

FACTORS AFFECTING INTENTION TO PURCHASE ORGANIC FOOD PRODUCTS AMONG IRANIAN CONSUMERS

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ABSTRACT

Considering the numerous environmental crises in Iran, promotion of consumer behavior to purchase organic food products as the green marketing perspective can be a fundamental way of increasing the social responsibility of consumers and, consequently, reducing environmental damage. This study aims to investigate the factors affecting the intention to purchase organic food products among Iranian consumers. In this study, based on a review of the literature and development of the theory of planned behavior, the determinants of intention to purchase organic food products considered as attitude, subjective norms, perceived behavioral control, ethical orientation, organic knowledge, healthy lifestyle, health awareness and environmental concerns. Data were collected through the Pathak's (2015) and Chen (2009) questionnaire. The statistical population consisted of faculty members and staff at the University of Mohaghegh Ardabili, as the most prominent higher education institution of Ardabil province in Iran. The sample size was calculated as 280 individuals using Cochran's formula, but finally, 215 questionnaires collected completely. The hypotheses were analyzed using the Structural Equation Modeling (SEM) and Lisrel software. The results showed that ethical orientation, organic knowledge, attitude towards organic food products, environmental concerns, subjective norms, healthy lifestyle, health awareness and perceived behavioral control have respectively the most significant effect on intention to purchase organic food products.

Keywords: Green Marketing, Organic Food Products, Theory of Planned Behavior, Intention to Purchase.

INTRODUCTION

The world today faces the issue of population growth, which results in a shortage of food. To provide the food needed for this growing population and the production of more agricultural products to cover increased demands, the use of various chemical pesticides has led to an increase in the efficiency of agricultural production (Jensen & Blok, 2008; Kirchmann & Thorvaldsson, 2000). Accordingly, the world faces challenges such as increasing the number of diseases, the destruction of natural ecosystems and many environmental problems (Yazdanpanah et al., 2015). Meanwhile, Iran also has been suffering from the effects of industrial malnutrition, so that the World Health Organization (WHO) ranked Iran's health as 93 in 2009 among countries around the world (Shams & Omid, 2014). The high rate of incidence of cancer, especially gastrointestinal cancers in Iran, is related to the presence of chemical pesticides higher than the global standard in agricultural products (Chaychi, 2009).

Today, healthy food production is more vital than ever. In developed countries, special policies have been developed for the production of healthy food, including the expansion of organic farming (Ranjbar, 2014). Organic farming is an agricultural system in which organic fertilizers and other chemical substances are avoided (Chen, 2009). Food production and consumption are the most commonly discussed subjects in the literature of ethical behavior (Yazdanpanah & Forouzani, 2015). Nowadays consumers have shown that concern about the health and nutritional values of foods prompt them to change their dietary preferences.

Consequently, consumers' preferences to customarily grown foods have been altered to organically produced foods (Yadav & Pathak, 2016). Mohammadian et al. (2013) argue that manufacturing companies, the consumer society and governments have three main players involved in the purchase and use of green or organic products, each of which faces particular challenges (Chen & Chai, 2010). Although the role of governments in protecting the environment is undeniable, consumers have a much more critical role in protecting the environment. The Dehghanan and Bakhshandeh (2014) state that it can be claimed that environmental protection efforts have been made when consumers purchase and consume green products.

Fortunately, evidence suggests that consumers' concerns about environmental issues have increased in Iran and green market sectors have emerged among consumers (Hosseini & Ziaei, 2013). However, little research has been done on the attitudes of Iranian consumers towards green products; thus, this research mainly focuses on assessing the direction and intensity of an attitude. However, researchers believe that consumer's attitudes are affected simultaneously by changing factors affecting their attitudes toward green products that lead to increasing their tendency or unwillingness to purchase green products (Ghosh, 2010). Considering the importance of resources in creating attitudes toward green products, researchers such as Haghghi and Khalil (2011) state the investigation of Iranian consumers' attitudes is necessary for developing marketing plans. Baker et al. (2014) argue that a deep understanding of customers' attitudes and desires to participate in green activities can lead to designing efficient green programs (Hanson & Benedict, 2002).

The first step in moving towards the development of organic products is identifying the target market, i.e., the recognition of consumer behavior, the factors affecting it and the power of prediction of behavior (Haghjou et al., 2013). Therefore, this study aims to identify factors affecting the consumer intention to purchase organic food products among Iranian consumers. In this study, behavioral models, which are the most common conceptual models in the field of behavior review, have been used to assess the consumers' purchasing behavior. The theory of planned behavior is an important psychological model for explaining individual behavior (Ajzen, 1985). According to this theory, individuals' actual behavior, as a central factor, is directly influenced by the behavioral intention and perceived behavioral control. Also, the behavioral intention is perceived by attitudes, subjective norms and behavioral control (Ajzen, 1991). Although the success of this model has been proven in predicting behaviors, the evolution of theory has not stopped and other researchers have added structures to this theory to increase the predictive power of it (Fielding et al., 2008; Burton, 2004; Yazdanpanah et al., 2014). These variables are ethical orientation, health awareness and environmental concerns (Yadav & Pathak, 2015; Arvola et al., 2008). In addition to the traditional variables in the planned behavioral model, this study intends to examine the effect of these new variables on the purchasing behavior of organic food products among Iranian consumers.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Behavioral attitude means the degree to which a person evaluates a behavior as desirable or undesirable (Yadav & Pathak, 2016). Attitude can be referred to a person's viewpoint toward intended action. Attitudes have a significant effect on a person's behavior and even when it is health-related, the relationship will be more intense. In any case, doing or not doing behavior is related to the judgment of the person. It is necessary, individuals see the results of the evaluation and have a positive belief that the effect of that attitude will be favorable and ultimately may lead to intent and conduct. Kasarjian found that the attitude toward air pollution was the most crucial variable in determining consumer behavior towards the product. Also, Balderjan (1988) emphasizes the healthy lifestyle indeed exert effects on the intention to purchase and use environmentally friendly products. Social psychologists believe studying attitudes to understand vital behavior is crucial; they consider behavioral attitudes and changes in behavior as a requirement to change in attitude (Ranjbar & Omid, 2004). Accordingly, the first hypothesis can be expressed as follows:

H1: The attitude towards organic food products affects intention to purchase organic food products.

