, 2007; Hughner et al. 2007; Smith and Paladino, 2010; Cerjak et al. 2010; Lee et al., 2015; Monier-Dilhan and Bergès, 2016).

As a pro-environmental attitude, environmental concern is one of the most important motives for purchasing organic foods (Magnusson et al., 2003; Fujii, 2006; Mondelaers et al. 2009; Tang et al., 2014). Environmental concern not only increases green purchasing intentions but also makes consumers more satisfied with such purchases (Hopper and Nielsen, 1991; Keesling and Kaynama, 2003). Environmental concern can thus make individuals' behavior more environmentally friendly (Paladino and Ng, 2013). That is, environmentally-friendly behaviors and purchase intentions are correlated (Bertrandias and

Elgaaied-Gambier, 2014). This leads to the second hypothesis of the present study:

H2: Environmental concern affects attitudes towards organic foods.

Subjective Norm

Subjective norms, which are also known as social norms, are perceptions about the nature and content of widespread emotions and thoughts (Verhoef, 2005; Wang, 2014). They also represent normative behavioral beliefs and the motivation to adhere to these beliefs (Kaiser, 2006). A subjective norm is defined as “perceived social pressure to perform or not perform the behavior” (Tarkiainen and Sundqvist, 2005; Ruiz de Maya et al., 2011; Wang, 2014; Suh et al., 2015; Lee et al., 2015; Yadav and Pathak, 2016). Thus, it refers to external social pressure (Wang and Myint, 2016), which is perceived as an important factor determining attitudes and behaviors. A subjective norm includes beliefs influenced by reference groups (such as family members or friends) who influence the individual regarding performing or not performing the behavior (Teng and Wang, 2015). Therefore, subjective norms affect both individual intentions and behaviors (Paladino and Ng, 2013). Individuals comply with subjective norms because they want to avoid reactions and pressures from their reference groups (Wang, 2014; Lee et al., 2015). Thus, subjective norms influence attitudes and intention to buy organic food (Chang, 1998; Tarkiainen and Sundqvist, 2005; Numraktrakul et al., 2012; Irianto, 2015; Paul et al., 2016; Chu, 2018). They are therefore an important factor in organic food purchase intentions and environmentally conscious consumption. A subjective norm decreases risk perception of a consumer, which increases their tendency to purchase (Paladino and Ng, 2013). According to Armitage and Conner (2001), there is a connection between subjective norms and intention. More specifically, Chen (2007) claims that, if subjective norms regarding organic products are positive, then intentions to buy them will increase. Relevant subjective norms also increase recycling intentions, and purchases of sustainable and environmentally friendly products (Wang, 2014). This leads to the third hypothesis:

H3: Subjective norms influence attitudes towards organic foods.

Consumption Emotions

According to Laros and Steenkamp (2005), emotion is the power that describes consumer behavior. Emotions emerge in line with an individual’s subjective assessments and reflect the inner world of that individual (White, 2010: 382). They therefore provide the basic motivations for evaluating products and product choices (Chaudhuri, 1997). Consumption emotions, specifically, are a set of emotions that are elicited during product usage or consumption experiences (Mattila and Ro, 2008; Han et al., 2010). These emotions are crucial for the shopping experience. The positive and negative emotions experienced before and after the moment of purchase directly influence the consumer’s perception, evaluation,

and behavior (Chaudhuri, 1997; Argan et al., 2014). In other words, consumption emotions are responses to the consumption of products that affect the next consumption experience (Richins, 1997; Phillips and Baumgartner, 2002). There is rising interest in assessing emotions to understand consumer behavior better, with measurement of emotional response to food and beverages being seen as a valuable source of information for marketing strategists. Emotional data provide valuable information about products, such as to reveal previously unidentified aspects of sensory profiles and product attributes (Kenney and Adhikari, 2016).

Emotions affect human eating behavior in terms of food choices, quantity, and frequency of meals. These behaviors depend on many different variables, not just physiological needs. Generally, individual eating behavior is affected by changes in emotional state. Consumers have many options to buy or eat food, with price, health, convenience, and taste being prominent variables. In addition, affect-focused and environmental motives play significant roles (Verhoef, 2005; Onwezen, 2015). Various emotions, like anger, fear, sadness, and joy, influence food choices and eating. Emotional stress has an especially strong effect on food consumption. These different emotions may increase or decrease eating due to mood changes (Gibson, 2006; Macht, 2008; Köster and Mojet, 2015).

There are many emotional distinctions, of which the most common is between negative and positive emotions (Verhoef, 2005; Onwezen, 2015). According to Lyman (1982), healthy foods are consumed in association with positive emotions whereas junk food is consumed with negative emotions. Patel and Schlundt (2001) also found that positive and negative emotions influence the meals that are eaten, with positive emotions having a stronger impact on food consumption than negative emotions. Macht (1999) report that anger increases impulsive eating whereas joy increases hedonic eating habits. Both these emotions influence eating more strongly than sadness and fear. Studies on consumption emotions show that negative emotions increase impulsive eating and junk food while decreasing food pleasantness. Conversely, positive emotions make consumers perceive organic food as more appealing and become more eager to consume healthy foods (Macht, 2008; Köster and Mojet, 2015). These findings lead to the following three hypotheses.

