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*Research Article*

# A Behavioral Model for Buyers of Organic Products (Components, Antecedents and Consequences)

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## Abstract

Within the food market, it would be essential to study the factors affecting the behavior and desire of consumers to buy organic food products. Providing organic food has many health and environmental benefits, nevertheless, the demand for inorganic food compared to organic is growing. The main objective of this study is to provide a behavioral model on buyers of organic products in terms of components, antecedents and consequences. This study has applied and mixed components. In the qualitative part, the Grounded theory is used and in the quantitative part, the technique of structural equations. Data were collected through semi-structured interviews and a completed questionnaire, where ten buyers were interviewed. Then, based on the systematic approach suggested by Strauss and Corbin on three main steps of open, axial and selective coding, the behavioral model of the buyers of organic products was presented in terms of components, antecedents and consequences. Finally, the validity of the developed theory was examined and hypotheses were developed. In the quantitative part, the results show that among the causal conditions, the price of organic products, trust, perceived health, advertising, supply of organic products and perceived value have a significant effect on buyers' behavior, while the characteristics of organic products and organic knowledge have no significant effect on buyer behavior. It was also found that buyers' behavior has a significant effect on increasing the share of the organic market and, consequently, on the environmental consequences, the growth of organic markets and the promotion of public health. Finally, it was conjectured via observation that social norms, systematic trust, individual norms, and environmental concerns would increase the share of the organic market further.

**Keywords**: Green Marketing, Buyer Behavior Model, Organic Products, Grounded Theory, Structural Equations

## Introduction

Researchers have found that food products can be dangerous due to contamination and that they can lead to many diseases. Thus, the use of organic products is encouraged, which can be better for both consumers and the environment (Misra and Singh, 2016).

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Increasing public awareness of the harms of consuming conventional products that use chemical fertilizers and pesticides during their production, on one hand, and the benefits of using organic farming on health and the environment, on the other, has increased the demand for organic products (Hashemi and Fatahi Ardakani, 2016).

On one hand, social and demographic variables and on the other, consumer values and attitudes and their knowledge and awareness affect each other (Barimnejad, 2014). The importance and necessity of addressing the behavior of buyers of organic products becomes clear when one considers that the market for green and organic products in the world is expanding (Al-Swide et al., 2014). This in particular shows excellent performance in the field of production and sales (Liang, 2016).

According to a 2016 survey, Asian consumers now prefer organic products (Ghazali et al., 2017). In the last decade, its production and sales volume has been at an annual growth rate of more than 10% (Willer and Yussefi, 2016). Cazacu et al. (2014) showed that knowledge, nutrition benefits, attitudes, and social contacts affect behavioral intention. Arvola et al. (2008) also stated that ethical norms play an important role in people's intentions to consume these products.
Suprapto and Wijaya showed that the attitude towards organic food directly affects the intention to buy them. Pino et al. (2012) acknowledge that ethical motivation affects the purchase intentions of regular consumers, while food safety and health-related concerns affect the purchase intentions of occasional consumers.

Sadati and Mohammadi (2012) showed that consumers' intentions to use organic food are influenced by three key factors: attitude, subjective norm and perceived behavior control. Yazdanpanah et al. (2015) has shown that perceived benefits, general health orientation regarding pesticides and organic foods, self-efficacy and perceived barriers have a significant impact on young adults' willingness to use organic food. Vassallo et al. (2009), in a study on willingness to use organic breads, showed that perceived benefits and barriers and health motivation are good predictors in willingness to use these products. Wier & Calverley (2002) also stated in their report that the health benefits of organic food are the main motivation for people to consume organic products. Milne et al. (2000) have shown that self-efficacy is an important factor that affects people's desire to consume organic products.

Consumers buy organic products because of their quality and health benefits. As a result, consumers' demand for organic products is the main incentive for ensuring the health condition of these products (Joly, 1991). Compared to other research, it showed that one third of consumers are willing to pay extra for organic products up to 100% (GrunrtS and Juhl, 1995).
Some researchers have considered the lack of timely and appropriate access to these products as an obstacle to the availability of this type of products (Akbari et al., 2008). 56% of consumers get information about organic products from TV, 47% from newspapers, 23% from the Internet, 16% from department stores, 10% from friends and acquaintances, and the remaining 5% from other communication media (Zhou and Chen, 2007).

Furthermore, there is no market in Iran for buying and selling organic agricultural products and to maintain a balanced price set for these products. The production of organic products by farmers has been accompanied by high price risk (Miremadi et al., 2012). Finally, it can be stated that the desire to buy products that have the least or no danger to society and nature; it has become an inner desire of conscious consumers.

Companies need to be able to model the behavior of buyers of organic products in different societies and in terms of cultural, social and economic factors in order for companies to respond to buyers' demands. In this way, they can predict the sales of organic products in the future.

Therefore, the research intends to formulate a behavioral model for buyers of organic products in rural communities (villages of Gilan province), urban communities (Tehran province). In fact, the main question that is answered in the research is: What is the behavioral model of buyers of organic products (components, antecedents and consequences)?