Knowledge of organic products is the science of the application of voluntary environmental standards. It includes methods for using qualified products without any synthetic chemicals and the remaining elements, metals and harmful substances. Also, knowledge of organic products is influenced by the provision of information by the general government, mass media and native associations and sales sites; therefore, the level of knowledge of organic products depends on the demographic characteristics, lifestyles and information on available organic products (Garcia & Magistris, 2007). Organic knowledge has a positive effect on the consumer purchase attitudes and intention towards organic food products. Researchers have found that consumers who prefer organic products, like to do nature-friendly activities and show their concern for the environment. In a study by Garcia and Magistris (2007) in Italy, it was shown that consumer purchase intention depends on the attitude and knowledge of organic products. As a result, the second and third hypotheses can be expressed as follows:

H2: Organic knowledge affects the attitude toward organic food products.

H3: Organic knowledge affects intention to purchase organic food products.

Lifestyle can be interpreted as a set of behavior adopted by individuals not only to fulfill their current needs but also to manifest a particular narrative chosen as their identities (Rahmat & Aghabakhshi, 2006). Lifestyle is an attempt to transform individual behaviors to achieve fundamental values throughout life, even when the environment changes, so the way of life changes over time systematically, not suddenly or accidentally. However, it maintains the balance in environmental change and also preserves this equilibrium in its value system. That is why the classification of lifestyle is often used to predict consumer behavior in line with marketing objectives. Lifestyle is an important factor that has a close relationship with various aspects of health including the quality of life (Feizi et al., 2012). A healthy lifestyle is comprised of healthy behavior patterns based on people's choices and conditions of their lives. Activities such as alcohol consumption, smoking, consuming chemically processed food and so forth. Can strengthen to weakening a person's position in life. In other words, a healthy lifestyle is a set of choices made by people by the conditions of their lives while these choices tend to affect their

health. A healthy lifestyle is also linked to a change in diet to maintain or improve individual's health and their living environment. A healthy lifestyle is scientifically shaped in the form of specific activities such as the consumption of natural foods, health care, balance in life and the creation of peace in life. People with healthy lifestyles always look for information about green brands to minimize the risk of physical and even mental disorders by adopting a suitable diet. Numerous studies indicate that encouraging a healthy lifestyle in target markets is considered one of the most important factors for the success of marketing programs (Divine & Lepisto, 2005). Chen (2015) showed that a healthy lifestyle has a positive impact on the attitude and the consumer purchase intention towards organic food products. Therefore, a healthy lifestyle is a good predictor of consumer purchase attitudes and intention towards organic food products. Accordingly, the fourth and fifth hypotheses can be expressed as follows:

H4: Healthy lifestyle affects the attitude towards organic food products.

H5: Healthy lifestyle affects intention to purchase organic food products.

Health awareness refers to the degree to which people are concerned about health in daily activities. Consumer's health considerations are one of the most critical factors in purchasing food products. Consumers who are most concerned about their health tend to be more likely to buy organic products. Organic foods are generally regarded as a healthier option compared to non-organic ones and health concerns are considered as the most critical factor in stimulating consumer purchase attitudes and intention towards organic foods (Yadav & Pathak, 2015). Siti et al. (2014) found that organic food consumption has increased among Malaysian consumers due to the increase in their Health awareness. In a study conducted consumer perceptions and their intention to purchase organic food in Malaysia. Accordingly, the sixth and seventh hypotheses can be formulated as follows:

H6: Health awareness affects the attitude toward organic foods.

H7: Health awareness affects intention to purchase organic food products.

Environmental concerns provide a degree of awareness among individuals to solve environmental problems. Individual's concern for the environment is related to their friendly behaviors with nature. It seems that citizens and various organizations and institutions around the world have been concerned with environmental issues for more than a few decades. During this period, the world has witnessed a considerable increase in activities promoted by environment protection groups that focus on preventing environmental damage (Chegini & Saleh, 2016). In recent years, environmental and social issues have gained special importance in purchasing decisions made by consumers. Society's concern about the environment has led to the emergence of a new type of consumers that reflect these concerns in their purchasing decisions. Responsibility in dealing with environmental issues not only helps organizations to remain competitive and increase their market shares but also there is evidence indicating increased consumer loyalty toward such organizations (Chegini & Saleh, 2016). Therefore, environmental concerns play a key role in determining the intention to purchase organic food, so that the purchases of organic food are considered environmentally friendly behaviors (Yadav & Pathak, 2015). Although environmental awareness measurement is difficult, knowledge is recognized as the basis for environmental beliefs (Barber et al., 2009). Chen (2009) in Malaysia investigated the existence of environmental concerns and found out that this variable played a significant role

in consumer's environmental behaviors. Accordingly, the eighth and ninth hypotheses are as follows:

H8: Environmental concerns affect the attitude towards organic food products.

H9: Environmental concerns affect intention to purchase organic food products.

A significant number of psychological studies indicate that subjective norms are an important factor in the intention to do the behavior. Subjective norms include very strong cognitive elements that are formed by judged expectations of important individuals. Subjective norms are reflections of social pressures that are perceived by a person and form certain behaviors. Subjective norms indicate how customers are influenced by the behavior of some important people in their lives. In an investigation into the intention to purchase organic foods among young consumers in India, Yadav and Pathak (2015) found that subjective norms positively affect consumer purchase intention of organic foods. Accordingly, the tenth hypothesis can be expressed as follows:

H10: Subjective norms affect intention to purchase organic food products.

The perceived behavioral control means how much one feels that doing or not doing a behavior is under his/her voluntary control. Perceived behavioral control can directly or indirectly affect behavior through behavioral intention (Hesami & Parvinchi, 2014). Individuals with a higher degree of behavioral control have a stronger intention for certain behaviors (Yadav & Pathak, 2015). Accordingly, the eleventh hypothesis can be expressed as follows:

H11: Perceived behavioral control affects intention to purchase organic food products.

The theory of planned behavior has been substantially criticized for this reason, which does not consider the effect of ethics on behavior. An ethical attitude has an important role when there is a conflict between personal and social interests. Ethical commitment can affect attitudes towards organic food, so that people may have personal concerns about themselves, the community and the environment with the intention to purchase organic food products. Therefore, it is possible that the conflict derives from personal and social interests. Adding an ethical attitude to the theory of planned behavior proves its applicability in behavioral studies. Researchers have found that adding ethical orientation has a profound effect on the theory of planned behavior and has increased the ability to explain this model (Yadav & Pathak, 2015). Accordingly, the twelfth hypothesis can be formulated as follows:

H12: Ethical orientation affects intention to purchase organic food products.