H4a: Consumption emotions influence attitudes towards organic foods.

H4b: Positive emotions influence attitudes towards organic foods.

H4c: Negative emotions influence attitudes towards organic foods.

Self-monitoring

The concept of self-monitoring was introduced by Snyder (1974), who defined it as “the degree to which individuals observe the situations and behaviors in their surroundings and

controls their behaviors accordingly” (Graeff, 1996; Aaker, 1999; O’Cass and McEwen, 2004). According to O’Cass, it “reflects the degree to which an individual monitors, and controls self-presentation in accord with social cues” (2001:47), which helps the individual make useful social comparisons. There are two types of self-monitoring: high and low (Kjeldal, 2003: 354). High self-monitoring is expressed as social pattern adaptation. Such people monitor social cues very carefully and avoid exhibiting other behaviors, controlling their self-presentation according to the people. They therefore exhibit both social and interpersonal responsive behaviors, as well trying to be the “right person in the right place at the right time.” Conversely, low self-monitoring people do not control their self-presentation. They believe that their behavior reflects themselves, their attitudes, their qualities, and their emotions (Graeff, 1996; Harnish and Bridges, 2006). They therefore behave without being influenced by their environment, and do not want to change themselves according to social cues and patterns of behavior. Instead, they do what they want. That is, they do not pay attention to social norms and the social self (Hogg et al., 2000; O’Cass, 2001; O’Cass and McEwen, 2004). While high-level self-monitoring individuals prefer to buy prestigious and famous products, low self-monitoring individuals prefer products with more functional qualities, and tend to believe that generic brands are at least as good as other brands (Browne and Kaldenberg, 1997).

Based on the literature, we aimed to investigate self-monitoring influences on organic food choices to identify the relevant motivational and psychographic variables to understand organic food consumption better. Self-monitoring behaviors include dietary intake, physical activities, weight control, and the individual’s conscious behavior (Helsel et al., 2007; Burke et al., 2011). This leads to the following research hypothesis

H5: Self-monitoring influences attitudes toward organic foods.

Attitudes and Purchasing Intentions

Attitudes and behaviors play a major role in determining consumer behaviors. An attitude is a psychological structure formed by consciousness, values, and emotions (Al-Swidi et al., 2014). Attitudes determine the consumer’s final decision at the point of purchase. If an attitude towards the behavior of consuming organic products is affirmative, then the individual’s intention to buy will increase. Therefore, a consumer’s purchasing behaviors regarding organic products can be accurately estimated from their attitudes (Lee and Goudeau, 2014). Generally, consumers have a positive attitude toward sustainable products and their consumption. Environmental-focused consumer groups care about ecological packaging, product origin, and buying ecological organic foods because they think such products’ taste, quality, safety, and freshness are more beneficial to human health (Vermeir and Verbeke, 2006).

Research on attitudes towards organic products shows that the most important factors explaining consumer decision-making are attitudes towards organic food characteristics and the environment. Thus, if consumers have a positive attitude towards eco-friendly issues, they also have a positive attitude towards purchasing organic products. Consumer motivations provide other important factors for buying organic products. Several studies have found that environmentally friendly attitudes lead to green behaviors and ecological consumption (Paladino and Ng, 2013).

Many studies on attitudes and the consumption of organic products show that health (McEachern and Willock, 2004; Padel, et al., 2005; Chen, 2007; Kulikovski and Agolli, 2010; Denver and Christensen, 2015; Tung et al., 2015; Hsu et al., 2016; Aschemann-Witzel et al., 2013; Mie et al., 2017; Oroian et al., 2017; Petljak et al., 2017; Singh and Verma, 2017), animal welfare (Lindeman and Väänänen, 2000; de Boer et al., 2007; Lu et al., 2010; Hasselbach and Roosen, 2015; Escobar- López et al., 2017) environmental consciousness and attitudes (Thøgersen and Zhou, 2012; Irianto, 2015; Nedra et al., 2015; Lee, 2016), taste (Millock et al., 2004; Aertsens et al., 2009; Suh, et al., 2012; Lee and Goudeau, 2014), environmental concern (Salleh et al., 2010; Anburaj, 2015; Fernandes et al., 2012; Lee et al., 2015; Nedra et al., 2015; Petrescu and Petrescu-Mag, 2015; Uma and Selvam, 2017; Sharma and Singhvi, 2018), and ecological motives and attitudes towards organic food (Honkanen et al., 2006) affect attitudes and intention of purchasing organic products (Van Loo et al., 2010; Basha et al., 2015; Teng and Wang, 2015; Lee and Yun, 2015; Yazdanpanah and Forouzani, 2015; Zhu, 2018; Žibret et al., 2018; Hsu et al., 2019; Wang et al., 2019). There is a positive relationship between organic product consumption or purchasing and attitudes in that positive attitudes are related to organic product purchases. In addition, level of interest in the environment is one of the most important factors determining attitude and intention to purchase (Aertsens et al., 2009). This leads to the following hypothesis.

