

Provide computational and impactful models on the development of the organic food market based on environmental factors

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Abstract

One of the industries that has played an undisputed role in the economic cycle in recent years, both in economic issues and profitability and in the health sector, is the organic products industry. This study aims to identify the dimensions and components of the two categories of characteristics. Demographic and environmental factors affecting the development of the organic food market were conducted in the form of a conceptual model. The method of the present study is descriptive-analytical and of a combined type which includes both qualitative and quantitative methods. The research method in the qualitative stage was content analysis and in the quantitative part was descriptive and survey research. The statistical population in the qualitative stage were experts, professors as well as experts in the field of organic production. In the qualitative sampling method with interview tools, we continued to collect information until we reached saturation point. The tool used the interview was semi-structured. The statistical population in the quantitative part is unlimited, which includes all consumers of organic products in the city of Mashhad and 384 people were selected as a sample by available sampling method. The data collection tool was a researcher-made quantitative part of the questionnaire. To analyze the data of this research in the qualitative stage, Max Kyoda software and in the quantitative part to determine the effect and fit of the model in the quantitative part, the structural equation modeling method was used. In the end, seven moles were obtained,

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which included the characteristics of households, urbanization, political, cultural, economic, social and competing factors.

Keywords: environmental factors, demographics, organic food products, market development.

1. Introduction

An organic product is a product that is produced without the use of chemicals, pesticides, food additives, and flavorings or "aromatic" compounds. In fact, the purpose of this system is the production of organic products, preservation, resources, and stability, production factors on the one hand and providing health and food security for consumers on the other hand [18].

The organic food market is one of the fastest growing sectors in developed countries around the world, especially in the European Union [26]. Today, the organic food industry is one of the most dynamic developing industries in the world. By the end of 2011, the global market turnover was more than 60\$ billion [34]. High consumption of organic food may play an important role in life satisfaction of participants over 45 years of age through thought-provoking approaches [45]. However, other studies have shown that younger consumers (under 45) are more likely to buy organic products than older consumers. In the past, the production of organic food was more popular in developed countries, but this concept is also accepted in developing countries. About one-third of environmentally managed land is located in developing countries [51].

In a 2013 study of power, farmers' knowledge, behavior, and attitudes, Power et al. Found that organic farmers had better environmental attitudes than farmers who grew conventional crops, and that they knew more about the problems and the ratio. They have a positive attitude towards the environment [44]. On the other hand, because organic foods are more nutritious, healthier, more natural, friendlier than conventional foods, consumers have changed their attitude towards organic foods and tend to pay more for products. Are organic [46]. Today, the issue of environmental protection, safety and food hygiene is one of the most important human challenges and the production of bio-agricultural products is one of its new strategies. The characteristics of the buyers of these foods, their patterns, habits and food interests should be examined. In order to understand the potentials of organic agriculture, it is very important to know how consumers recount the issues of food production system and its quality and health Mafi et al. [24].

Consumption of organic food is related to a lifestyle that includes pro-environmental, vegetarian, or medical options. [54] found that health is the most important motivation to buy organic products among both regular consumers and occasional consumers of organic foods.

In Italy, Nellie and Millie found that certain types of consumers, such as those who have experienced a serious illness (cancer, MS) or young mothers or children, are more interested in organic products and buy more regularly and more than other consumers [29]. Most studies show that attention to health plays a major role in consumer preferences for organic food [50]. It also promotes health as an important motivator for eating organic food Have stated [45].

The main reasons for buying organic food are the health benefits of organic products, food safety, quality and taste [26]. One of the most important reasons for buyers to buy organic products is to pay attention to general health by receiving the maximum necessary nutrients and the minimum amount of synthetic additives, food safety against animal diseases, risks from consuming genetically modified substances, residual toxins Chemical as well as ethical issues and attention to the environment [4].

Achieving healthy food in order to achieve a dynamic life has given special importance to the quality of food products. Now after facing the environmental, social and economic effects of industrial agriculture; Sustainable and healthy food production seems more vital than ever. In developed coun-

tries, special organizations and policies have been formed for food production. These organizations have chosen organic agriculture as a solution to the problems of industrial agriculture. According to the definition of the International Federation of Organic Agriculture Movement, organic agriculture is an agricultural system in which the biological, social, economic, sustainable production of food, clothing, wood products, etc. are improved. Also in this system, soil fertility is considered as successful production. In organic agriculture, using the natural properties of plants, livestock and the environment; The quality of the agricultural system and the environment is maintained and improved.

