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Organic Agriculture: Food for Future Green Consumers in Iran

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Abstract

Keywords: environmental marketing, intention to purchase, organic agriculture

The aim of this paper was investigating the effects of organic **I** knowledge, perceived consequences, subjective norms, price, and green trust, perceived consumer effectiveness, availability, relative advantage, and organic purchase intention on organic purchase behavior among Iranian consumers as the consumers in a developing country. The survey questionnaire was administered to the customers of large chain stores and organic food stores in five provinces of Iran that had branches for producing and selling organic food products. Given the very few number of organic food consumers in Iran, only 192 out of 240 questionnaires were filled and then used as samples of study. In order to analysis the data and test the hypotheses, multiple regression analysis method was used using by SPSS software. Results showed strong support (R²=0.51) for the impact of price, consumer effectiveness, and perceived consequences on intention to purchase organic food products. Organic knowledge, green trust, price, consumer effectiveness, and intention were found to have influenced purchase behavior. This paper will discuss the implications of these results for agricultural practitioners and marketers.

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INTRODUCTION

Food consumption is associated with several kinds of environmental impacts, and a collaborating production-consumption system is needed for sustainable food consumption (Partidario et al., 2007). In the one hand supply crises arising from mad cow disease, the foot-and-mouth epidemicand concerns over the use of pesticides in farming as well as antibiotics and hormones in livestock feed, have prompted consumers to lose someconfidence in the quality of food resulting from conventional production (Chen, 2009). In the other hand, severe reduction of environmental diversity and the extinction of many herbal and zoological species, accumulation of hazardous materials in environment, as well as diseases of many kinds are examples of negative effects of chemical use such that, over the time, those who have been concerned about environmental problems have extensively criticized modern agricultural systems, and a global consensus have reached in favor of the natural environment to extend the kind of agriculture that is able to increase productivity with less damage to the environment. As a result, human beings try to take some preventive measures that help to disrupt this disastrous process. Therefore, the demand for organically grown production has increased. Organic agriculture is a system of agricultural products in that no fertilizers, pesticides, hormones, and synthetic chemical additives are applied; rather, non-chemical practices including crop rotation, green manure, biological control, and compost are applied to strengthen soil fertility and manage pests, diseases, and weeds. High quality and sufficient food production, along with the conservation of nature and environment, the preservation of genetic diversity in production system and its surroundings, the reinforcement of environmental cycles, as well as long-term soil fertility are general aims of organic agriculture (Rajabi et al., 2013; Chen, 2009).

Green food refers to the type of food that is safe to use, has fine quality, is nutritious, has concerns for the welfare of animals, and is grown and produced in accordance with the principles of sustainable development. Organic refers to products that are produced without the aid of fertilizers or pesticides and organic food is food guaranteed to have been produced, stored and processed without the addition of synthetically produced fertilizers and chemicals. Moreover, organic foods generally contain less harmfuladditives and more primary and secondary nutrients than conventional foods, and theycarry no additional risk of food poisoning. Previous studies have defined organic products as food which is cultivated via an environment-friendly process. Products which are listed as organic are produced in accordance with the standard rights in all areas of production and are certified by an industrial body. There has been noticeable growth in the organic agriculture industry over the past 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 (Seyed Saleki & Seyed Saleki, 2012; Smith and Paladino, 2010; Chen, 2009).

Presently, there are many promising indications which show rapidly increasing demand for greener products. Accordingly, it is important to understand consumers' organic buying behavior not only for academia and agriculture practitioners but also for marketers, and it is especially critical for environment-friendly businesses (Ali & Ahmad, 2012). Despite the attention that the scholars have paid to green issues, the market shares of many green products have not increased significantly along with academic pursuit and interest over the past decade (Tseng & Hung, 2013). Although, consumer green purchase behavior has become one of the most popular research topics among academia, recent reviews of the literature show that researchers have had only limited success to explain consumer green purchase behavior (Albayrak et al., 2011).

The 1990s experienced a substantial increase in the number of studies on green behavior determinants. Yet, these efforts have chiefly focused on developed rather than emerging economies. Many researchers have identified the determinants of consumers' green purchase behavior, a majority of which have been conducted in industrialized countries (Ali & Ahmad, 2012). 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 (Cheah & Phau, 2011). Accordingly, an investigation of the effects of various factors on consumer green purchase intentions in emerging Asian markets can be considered relevant and proper. Concerning studies on emerging economies, consumers seem to express little environmental commitment (Carrete et al., 2012). In developing countries such as Iran, there is a need to understand entirely how to encourage the intention to consume green food and how to evolve it into actual behavior.