According to the explanations given in connection with the hypotheses, the conceptual model of research can be presented as Figure 1.

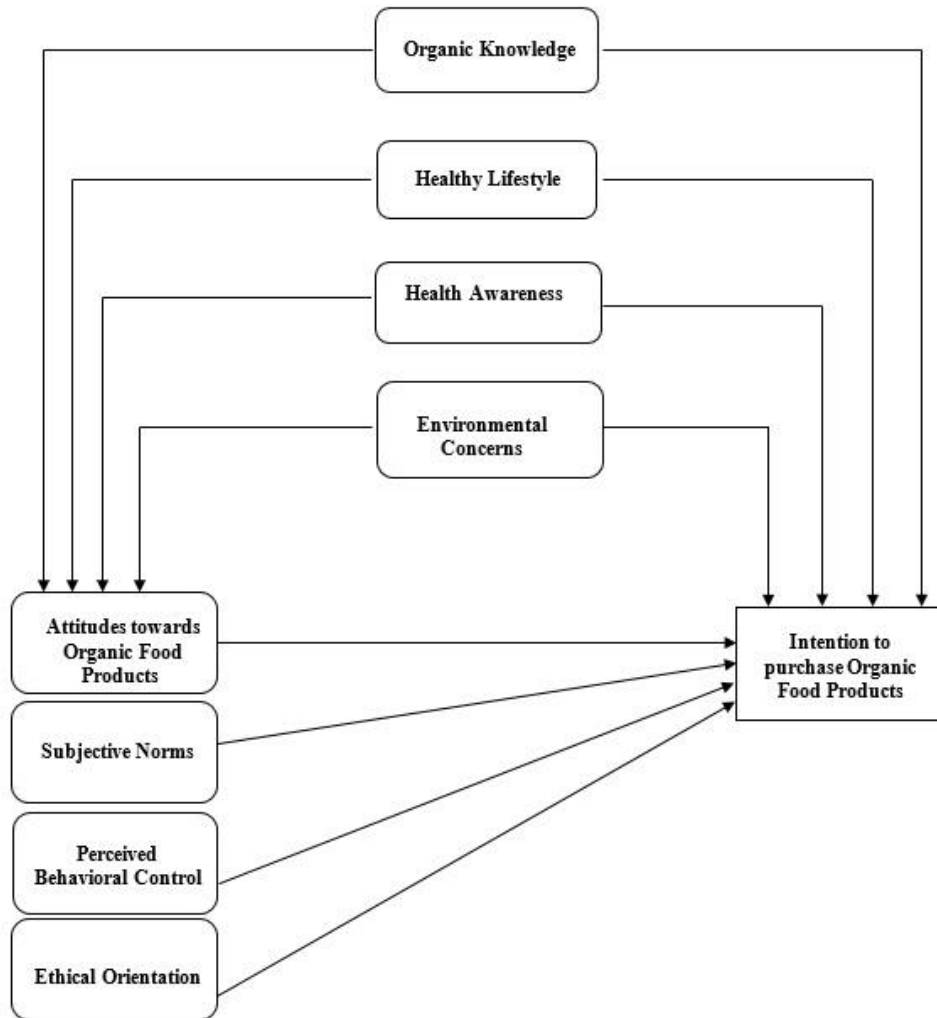


FIGURE 1

THE RESEARCH CONCEPTUAL MODEL

Source: YADAV & PATHAK, 2015; CHEN, 2009; YAZDANPANA & HASHEMINEJAD, 2015; HESAMI & PARVINCHI, 2014.

METHODOLOGY

Population and Sampling Method

The statistical population of the present research is faculty members and staff at the University of Mohaghegh Ardebili. The total population consisted of 674 individuals (320 staff and 354 faculty members). The Cochran's formula was employed to determine the sample size. According to this technique, the sample consisted of 245 participants. Random sampling was used to select members of the statistical sample. So, 280 questionnaires were distributed among the professors and staff of the Faculties of Basic Sciences, Agriculture, Engineering, Humanities and Psychology and various departments of the university including the departments of education, research and technology and administrative and financial affairs. However, some respondents did not show adequate cooperation in filling out the questionnaires and some of

them provided incomplete answers. Therefore, out of 280 distributed questionnaires, 65 were omitted and in the end, 215 complete questionnaires were collected indicating a response rate of 76.7 percent.

Variables Measurement

The questionnaire has three sections. In the first section, in addition to introducing a member of the research team, explanations are provided about the main objectives of the study. Moreover, guidelines are provided to respondents on how to complete questions. The second section contains some of the most important demographic characteristics, including age, gender, marital status, education level and income level of the respondents. The third part is dedicated to specific questions to measure the research variables. Table 1 illustrates the arrangement of questions and resources used to develop a standard questionnaire.

Table 1 STRUCTURE OF THE RESEARCH QUESTIONNAIRE			
Variables	Abbreviations	Number of Questions	Resources
Attitudes towards organic food products	AT	8	Yadav and Pathak (2015); Fang Chen (2009).
Subjective norms	SN	3	Yadav and Pathak (2015).
Perceived behavioral control	PBC	3	Yadav and Pathak (2015).
Organic knowledge	OK	8	Yadav and Pathak (2015); Fang Chen (2009).
Environmental concerns	EC	9	Yadav and Pathak (2015); Fang Chen (2009).
Healthy lifestyle	HL	11	Chen (2009).
Ethical orientation	EO	3	Yadav and Pathak (2015).
Health awareness	HA	4	de Magistris (2007).
Intention to purchase organic food products	IP	2	Yadav and Pathak (2015).

Note: Participants were asked to answer any questions related to the variables based on a five-point Likert scale of Strongly agree, Agree, No idea, Disagree and Strongly disagree.