H6: Attitudes towards organic foods have an effect on affect organic food purchase intentions.

Uncertainty

Uncertainty is defined as the lack of information, low knowledge, and lack of trust in the organic certification process (Aertsens et al., 2009). Uncertainty is the absence of information (Daft and Lengel, 1986).

Uncertainty is a condition where current information deviates from the ideal knowledge of the consumer (Shiu et al., 2011). Gunasti and Ross, (2009) claim that lack of knowledge increases uncertainty. Consumers feel uncertainty in several situations, specifically lack of technical expertise, inability to control the basic requirements for distinguishing organic

foods and the absence of chemical components in organic food production compared to traditional products (Teng and Lu, 2016). Shiu and colleagues identified several uncertainty effects on behavior: “the amount, content, and sequence of information input are expected to impact on the formation, development, and change of such higher-order processes as beliefs, attitudes, evaluations, images, impressions, and intention” (Shiu et al., 2011).

Uncertainty about the natural environment refers to changes in environmental components, when an individual has no knowledge of the various states of nature (Lipshitz and Strauss, 1997; Koufteros et al., 2005).

The uncertainty level of the consumer has an essential impact on organic product consumption. Uncertainty about the organic products can change the purchase decision of the consumer whereas the consumer has willingness to buy organic food (Teng and Lu, 2016). This leads to the following hypothesis.

H7: Uncertainty moderates the relationship between organic food attitudes and purchase intentions.

Price of organic foods

Price is a value that will purchase a finite quantity, weight, or another measure of a good or service (Businessdictionary). It plays an important and complex role in consumer evaluation of a product, as well being perceived as a sign of quality by consumers (Marian et al., 2014: 53; Liang, 2016). Price is always accepted as an indicator of product quality and value, and is defined as “what is given up or sacrificed to obtain a product” (Zeithaml, 1988: 10).

Organic food studies have focused on the price of organic foods because of their higher prices, particularly consumers’ willingness to pay for organic foods (de Magistris and Gracia, 2008). If consumers have a high awareness of environmental protection and organic food, they willingly accept higher prices (Liang, 2016). Organic products are generally more exclusive than conventional foods for several reasons. First, their supply is less than demand. Second, the greater labor inputs per unit of output make production costs higher. Third, comparatively small quantities of organic foods increase the costs of post-harvest handling. Relatively small volumes of organic foods increase costs while the marketing and distribution chains for organic products are less efficient than those for traditional foods (<http://www.fao.org/organic/oa-faq/oa-faq5/en/>).

The other important issue is that organic foods are generally considered within the good credence category. That is, consumers cannot be sure about organic production; i.e. which attributes differentiate organic foods from conventional foods (Moser et al., 2011; Janssen and Hamm, 2012). In addition to this suspicion, the high price of organic foods increases

negative attitudes towards buying intentions (Lea and Worsley, 2005). The higher price of organic foods and the uncertainty about the product has been a major barrier for consumers (Davies et al., 1995; Fotopoulos and Krystallis, 2002; Chinnici et al., 2002; O'Donovan and McCarthy, 2002; Zanolli and Naspetti, 2002; Hughner et al., 2007; Hoek et al., 2017).; Xie et al., 2015). However, some studies have found that price has less effect once consumers start to buy organic food. If their experiences increase organic food buying behavior, then organic food buying will become a lifestyle (Krystallis and Chryssohoidis, 2005; Marian et al., 2014). Consumers are also willing to pay a higher price premium if the product has a label from a trustworthy organization (like the USDA organic logo) (Mondelaers et al., 2009; Van Loo et al., 2011; Janssen and Hamm, 2012). Some authors have clustered organic food markets to identify different subgroups of organic consumers according to their willingness to pay the price premium or see the price as a deterrent (Williams and Hammitt, 2000; Cicia et al., 2002; Tarkiainen and Sundqvist, 2005; de Magistris and Gracia, 2008; Gifford and Bernard, 2011; Thøgersen and Zhou, 2012). This leads to the following hypothesis:

H8: Organic food price levels mediate the relationship between organic food attitudes and organic food purchase intentions.

Methodology

Research Model

This study investigated the effects of several personal and social factors on purchasing intentions regarding organic foods. According to the literature, organic food consumption has different attributes. To determine factors affecting organic food buying behaviors and the variables underlying this relationship, uncertainty about organic food attributes as moderator and organic food prices levels are were included as a mediator variables, respectively. The research model developed based on this research aim is shown in Figure 1.

Data collection

The data was gathered via a web-based survey using convenience sampling from members of ETO (Ecological Agriculture Organization) and Orguder (Organic Product Producers and Industrialists Association), which are both members of IFOAM (International Federation of Organic Agriculture Movements). IFOAM is a worldwide umbrella organization for the organic agriculture movement. The survey was sent to these organizations, who forwarded it their members. Of 285 questionnaires returned, 264 had complete data for further analysis.

