

Pathology of Organic Agriculture in Iran's Sanctioned Economy for Green Products (Opportunities, Challenges and Strategies)

Mohammad Taleghani^{1*} and Ataollah Taleghani²

¹Associate professor, Department of Industrial Management, Rasht Branch, Islamic Azad University (IAU), Rasht, Iran

²Research Assistant, Ted Rogers School of Management, Toronto Metropolitan University (TMU), Toronto, Canada

***Corresponding author:** Mohammad Taleghani, Associate professor, Department of Industrial Management, Rasht Branch, Islamic Azad University (IAU), Rasht, Iran.

Submitted: 30 July 2024 Accepted: 06 August 2024 Published: 13 August 2024

Citation: Mohammad Taleghani, Ataollah Taleghani (2024) Pathology of Organic Agriculture in Iran's Sanctioned Economy for Green Products (Opportunities, Challenges and Strategies). J of Agri Earth & Environmental Sciences 3(4), 01-09.

Abstract

Through the ages, agricultural system has been changed variously and human has always been the most important factor in this change. In the recent century, due to growing population, human primary attitude, which is a sort of friendly one, is replaced with the one-side relationship that is against the nature. In this case, chemical fertilizers, pesticides, hormones products and etc., enter to the agricultural sector and through utilization of modified varieties, there has been great mutation in production of agricultural products to be a response to increasing demand of foods. But this enhancement is followed by environmental and health problems for producers and consumers. Iran is vulnerable to the arable land equipped for irrigation, food imports over total merchandise exports, and the cereal imports dependency ratio while being resilient per capita food production and food supply variability. Growing consumer awareness about environmental issues has resulted in increased attention toward the consumption of organic food. This has driven an increase in organic research. Most of these researches are conducted in developed countries and developing countries has a small contribution. This paper investigates the effects of organic knowledge, perception of consequences, subjective norms, price, green trust, perceived consumer effectiveness, availability, relative advantage and organic purchase intention on organic purchase behavior among Iranian consumers as a developing country consumer. Results showed strong support for the impact of price, consumer effectiveness and perception of consequences on intention to purchase organic food products. While organic knowledge, green trust, price, consumer effectiveness and intention were found to influence purchase behavior. This paper will discuss the implications of these results for agricultural practitioners and marketers.

Keywords: Organic Agriculture, Green Products, Environmental Marketing, Sanctioned Economy.

Introduction

Food consumption is associated with several kinds of environmental impacts, and a collaborating production–consumption system is needed for sustainable food consumption [1]. Severe reducing of environmental variety and extinction of many of herbal and zoological species, accumulation of hazardous materials in environment, and various disease are samples of negative effects of chemical use. So that, with passing time, cause for worry of environmental problems, modern agricultural systems have been criticized severely; and a global consensus exists in favor of the natural environment to extend a kind of agriculture that while is able to increase productivity, cause less damage to

environment. Therefore, human beings try to prevent this disastrous process with providing some measures. Organic agriculture is a system of agricultural products that does not apply any kind of fertilizers, pesticides, hormones and synthetic chemical additives; in return, to strengthening soil fertility, pests' control, diseases and weeds use non-chemical methods including crop rotation, green manure, biological control, compost and so on. High quality and sufficient food production, in line with nature and environment, the preservation of genetic diversity in production system and its surroundings, reinforcement of environmental cycles and soil fertility long term extension are of general aims of organic agriculture [2].

Food which are safe to use, have fine quality, are nutritious, have concerns for the welfare of animals and are grown and produced in line with the principles of sustainable development, are known as green food. Green foods include two categories; the first category allows us to utilize a specific amount of chemicals, however the second category consists of organic food. "Organic" means products in which their production did not utilize pesticides or fertilizers. Chinnici, D'Amico, and Pecorino (2002) defined organic products as food which is cultivated via a process that is environmentally friendly. Products which are listed as organic are produced in line with standard rights in all areas of production and are awarded a certificate by an industrial body. There has been noticeable growth in the organic agriculture industry within the previous few years and the average yearly increase in the sales of organic food is anticipated to go up by 20 to 24% in the next ten years [3]. Less than one-third of the cultivated area is irrigated; the rest is devoted to dry farming. The western and northwestern portions of the country have the most fertile soils. The country's most important crops are wheat, rice, other grains, sugar beets, fruits, nuts, cotton, and tobacco. Iran also produces dairy products, wool, and a large amount of timber. Irrigated areas are fed from modern water-storage systems or from the ancient system of qanat. Bread has always been the staple food of Iran. Wheat production is still vital to Iran's food security and bread continues to be consumed at much higher per capita rates than rice.