Statistical Analysis Methods

Structural equation modeling has been used to test the hypotheses. This method consists of two components of the measurement model and the structural model. Before using the structural model, it is first necessary to verify the accuracy of the measurement model, in which the relationship between the hidden and observed variables is checked. There are several

methods to check the fitness of the model of measurement, but the method used in this study to examine the fitness of the measurement model includes the construct validity criterion. Construct validity is a compound concept that requires a multi-stage review, which is the extent to which the scale is accurate in measuring the theoretical construct or desired feature. To verify the validity of the questionnaire structure, confirmatory factor analysis is used. After ensuring the proper fitness of the model of measurement, in the next step, the structural model is used to test the relationships between variables based on the research model and, finally, conclusions on confirming or rejecting the hypotheses. The use of this method has significant advantages compared to other statistical methods, especially regular regression, the most important of which is the estimation of multiple relationships, the ability to measure hidden variables, calculation of the measurement error, the ability to examine the co-linear effect and the false and unrealistic relationship tests of research model structures (Mohammad et al., 2014). It should be noted that the implementation of these statistical methods done with the use of SPSS and Lisrel software.

RESULTS

Demographic Characteristics of Respondents

The results of the analysis of the demographic characteristics of respondents are shown in Table 2.

Demographic Characteristics	Number of Respondents	Levels	Absolute Frequency	Relative Abundance
Gender	211	Man	164	77.7
		Woman	47	22.5
Marital Status	210	Married	176	83.8
		Single	34	16.2
Age	211	20-30 Years old	16	7.6
		31-40 years old	103	48.8
		41-50 years old	70	33.2
		Over 50 years old	22	10.4
Level of Education	212	Diploma and lower	4	1.9
		B.A/B.S	41	19.3
		M.A/M.S	66	31.1
		Ph.D. and higher	101	47.6

Employment Status		207		Employee	104	50.2
				Faculty member	103	49.8
Average Monthly Income		200		Less than 200 USD	26	0.13
				200-600 USD	56	0.28
				600-1000 USD	48	0.24
				More than 1000 USD	70	0.35

The Kolmogorov-Smirnov test

The Kolmogorov-Smirnov test was used to investigate the normality distribution of quantitative variable. In this test, the zero assumption represents the claim that the data distribution is normal. Table 3 shows the results of this test.

Variables	Kolmogorov-Smirnov Test	The significance level	Test Result
Attitude	0.183	0.000	Not normal
Subjective norms	0.160	0.000	Not normal
Perceived behavioral control	0.129	0.000	Not normal
Health awareness	0.149	0.000	Not normal
Environmental concerns	0.070	0.012	Not normal
Healthy lifestyle	0.073	0.007	Not normal
Ethical Orientation	0.202	0.000	Not normal
Organic knowledge	0.171	0.000	Not normal
Intention to purchase	0.221	0.000	Not normal

The results of Table 3 show that the significance level for all variables is more than 0.05. Therefore, we can conclude that variables have abnormal distribution.

Validity and Reliability of the Questionnaire

In conducting factor analysis, first, the researcher must make sure that the data can be used for analysis, In other words, are the collected data suitable for factor analysis? For this purpose, the KMO index and the Bartlett test are usually used. The KMO index and Bartlett test for the data in this study are shown in Table 4.

Table 4		
KMO INDEX VALUES AND BARTLETT TEST		
Indicator KMO		0.829
Bartlett Test	Chi-squared test	455.925
	Degree of freedom	1225
	The significance level	0.000

According to Table 4, the KMO index is equal to 0.829, which is in the range above 0.6. Therefore, the sample size of the research is sufficient for confirmatory factor analysis. Also, the significance level of the Bartlett test is less than 0.05, which shows that the factor analysis is appropriate for identifying the structure of the factor model and the assumption of the recognition of the correlation matrix is rejected. Therefore, the results of KMO and Bartlett tests show, the collected data based on the research questionnaire are adequate and sufficient for confirmation factor analysis; therefore, confirmatory factor analysis can be used to evaluate the questionnaire.

The decision criterion for maintaining or deleting questions from the research questionnaire is based on the factorized load extracted from the implementation of the confirmatory analysis method. Confirmatory factor analysis is used to identify the underlying variables of a concept or summarizing a set of data. The power of the relationship between the agent (hidden variable) and the visible variable is shown by the factor load. If the factor load of each of the questions is less than 0.5, then the question will be omitted from the questionnaire. However, if the amount of load is more than 0.5, then it can be concluded that the questions are suitable to remain in the questionnaire. The t-test statistic is also used to determine the significance of factor loads. Because the significance is checked at the error level of 0.05, so if the value of the t statistic for the observed factor loads is larger than 1.96, then the relationship is significant. The results of the confirmatory factor analysis are shown in Table 5.

Table 5
CONFIRMATORY FACTOR ANALYSIS

Variable	Questions	Factor Loading	t-Statistics	Cronbach's Alpha Coefficients
Attitude	1. Purchasing organic food is a good idea.	0.73	15.61	0.734
	2. Purchasing organic food is a wise choice.	0.73	16.83	
	3. I love the idea of buying organic food.	0.72	17.11	
	4. Organic food purchase can be pleasant.	0.69	14.65	
	5. Organic products are healthier. (Good for health.)	0.68	15.50	
	6. The availability of organic food products is very important to me.	0.65	13.22	
	7. Organic products have a higher price.	0.31	5.19	
	8. Organic products have a higher quality.	0.36	6.55	
Subjective norms	1. People who care about me think I should buy organic food.	0.63	11.55	0.878
	2. Most people who are essential to me want me to buy organic food.	0.86	18.66	
	3. People whom I value their opinions prefer that I should buy organic food.	0.73	14.13	
Perceived behavioral control	1. Buying or not buying food depends entirely on me.	0.35	4.70	0.723
	2. If I had enough budget, I would buy organic food	0.77	8.80	
	3. I have the resources and time to buy organic food.	0.75	8.58	
Health awareness	1. I care about the choice of food to ensure its usefulness for health.	0.79	2.99	0.742
	2. I consider myself an informed consumer.	0.35	6.62	
	3. I often think about health-related issues.	0.48	10.05	
	4. I know myself with high health awareness.	0.60	11.25	
	5. I think that I consider health in my life a lot.	0.52	11.01	
	6. My health is precious to me and I sacrifice a lot to get it.	0.55	9.87	
	7. I often ask myself if the things I eat are good for my health.	0.65	10.81	
	8. I think people are less likely to pay attention to their health compared to me.	0.32	4.83	