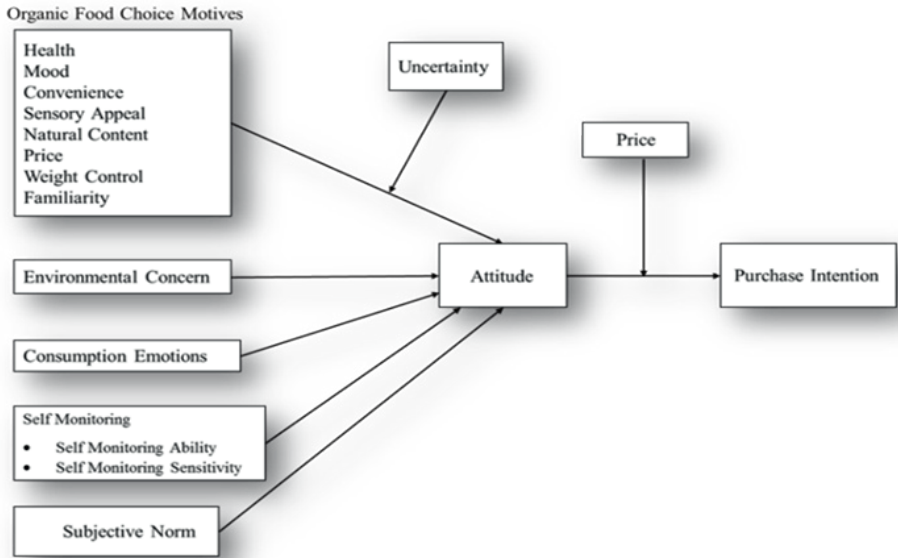


Figure 1. Research Model

Measurements

We divided the input variables that affect consumers' organic food buying intentions (independent variables) into two groups: personal and social factors. The personal factors were motives related to organic food choice behavior, environmental concern, consumption emotions, and feelings of uncertainty. The social factors were self-monitoring and subjective norms. Purchasing intention was the output variable. While most consumers have a positive attitude towards organic foods, they generally cost more than conventional foods, which may suppress purchase intentions. It was therefore assumed that organic food price levels mediate between attitudes and buying intentions. Another important point is that most consumers lack reliable information about the quality of organic foods, so they are always suspicious about the ingredients. Thus, despite their positive attitudes towards organic foods, the uncertainty about organic food attributes may weaken their purchase intentions (Teng and Lu, 2016). Accordingly, it was assumed that uncertainty about organic foods plays a moderator role in buying intentions.

The organic food choice motives scale was based on the original FCQ (Steptoe et al., 1995), although not all the original FCM items were included in this study. Specifically, whereas the FCQ assesses nine food choice motives (health, mood, convenience, sensory appeal, natural content, price, weight control, familiarity, and ethical concern), the present study omitted ethical concern (Schleenbecker and Hamm, 2013).

The environmental concern and subjective norm scales was adapted from Yadav and Pathak (2016), while the Laros and Steenkamp (2005) consumptions emotions scale was used to measure the consumers’ emotions towards organic foods. The purchase intention and uncertainty scales were adapted from Teng and Lu (2016) while the self-monitoring scale was adapted from O’Cass (2000). The attitudes towards organic foods scale was adapted from Chen, M. (2009). This scale has 9 items forming two subscales, of which 6 are affirmative items, such as “Organic products are healthier”, whereas 3 are negative, such as “Organic products are worse than conventional food”.

Most constructs were measured using a five-point Likert scale, with “1” indicating “strongly disagree” and “5” indicating “strongly agree”. However, the consumption emotions scale was measured on a seven-point interval scale, with “1” indicating “strongly do not feel” and “7” indicating “strongly feel”. Organic food price levels were measured by the following question: “How much do you think you will pay when buying organic food products?” Respondents were asked to choose one of the following price percentages (compared to traditional food products): 10% more, 20% more, or 30% more).

SPSS 20.0 and Smart PLS3 statistical programs were employed to analyze the data through descriptive statistics and SEM (Structural Equation Modelling). Because the sample size was small and non-normally distributed, Smart PLS3 was used to test the hypotheses. The Kolmogorov-Smirnov normality test results are presented in Appendix A.

Findings

Demographic and Organic Food Consumption Behaviours

The majority of respondents are female, married, 26-33 years of age, have university-level education. 52, 2 % of the participants buy organic foods on occasion, 28, 8 % of buy always, and 13, 7% of buy seldom. Participants are asked in which food category they prefer and buy organic foods; the results are in Table 1.

Table 1.
Organic food/foods categories bought by participants

Food categories	Frequency	Percent
Vegetable-fruit	119	52,4
Meat and meat products	45	19,8
Milk and milk products	43	18,9
Dry legume	59	26,0
Bakery	52	22,9
Dried fruits and nuts	46	20,3
Hot and cold beverages	40	17,6

Table 2.
Organic Food Price Rate

Organic Food Price Rates	Frequency	Percent
Same as regular foods	41	18,1
%10 more	75	33,2
%20 more	57	25,2
%30 more	19	8,4
%40 more	16	7,1
%50 and over	16	7,1

The consistently higher prices of organic foods was an obstacle for these consumers. Table 2 summarizes how much more consumers were willing to pay for organic foods.