In recent times, there are many encouraging indications which show that the demand for greener products is increasing rapidly. Therefore, understanding consumers' organic buying behavior is important not only for academics and agriculture practitioners but for marketers, and it is especially critical for environment friendly businesses [4]. Despite the scholarly attention paid to green issues, the market shares of many green products have not increased significantly in accordance with academic pursuit and interest over the past decade. Although Consumer green purchase behavior has become one of the most popular research topics among academics, however later literature reviews showed that they have had only limited success to explain consumer green purchase behavior [5, 6]. The government of Iran is planning to increase the area under greenhouse cultivation to 48,000 hectares by 2027. This will boost the production of fruits and vegetables which would result in an incline in the overall agricultural export.

The 1990s experienced a substantial increase in the number of studies on green behavior determinants. However, these efforts have focused on developed rather than on emerging economies. For example, Diamantopoulos et al. (2003) reported that most studies have been conducted in the USA, Australia, Germany, France, Denmark, and the UK [7]. Many researchers have identified the determinants of consumers' green purchase behavior, majority of them have been conducted in industrialized countries [4]. The next logical step is to expand these concepts universally to evaluate the differences that may exist between cultures, especially when dealing with consumer behavior in an environmentally conscious setting [8]. So, the study about various factors effect on consumer green purchase intentions in emerging Asian markets will be considered proper. Concerning studies in emerging economies, consumers seem to express little environmental commitment [7]. In developing countries, as Iran, it needs to

understand entirely how encourage the intention to green food consumption and how converting it to actual behavior.

Chemicals use in agriculture has had significant growth in Iran. According to the statistics, in the past decade, the use of fertilizers has increased from 2400000 tons in 1378 to 3300000 tons in 1387; also, this sector annually applies more than 27000 tons chemical pesticides [2]. Given that consumers are of the most important parts of green revolution, we could effect on their green agricultural products purchase through better realization of their characteristics and behaviors. To make a success of marketing of organic agricultural products, it must discover the determining of green purchase behavior. The result of such surveys helps public policy makers to develop environmental trainings and increasing awareness programs to encourage people to do green initiatives; and also, it provides valuable insights on consumer's behavior for business planer. This additional knowledge could be useful in their business in order to sketching of marketing procedures and improving the imaginable proportion between traditional and ecological nature products.

Background and Hypotheses

Theoretical Framework

Understanding of customers' behaviors and their intention to purchase is necessary to understand why they tend to buy organic food. In order to perception of reasons behind of this intention, various theories are used until now.

According to Ravis et al. (2009), "the TPB is perhaps the most influential theory in the prediction of social and health behaviors [9]. TPB has been applied in organic researches. The premise of the TPB is that human being is rational and uses a variety of information when making a decision to act. Briefly, the TPB predicts that behavior is influenced by behavioral intentions [9]. Behavioral researchers have emphasized that purchase intention is the most immediate relevant predictor of corresponding behavior [10, 4]. Moreover, TPB has been applied to the studies on many other environmental behaviors in western countries, including travel mode choice, household recycling, the purchasing of energy saving light bulbs, the use of unbleached paper, water use, meat consumption, food consumption, green hotel and general pro-environmental behavior [11]. Therefore, consistent with these past studies, this study incorporates TPB as its theoretical framework.

Intention to Purchase Organic Food Products

Green purchase intention is conceptualized as the probability and willingness of a person to give preference to products having eco-friendly features over other traditional products in their purchase considerations. According to Beckford et al., (2010) research studies, green purchase intention is a significant predictor of green purchase behavior, which means that purchase intention is positively affecting the probability of a customer decision that he will buy green products [4]. Intentions are considered as a precursor to behavior and are therefore seen as the best predictor of behavior [12]. As in many countries in the Mid-East, the domestic market for organic products in Iran is still relatively small. However, local demand for organic products has been growing parallel with consumer awareness as well as concerns related to several food safety issues. Iranian cuisine places a strong emphasis on using fresh and natural ingredients

to prepare healthy food. Staples like rice, legumes, herbs, and vegetables form the foundation of Persian dishes that are nutritious foods.

A mediator has been defined as “the generative mechanism through which the focal independent variable is able to influence the dependent variable”. The TPB indicates that mediation effects will influence the relationships formed [13]. Therefore, this report will examine the effect of mediators. So, the effect of purchase intentions on the relationship between the antecedents and purchase behavior will be examined. Individual hypotheses will be discussed in each antecedent section.