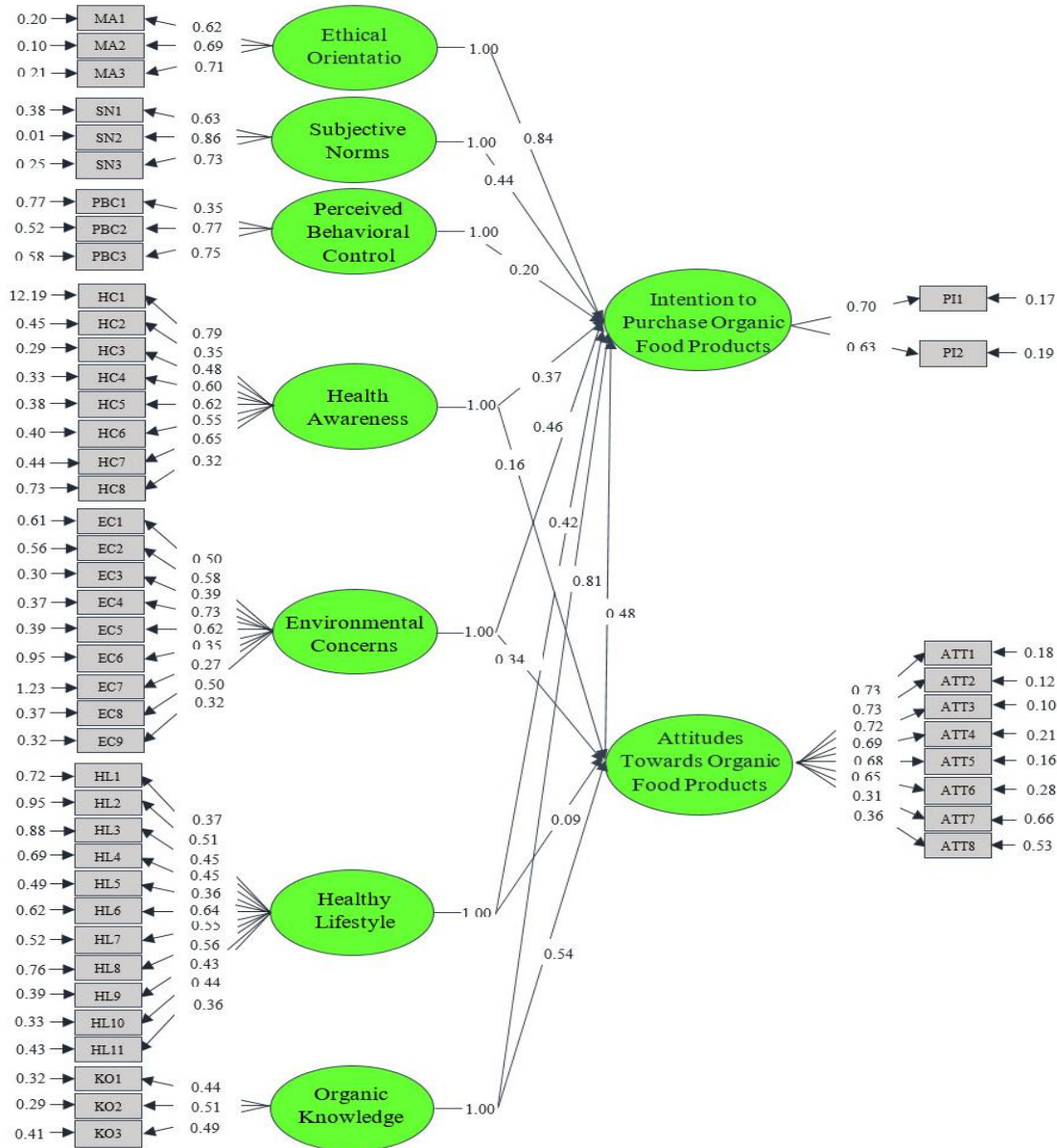
Table 5 CONFIRMATORY FACTOR ANALYSIS				
Environmental concerns	1. The balance of nature is very sensitive and can easily blend.	0.50	7.79	0.773
	2. The existence of humans is repeatedly harmful to the environment.	0.58	9.04	
	3. Humans must preserve the balance of nature to survive.	0.39	8.50	
	4. Human interference with nature often leads to a dangerous and heinous consequence.	0.73	12.22	
	5. The current development pathway has environmental degradation.	0.62	10.87	
	6. I split the rubbish and pour it into separate containers.	0.35	4.64	
	7. I prefer to consume recycled products.	0.27	3.10	
	8. If we do not do some actions, environmental damage will be irrecoverable.	0.50	9.48	
	9. I carry out environmental protection duties.	0.32	6.94	
Healthy life style	1. I follow the low-salt diet (salt control)	0.37	5.45	0.790
	2. I am a vegetarian. (Vegetarian food)	0.51	6.50	
	3. I exercise regularly. (Regular exercises)	0.46	6.03	
	4. I avoid eating processed foods.	0.45	6.69	
	5. I often eat fruits and vegetables. (High intake of fruit)	0.36	6.47	
	6. I eat less red meat (moderate intake of meat)	0.64	9.37	
	7. I avoid eating food products with additives.	0.55	8.96	
	8. I regularly test my health (regular health check).	0.56	7.78	
	9. I try to reduce my stress.	0.43	8.22	
	10. I try to have a planned and organized lifestyle (regular life).	0.44	8.92	
	11. I try to keep a balance between my personal and professional life. (Personal and business life)	0.36	6.87	
Organic knowledge	1. I would like to have more knowledge about organic products before shopping	0.44	9.01	0.751
	2. More knowledge about organic products helps me decide to buy them.	0.51	10.24	

Table 5 CONFIRMATORY FACTOR ANALYSIS				
	3. I am confident in the knowledge of organic products.	0.49	8.87	
Ethical Orientation	1. Purchasing Organic Food instead of conventional foods creates an emotion similar to personal engagement for better things.	0.63	13.91	0.886
	2. Purchasing organic food instead of conventional foods creates an emotion similar to doing the right things in my life.	0.69	16.59	
	3. Purchasing organic food instead of conventional foods creates a feeling that looks like I'm a better person...	0.71	14.63	
Intention to purchase	1. I want to buy organic food when shopping.	0.70	14.68	0.831
	2. I will try to buy organic food shortly.	0.63	13.72	

In this study, the standard value for factor load is considered to be 0.5. The results of Table 3 show that for all the items, the factor loads are higher than 0.5 standard level and the values of the Student's t-test are obtained at 95% confidence level higher than 1.96. Therefore, according to the reported amounts in Table 5, the appropriateness of questions and their ability to measure variables in the research is confirmed and it can be claimed that the questionnaire has an acceptable validity. Also, in Table 5, the values of the Cronbach's alpha coefficient for each of the variables are presented. If the coefficient is greater than 0.7, then the questions are valid. Given the reported amounts in Table 5, it is concluded that the questionnaire is highly valued.