The table 2 shows that over half of respondents were willing to pay between and 10 and 20% more.

Hypotheses Testing

Before testing the research model, an exploratory factor analysis was conducted to explore the appropriateness of the construct of FCMs for this Turkish sample. Principal component analysis (PCA) with varimax rotation was used.

Table 3.
FCMs factor analysis

Variables	Factor Loadings	% of Variance	Eigenvalue	Cronbach Alpha
Factor1: Health		12,476	3,743	,881
1.Organic food contains a lot of vitamins and minerals.	,821			
2.Organic food keeps me healthy.	,798			
3.Organic food is nutritious.	,647			
4.Organic food is high in protein.	,606			
5.Organic food is good for my skin/teeth/hair/ nails etc.	,520			
21. Organic food tastes good.	,504			
22. Organic food contains no additives.	,530			
Factor2: Weight control		11,956	3,587	,852
27. Organic food is good value for money.	,658			
28. Organic food is low in calories.	,745			
29.Organic food helps me control my weight.	,780			
30. Organic food is low in fat.	,716			
31. Organic food is what I usually eat.	,734			
32. Organic food is familiar	,684			

Variables	Factor Loadings	% of Variance	Eigenvalue	Cronbach Alpha
Factor3: Easiness		10,045	3,013	,761
6. Organic food is high in fiber and roughage.	,646			
7. Organic food helps me cope with stress.	,800			
15. Organic food takes no time to prepare.	,678			
Factor4: Sensory Appeal		9,683	2,905	,823
18. Organic food smells nice.	,676			
19. Organic food looks nice.	,799			
20. Organic food has a pleasant texture.	,712			
Factor5: Mood		9,013	2,704	,824
11. Organic food cheers me up.	,581			
12. Organic food makes me feel good.	,755			
13. Organic food is easy to prepare.	,858			
14. Organic food can be cooked very simply.	,810			
Factor6: Relaxing		7,832	2,350	,800
8. Organic food helps me to cope with life.	,743			
9. Organic food helps me relax.	,649			
10. Organic food keeps me awake/alert.	,644			
Factor7: Convenience and price		7,748	2,324	,706
16. Organic can be bought in shops close to where I live or work.	,611			
17. Organic food is easily available in shops and supermarkets.	,751			
25. Organic food is not expensive.	,696			
26. Organic food is cheap.	,757			

In this study, the FCM items formed 7 factors with 30 items (after deleting 3 items) whereas the initial scale had 8 factors. The familiarity dimension was excluded, with its items falling under other factors. Total variance explained was 68.601% while the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.856, and Bartlett’s Test of Sphericity was statistically significant (3860.632: df: 435, sig: 000).

In the second step, the research model was tested. The path model is shown in Figure 2.

Table 4
R Square and model fit summery

	R Square	Adjusted R Square
Positive Attitude	0,424	0,413
Purchase Intentions	0,413	0,407
negative attitude	0,259	0,245
	Saturated Model	Estimated Model
SRMR	0,098	0,104
d_ULS	4,476	5,057
d_G	1,198	1,225
Chi-Square	1.455,655	1.476,075
NFI	0,611	0,606