## Literature Review

It is very important to study the factors affecting the behavior and desire of consumers to buy organic food products (Shirkhodaei et al., 2016). Various studies on the purchase of organic food products provide a clear picture of the reasons for their purchase. Although it may differ in some areas, the main reasons are priority, health, product quality and concern for the environment and environmental degradation, respectively (Singh & Verma, 2017). Harper and Makatouni (2002) found that consumers have a positive attitude towards organic products. One of the reasons for buying organic products is mainly that these products are healthier. So far, many models of consumer behavior have been presented, the most important of which are the following models:

1- **Theory of Reasoned Action (TRA):** TRA was proposed by Ajzen and Fishbein (1967). This model can be used to develop market positioning and communication strategies for service delivery and product development. TRA predicts that one moves from the intention of acceptance to acceptance. Thus, in short, the theory of reasoned action is specific to behaviors that result from behavioral intention. Respectively, the intention to perform the behavior is due to the attitude about the behavior and the subjective and social norms in performing the behavior.

2- **Theory of Planned Behavior (**TPB**):** Ever since the theory of rational action was used in the social sciences, researchers have realized that this theory has several limitations. In 1991, Ajzen added a third element to the main theory called perceived behavioral control. By adding this element, the result was the same TPB in which the behavior of involuntarily controlled individuals was predicted (Ajzen, 2005).

**3- Decomposed Theory of Planned Behavior (DTPB):** Taylor and Todd (1995) show that the decomposed model has better descriptive power than the pure TPB model and the theory of model behavior. Taylor and Todd (1995) also emphasize that, based on innovation dissemination theory, attitudinal belief includes three salient features of an innovation that influence acceptance: comparative advantage, complexity, and compatibility.

4- **Technology Acceptance Model (TAM):** TAM was developed by Davis in 1986. This model justifies and predicts the acceptance of information systems by individuals (Yiu et al., 2007).

5- **The Consumer Behavior Model of Hawkins:** In Hawkins' consumer decision-making model, buyers do not follow the public decision-making sequence at all times. The process will change depending on the time available, the perceived risk, and the buyer engagement with one type of product (Heidarzadeh and Khosrozadeh, 2011).

6- **Consumer purchase decision process:** The consumer goes through five steps in the purchasing decision process: problem identification, information search, evaluation of alternative, purchase decision, and finally post-purchase behavior (Kotler et al., 2006).

Caleman et al. (2005) in a study, the main reasons for the acceptance of organic products by consumers were as follows: better quality of organic products (47%), health issues (30%), better taste of organic products (23%). Lampkin et al. (2006) in his studies on organic farming, he states that social networks and social learning influence the process of organic farming and in fact, organic farmers are an important source of information and knowledge for farmers in converting

to organic farming. Akgüngör et al. (2007) concluded that urban consumers are willing to pay 36% more for organic products.

Tagbata & Sirieix (2008) showed that half of consumers are sensitive to organic labels in their purchases. Arvola et al. (2008) show that ethical norms play an important role in people's intentions to consume these products. Lusk & Briggeman (2009) showed that on average, safety, nutritional value, taste and price were the most important factors for consumers, while values of fairness, traditional and origin were the least important. Smith and Paladino (2010) examined the effects of health consciousness, environmental concern, availability, quality, price consciousness, perceived control, and familiarity on organic attitude, organic purchase intentions, and organic purchase behavior. The results showed strong support for the relationship between knowledge, subjective norms, and environmental concerns about organic attitudes.

Aertsens et al et al. (2011) studied the effect of personal determinants on the consumption of organic products. According to this study, individual knowledge about the physical properties of organic products are the most important positive factors and higher product prices and the lack of availability are the most important negative factors. Lack of information and lack of awareness of the determinants of organic products is the main reason for not buying organic products of American consumers. Kim and Chung (2011) based on the findings of this survey, new consumer values have a direct positive effect on their attitudes and tendencies towards buying organic products and ultimately the purchase intention. Lapple & Rensburg (2011) concluded that early adopters were the youngest and they are more inclined to protect the environment and are stronger than the late adopters in information gathering and social learning. Suprapto & Wijaya (2012) studied model of consumer's buying intention towards organic food. The results showed that a healthy consumer lifestyle is a good predictor of attitudes towards organic food. Zsuzsa (2012) states that behavioral attitudes have a direct effect on buying intentions. Predicting buying intentions increases with subjective norms and almost with behavioral control. Kai et al. (2013) showed that environmental awareness, health consciousness, perceived expensiveness and the issuance of product labelling and certification affect the willingness to pay. Consumers also consider them to be very healthy, environmentally friendly organic products, however, these products are perceived relatively expensive.

Van Loo et al. (2013) reveal knowledge, attitudes, and the frequency of purchasing and consuming organic yogurt. Cazacu et al. (2014) showed product knowledge, nutritional benefits, attitudes and social contacts positively affect intention of residents. Thorsøe (2014) argued that trust in organics can be as two forms of trust 1) personal trust, directed at persons and 2) systemic trust, directed at abstract systems, like labelling and control schemes. Systemic trust, in particular the Danish labelling and control scheme, is important for consumer trust in organic product. Personal trust is also important to many consumers, and systemic trust is not left alone. Consumers buy organic products based on their expectations, which cannot be fully achieved through the food network.

Kim (2014) showed that a moderate hierarchical structure is applicable to the consumption of organic foods. Structural equation modeling analysis supported all of the hypotheses tested for relationships between the four structures (eg, attributes, consequences, values, and behavioral outcomes) except for the moderating role of preventive health care behavior and socially responsible behavior. Oyawole et al. (2015) showed that age does not affect the willingness to pay for organic vegetables; but higher levels of education and consumer awareness have an effect on willingness to pay, and an increase in income has no significant effect.