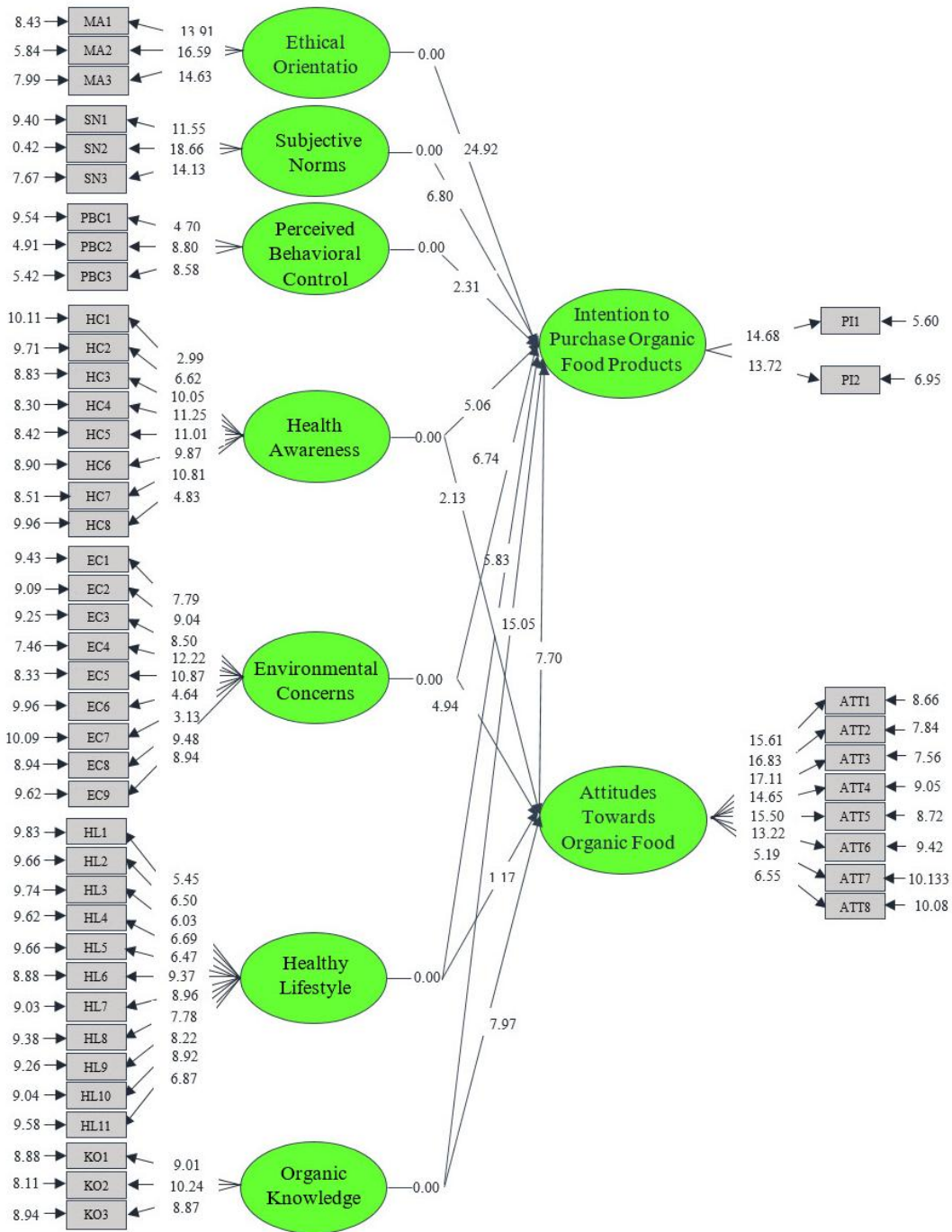
Estimation of the Conceptual Model

The research model test was performed using structural equation modeling method. Figures 2 & 3 showed the model of research with its independent and dependent variables in the form of measuring models along with the path coefficients between the variables as well as the t-student statistic.



Chi-Square=1869.86, df=1139, P-value=0.00000, RMSEA=0.056

FIGURE 2
ESTIMATION OF THE STANDARDIZED PATH COEFFICIENT IN THE MODEL



Chi-Square=1869.86; df=1139; P-value=0.00000; RMSEA=0.056.

FIGURE 3
ESTIMATION OF THE T-STATISTIC IN THE MODEL

The hypothesis test results are summarized in Table 6.

Table 6
RESULTS OF HYPOTHESES ESTIMATION

Hypothesis	Independent Variable	The Dependent Variable	Path Coefficient	T Statistics
<i>H1</i>	Attitude towards organic food products.	Intention to purchase organic food products.	0.48	7.70
<i>H2</i>	Organic knowledge.	Attitude towards organic food products.	0.54	7.97
<i>H3</i>	Organic knowledge.	Intention to purchase organic food products.	0.81	15.05
<i>H4</i>	Healthy lifestyle.	Attitude towards organic food products.	0.09	1.17
<i>H5</i>	Healthy lifestyle.	Intention to purchase organic food products.	0.42	5.83
<i>H6</i>	Health awareness.	Attitude towards organic food products.	0.16	2.13
<i>H7</i>	Health awareness.	Intention to purchase organic food products.	0.37	5.06
<i>H8</i>	Environmental concerns.	Attitude towards organic food products.	0.34	4.94
<i>H9</i>	Environmental concerns.	Intention to purchase organic food products.	0.46	6.74
<i>H10</i>	Subjective norms.	Intention to purchase organic food products.	0.44	6.80
<i>H11</i>	Perceived behavioral control.	Intention to purchase organic food products.	0.20	2.31
<i>H12</i>	Ethical Orientation.	Intention to purchase organic food products.	0.84	24.92

The results of Table 6 show that, for all the hypotheses other than the fourth hypothesis, the T-Student statistic is higher than 1.96 and the significance level is less than 0.05. Therefore, all hypotheses, except for the fourth hypothesis, are confirmed at the 95% CI. The path coefficients obtained from these hypotheses are positive, which indicates the positive effect of the independent variable on the dependent variable in the hypothesis.