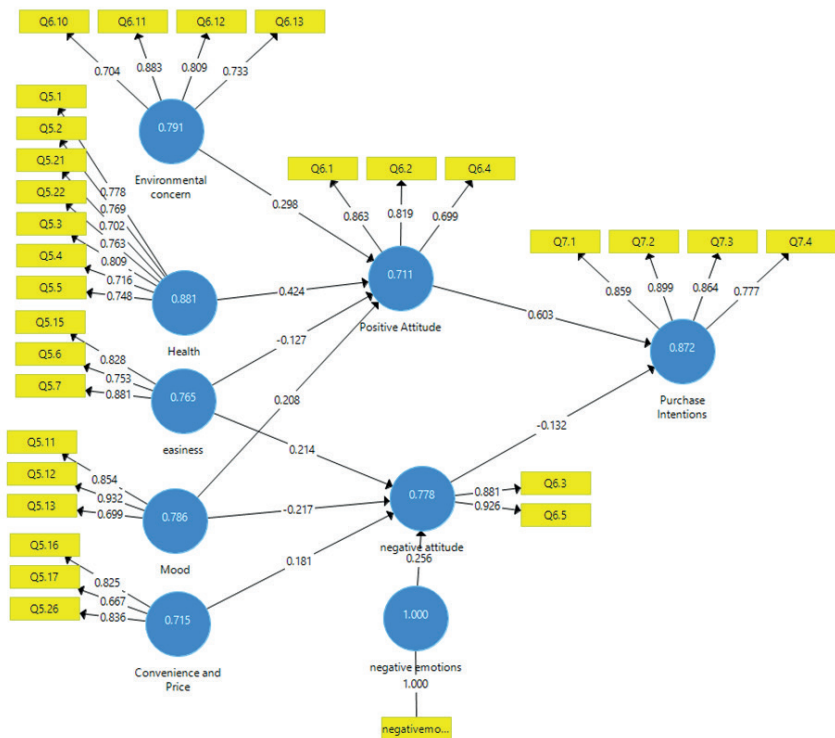


Figure 2. Research Model

The figure shows that four motives, along with health and mood, had positive effects on positive attitudes towards organic foods whereas easiness had a negative effect. That is, organic food buyers thought that organic foods are healthy and help their mood, i.e. feeling better, although it is not easy to prepare them. Easiness and convenience-price had positive effects on negative attitudes towards organic foods. That is, consumers with negative attitudes towards organic foods (because they believe they are fake and worse than conventional foods) also believe that their prices are unreasonable and that they cannot be purchased or prepared easily. Mood has a negative effect on negative attitudes towards organic foods in that consumers with negative attitudes towards organic foods believe that these foods do not help them feel better.

Thus, H1 (Organic food motives influence attitudes towards organic foods) was confirmed.

According to Figure 2, environmental concern affects positive attitudes toward organic foods. Therefore, H2 was confirmed. Likewise, negative emotions influenced negative attitudes towards organic foods. Therefore, H4a (Negative emotions have an influence on attitudes towards organic foods) was confirmed. On the other hand, self-monitoring,

Table 5.
Path Coefficient and T Values

	Original Sample (O)	T Statistics	P Values
Convenience and Price -> Negative Attitude	0,181	3,086	0,002
Environmental concern -> Positive Attitude	0,298	4,634	0,000
Health -> Positive Attitude	0,424	6,848	0,000
Mood -> Positive Attitude	0,208	3,364	0,001
Mood -> negative attitude	-0,217	3,773	0,000
Positive Attitude -> Purchase Intentions	0,603	11,252	0,000
easiness -> Positive Attitude	-0,127	2,017	0,044
easiness -> negative attitude	0,214	3,767	0,000
negative attitude -> Purchase Intentions	-0,132	2,540	0,011
negative emotions -> negative attitude	0,256	4,640	0,000

subjective norms and positive consumption emotions had no effects on attitudes towards organic foods. Thus H3, H4a, and H5 were rejected. Model fit values, R squared, coefficients, t values and Construct Reliability and Validity are shown in tables 4, 5, and 6 respectively

All factors in the research model were reliable and valid. The Q² value (Stone-Geisser's Q² value), used as a criterion of predictive accuracy, examines the predictive relevance of latent variables in the PLS path model, obtained using the blindfolding procedure (Stone, 1974; Geisser, 1974). A Q² value larger than zero for a specific endogenous latent variable indicates the PLS path model has predictive relevance for this construct (Hair et al. 2017). As Table 6 shows, all endogenous variables had predictive relevance in the model.

As discussed earlier, even if consumers are willing to buy organic food, their uncertainty about the products affects organic product consumption. Organic food ingredients or production conditions are mostly confusing for consumers, so they hesitate to choose organic food and even give up their buying decisions. Thus, it was assumed that because uncertainty

Table 6
Research Model Construct Reliability, Validity, and Q2

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)	Q ² (=1-SSE/SSO)
Convenience and Price	0,715	0,729	0,822	0,609	
Environmental Concern	0,791	0,819	0,865	0,617	
Health	0,881	0,890	0,903	0,571	
Mood	0,786	0,894	0,871	0,695	
Positive Attitude	0,711	0,736	0,838	0,635	0,247
Purchase Intentions	0,872	0,875	0,913	0,724	0,279
Easiness	0,765	0,797	0,862	0,676	
Negative attitude	0,778	0,805	0,899	0,816	0,192
Negative emotions	1,000	1,000	1,000	1,000	