One of the main and influential factors in agricultural production is consumer demand. Developed countries by creating awareness and knowledge of health, hygiene and environmental issues; They have provided the ground for increasing consumer demand. Experts believe that the lack of awareness of people about organic products and the fact that these products are more expensive than non-organic products as factors affecting attitudes is one of the most important reasons for the community's lack of acceptance of organic products in agriculture and livestock products. Studies in this field; General characteristics, knowledge of organic products, environmental concerns, health awareness, taste and motivation are effective factors in the attitude of consumption of organic products [40] and [42].

In an increasingly competitive business environment, customers need more information about products, access to more products, product alternatives, and therefore higher expectations than ever before. The end result for marketers and companies is to differentiate products so that their products are seen as commodities. To meet the growing demand of customers, companies and marketers have increased the branding of their products in order to be unique from their competitors.

According to market research projects carried out by various authors, the main motivations for buying organic products are related to: taste, health, environmental characteristics, environmental protection and animal protection. On the other hand, organic products in many shops in They are not available, which is very expensive and potential buyers are unaware of their value or doubt their reliability. In fact, price is a barrier to buying these products. Even 50 to 60 percent. This problem is due to the average breadth of EU consumer awareness, so consumers should be strongly stimulated by providing a variety of information and more information. Therefore, the challenge to strengthen environmentally friendly agriculture is due to the extensive communication, rigid control system and reliable market research, which are the main tasks of the policy to support the production of organic products. The buyer must be aware of all benefits and laws. And the task of communicating this concept lies not only with government officials and major operators, but also with all stakeholders involved in the distribution of organic products [33].

High prices for organic products have been a major barrier for consumers [9]. However, studies have shown that consumers tend to pay more for organic products [49]. Because organic shoppers have unique demographic characteristics [7] and play an important role in their purchasing behaviors on the extent to which they participate in organic food, although the mass media has been widely discussed in consumer behavior, But its role in organic products has not been explored, even if organic products are a popular topic. The media has led to an impact on consumer perception and thus increased consumer demand for organic products. Therefore, when making predictions about organic products, consumer participation and mass media should be considered [20].

Many studies have shown that consumers who buy organic products have different beliefs and values from buyers of traditional products [21]. Organic buyers value their quality of life more than traditional buyers, which includes orientations. It becomes another value (ie, selfish, altruistic), [9, 21]. Also, previous findings show that consumer knowledge about organic products plays a vital role in consumer purchasing decisions [1, 53]. Previous studies have shown that lack of awareness

And there is a definite understanding of certifications and what the term organic actually implies [16, 28, 35]. For example, Midmore et al. [28] found that Customer knowledge about how to produce organic products is also very limited for consumers. Lack of knowledge is one of the main barriers for consumers to buy organic food [1]. Apart from lack of knowledge about Organic products The main barriers to buying organic products are: price tag, lack of access to organic food, doubt about organic certification, insufficient marketing, satisfaction with current food sources and sensory deficits.

Because organic buyers have unique demographic characteristics [7] and play an important role in their purchasing behaviors on the amount of their participation in organic food, but the role of demographic and environmental factors in the field of organic products is examined. Not located. Finally, due to the importance of the literature on the subject, various studies have been conducted that show the need for research. In this study, a field survey on cucumber producers in Alborz province as a statistical population has been used to collect the required information. Due to the limited number of cucumber producers in the statistical population, which includes only 24 units, so in this study, the census method has been used and all cucumber producers have been studied as a sample.