The Fitness Indices of the Estimated Model

In general, to determine the fitness of the estimated model, various indicators have been used. However, each of the indicators alone cannot be a reason for appropriate fitness or

weakness the model and these indicators should be summed up together. The values of the appropriate indexes of the model are shown in Table 7.

Table 7 MODEL FIT INDICES		
Model fit indices	Acceptable range	The amount earned
Chi square	-	1869.86
Degree of freedom	-	1139
The ratio of chi-square to the degree of freedom	Less than 3	1.64
The Root Mean Estimation of the Approximation Error Variance (RMSEA)	Less than 0.1	0.056
Incremental Fitting Index (IFI)	Greater than 0.9	0.94
Non-Normalized Fitting Index (NNFI)	Greater than 0.9	0.94
Comparative Fitting Index (CFI)	Greater than 0.9	0.94

According to Table 7, all model fitness indicators are within the acceptable range. Therefore, about the set of all fit indices, it can be concluded that the developed model has a suitable fitting and the results from the estimation of relationships in the research model can be considered valid and reliable.

DISCUSSION

The results of the first hypothesis test show that attitudes toward organic foods have a significant impact on the intent to purchase organic food products. Yadav and Pathak (2015), Yazdanpanah and Hasheminejad (2015), Mohammadian and Bakhshandeh (2011) have achieved similar results. Attitude is one of the key elements that influence people's intent to buy various products; in the sense that behaving or not behaving in a certain way depends on personal judgment. People should see the result of their evaluations and positively believe in them which results in the desired attitude, stronger buying intent and finally the act of buying. So it can be argued that consumers evaluate environmentally compatible behavior as beneficial and the positive attitude toward green products leads to the serious intent to buy and use such products. Therefore, people who consider environmental behaviors as important constitute very important targets for desirable environmental action and especially green purchasing behavior. These people consider environmental activities as very important and engage in these activities. By identifying these people, all the environmental programs (in marketing or other areas) may be implemented on them because they are more apt to adopt desirable environmental activities (including green purchase). Kasarjian found out that attitude toward air pollution was the most important variable in determining consumer behavior toward a product. Balderjan (1988) also considered a positive attitude toward environmentally aware lifestyle to result in the purchase and application of environmentally compatible products (Zand & Parvinchi, 2014).

The result of the second hypothesis test shows that organic knowledge has a significant positive effect on purchase of organic foods. The results of Ranjbar and Omid's research (2014) and Rajabi and Omid (2011) also confirm this finding. The result of the third hypothesis test shows that organic knowledge has a significant positive effect on the intention to purchase organic foods, which is consistent with the findings of Tris (2007). Increased environmental awareness has profound effects on consumer behavior and the expansion of the market for green products. Increased knowledge about green products and the environment is an important factor in the behavior of environmentally aware consumers. This enhanced awareness about green issues is evident in consumer purchasing decisions. Numerous customers argue that greater environmental knowledge and preference toward products made by green companies justify their inclination to buy green products and pay extra amounts of money for environmentally friendly products and services (Han et al., 2011). Chan and Lau (2000) realized that environmental knowledge is an independent variable in predicting purchase of green products and Chinese consumers with greater knowledge about the environment show stronger preference to participate in activities related to the green purchase. Knowledge also affects attitudes (Powell & Ham, 2008). Larouche et al. (2001) believe that people's knowledge about the environment plays an important role in shaping their desirable attitudes toward green products. Previous research has also proved that environmental knowledge has a positive and significant effect on attitude toward green products (Cheah & Phau, 2011). Therefore, it can be said that informing the public and making them aware of environmental conditions (general and applied knowledge rather than purely specific and scientific knowledge) can probably enhance preference and tendency toward environmentally desirable behavior (Seif et al., 2015).

The result of the fourth hypothesis test showed that lifestyle had no significant effect on attitude toward organic foods. The result of the fifth hypothesis test shows that lifestyle has a significant positive effect on the intention to purchase organic foods. Such a conclusion is consistent with the studies of Yadav and Pathhak (2015) and Chen Fang (2009). Lifestyle can be interpreted as a set of behavior adopted by individuals not only to fulfill their current needs but also to manifest a particular narrative chosen as their identities (Rahmat & Agha, 2006). Lifestyle is an important factor that has a close relationship with various aspects of health including the quality of life (Feizi et al., 2012). Therefore, lifestyle marketing can be employed to study and evaluate people's personal and social success. Many studies indicate that people who choose healthy lifestyles are less inclined toward dangerous behaviors (Cockerham, 1997). Wertenbroch (1998) noted that restrained eaters choose to purchase small packaged foods at a premium price to help them reduce caloric intake in order to have a healthy way of life.

The result of the sixth hypothesis test shows that health information has a significant positive effect on attitude toward organic foods. The relationship between these two variables was also confirmed in the researches of Elda and Pathek (2015), Chen (2009) and Ranjbar and Omid (2014). The results of the seventh hypothesis show that health awareness has a significant positive effect on the intention to purchase organic foods. Yadav and Pathak (2015), Chen (2009) and Yazdanpanah and Hasheminejad (2015) showed that health awareness has an impact on the intention to purchase organic food products. Healthiness has become an important determinant for food purchases and a parameter of quality for many consumers. Public concern about health maintenance or health improvement is the main reason for buying organic foods. Many consumers believe that organically grown foods are safer and provide greater health benefits than conventional alternatives and have positive attitudes toward organic products. Studies related to

the consumer's food choice and the increasing importance of health and the impact that food production has on the environment are well documented in the literature (Chen, 2009).