Seegebarth et al. (2016) show that there are significant differences in perceptions of value, especially functional and individual value, and suggested behavior toward organic food for US and German consumers. Wang and Huo (2016) showed that the variables of gender, level of education and monthly income have a significant positive effect on the willingness of consumers to pay for these products. In study of Misra and Singh (2016), the results emphasize that the intention to buy organic products is influenced by the customer's belief in the health and safety aspects of the product, trust, certification, information, availability and lifestyle. Hossain and Lim (2016) found that government support, perceived attitude, availability and awareness and knowledge have a positive relationship with consumer behavior. Health awareness, environmental concerns and prices were not significantly associated with consumer behavior towards organic foods. Liang (2016) showed that consumer attitudes towards labeling and certification institutions have a positive effect on food label trust. Singh and Verma (2017) showed that health consciousness, subjective norms, knowledge, price is effective on consumer attitudes to buy organic products.

Katirji (2017) states that students have a higher understanding of organic foods than conventional foods due to the fact that they are better for the environment. Consumers buy organic food based on perceived profit. Consumers buy organic food based on perceived profits. Ghazali et al. (2017) also concluded that perceived value is related to the consumer attitude of organic products. Also, knowledge and awareness about organic products leads to a more positive attitude towards repurchasing these products. Persaud and Schillo (2017) showed that the perceived value of organic products is related to the intention to buy. Therefore, the researcher tries to provide a behavioral model in terms of components, antecedents and consequences according to the theoretical foundations of the factors affecting the actual behavior of buyers of organic products.

## Methodology

This study is of applied form because it seeks to understand the behavior of buyers of organic products and attempts to provide reliable guidelines in terms of components, antecedents and consequences. On the other hand, due to the increase in knowledge resulting from the presentation of the native model and the study of the effects of effective variables in it, this research also has a developmental orientation.

The data and information contained in the present study were obtained via two different sources. First, data collected via literature, articles, and documents. Preliminary data were also obtained via interviews and questionnaires. Therefore, the present study falls into the field and library research categories. The research method of the present study is mixed-exploratory design-based and under the qualitative stage it is based on Grounded theory augmented with a data-localization approach. In the quantitative part of the study, the technique of structural equations has been used.

In the first step, a theory on the behavior of buyers of organic products was developed based on the qualitative data collected from the interviewees. Then, based on the process model and strong propositions obtained from the first step, research hypotheses were designed and quantitatively tested at the consumer level in Tehran and Gilan provinces. The executive algorithm of the research method is shown in Figure (1):

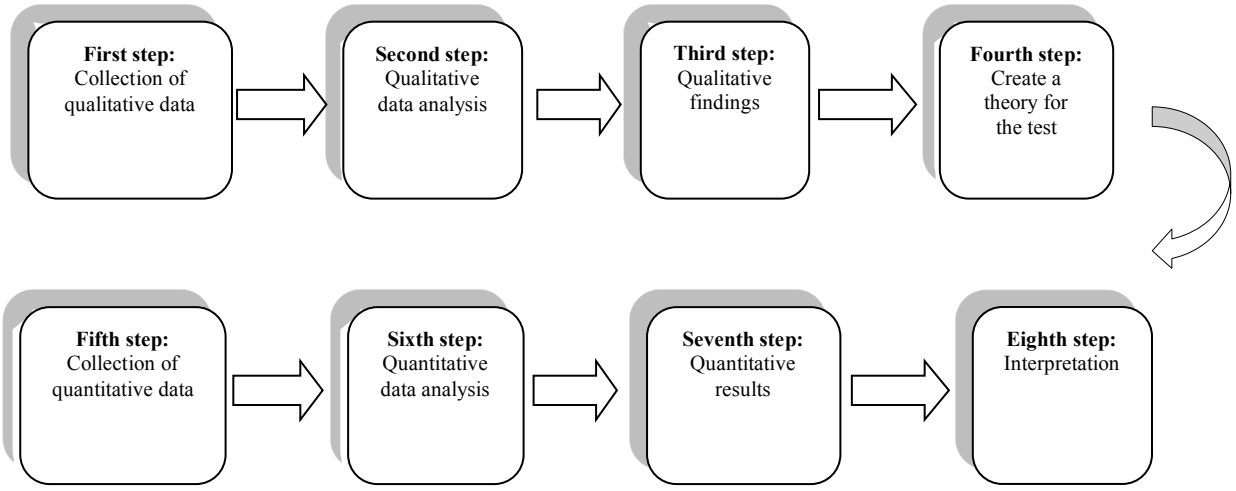


**Figure 1.** Research method implementation algorithm

The statistical population used in the present study was selected among the people using a series of constraints. This type of statistical cannot be generalize to a large population, though. The constraints of the selected statistical population in the present study are experts, university professors and researchers in the field of green marketing and organic, final consumers of organic products, resident in Tehran and Gilan (native).

The number of participants in the present study has not been determined in advance. In the qualitative part, theoretical sampling has been used. Theoretical sampling is a type of purposeful sampling that helps the researcher to create or discover a theory or concepts whose theoretical connection with the evolving theory has been proven. Theoretical sampling continued until the categories were saturated and Ten people were interviewed. The selected individuals are selected from different groups (gender, income, education, type of job, etc.).