The data collection tool was a questionnaire that was completed by face-to-face interview in 1399. After collecting statistics and information, the information was analyzed using descriptive statistics. The dependent variable in this study is a qualitative and virtual variable that indicates the amount of willingness to receive farmers in Alborz province to grow organic cucumber. Organic cultivation was collected in a pre-test and then, taking into account the fashion of these amounts and considering the selling price of the product in the market, finally the amount of 1444 Tomans per kilogram of cucumber was used as a criterion for dividing the two groups of farmers. The option of 1444 Tomans or less has been accepted as a desire to receive, has a tendency to receive less, which is called the number zero, and to those farmers whose willingness to receive the amount is more than 1444 Tomans, is the number one. Due to the discretization of the dependent variable, the Logit model has been used to estimate the model. The logit model is based on the cumulative logistic probability. Based on this model, the probability of a farmer's participation in the desired activity, which here is the acceptance of the amount of willingness to receive less than or equal to 1444 Tomans, is calculated from the following equation:

$$P_i = F(Z_i) = F(\beta_0 + \sum_{j=1}^n B_j X_{ji}) = \frac{1}{1 + e^{-Z_i}} = \frac{e^{Z_i}}{1 + e^{Z_i}} \quad (1.1)$$

Where the probability of accepting the amount of willingness to receive less by the farmer i , F is the functional relationship of the farmer reaction index width of the model origin, n is the total number of observations of the model explanatory variables which includes a set of socio-economic characteristics of the farmer, i farmer number, e number Neper) is the basis of the natural logarithm (and the parameters estimated by the model. In the logit model,) is the reaction index of a random variable that predicts the probability of occurrence of the dependent variable. If the amount is more than such a threshold, the farmer is one of the recipients of the amount of willingness to receive less, otherwise the amount of willingness to receive more. This index is obtained for a farmer as follows:

$$Z_i = \ln\left(\frac{P_i}{1 - P_i}\right) = \beta_0 + \sum_{j=1}^n B_j X_{ji}.$$

As the above equation shows, the following regression model must first be estimated to calculate:

$$Z_i = \beta_0 + \sum_{j=1}^n B_j X_{ji} + V_i.$$

Then, using the estimated parameters of the model and the values of the explanatory variables, the value is calculated for each farmer. In this model, the relative effect of each explanatory variable on the probability of accepting the amount of willingness to receive by differentiating from the model to the explanatory variable can be calculated as follows:

$$\frac{\partial P_i}{\partial X_{ji}} = \frac{B_j e^{Z_i}}{(1 + e^{Z_i})^2},$$

where the probability of occurrence of the dependent variable and the vector of the model explanatory variables. As mentioned earlier, the LG model is a heterogeneous variance model. Therefore, to estimate its coefficients, the ordinary least squares method is not efficient and the maximum likelihood method should be used. Predictive value also depends on other variables. Since this change in probability is not constant, the interpretation of the coefficients is not done directly and only the sign of the coefficients to change the probability for the initial and final groups is specified. For this reason, a concept called the final effect is used to change the probability of occurrence of each class by changing the value of the unit of the explanatory variable. This means that if the value of a unit variable changes or in the case of fictitious variables changes from one situation to another, the likelihood that the farmer will choose the amount of the desire to receive less will increase by several units

$$ME^L = \frac{\delta_{p_i}}{\delta X_K} = \frac{\exp(\beta' X)}{(1 + \exp(\beta' X))^2} \cdot \beta_k.$$

In which the final probability of the logit model, the probability density function for the normal distribution, expresses my explanatory variable and the parameter of this variable. The cucumber product is organic and the explanatory variables are: experience of the year, education of the year (, main job of the farmer) 1 = main job, zero = sub-job (number of family members) person (area under cultivation) hectare (selling price of one Kg of cucumber (Tomans), yield (tons) per hectare (income from cucumber cultivation) million Tomans, cultivation environment (1 = greenhouse, zero = arable land).

Ghorbani [12], in a field study in Mashhad, studied the demand and preference of consumers for organic products in a descriptive manner. According to the results of this study, about 80% of respondents do not have good knowledge about organic products, however, most respondents showed a desire to consume these products.

Rajabi et al. [39], in a study examined the knowledge and willingness of people to buy and consume organic products. Findings showed that the amount of knowledge about organic products is moderate. Of course, the level of knowledge of individuals is not the same and varies according to whether people have a history of agricultural activity or not.

Haghjoo et al. [14] evaluated the factors affecting the willingness to pay potential increased rates for healthy food products in East Azarbaijan province. The results of model estimation indicate that factors such as income, household size, environmental tendencies, level of knowledge about the characteristics of healthy products and the risk of hazardous food have a positive and significant effect on their willingness to pay for healthy food products.