H1: An increase in intention to purchase organic food products will increase consumer’s purchase behavior of organic food products.

Organic Knowledge

Knowledge has a key part in the process of making the decision to buy. Hill and Lyncheaun (2002) agree with this fact due to their discovery that knowledge is a major element in affecting the decision to buy products that are organic. Lyons et al. (2001) indicated that customers explain organic products as natural, unrefined, and unprocessed compared to other normal products. A study carried out by Hill and Lyncheaun (2002) portrayed that even though customers know the main factors of organic products, they do not have enough knowledge about the agricultural processes that are involved in organic production. Based on the studies by Werner and Alvensleben (2011), knowledge creates a positive influence on a person's viewing habits of buying and using food [3]. Consumer knowledge about environmental issues has been identified as a significant predictor of environmentally friendly behavior [14]. Therefore, the following propositions are put forward:

H2a: An increase in organic knowledge will increase consumer’s intention to purchase organic food products.

H2b: An increase in organic knowledge will increase consumer’s purchase behavior of organic food products.

H2c: The effect of organic knowledge on organic purchase behavior will be mediated by green purchasing intention.

Perception of Consequences

It represents an individual’s perception of the impact which someone’s behavior may have on the environment. Perception of threat greatly increased the level of environmental behaviors [11]. Researchers suggested that threat perception is an important catalyst that causes a change to happen; it predicts behavioral change in one’s life. Subsequently, this concept has also been applied to study the pro-environmental behavior and the term of “threat perception” refers more than the personal sphere and also encompasses other individuals, living things and entities of the physical environment [14]. Therefore, the following propositions are put forward:

H3a: An increase in perception of consequences will increase consumer’s intention to purchase organic food products.

H3b: An increase in perception of consequences will increase consumer’s purchase behavior of organic food products.

H3c: The effect of perception of consequences on organic purchase behavior will be mediated by green purchasing intention.

Subjective Norms

Subjective norms can be conceptualized as the internalized perception that people that are important in the decision maker’s life desire them to act (not act) in a certain way. In other words, subjective norms are the ‘perceived social pressure’ an individual feel to perform the behavior [12]. The importance of social norms for environmentally responsible behavior is thoroughly documented in the literature. In the context of food choice, Vermeir and Verbeke (2006) reported that the desire to comply with other people could explain strong intentions to purchase sustainable dairy products despite weak personal attitudes. Applied to organic food consumption, Chen (2007), Thøgersen (2007b) and Dean et al. (2008) find a significant positive relation between consumers’ intention to purchase organic food and their subjective norm also Subjective norms have been proved to influence the buying behavior of people [15, 3]. Therefore, the following propositions are put forward:

H4a: The stronger the subjective norms, the more likely a consumer will intend to purchase organic food products.

H4b: The stronger the subjective norms, the more likely a consumer will purchase organic food products.

H4c: The effect of in subjective norms on organic purchase behavior will be mediated by green purchasing intention.

Price

Consumers perceive organic foods as expensive compared to conventional alternatives. Magnusson et al. (2001), report that many consumers consider price to be an important determinant of purchase. They go further to state that organic food products should not be more costly than conventional ones. Price is often perceived to be the major barrier to the purchase of organic produce. Research has also shown that the majority of consumers would purchase more organic food products if there was a decrease in price premiums. Nevertheless, research suggests that some consumers are willing to pay price premiums for organic goods. While figures vary across studies, on average, research shows that consumers are willing to spend up to 10–20% more. This is significant as it suggests that price premiums may not be a major purchase barrier for consumers. [3]. Therefore, the following propositions are put forward:

H5a: An increase in willingness to pay a premium will increase consumer’s intention to purchase organic produce.

H5b: An increase in willingness to pay a premium will increase consumer’s purchase behavior of organic food products.

H5c: The effect of price consciousness on organic purchase behavior will be mediated by green purchasing intentions.

Green Trust

Trust is an extent of the confidence that another party would behave as expected [16]. Customer trust is a fundamental determinant of long-term consumer behavior [17]. Hence, consumer purchase intentions are affected by consumer trust (Harris and Goode, 2010). Past literature posits that customer trust is a determinant of consumer purchase intentions. If buyers have had a trust experience with the seller, they would possess a higher level of purchase intentions. Recently some companies exaggerate the environmental performance of their products, and thereby customers are reluctant to trust them anymore. Thus, Chen (2010) argues that green trust would influence consum-

ers' purchase behaviors in the environmental era [16]. Applied to organic food this can be understood as that uncertainty about the effects of organic food will trigger people to follow the behavior of others they observe and as a majority of people rarely or not buy organic products, uncertainty may make that people will be more likely to restrain from purchasing organic food. Thøgersen (2007a) found that if people feel uncertain about organic food, they are less likely to make a decision to buy it, in spite of favorable attitudes and norms. Uncertainty may relate to e.g. the question whether (organic) food is healthy, whether organic certification can be trusted, and even whether organic food is considered as fashionable [15]. Therefore, the following propositions are put forward:

H6a: An increase in green trust will increase consumer's intention to purchase organic food products.