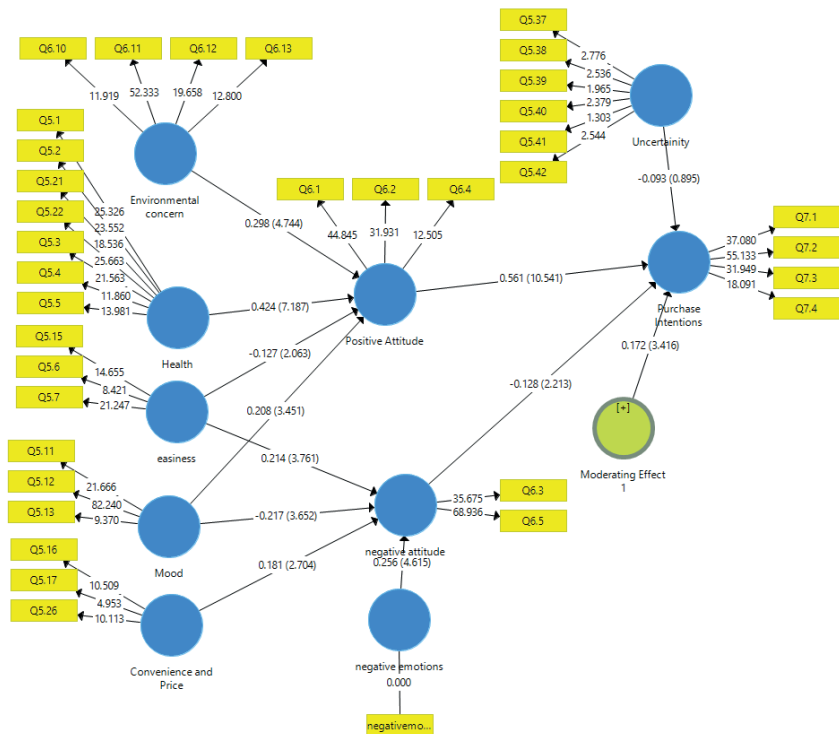


Figure 3.
Moderating Effect of the Uncertainty

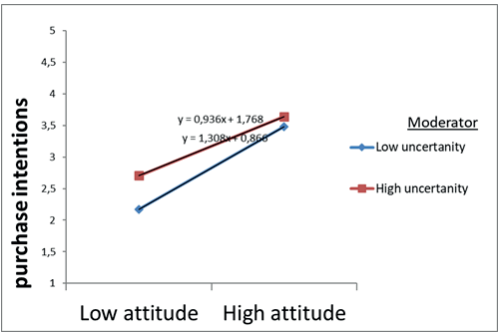


Figure 4. Moderating effect of Uncertainty

about organic foods makes attitudes towards organic foods less positive, it has a moderating effect on organic food motives. Figure 3 shows this moderating effect of uncertainty, including the path coefficients and t values.

Figure 3 shows that uncertainty did indeed have a moderating effect on the relationship between positive attitude towards organic foods and purchasing intention. Uncertainty

Table 7.
Mediating Effect of Price

Mediator effect	Coefficients	T value	p-value
Price - Attitude	-0,036	0,513	,608
Purchase Intentions - Price	0,009	0,189	,850

dampened the positive relationship between attitude and purchase intention, as seen in Figure 4. However, it had no moderating effect on the relationship between negative attitude and purchase intention.

Thus, H7 (Uncertainty moderates the relationship between food choice motives and organic food attitude) was confirmed.

To test the mediating effect of price, the method proposed by Baron and Kenny (1986) was used. According to this method, three conditions should be met. First, the independent variable must affect the mediator variable. Second, there must be a significant relationship between the dependent variable and mediator variable. Third, the effect of the independent variable on the dependent variable must be less in the third equation than in the second. In other words, when the independent variable and the mediator variable are included in the analysis together, the effect of the independent variable on the dependent variable must be reduced or zero (Preacher and Andrew, 2004). In this study, there was no mediating effect of price on attitude and organic food purchase intention tested. The findings are shown in Table 7.

Discussion and Conclusions

This study examined the effect of organic food choice motives, and personal and social factors on purchasing intentions regarding organic food consumption. It also tested the moderating role of uncertainty and the mediating role of the price of the organic foods. The findings showed that consumers buy organic foods because they believe they are healthy, easy to prepare, easy to get, are reasonably priced, and help improve their mood. Thus, consumers think that organic food is beneficial for both their body and mind. Organic foods are easy to find and prepare while the price has no effect on the decision to choose organic foods. These findings support previous studies claiming that the price becomes less important once consumers start to buy organic food as their experience increases and organic food buying become a lifestyle (Krystallis and Chrysosoidis, 2005; Marian et al., 2014).

This study tested the role of subjective norms, environmental concern, consumption emotions, and self-monitoring. Subjective norms, self-monitoring, and positive emotions have no effect on holding an attitude towards organic foods, suggesting that social groups have no impact on consumer decisions regarding organic food consumption. That is, organic food consumption is not related to group-oriented decision-making processes and unrelated to conspicuous consumption. Instead, consumers want to buy organic food products to

satisfy their psychological and physical needs. In short, organic food oriented consumption is related to self-enhancement decisions rather than reference group-centered.

Another finding is that environmental concern and organic food buying are positively related. That is, consumers who are aware about and interested in environmental issues choose the organic foods more. Considering environmental concern from a wide perspective, Yadav (2016) argues that environmental concern is connected to altruistic human values. Individuals perform these behaviors of protecting the natural environment with little thought of benefits for themselves. Thus, choosing organic food products shows concern for others and the common welfare. This assumption is supported by our findings.

Regarding consumption emotions, negative emotions are associated with negative attitudes towards organic foods. Consumption emotions are an indicator of organic foods consumption (Richins, 1997; Phillips and Baumgartner, 2002). The findings in the present study confirm that uncertainty has a moderating effect. Specifically, if consumers believe that organic foods are fraudulent or worse than conventional foods then they have negative feelings like anger, fear and sadness about these products.