Ghazizadeh and Hamayeli Mehrabani [11] examined green marketing strategies as a competitive advantage of the new era. Today, companies have been forced to pay more attention to and maintain environmental issues based on environmental norms, economic impacts and increasing public sensitivity to environmental issues, so that many leading companies understand the importance of environmental issues as well as community concerns. They have been able to use it as a competitive advantage to compete with competitors. This has been made possible by introducing green marketing strategies in the planning of these companies, so in this article we try to theoretically examine

issues related to green marketing and especially green marketing strategies, the way for companies to use green marketing as a Let's open a very important competitive advantage in the present age.

Mir Salimi et al. [30] in a study entitled Consumer Attitudes Towards Organic Agriculture (Case Study: Alborz Province). The findings showed that among the factors required in the use of organic agriculture, in the above two groups Diploma and less and bachelor and higher There was a significant difference at the level of 5%. There was also a positive and significant correlation between the two variables of consumption barriers and factors affecting the use of organic agriculture with consumer attitudes.

Artenses et al. [1] studied the effect of individual variables 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 lack of proper availability are the most important negative factors affecting this issue. Lack of information and lack of awareness of the characteristics of organic products has been cited as the main reason for non-purchase by American consumers. Yahaya [52] examined the willingness of urban consumers and neighboring cities to pay for healthy vegetables in Ghana and factors such as income, female gender and experience of diseases caused by contaminated vegetables have a positive and significant relationship to willingness to pay. Showed consumers. Molinillo et al. [32] identified incentives to buy organic food. In this article, we examine the history of buying organic food in the millennial generation. The conceptual framework is based on product features and consumer concerns and awareness. Data were collected through a survey to increase the reliability and generalizability of the results in two countries that are culturally and socio-economically different (Brazil vs. Spain). The results show that product characteristics and consumer concerns improve health information and increase social awareness in the millennial generation, which in turn increases their willingness to pay extra and increase their frequency of purchase of organic food. Be. The findings show that the proposed model has a high validity and there is only one significant difference between the two countries. Theoretical partnerships and managerial concepts are discussed.

1.1. The main purpose of the research

The main purpose of this study is to identify the dimensions and components related to the two categories of demographic characteristics and environmental factors affecting the development of the organic food market in the form of a conceptual model.

2. Research method

The present study is applied in terms of purpose and mixed research in terms of strategy. Method Research in the qualitative stage is the method of content analysis and in the quantitative part is descriptive and survey research. The statistical population in the qualitative stage are experts, thinkers, professors as well as experts in the field of organic production. In the qualitative sampling method with interview tools, ideally we continued to collect information until the point Saturation, where the new data collected were no different from the data we had previously collected. The tool used is a semi-structured interview. For data validity in the qualitative part, long-term engagement and continuous observation and review by the participants have been used, and for reliability, kappa coefficient has been used. In other words, 15% of the research documents or interviews coded by the researcher were given to one of the experts for evaluation and the results of the coding of the two researchers show that the kappa coefficient calculated by SPSS software was 0.635. Considering that it is more than 0.6 and the significance level obtained for the kappa index is less than 0.05,

the assumption of the independence of the extracted codes is rejected and the dependence of the extracted codes on each other is confirmed. The product of the qualitative part was the production of a questionnaire with an interventionist theme that included demographic and environmental factors in the development of the organic food market. The statistical population of this research is unlimited in a small part, which includes all consumers of organic products in the city. The statistical population of this research is quantitative, unlimited, which includes all consumers of organic products in the city of Mashhad and 384 people were selected as a sample by available non-probability sampling method. In the quantitative part of the data collection tool, a researcher-made questionnaire was made and for validity, face validity and confirmatory factor analysis were used, and for reliability, Cronbach's alpha and combined reliability were used, which is 0.7 in both. In the qualitative stage, Max Kyoda software was used to analyze the data obtained from the interviews, and in the quantitative part, descriptive and inferential statistical methods were used. To determine the effect and fit of the model, the structural equation modeling method was used in a small part. Which has used SPSS software as well as Emus.