Conventional non-probability method has been used for quantitative sampling, due to the size of the statistical population. In order to determine the sample size, first a pre-test was performed on 30 consumers to determine the standard deviation of the sample. The Cochran sampling formula for determining the sample size in a limited population is Equation (1). According to the result of the relationship, 392 people have been selected as a sample.

$$n = \frac{(Z\alpha_{/2})^2 * s^2}{\varepsilon^2} = \frac{1.96^2 * 0.5051^2}{0.05^2} = 392.11 \cong 392$$

n= sample size; $\mathbf{Z}^{\mathbf{2}}_{\frac{\boldsymbol{\alpha}}{\mathbf{2}}}$= The size of the variable under the standard normal distribution with a level of uncertainty of 0.05, $\mathbf{e}^{\mathbf{2}}$= error; rate = 0.0025; $S^2_x$= Sample variance

## Findings

Under a Grounded theory, we emphasize the use of data analysis steps consisting of open, axial, and selective coding, and the development of a logical model with a visual description of the generated theory. Under this definition, there will be three stages of coding (Creswell and Clark, 2007).

**Step 1: Open Coding**

In this type of coding, events, actions, and interactions are compared to each other to examine similarities and differences, as well as to label concepts. During open coding, data are pre-processed, analyzed, compared, attached, and conceptualized.

**Step 2: Axial coding**

The purpose of this step is to establish the relationship between the concepts generated in the open coding step. The basis of the communication process in axial coding is to focus and define a category as the central category and then place other sub-categories of the same sub-category under the main category.

The basis of the communication process in axial coding is to focus and define a category as the central category and then place other sub-categories of the same category below the main category. Then, by examining the concepts and placing close and homogeneous concepts around a class, its central category is extracted and can be seen in Table (1).

The extracted categories according to Strauss and Corbin model should be placed in 4 sections: conditional (causal, contextual, intervening), main category, strategies (interactions) and consequences.

Conditional categories:
Categories are conditions that affect the main parameters or design factors and lead to the occurrence or spread of the phenomenon of interest in question. Causal conditions in data are often expressed in terms such as when, while, since, because and due to.

Interfering conditions are structural conditions that belong to a phenomenon and affect strategies of action and reaction. They facilitate or limit strategies within a particular context.

Contextual conditions are those that already prevail and also affect strategies. These conditions represent a set of specific factors in which action and reaction strategies take place.
Strategies (interactions): Strategies are based on actions and reactions to control, manage and deal with the phenomenon. Strategies are purposeful, and done for a reason.

Consequences: This roots from adopted strategies. Consequences are the results of actions and reactions. Consequences are not always predictable and are not necessarily what people intended.

**Step 3: Selective coding**

In the following, it is shown that the major categories are related to each other in the form of a paradigm model (contextual model) around the core category. In fact, the drawn model formally describes the category, analyzes and explains it. This process is called a combine-and-refine structure. The model can be drawn as a model or formal diagram, but in a semantic and conceptual form.

**Table 1.** Final extracted categories

| Final category | Concepts |
|---|---|
| Prices of organic products | Price awareness |
| | Weight / share of organic product in household basket |
| | The purchasing power of people in the society |
| | Balanced price |
| | High prices of organic products |
| Personal trust | Impurity and fraud |
| | Perceived risk |
| | Store / brand credibility |
| Systematic trust | Trust in national media advertising |
| | Organic Labeling and certification |
| Attributions of organic products | Taste |
| | Preservatives |
| | Suitable packaging |
| Perceived health | Prevention is better than cure |
| | Health motivations |
| | physical health |
| | Awareness of the impact / consequences of consuming organic products |
| | Observance of hygienic principles |
| | Life style |
| | Pay attention to personal health |
| Organic Knowledge | Information about organic products |
| | Toxins and chemical fertilizers |
| Advertising | Efficient TV commercials |
| | Advice from others (word of mouth) |
| | Efficient public information structure |
| | Social media |
| | Effective TV advertising |
| Supply of organic products | Availability of organic products |
| | Frequency of supply of organic products |
| | Lack of specific markets for supply |
| | Balanced distribution of organic products |
| | Local supermarkets |
| | Low variety of organic products |
| Perceived necessity | Perceived effectiveness |
| | Perceived psychological benefit |
| | Perceived quality |
| | Perceived benefit |
| | Perceived usefulness |
| | Necessity of use |
| | Feeling committed to family members |
| Social norms | Public training courses |
| | Government support |
| | Public beliefs |
| | Dominant paradigm in society |
| | society culture |
| Environmental concerns | Environmental health |
| | Current state of the environment |
| Individual norms | Human naturalism |
| | The individual's subjective norm and way of thinking |
| | Perceived social responsibility |
| | Buyers' preferences |
| Buyer behavior | Past experiences of buying organic products |
| | Suggesting to others |
| | Increasing the share of organic products in the household basket |
| | Buying Organic Products (Actual Behavior) |
| | Evaluation of organic products |
| | Desire to buy organic products |
| Increasing organic market share | Helping consumers to make decision |
| | Green marketing strategy |
| | Improving the sustainable performance of enterprises |
| Consequences of consuming organic products | Environmental consequences |
| | The growth of organic markets |
| | Promoting public health |