H6b: An increase in green trust will increase consumer's purchase behavior of organic food products.

H6c: The effect of in green trust on organic purchase behavior will be mediated by green purchasing intention.

Perceived Consumer Effectiveness

The concept of perceived consumer effectiveness (PCE) was first described by Kinnear, Taylor and Ahmed (1974) as a measure of an individual belief that he or she can have an effective contribution on pollution abatement. Among the top 10 predictors of environmental concern, PCE was found to be the best predictor and the findings have shown that individual who felt strongly that his individual efforts could be useful in pollution abatement exhibited a higher environmental concern than average [14].

PCE reflects the belief of people that their actions (e.g. purchasing environmentally friendly products and subscribing to e-voice campaigns, etc.) will make a difference in helping to solve environmental problems, such as a decrease in pollution. Those people who strongly believe that their environmentally sensitive behaviors may result in positive consequences or outcomes are more likely to engage in environmental sensitive behaviors than others. Ellen et al. (1991), found that PCE has direct effects on environmentally conscious behaviors [6]. Therefore, the following propositions are put forward:

H7a: The stronger the perceived consumer effectiveness, the more likely a consumer will intend to purchase organic food products.

H7b: The stronger the consumer self-effectiveness, the more likely a consumer will purchase organic food products.

H7c: The effect of perceived consumer effectiveness on organic purchase behavior will be mediated by green purchasing intentions.

Availability

Lack of availability is often cited as a barrier to the purchase of organic products. Davies et al. (1995) found it to be the main reason why consumers did not purchase organic produce. Studies have demonstrated that consumers would like to see an increase in the availability and range of organic products, and that the majority of consumers would purchase more organic produce if it was more readily available. In addition, Jolly (1991)

found that the extra time needed to search for organic products was viewed as an inconvenience and may impede purchase. Padel and Foster (2005) suggest that consumers do not want to exert excessive effort in order to purchase organic goods. In other words, consumers want organic products available where they would normally shop in order to not be inconvenienced by choosing organic goods [12]. Therefore, the following propositions are put forward:

H8a: An increase in availability will increase consumer's intention to purchase organic food products.

H8b: An increase in availability will increase consumer's purchase behavior of organic food products.

H8c: The effect of in availability on organic purchase behavior will be mediated by green purchasing intention.

Perception of Relative Advantage

Innovation characteristics include those innovative features that lead to the sooner, later acceptance or refusal of it by individuals. The use of innovation is in fact attributed to its features; that is, the decision to accept innovation depends on the perception of innovation characteristics by the members of social system. Accordance with innovation acceptance theory of Rogers, one of the characteristics of innovation that influence on acceptance, is relative advantage. Relative advantage is the extents to which innovation is perceived to be better than what supersedes and one believes that it enhances his/her job performance [18]. Perception of relative advantage in relation with organic food include, the quality of food such as appearance, flavor, nutrition value and health of it. Therefore, the following propositions are put forward:

H9a: The greater the perceived relative advantage, the more likely a consumer will intend to purchase organic food products.

H9b: The greater perceived relative advantage, the more likely a consumer will purchase organic food products.

H9c: The effect of stronger perceived relative advantage on organic purchase behavior will be mediated by green purchasing intentions.

Methodology

Quantitative data was collected using a questionnaire to assess a range of relationships, as depicted in Fig.1. Various articles, researches and books were primarily investigated to design the questionnaire. Then, measurement component was derived to each variable in question. The questionnaire included 31 close questions based on Likert Scale of 5 multiple-choice items. The validity of questionnaire was supported by some of the university professors and also it was used from confirmatory factor analysis method for determining validity of questionnaire. Cornbach's Alpha coefficient test was used to determine the reliability of the research. The coefficient reached for whole questionnaire is 0.95. This indicates that the questionnaire has the required reliability. The population in this research includes organic food customers of Iran that were randomly chosen from the stores and supermarket customers. Regarding the very few consumers of organic food in Iran, only 192 out of 240 questionnaires were filled and then used as samples of research. In order to analysis the data and test hypotheses, regression method is used.