3. Research findings

The method used in this research is the content analysis method in the interview section. Stages of content analysis used for interview data in this research

1. Compilation of interview questions.
2. Dividing the interview data into smaller components. In qualitative research at this stage, the analyst should separate and delimit the data into smaller sections that can be organized.
3. Data reduction. At this stage, the researcher, after a complete review of each interview, ignores parts of the text that do not have appropriate topics for categorization and does not interfere in the categorization.
4. Categorization. The concepts obtained in the open coding of the interviews were classified into groups of categories and the relationships between them were determined.

Finally, the following table was prepared

Table 1- Categorization of primary codes.

Open source component categories.

Income Characteristics of households Demographic characteristics.

Education level The highest educated person.

The presence of children.

Gender.

Tendency to consume organic products due to air pollution Urban characteristics.

Living in big cities.

Consumption of organic products due to environmental compatibility.

Different consumer cultures Cultural factors Environmental factors.

Environmental factors.

Creating a culture for market development.

Improving the general culture of the society by changing the approach to organic products.

Sanctions are political factors.

Political instability.

Controlling institutions in the government.

The need to eliminate government subsidies for inorganic products Legal factors.

The role of the government as an observer.

Table 1: Qualitative model of environmental and demographic factors extracted from interview data with Max software

Category	Component	Open source
Demographic characteristics	Characteristics of households	Income
		Education level The highest educated person
		The presence of children
		Gender
	Urban characteristics	Tendency to consume organic products due to air pollution
		Living in big cities
Environmental factors Environmental factors	cultural factors	Consumption of organic products due to environmental compatibility
		Various Culture
		Creating a culture for market development
	Political factors	Improving the general culture of the society by changing the approach to organic products
		Sanctions
		Iași SA volatility the B))
	Legal factors	Controlling institutions in the government
		The need to eliminate government subsidies for inorganic products
		The role of the government as an observer
	Economic factors	The need for government non-interference in the affairs of companies producing organic products
		the the economy and of The financial crisis
		High prices of organic products
		Manufacturers' reluctance to produce organic products due to high costs
		High costs, especially production and labor costs
	Competitors	Transfer costs from traditional to organic farming
		and new competitors entrants The threat of new
		Number of competitors and volume of competition

The need for government non-interference in the affairs of companies producing organic products.

Financial and economic crisis Economic factors.

High prices of organic products.

Manufacturers' reluctance to produce organic products due to high costs.

High costs, especially production and labor costs.

Transfer costs from traditional to organic farming.

New threats.

New competitors and competitors.

Number of competitors and volume of competition.

Pattern of new competitors' technologies.

Finally, the following model was obtained using Max Kiuda separation software.

Qualitative analysis of demographic characteristics

Demographic characteristics include characteristics such as gender, income, education and urban

characteristics that have been mentioned in this study.

As mentioned earlier, based on the research interviews, the category of demographic characteristics includes the components of household characteristics and urban characteristics, which are examined below for each of the enumerated components.

- Household characteristics. Household characteristics, income, level of education of the highest educated person, presence of children, gender, which can affect the desire to buy organic products. For example, if a person in a household has a higher education, he can seek the opinion of other family members to encourage them to use organic products to increase health.
- Urbanization features. The characteristics of urbanization, different consumer cultures, consumption of organic products due to adaptation to the environment, living in large cities.

Qualitative analysis of environmental factors

Environmental factors are factors that are in the environment of an organization or company that produces organic products and can affect the amount of products produced or sold.

As mentioned earlier, based on research interviews, The category of environmental factors includes cultural factors, political factors, legal factors, economic factors and competitors, which are examined in each of the components listed below.

- cultural factors
Cultural factors refer to factors such as customs, rituals and rituals that exist in a society. The culture of a society can overshadow the desires and interests of the people of the society.
- Political factors
Political factors refer to policies or political decisions at the macro level of a society that surrounds a company that produces organic products and can, like other factors, affect the amount of products produced or sold.
- Legal factors
Legal factors refer to legislation that is enacted by government agencies at the macro level and can affect all decisions and activities of companies producing organic products.
- Economic factors
Economic factors mean financial, economic and budgetary factors that take place at the macro level and can affect all decisions and activities of companies producing organic products.
- Competitors
Competitors are organizations or companies that have an activity similar to the activity of a company producing organic products and seek to use techniques to remove their competitors from the competition and achieve the goals of the organization in their favor.