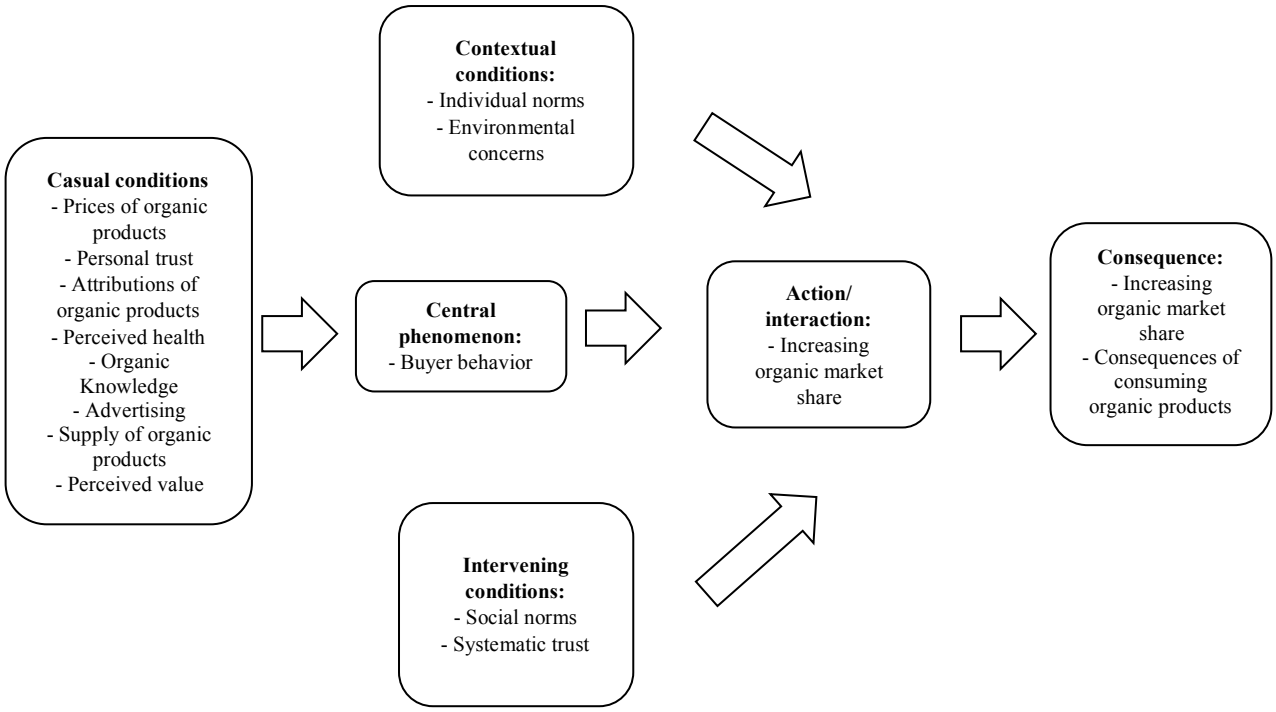


**Fig. 2.** Paradigm model

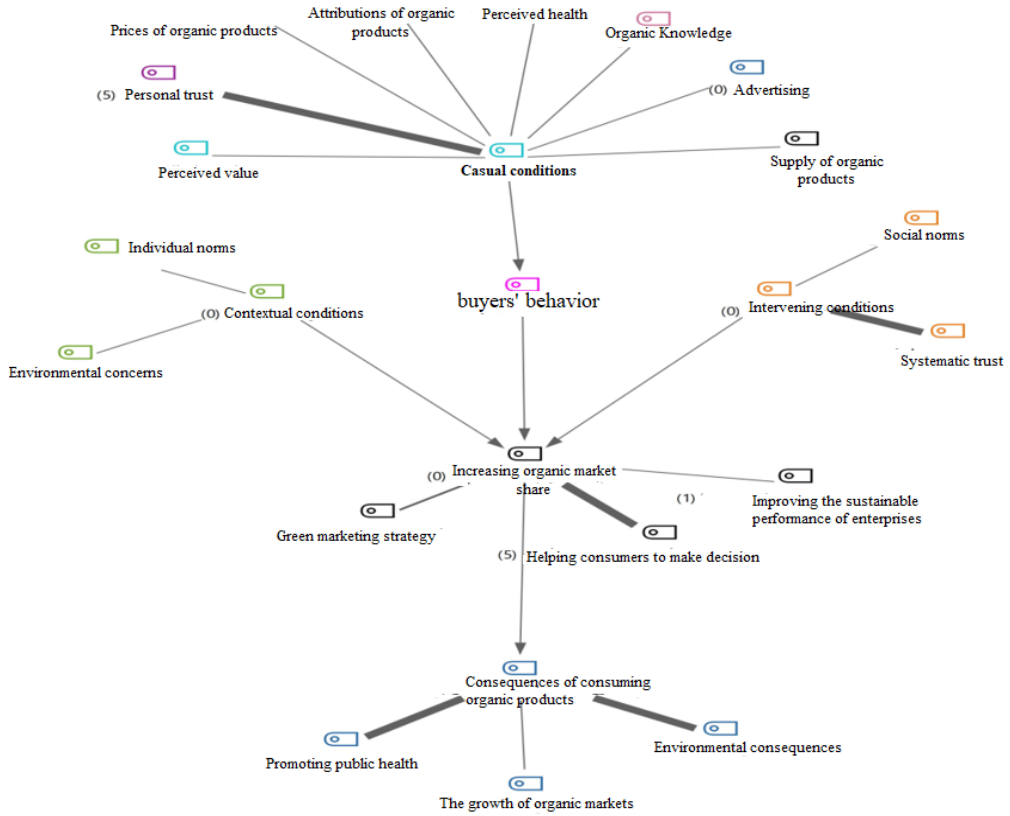


**Figure 3.** The final model

*Validation of theory*

After formulating a theory, grounded theorists validate the process by comparing it to existing processes found in the state of the art (Danaeifard and Emami, 2007). For this purpose, after presenting the final model, the theoretical foundations for each component were examined. Numerous studies have been conducted for most of the concepts extracted from the interviews as well as in relation to all categories which indicates the validity of the categories. Figure 4 shows the number of studies related to the categories. In all studies, buyers' behavior (purchase intention and actual behavior) is under the dependent variable and other variables are called independent variables. Individual norms have had the most repetition in previous studies. Therefore, it has strong theoretical foundations. The lowest weight is related to the perceived necessity. Therefore, this category was removed.