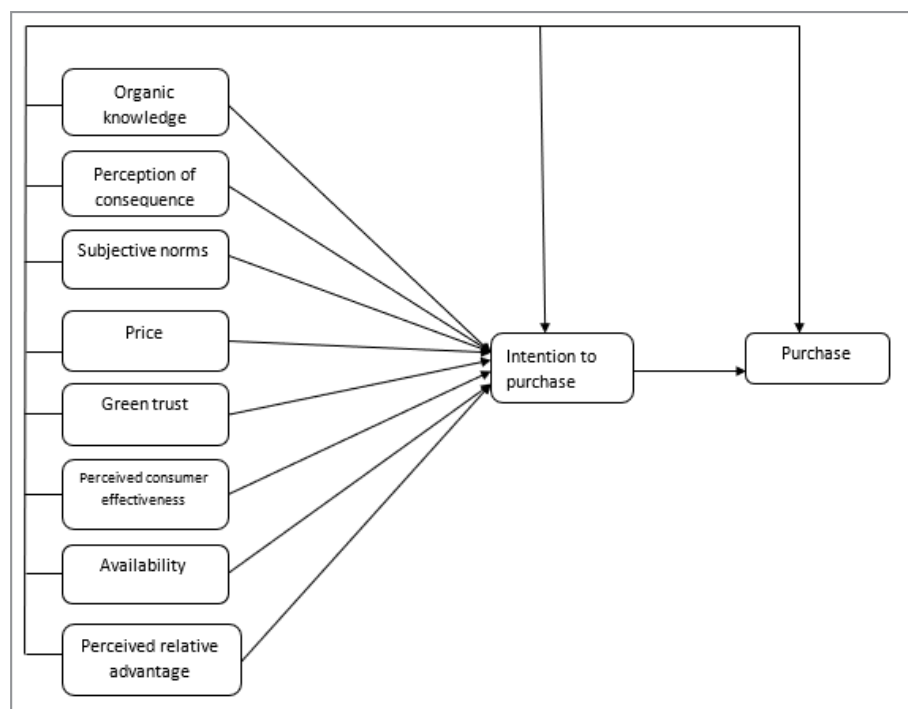


Figure 1: Proposed conceptual model

Result

Multiple Regression Analysis

Stage 1 Analysis: Stage 1 regression examines the influence of the antecedents on organic purchase intention. As indicated by Table 1 fifty-one percent of the variance in intention to organic food products is explained by the independent variables. Perception of consequences, price and self-effectiveness were all significant, supporting H3a, H5a, and H 7a respectively.

Stage 2 Analysis: Stage 2 regression examined the influence of organic purchase intentions on organic food purchase. Table 1

lists details of the results. Forty- one percent of the variance (R2) in organic food purchase is explained by intention to purchase organic food. This suggests that intention to purchase organic food have strong explanatory power over purchase behavior. The results indicate intention to purchase organic food were positively related to purchasing organic food products that providing support for H1. This was further supported by the correlations. Organic knowledge, price, trust and self-effectiveness were all found to be positively related to purchase behavior, providing support for H2b, H5b, H6b and H7b respectively.

Table 1: Multiple Regression Results

Analysis1 Dependent variable Purchase intention R2=0.51				Analysis2 Dependent variable Purchase behavior R2=0.41			
Independent variable	Beta	t	Significance (p)	Independent variable	Beta	t	Significance (p)
organic knowledge	.057	.685	.494	organic knowledge	.194	2.892	.004
Perception of consequences	.280	2.717	.007	Perception of consequences	.133	1.599	.111
Subjective norms	.134	1.660	.099	Subjective norms	.051	.785	.434
Price	.211	2.578	.011	Price	.201	3.034	.003
Availability	-.057	-.712	.477	Availability	.021	.329	.743
Trust	-.104	-1.251	.213	Trust	.142	2.099	.037
Perceived of consumer effectiveness	.177	2.146	.033	Perceived of consumer effectiveness	.190	2.845	.005
Relative advantage	.105	1.102	.272	Relative advantage	.045	.581	.562
				intention	.643	11.564	.000

Mediation Effect

Stage 3 regression is concerned with examining mediation effect. The procedure used is outlined in smith and paladino and is based on Baron and Kenny's (1986) accepted procedures [12]. Briefly, correlations were examined to ensure the relationships between constructs were significant. If the new relationship, which included the mediating variable, remained significant and unchanged then mediation was not supported. If it reduced but was still significant then partial mediation exists. However, if it was reduced to the point of insignificance then full mediation was present.