The result of the eighth hypothesis test shows that environmental concerns have a significant positive effect on the attitude toward organic foods, which is consistent with the studies of Yadav and Pathak (2015) and Chen (2009). The result of the ninth hypothesis test shows that environmental concerns have a significant positive effect on the intention to purchase organic foods. The results of this study are consistent with the research of Yadav and Pathak (2015) and Yazdanpanah and Hasheminejad (2015). Environmental concerns refer to the degree of emotional involvement that people feel toward environmental issues. It reflects people's response to protection of the environment. On the contrary, environmental attitude refers to people's moral judgments regarding the protection of the environment. In other words, environmental attitude refers to judgments and evaluations based on awareness about environment protection values (Lee, 2008). These findings indicate that green purchasing behavior in consumers especially in Iranian youth is more easily activated by emotional persuasion and increasing awareness based on logic and reason. Studies by Peattie (2001) showed that rationality and awareness should be employed for partitioning of young consumers in green marketing. Contrary to the statistical sample investigated by Peattie (2001), this study suggests that the purchasing behavior of young consumers is more emotional than rational (Hamdi et al., 2011).

The result of the tenth hypothesis test shows that subjective norms have a significant positive effect on the intention to purchase organic food products. Yadav and Pathak (2015), Arvola et al. (2008), Thøgersen (2002) and Yazdanpanah and Hasheminejad (2015) also showed that the subjective norm is a strong predictor of the intention to purchase organic food products. The results confirm that key influential people such as family father and mother-or friends and personal role models can greatly influence younger generations. A network of close friends can suggest, expand, promote, transfer and amplify environmental behavior as a social norm. Therefore, in younger people purchasing of green products has social functions and significance. Uusitalo and Oksanen (2004) state that green consumption is a type of symbolic consumption. Also, their findings show that interpersonal communication is one of the most effective instruments to influence purchasing behavior. It shows that in this group of consumers, marketing to encourage people to recommend and introduce green products to their friends is of great importance. Rayan (2001) also believes that emphasis on following and adopting behaviors in social circles is very strong especially in the collective culture of the Iranians. Based on this, people tend to moderate their interests to follow greater social norms (Hamdi et al., 2011).

The result of the 11th hypothesis test shows that perceived behavioral control has a significant positive effect on the intention to purchase organic food products. Findings from Yadav and Pathak (2015), Yazdanpanah and Hasheminejad (2015) confirm this result. The results of the 12th hypothesis test show that ethical Orientation has a significant effect on the intention to purchase organic food products, which is consistent with the study of Yadav and Pathak (2015) and Yazdanpanah and Hasheminejad (2015). According to the programmed behavior theory, people's motivation is influenced by their perception about the results of a certain behavior. If people come to believe that they can help protect the environment by using environmentally compatible products, they will be more inclined to such products. Therefore, it may be concluded that given the current environmental concerns in the society, increased production of environmentally friendly products will be met with people's preference to use them (Seif et al., 2015).

CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

The purchase of organic products or green products to preserve the environment and maintain the health of individuals and society has become one of the essential issues in Iran. Government and companies in Iran have not been serious about this issue so far and the production and consumption of organic products have not been well-established in the society. To prevent the occurrence of any type of illness caused by consuming processed food products and having harmful chemical fertilizers for the health of individuals and the environment the production and consumption of organic foods have been used as one of the necessary solutions in some countries of the world. Therefore, in this study, we tried to present and test a model of factors affecting the intention to purchase organic food products among Iranian consumers. Based on this, professors and employees at the University of Mohaghegh Ardabili, an active state university in Ardabil province in Iran, were chosen as the statistical population. Then a sample of 280 people was selected for questionnaire distribution. Data analysis was carried out through structural equation modeling using LISREL software package. The results showed that organic knowledge, health awareness and environmental concerns had a positive effect on the attitude toward organic food products. Also, the positive effect of organic knowledge, healthy lifestyle, health awareness, environmental concerns, subjective norms, perceived behavioral control and ethical orientation towards the intention to purchase organic food products had been approved.

According to the results, government officials, food firms and marketers are faced with a significant vacuum in educating people and by providing appropriate environmental plans, health awareness and knowledge about organic food products can enhance consumers' attitudes toward using organic food products. It is suggested that policymakers of the society health provide information about the type of nutrition and its impact on the development of a variety of diseases to the public and guide people in a planned way to consume organic food products. In this area, tools such as public media, social networks, brochures and health books, holding seminars, publishing banners for the theme of health slogans, etc can be used. Promoting the concepts of organic products through brochures, booklets, television programs, educational and promotional programs for the consumption of organic food and introducing the benefits of these products compared to other kinds of products is another suggested solution to increase organic foods consumption. Providing environmentally friendly practices by focus on environmental sustainability concepts and highlighting the danger of environmental degradation in the media, incorporating environmental concepts into student textbooks, installing environmental slogans in public transit and encouraging people to adopt nature-friendly measures are some of the recommended solutions. It is suggested that marketers, through advertising or labeling on their products, try to strengthen green purchasing behavior. Governments, businesses and environmental groups must demonstrate that environmental problems are controllable by changing consumer behavior. It is suggested that the marketers of firms corporate more effectively in engineering the lifestyle of the society and by promoting a healthy lifestyle, provide a lifestyle compatible with organic food products for the society. By subjective norms, if consumers believe that other people's mindset about organic products is positive, they will be more likely to purchase these products. Therefore, since the family is the first socially influential group, organic producers must target the family with the promotion of their products and marketers step forward by using social pressures to strengthen their intent to purchase organic products.

Future researchers can, in addition to the planned behavior theory, consider other related theories, such as rational action theory, technology acceptance theory and therefore design and

test a more comprehensive model of the factors affecting the purchasing behavior of green products. It is suggested that in future studies, the model of this research be used for other types of green products such as green household appliances. Assessing the role of moderating the demographic characteristics of respondents in the behavioral patterns of purchasing green products is another field that can be considered in future research. It is suggested that to be more confident to generalize the results, the subject of this research is studied in other cities of Iran. Future researchers to increase the credibility of the results can do this research with a more extended period and also consider the higher sample size. It is suggested to investigate the effects of other factors on consumption behavior of green products. These factors may include marketing mix components such as product characteristics, pricing, distribution and promotion methods, etc. as well as other factors such as behavioral and cultural habits, education and general information, family and friends, etc.

Little research on the subject of this research is one of the main limitations, especially in Iran. Another limitation was the lack of willingness and motivation of some respondents to answer the questionnaire. The limited scope of the research to only one of the Iranian universities in Ardabil Province and the lack of complete and accurate information of some respondents about organic products are the other limitations of this research.

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