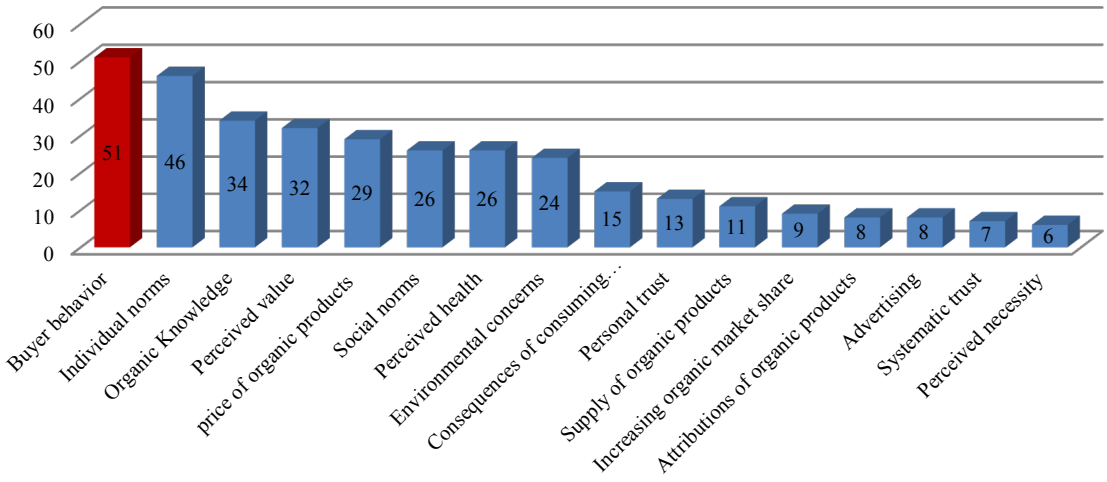


**Figure 4.** Number of researches related to each criterion

*Formulation of hypotheses*

According to the proposed model, 11 direct hypotheses can be examined. Which will be tested in the quantitative part with the structural equation technique. These hypotheses are:
Hypothesis 1: The price of organic products has a significant effect on buyers' behavior.
Hypothesis 2: Personal trust has a significant effect on buyers' behavior.
Hypothesis 3: The characteristics of organic products have a significant effect on buyers' behavior.
Hypothesis 4: Perceived health has a significant effect on buyers' behavior.
Hypothesis 5: Organic knowledge has a significant effect on buyers' behavior.
Hypothesis 6: Advertising has a significant effect on buyers' behavior.
Hypothesis 7: The supply of organic products has a significant effect on buyers' behavior.
Hypothesis 8: Perceived value has a significant effect on buyers' behavior.
Hypothesis 9: Social norms and systematic trust have a significant effect on increasing organic market share.
Hypothesis 10: Individual norms and environmental concerns have a significant effect on increasing organic market share.
Hypothesis 11: Increasing organic market share has a significant effect on the consequences of buying organic products.

*Modeling and responding to research hypotheses*

In general, the structural equation model using LISREL software has been used to test research hypotheses. For this, first the data distribution normality test was performed, then the confirmatory factor analysis for the questionnaires was assessed. Finally, the model related to research hypotheses has been implemented.

*Normality Test of the data distribution*

Kolmogorov-Smirnov (KS) test was used to evaluate the normality of the distribution of research variables. According to Table (2), the hypothesis of normality of data distribution at the level of α= 5% error probability was tested by KS technique and according to the table, the null hypothesis based on the normality of data distribution is accepted, in other words, the distribution of research data is normal.

**Table 2.** Normality Test of data distribution

| | Value of Kolmogorov–Smirnov | Sig | Result |
|---|---|---|---|
| Price of organic products | 0.621 | 0.836 | Normal distribution |
| Personal trust | 0.587 | 0.881 | Normal distribution |
| Characteristics of organic products | 0.742 | 0.641 | Normal distribution |
| Perceived health | 1.124 | 0.160 | Normal distribution |
| Organic Knowledge | 0.878 | 0.424 | Normal distribution |
| Advertising | 0.815 | 0.520 | Normal distribution |
| Supply of organic products | 0.561 | 0.911 | Normal distribution |
| Perceived value | 0.618 | 0.840 | Normal distribution |
| Systematic trust | 0.666 | 0.767 | Normal distribution |
| Social norms | 0.785 | 0.568 | Normal distribution |
| Individual norms | 0.577 | 0.893 | Normal distribution |
| Environmental concerns | 0.608 | 0.853 | Normal distribution |
| Buyer behavior | 0.928 | 0.356 | Normal distribution |
| Increasing organic market share | 0.557 | 0.916 | Normal distribution |
| Consequences of consuming organic products | 0.805 | 0.537 | Normal distribution |

*Factor Loading*

In this study, a questionnaire was used to extract the data and to do conformity factor analysis to validate the overall structure of the research questions. For conformity factor analysis and modeling of structural equations, standard-factor-loading and t-statistics have been calculated and the governing rules were expressed as follows:

The strength of the relationship between the factor (Latent variable) and the observed variable is indicated by the factor loading. In one-step factor analysis, the relationship between the variable and the questions is called the factor loading. The numerical factor load is between zero and one. If the factor loading is less than 0.3, a weak relationship is considered and the question is removed. Due to the fact that the factor loading of all questions is more than 0.5, so the validity of all questions is confirmed and the question is not deleted.