Stage 3 Analysis: Stage 3 was concerned with the mediation effects of purchase intentions on the relationship between the antecedents and purchase behavior (H2c–H9c). Perception of

consequences, price, trust and self-effectiveness were all found to be positively related and significant. A comparison of table 1 and 2 shows that organic knowledge remains significant but relatively unchanged. The p-value for organic knowledge went from 0.004 to 0.006. Therefore, mediation is not found and H2c is not supported by the results. The relationship with price remains significant but increases from p-value of 0.003 to 0.012. therefore mediation is not present and H5c is not supported. Also, the relationship with perceived consumer-effectiveness remains significant but increases from a p-value 0.005 to 0.015. Therefore, mediation is not present and H7c is not supported. Trust was reduced but is still significant, therefore partial mediation is present, providing partial support for H6c. Results are depicted in Table 1-4.

Table 2: Mediation Analysis

Dependent variable Purchase behavior Mediator Purchase intention			
Independent variable	Beta	t	Significance (p)
organic knowledge	.186	2.802	.006
Perception of consequences	.090	1.082	.281
Subjective norms	.031	.475	.635
Price	.169	2.541	.012
Availability	.030	.470	.639
Trust	.158	2.361	.019
Perceived of consumer effectiveness	.163	2.447	.015
Relative advantage	.029	.377	.706

Discussion

Intention Toward Organic Food Products

This research was concerned with the determining factors influencing on purchasing organic food. Accordance with the TPB model, purchase intention is the most immediate relevant predictor of corresponding behavior and it looked at H1. H1 was supported and this suggested that intention to purchase organic food products do influence purchase behavior. This relationship is corroborated with a correlation of 0.41 and p-value of 0. This finding is also consistent with another research conducted [12].

Antecedent

The result obtained for the individual antecedents will now be investigated. The first variable examined was organic knowledge, which is concerned with H2a-b. H2a the relationship between organic knowledge and intention was not supported. But H2b, the relationship between organic knowledge and purchase behavior was supported. Suggesting that an increase in organic knowledge acts to increase the purchase behavior. This finding may reflect the fact that organic knowledge directly influences on purchase behavior.

Hypotheses H3a-b were concerned with perception of consequences. H3a which investigated the relationship between perception of consequences and intention to organic food products

was found to be positive and significant. This suggests that an increase of perception of consequences do increase the intention to purchase organic food products. However, this intention was not found to be reflected in purchase behavior, as H3b was not supported.

Subjective norms were investigated in H4a-b. Results showed it was not substantiated with all hypotheses not being supported. This result is inconsistent with research that shows subjective norms is a significant variable in organic purchase [12]. This finding can be mean that Iranian consumers are not affected by social pressure in food choices. Further studies are needed to support this claim.

Price was investigated in the form of H5a-b. H5a was supported in the finding with the p-value 0.011, showing that an increase in willingness to pay a premium will increase consumer's intention to purchase organic food. Additionally, H5b with a p-value of 0.003 was supported, supporting a relationship between in willingness to pay a premium price and purchase behavior. This result is consistent with finding by (Padel and Foster, 2005).

Green trust was investigated in the form of H6a-b. H6b was found to be significant with a p-value of 0.037. Suggesting that an increase in green trust will increase consumer's purchase be-

havior of organic food products. Conversely H6a was not supported suggesting that green trust does not influence intention. This is not consistent with past research that has found green trust as an important determinant of intention to purchase [19].

H7a-b examined the influence perceived consumer effectiveness on intention to and purchase organic food products. Both hypotheses were supported and significant (p -value= 0.033, 0.005 respectively). Suggesting that the stronger the perceived consumer effectiveness, the more likely a consumer will intend to purchase organic food products and purchase organic food products. This finding is consistent with past researches [14, 6].

H8a-b examined the influence availability has on organic food purchase intention and behavior. Both of hypotheses were not supported. This finding is inconsistent with past research that shows availability has a strong impact on organic purchase decisions (Padel and Foster, 2005). However, as these studies were conducted overseas, the availability of organic food in Iran may not be a big influence on purchase. Further studies are needed to support this claim.

Perceived relative advantage was investigated in H9a-b. Both of hypotheses were not supported one more time. Suggesting that relative advantages like flavor, appearance, nutrition value and quality as a whole may not influence on purchase intention and behavior in Iran. Further studies are needed to support this claim.