A little research

Sampling adequacy index (KMO) in order to allow factor analysis

In this research, in order to investigate the existence of the necessary conditions for factor analysis, the KMO sampling adequacy index has been used. Cerny and Kaiser believe that when the KMO value is greater than 0.6, it indicates the adequacy of the sample for analysis and that factor analysis is possible. The desired value was obtained from the software 0.634 in which the chi-square

Table 2: Results of Bartlett sample adequacy and sphericity test

	Statistics KMO	634 . 0
Bartlett test	Chi-square index	171 . 8141
	Degrees of freedom	3655
	The significance level	000 . 0

Table 3: Results of confirmatory factor analysis (CFA) For items in the questionnaire.

Statistics	Bar ameli	cholgi	Elongation	Item	Component	Category	Theme
467.7	551.0	361.0-	744.0	01P	Characteristics of households	Demographic characteristics	Development organic of market food
162.17	776.0	243.0-	258.0	02P			
059.26	825.0	789.0-	384.0	03P			
846.10	708.0	831.0-	243.0	04P			
316.13	740.0	283.0-	731.0-	05P	Urban characteristics		
374.15	750.0	445.0-	570.0-	06P			
817.11	738.0	624.0-	430.0	07P			
046.28	874.0	036.0	193.0	08P			
382.25	867.0	395.0-	367.0	09P			
590.14	746.0	876.0-	490.0	10P			
109.11	701.0	458.0-	024.0-	11P	cultural factors	Environmental factors	
508.9	626.0	588.0-	636.0-	12P			

value was obtained 8141.171. Due to the fact that the KMO index is greater than 0.6 and the result of Bartlett sphericity test is significant at 99% confidence level, factor analysis is allowed.

Homogeneity test (confirmatory factor analysis)

According to Hair [15] studies, before performing any test on reflective measurement models, a homogeneity test should be performed to homosexualize or unidimensional the questions of a variable. Test before structural modeling Equation In order to test research hypotheses, it is necessary to verify the validity of the research measurement tool through confirmatory factor analysis (CFA) technique.

The numbers showed that the quality of the measurement model is moderate and strong with respect to the three values given for each of the variables.

4. Discussion and conclusion

In relation to the research findings, the identified categories include the two main categories of demographic characteristics and environmental factors. The category of demographic characteristics of ShaMel are components of household characteristics and urban characteristics. Demographic characteristics are characteristics such as gender, income, education and urban characteristics, and the category of environmental factors includes the components of cultural factors, political factors, legal factors, economic factors and competitors. The results obtained from this section are in line with the results of previous studies. Haghjoo et al. [14] evaluated the factors affecting the willingness to pay potential surcharges for healthy food products in East Azerbaijan province. The results of the model estimate indicate that factors such as income, household size, environmental tendencies, level of knowledge about the characteristics of healthy products and the risk of dangerous foods have a positive and significant effect on their willingness to pay for healthy food products.[31] in a study on consumer preferences for organic products (Case study: Edible vegetables in Urmia) concluded