According to the literature, consumers do not have enough knowledge about organic food ingredients or farming conditions, which is the main reason why they lack confidence in organic food consumption. Our study showed that uncertainty also has a moderator effect on the relationship between a positive attitude towards organic foods and purchase intentions. That is, if the consumer has some doubts about organic food ingredients or lacks information about them then their purchase intention decreases despite their positive attitudes towards organic foods.

The main contribution of this study is that several authors have claimed that consumers' food choices are related to many factors – not just food-based issues. Social factors or ethical properties, such as environmental protection, affect organic food choosing behavior (Chen, 2007; Schleenbecker and Hamm, 2013; Lee et al., 2015). This claim is confirmed by the findings of this study, which showed that consumers choose organic foods according to both food-based issues and personal factors. This indicates that organic food consumption should be evaluated from a wider perspective as purchase intentions are both food-related (health, natural content, convenience, familiarity) and personal (mood, health, convenience, and consumption emotions). The following section discusses some implications for both academicians and business.

Implications

While a healthy life has always been important for human beings, consumer tendencies are currently becoming more health consciousness so that consumers now want to more natural foods. At the very least, they do not want to eat foods that include growth hormones,

antibiotics or pesticides. Yet, the matter is not just about consuming more natural and healthier but also increasing the quality of life through eating natural healthy foods. We therefore have several recommendations for companies to emphasize organic consumption. The motives driving the consumer towards organic food consumption are health consciousness and supporting an inner world with natural foods. Moreover, they want buying and preparing organic foods to be easy. Thus, companies who want to reach organic food consumers should emphasize both health issues and mood issues. Consumers feel good when they consume organic foods because they believe that feeding the body naturally also feeds the soul. Messages that point out how organic foods can produce good feelings, physically and mentally, can attract consumers.

Consumers' organic food buying behavior does not relate just to food-based issues. It is the same as other buying behaviors. In that, in their decision-making process, consumers reflect all attributes of being a consumer. Thus, companies should evaluate this process in terms of all relevant factors, including social, personal or situational ones. As this study demonstrated, emotions influence consumers when they are deciding to buy organic foods. That is, consumers are not just following utilitarian expectations. Rather, they are also expecting hedonic value from their organic food consumption decisions. Consequently, developing marketing strategies and communicating with consumers as just rational problem solvers is incorrect. According to these findings, consumers decide with their emotions, and are also affected by their social group. If other people in their social environment buy organic food consistently, this behavior will spread to them through modeling. Thus, it would be advantageous for companies to spread a positive attitude towards organic foods behavior through the help of social and reference groups.

While the price of organic foods is always important for consumers, their high cost is already well known. As a result, conscious organic food consumers pay attention to other issues than price, such as environmental protection and sustainable agriculture. Nevertheless, they also do not want to pay extreme prices so a premium of 10-20% may be affordable. The sensory appeal of organic foods is important for the consumer too. They want natural, hormone or pesticide-free foods, but at the same time the taste, smell and look of organic foods are also critical for consumers. Companies should therefore be aware of the importance of the consumers' sensory perceptions.

Convenience is another motivating factor for consumers. If they can buy and prepare organic foods easily then they consume more. Consequently, although intensive distribution is the costliest distribution strategy, selective or intensive distribution may be preferable given the demand for organic foods in the market and of the durability of organic food. Consumers can also lack knowledge about how to prepare or cook organic foods so information on the packages, programs or ads could support consumers.

Limitations

The major limitations of this study are that it did not focus on any specific product category and had a relatively small sample size. The aim was to test which motives drive the consumer to buy organic foods, and the effect of social and personal factors on buying decisions. The reason for the small sample size is that the study was conducted with just organic food consumers. This means that the results cannot be applied to specific product categories or generalized to all organic food consumers.

Future Research

The aim of this study was to investigate the effects of social, personal and food-related factors on organic food buying behavior, given that consumers' buying decisions are affected by many different factors. Although organic food consumption is regarded as a health-related or environment-focused decision, like other buying decisions, hedonic and utilitarian benefits, and several social-personal factors may play a role. Thus, future research should also investigate the effects of consumer personality, lifestyle and social-cultural factors.

This study focused on organic food buyers so future studies can also investigate the attitudes and decision making of consumers who do not buy organic foods in order to understand the underlying reasons why.

The all kind of organic foods indicated in this study regardless their category like vegetable, meat, milk etc.. Finally, regarding consumer motives and attitudes for different organic food categories, future research can consider one specific category of organic foods and perhaps compare this to other organic food categories in terms of motives or buying intentions.

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Appendix A

Kolmogorov-Smirnov Test

Variables	Test statistics	P
Health	1.525	.019
Mood	1,038	.231
Convenience	1,166	.132
Sensory Appeal	1,168	.131
Natural Context	2.222	.000
Weight control	2.163	.000
Familiarity	1.419	.036
Subjective norms	2.025	.001
Uncertainty	1.130	.156
Attitude	1.1969	.001
Environmental Concern	2.129	.000
Purchase intention	2.392	.000
Self-Monitoring	0.963	.312

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