Mediation Effect

Mediation was tested in terms of the mediation effects of purchase intentions on the antecedents and purchase behavior. Result showed partial mediation of green trust by intentions, suggesting that the influence of trust does impact a consumer's purchase behavior through their purchase intentions. This finding indicate consumer trust with organics, is important. All other antecedent resulted in no mediation by intention, which is largely inconsistent with the TPB.

Theoretical Implications

This paper adds to the growing body of research that supports the TPB as a useful predictive model. It presents the TPB as a beneficial theory for organic food purchase research. This paper

also adds to the area of future research. The unsupported hypotheses provide scope for further study into the field of organics. Specific future research focus will be discussed in a subsequent section.

This study has contributed to the growing body of research in the field of organic food purchases. It has examined the role of intentions and purchase behaviors in regards to organic agriculture produces. It has addressed these concerns in an Iranian context, thus filling a gap in the current literature which mostly consists of organic research in overseas countries. By looking specifically at Iranian consumers, the paper provides implications for marketers that are specifically relevant to the Iranian market.

Managerial Implications

This research has augmented the knowledge marketers have of the consumer decision making process with regards to organic food products. As a result, this section will provide implications for marketing practice and strategy formulation.

Price was found to influence both purchase intentions and behaviors. This makes it an important variable for marketers to consider. Consumers who are willing to pay premium, probably are People with high income. So, in first step, marketers can target this segment of market. Perceived consumer effectiveness was influence both purchase intention and behaviors too. This finding also suggests that education and increasing knowledge about the environment and organic agriculture is important, in order to make consumers more aware of environment, organics and therefore with the self-effectiveness and consequences. Increasing organic knowledge is likely to increase purchase of organic food products.

Along with raising awareness of environmental issues and organic products, marketers should try to reduce consumer confusion. In order to reduce consumer confusion a national logo needs to replace the several current different logos. This will help to build a unified industry and enhanced consumer perceptions of trust. There is also a need to provide a consistent integrated marketing communication message to all customers as this will further reduce confusion and help to build a positive market perception of organic food products.

Table 3: The Results of Testing Hypotheses

Variable	Hypotheses	Result
intention	H1: An increase in intention to purchase organic food products will increase consumer's purchase behavior of organic food products.	Confirmed
organic knowledge	H2a: An increase in organic knowledge will increase consumer's intention to purchase organic food products.	Rejected
	H2b: An increase in organic knowledge will increase consumer's purchase behavior of organic food products.	confirmed
	H2c: The effect of organic knowledge on organic purchase behavior will be mediated by green purchasing intention.	Rejected
Perception of consequences	H3a: An increase in perception of consequences will increase consumer's intention to purchase organic food products.	confirmed
	H3b: An increase in perception of consequences will increase consumer's purchase behavior of organic food products.	Rejected

	H3c: The effect of perception of consequences on organic purchase behavior will be mediated by green purchasing intention.	Rejected
Subjective norms	H4a: The stronger the subjective norms, the more likely a consumer will intend to purchase organic food products.	Rejected
	H4b: The stronger the subjective norms, the more likely a consumer will purchase organic food products.	Rejected
	H4c: The effect of in subjective norms on organic purchase behavior will be mediated by green purchasing intention.	Rejected
Price	H5a: An increase in willingness to pay a premium will increase consumer's intention to purchase organic produce.	Confirmed
	H5b: An increase in willingness to pay a premium will increase consumer's purchase behavior of organic food products.	confirmed
	H5c: The effect of price consciousness on organic purchase behavior will be mediated by green purchasing intentions.	Rejected
Green trust	H6a: An increase in green trust will increase consumer's intention to purchase organic food products.	confirmed
	H6b: An increase in green trust will increase consumer's purchase behavior of organic food products.	confirmed
	H6c: The effect of in green trust on organic purchase behavior will be mediated by green purchasing intention.	Confirmed
Perceived consumer effectiveness	H7a: The stronger the perceived consumer effectiveness, the more likely a consumer will intend to purchase organic food products.	Confirmed
	H7b: The stronger the consumer self-effectiveness, the more likely a consumer will purchase organic food products.	Confirmed
	H7c: The effect of perceived consumer effectiveness on organic purchase behavior will be mediated by green purchasing intentions.	Rejected
Availability	H8a: An increase in availability will increase consumer's intention to purchase organic food products.	Rejected
	H8b: An increase in availability will increase consumer's purchase behavior of organic food products.	Rejected
	H8c: The effect of in availability on organic purchase behavior will be mediated by green purchasing intention	Rejected
Relative advantage	H9a: The greater the perceived relative advantage, the more likely a consumer will intend to purchase organic food products.	Rejected
	H9b: The greater perceived relative advantage, the more likely a consumer will purchase organic food products.	Rejected
	H9c: The effect of stronger perceived relative advantage on organic purchase behavior will be mediated by green purchasing intentions.	Rejected