**Table 3.** Factor loading of the questionnaire questions

| Variable | Cronbach's alpha | KMO | Items | Factor loading |
|---|---|---|---|---|
| Price of organic products | 0.906 | 0.851 | PRC1 | 0.80 |
| | | | PRC2 | 0.74 |
| | | | PRC3 | 0.85 |
| | | | PRC4 | 0.83 |
| | | | PRC5 | 0.87 |
| Personal trust | 0.917 | 0.842 | TRS1 | 0.78 |
| | | | TRS2 | 0.72 |
| | | | TRS3 | 0.84 |
| Attributions of organic products | 0.915 | 0.852 | FRT1 | 0.62 |
| | | | FRT2 | 0.52 |
| | | | FRT3 | 0.93 |
| Perceived health | 0.906 | 0.858 | HLT1 | 0.84 |
| | | | HLT2 | 0.74 |
| | | | HLT3 | 0.85 |
| | | | HLT4 | 0.86 |
| | | | HLT5 | 0.74 |
| Organic Knowledge | 0.822 | 0.801 | KNW1 | 0.66 |
| | | | KNW2 | 0.71 |
| | | | KNW3 | 0.69 |
| Advertising | 0.882 | 0.709 | ADV1 | 0.77 |
| | | | ADV2 | 0.80 |
| | | | ADV3 | 0.79 |
| | | | ADV4 | 0.87 |
| Supply of organic products | 0.766 | 0.786 | SUP1 | 0.79 |
| | | | SUP2 | 0.80 |
| | | | SUP3 | 0.74 |
| | | | SUP4 | 0.85 |
| | | | SUP5 | 0.83 |
| | | | SUP6 | 0.81 |
| Perceived value | 0.959 | 0.876 | VLU1 | 0.95 |
| | | | VLU2 | 0.95 |
| | | | VLU3 | 0.80 |
| | | | VLU4 | 0.74 |
| | | | VLU5 | 0.84 |
| | | | VLU6 | 0.83 |
| | | | VLU7 | 0.77 |
| Systematic trust | 0.912 | 0.861 | STR1 | 0.94 |
| | | | STR2 | 0.93 |
| Social norms | 0.774 | 0.777 | SN1 | 0.92 |
| | | | SN2 | 0.94 |
| | | | SN3 | 0.94 |
| | | | SN4 | 0.94 |
| Individual norms | 0.828 | 0.703 | IN1 | 0.86 |
| | | | IN2 | 0.52 |
| | | | IN3 | 0.57 |
| | | | IN4 | 0.89 |
| Environmental concerns | 0.902 | 0.745 | WOR1 | 0.56 |
| | | | WOR2 | 0.58 |
| | | | WOR3 | 0.62 |
| Buyer behavior | 0.763 | 0.760 | BHV1 | 0.84 |
| | | | BHV2 | 0.68 |
| | | | BHV3 | 0.66 |
| | | | BHV4 | 0.72 |
| | | | BHV5 | 0.80 |
| | | | BHV6 | 0.84 |
| Increasing organic market share | 0.796 | 0.901 | MS1 | 0.74 |
| | | | MS2 | 0.81 |
| | | | MS3 | 0.78 |
| Consequences of consuming organic products | 0.846 | 0.826 | CNS1 | 0.86 |
| | | | CNS2 | 0.77 |
| | | | CNS3 | 0.78 |

*Model Estimation*

The behavioral model of buyers of organic products is estimated using the structural equation technique and LISREL software. The model was estimated via two modes of standard (path analysis) and significance (t-value). Eleven hypotheses were tested altogether. The results are described in Figure (5). As can be seen from Figure (4), all the hypotheses have been confirmed and only two hypotheses, namely the effectiveness of attributions of organic products and organic knowledge, have been rejected. It was also found that among the effective factors, the price of organic products (-0.73) had the most impact and the perceived value (0.17) had the least impact.