that as consumers age, their desire to use organic products increases; Because older people will tend to use organic and natural products due to more problems and diseases. [4] Using the logit model of variables such as age, gender, education, occupation or educational background related to agriculture, familiarity with the concept of healthy food, environmental conservation tendencies, buying healthy food and economic index as components Identified factors affecting the acceptance and consumption of healthy food products in Mashhad. Pourmozafar, [38] studied the development of markets for organic products in order to increase the welfare of villagers in Mazandaran province (a case study of organic cucumber). The results show that consumers of different classes tended to pay more than non-organic cucumber. The effects of each of the variables of gender, age, individual and household income, monthly consumption of cucumber, familiarity with organic products showed a significant effect on the willingness to pay. Except for the gender variables that showed a negative relationship with the willingness to pay more for organic products, the other variables have a positive relationship with the probability of accepting the proposed amount. Also, the results of foreign research studies are consistent with this study. Garcia [10] examined the willingness of consumers to pay for organic yellow pepper using the experimental selection method and the Logit model and concluded that the willingness to pay has a positive and significant relationship with their income levels and the demand for organic products. Certified is directly related to the economic growth of developing countries. Mervin and Velmurugan [27] in their study in India showed that gender, monthly income, area of residence, marital status, period of consumption, health awareness of organic foods have a positive relationship with consumer attitudes toward organic foods. Kisaka-Lavayo and Obi [22] in examining the factors influencing the decision of families to buy organic food products using regression regression show that gender, education, employment, location, price and the person responsible for purchasing are important factors in awareness and The choice of organic products is among consumers. Kumar and Ali [23] using the L-regression model show that gender, education, promotion and income are the factors affecting the level of consumer awareness. Aertsens et al. [1] pointed out the effect of individual variables 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 lack of proper access are the most important negative factors affecting this issue. Lack of information and lack of awareness of the characteristics of organic products is the main reason for non-purchase by American consumers. Govindasamy and Italia [13] found in their study that gender, age, income, and level of education are among the factors that affect the acceptance and purchase of organic products. Davis et al. [8] observed a slight difference between men and women in terms of acceptance and purchase of organic products, which is inconsistent with the above study. Tatlidil et al. [48] showed that more education and access to information can create a more favorable attitude towards sustainable agriculture. Researchers such as Autio [3] and Casimir & Dotil [6] in their research stated that there is a significant difference between suburban consumers and urban consumers in terms of acceptance of organic products. Kerhoft [17] observed that the environment (ecological area), income, age and level of education have a significant effect on attitude and research by [47] did not show that attitude is influenced by factors such as age, gender, marital status, education, Education is the dimension of family and income. It is also inconsistent with the results of the following studies. [40] in their study showed that the results showed that there was a negative and significant relationship between the age variable of consumers and their attitude towards the consumption of organic products at the level of 1% error and with increasing age the tendency to consume Organic crops are reduced, which is inconsistent with the above study.

There is farmers' awareness, technical and managerial issues, support issues and motivational and attitudinal barriers to the development of organic agriculture, which is inconsistent with the results of the above research. Maghsoudi et al. [25] in their research entitled Comparison of views of

men and women in Kermanshah regarding barriers and strategies for developing the consumption of animal feed products. Organic economic indicators, cultural infrastructure, in the eyes of consumers can be barriers to the consumption of organic products, which is inconsistent with the results of this study. Also, Akbari et al. [25] in his research on farmers' attitudes toward sustainable agriculture reported a positive relationship between farmers' technical knowledge and their attitudes and did not find a relationship between age, education, agricultural history and attitudes toward sustainable agriculture. It is inconsistent.

Finally, in line with the results obtained, it is suggested:

Appropriate education in all educational levels, holding training workshops and promoting a healthy eating pattern in the community and more among women and heads of households to create a culture of consumption and raise the level of knowledge and awareness of consumers in the community.

It is also suggested that in the education system, courses related to organic products be offered so that people can get acquainted with these products from the same period of education and knowledge about these products can be spread in the community.

It is suggested that books on organic agricultural products, the characteristics of these products, agricultural operations to produce these products, the nutritional value of products, and other related issues about organic products be made available to the public and through newspapers and magazines. Organic products and related issues should be introduced to increase people's knowledge about these products and to make people's attitudes more favorable.

Subsidizing subsidies for this type of products and providing them to all segments of society, especially low-income groups can be useful for the development of product consumption.

Allocation of part of the subsidies paid to consumers for the purchase of organic products, which in order to prevent the consumption of this allocated amount in other sectors, it is recommended that subsidies be allocated per unit of goods so that organic products are cheaper or at least the price of products Common to be offered.

Presenting branded organic products in local companies and markets at government rates: This means that each producer of organic products, produce their products with the standards set by the organization in charge of organic products to be able to supply their product with a specific brand N.

Implement appropriate supportive policies for producers, such as incentive policies for production bonuses, granting low-interest loans with long-term repayment, appropriate export facilities and guaranteeing the sales market of these products to increase production and supply of various organic food products needed by society.

Supply of organic food products in appropriate packaging and in large food stores such as chain stores using special labels to ensure the health of products to ensure consumers are healthy.

4.1. Recommended to other researchers

What is certain is that at the end of their research, the researcher will discover new perspectives that can guide researchers who intend to do similar research. Therefore, this research can be considered as a new chapter for some researches. Predictable studies due to the limitations of current research include:

Conducting similar research using a larger sample in other cities of the country, to strengthen the ability to generalize and build credibility for the findings.

Localization of models and indicators of environmental and demographic factors in the development of the market of organic products (according to the culture of Iran)

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