Table 4: Descriptive statistics

Variable	Number of items	Mean	Standard deviation	Reliability (cronbach's alpha)
Purchase behavior	4	4.267	0.44253	0.69
Intention to purchase	3	4.320	0.52175	0.81
organic knowledge	3	4.349	0.45091	0.60
Perception of consequences	5	4.461	0.50191	0.85
Subjective norms	2	4.312	0.50779	0.54
Price	3	4.297	0.49098	0.67
Green trust	4	4.234	0.45233	0.74
Perceived consumer effectiveness	2	4.287	0.58188	0.78
Availability	2	4.255	0.5016	0.55
Relative advantage	3	4.491	0.50481	0.78

References

1. Partidario PJ, Lambert J, Evans S (2007) Building more sustainable solutions in production–consumption systems: The case of food for people with reduced access. *Journal of Cleaner Production* 15: 513-524.
2. Rajabi A, Shabanali Fami H, Pouratashi M (2014) Investigating adoption component of agricultural organic product from the viewpoints of consumers. *Journal of Food Science and Technology* 38: 33-43.
3. Seyed Saleki Z, Seyed Saleki SM (2012) The Main Factors Influencing Purchase Behavior of Organic Products in Malaysia. *Interdisciplinary Journal of Contemporary Research in Business* 4: 98-116.
4. Ali A, Ahmad I (2012) Environment Friendly Products: Factors that Influence the Green Purchase Intentions of Pakistani Consumers. *Pakistan Journal of Engineering Technology and Science* 2: 84-117.
5. Tseng SC, Huang SW (2013) A framework identifying the gaps between customers' expectations and their perceptions in green products. *Journal of Cleaner Production* 1-11.
6. Albayrak T, Caber M, Moutinho L, Herstein R (2011) The Influence of Skepticism on Green Purchase Behavior. *International Journal of Business and Social Science* 2: 189-197.
7. Carrete L, Castano R, Felix R, Centeno E, Gonzalez E (2012) Green consumer behavior in an emerging economy: confusion, credibility, and compatibility. *Journal of Consumer Marketing* 29: 470-481.
8. Cheah I, Phau I (2011) Attitudes towards environmentally friendly products: The influence of eco-literacy, interpersonal influence and value orientation. *Marketing Intelligence & Planning* 29: 452-472.
9. Kim YJ, Njite D, Hancer M (2013) Anticipated emotion in consumers' intentions to select eco-friendly restaurants: Augmenting the theory of planned behavior. *International Journal of Hospitality Management* 34: 255-262.
10. Samarasinghe R (2012) The Influence of Cultural Values and Environmental Attitudes on Green Consumer Behavior. *International Journal of Behavioral Science* 7: 83-98.
11. Wang P, Liu Q, Qi Y (2013) Factors influencing sustainable consumption behaviors: a survey of the rural residents in China. *Journal of Cleaner Production* in press 1-14.
12. Smith S, Paladino A (2010) Eating clean and green? Investigating consumer motivations towards the purchase of organic food. *Australasian Marketing Journal* 18: 93-104.
13. Ajzen I, Fishbein M (1980) *Understanding Attitudes and Predicting Social Behavior*, Prentice Hall, Englewoods-Cliffs, New Jersey.
14. Tan BC, Lau TC (2011) Green Purchase Behavior: Examining the Influence of Green Environmental Attitude, Perceived Consumer Effectiveness and Specific Green Purchase Attitude. *Australian Journal of Basic and Applied Sciences* 5: 559-567.
15. Aertsens J, Verbeke W, Mondelaers K, Van Huylenbroeck G (2009) Personal determinants of organic food consumption: a review. *British Food Journal* Volume 111: 1140-67.
16. Chen YS, Chang CH (2012) Enhance green purchase Intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision* 50: 502-520.
17. Lee K (2009) Gender differences in Hong Kong adolescent consumer: green purchasing behavior. *Journal of Consumer Marketing* 26: 87-96.
18. Chirani E, Taleghani M, Rahmati Y (2011) Designing a model for explanation of the internet banking acceptance rate. *African journal of business management* 5: 8593- 8600.
19. Harris LC, Goode MMH (2010) Online services-capes, trust, and purchase intentions. *Journal of Services Marketing* 24: 230-243.