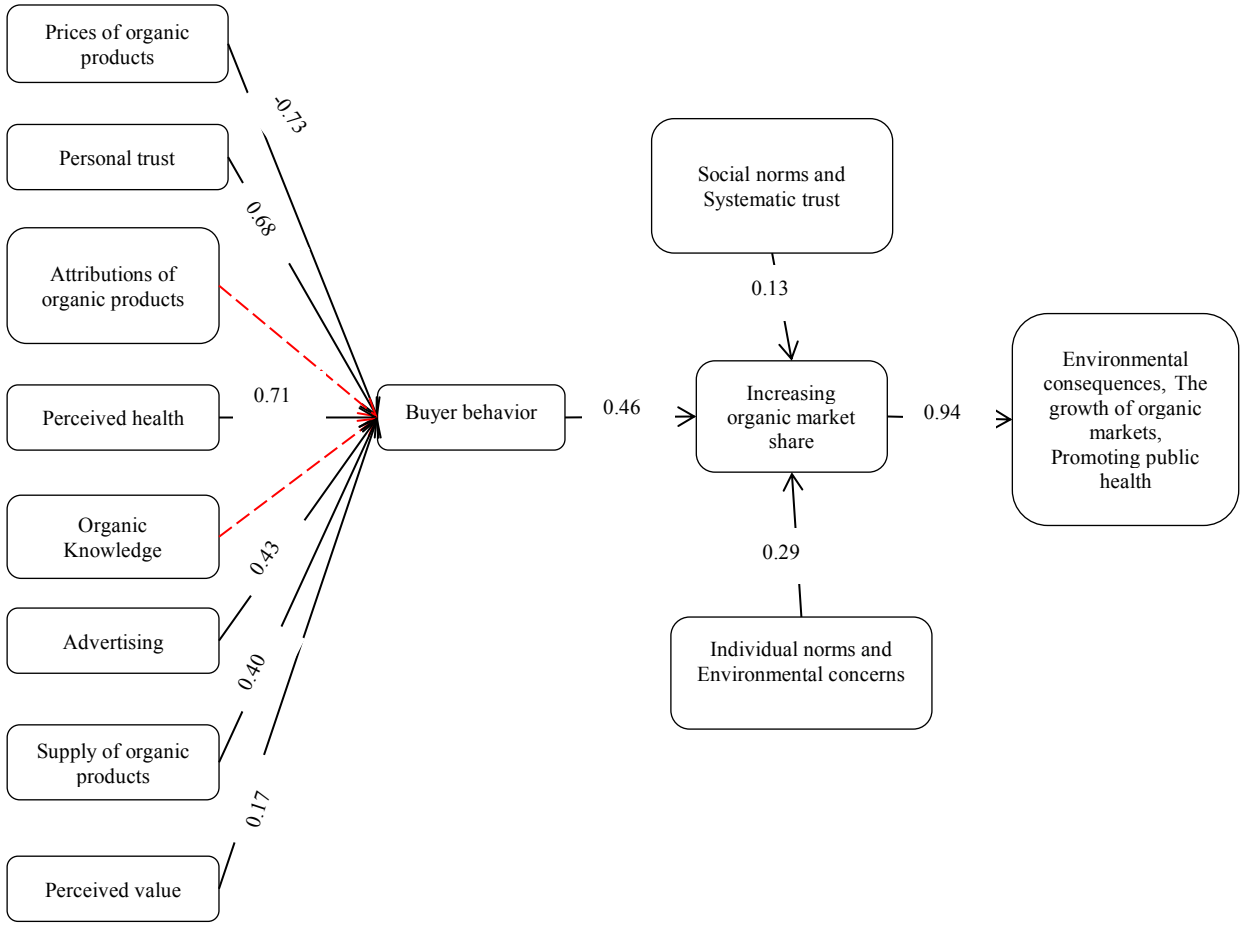


**Figure 5.** Model estimation

## Conclusions and Recommendations

The overall objective of this study is to simulate the behavior of buyers of organic products in different societies subjected to different cultures, and social and economic factors. Therefore, using a mixed research method, first the behavioral model of buyers of organic products was explained and then the relationships between model variables were estimated.

The results in the qualitative section show that based on the Strauss and Corbin paradigm model, the price of organic products, personal trust, the attributions of organic products, perceived health, organic knowledge, advertising, supply of organic products and perceived value should be considered as causal conditions. Buyer behavior remains a central category in this realm.

An Increase in the organic market share should be sought. In this market, individual norms and environmental concerns are referred to as contextual conditions. Social norms and systematic trust are effective as the conditions involved and ultimately environmental consequences, the growth of organic markets and the promotion of public health are considered as the consequences of the great influence in the conceptual model.

The results obtained via quantitative terms have shown that among the effective factors, the price of organic products, trust, perceived health, advertising, supply of organic products and perceived value have a significant effect on buyers' behavior, while the attributions of organic products and knowledge about the organic products would have less of an effect on buyers' behavior.

It was also found that buyers' behavior has a significant effect on increasing the share of the organic market and, consequently, on the environmental consequences, the growth of organic markets and the promotion of public health.

Finally, it was observed that social norms and systemic trust and individual norms and environmental concerns also increase the share of the organic market.

According to this study, we can suggest the active companies in the production of organic products to model the behavior of their customers according to the specific attributions of their products to be able to have a clearer forecast of market fluctuations of their organic products. Therefore, it is necessary for the research and development team of companies to conduct extensive need assessments on their consumers in this realm.

This study also suggests that companies producing organic products have a great role in developing and implementing environmentally friendly strategies and correct the large gap that is felt in educating and educating the public. It can, therefore, interact and collaborate with Non-governmental organizations (NGOs) to influence consumers' attitudes, mental norms, and perceived behavioral control. By re-assuring consumers that the company's products are harmful neither to the environment nor to the nature, can leverage and ensure the profitability of the company. It is also suggested that by using the components of social responsibility, they help to grow organic markets and promote public health. Other research suggestions include: avoid using preservatives, promote recyclable packaging, inform buyers about the benefits of using organic products, practice proper distribution of the organic products, and facilitate access to products. Supporting the food and pharmaceutical industries can be effective in building people's trust, as well as in gaining governmental support for the producers of these products that can be paved by granting low-interest loans, tax reliefs, and/or subsidies.

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