The use of chemicals in agriculture has been significantly grown in Iran. As shown by the statistics, the use of fertilizers has increased from 2,400,000 tons in 1999 to 3,300,000 tons in 2008. Inaddition, this sector annually applies more than 27,000 tons chemical pesticides (Rajabi et al., 2013). Given that consumers are one of the most important parts of the green revolution, we could influence their green agricultural products purchase through the better realization of their characteristics and behaviors. To achieve success in marketing of organic agricultural products, the determinants of green purchase behavior are to be identified. The result of such surveys help public policy makers to develop environmental training and increase awareness programs to encourage people to do green initiatives, and also it provides valuable insights on consumer's behavior for a business planning. This additional knowledge could prove useful in their businesses by sketching their marketing procedures and improving the appreciable proportion between traditional and ecological nature products.

Understanding customers' behaviors and their intention to purchase is necessary to understand why they tend to buy organic food. Various theories have been already used to figure out the reasons behind this intention.

The Theory of Planned Behavior (TPB) is perhaps the most influential theory in the prediction of social and health behaviors. TPB has been applied in organic research, too. The premise of the TPB is that human being is rational and uses a variety of information when making a decision to act. Briefly put, the TPB predicts that behavior is influenced by behavioral intentions (Kim et al., 2013). Behavioral researchers have emphasized that purchase intention is the most immediate relevant predictor of corresponding behavior (Ali & Ahmad, 2012; Samarasinghe, 2012). Moreover, TPB has been applied in studies on many other environmental behaviors in western countries including travel mode choice, household recycling, the purchase of energy saving light bulbs, the use of unbleached paper, water use, meat consumption, food consumption, green hotel, and general pro-environmental behavior (Wang et al., 2014). Therefore, in line with thesepast studies, the present study incorporates TPB as its theoretical framework. 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 (Ali & Ahmad, 2012). As shown by previous studies, green purchase intention is a significant predictor of green purchase behavior, which means that purchase intention positively affects the probability of a customer's decision to buy green products (Rahmati Ghofrani et al., 2015). Intentions are considered as a precursor to a behavior and are, therefore, seen as the best predictor of the behavior (Smith & Paladino, 2010).

A mediator is defined as "the generative mechanism through which the focal independent variable can influence the dependent variable" (Baron & Kenny, 1986). The TPB indicates that mediation will influence the formed relationships between independent variables and actual behavior (Ajzen & Fishbein, 1980). Therefore, this report examines the effect of purchase intentions on the relationship between the antecedents and purchase behavior.

Previous studies have shown antecedent for purchase intentions towards environmental products such as organic food include organic knowledge (Tan & Lau, 2011; Seyed Saleki & Seyed Saleki, 2012; Werner & Alvensleben, 2011), perceived consequences (Wang et al., 2014; Tan & Lau, 2011), subjective norms (Aertsens et al., 2009; Chen, 2007; Dean et al., 2008), price

Table 1 Research Hypotheses

Variable	Hypotheses
Intention	H1: An increase in intention to purchase organic food products will increase consumer's purchase behavior of organic food products
Organia knowladga	behavior of organic food products. H2a: An increase in organic knowledge will increase consumer's intention to purchase organ
Organic knowledge	food products.
	H2b: An increase in organic knowledge will increase consumer's purchase behavior of organ
	food products.
	H2c: The effect of organic knowledge on organic purchase behavior will be mediated by gree
	purchasing intention.
Perceived	H3a: An increase in perception of consequences will increase consumer's intention to purchas
consequences	organic food products.
consequences	H3b: An increase in perception of consequences will increase consumer's purchase behavi
	of organic food products.
	H3c: The effect of perception of consequences on organic purchase behavior will be mediate
	by green purchasing intention.
Subjective norms	H4a: The stronger the subjective norms, the more likely a consumer will intend to purchase of
	ganic food products.
	H4b: The stronger the subjective norms, the more likely a consumer will purchase organic food produc
	H4c: The effect of in subjective norms on organic purchase behavior will be mediated by greater
	purchasing intention.
Price	H5a: An increase in willingness to pay a premium will increase consumer's intention to purchas
	organic produce.
	H5b: An increase in willingness to pay a premium will increase consumer's purchase behavi
	of organic food products.
	H5c: The effect of price consciousness on organic purchase behavior will be mediated by gree
	purchasing intentions.
Green trust	H6a: An increase in green trust will increase consumer's intention to purchase organic food produc
	H6b: An increase in green trust will increase consumer's purchase behavior of organic food produc
	H6c: The effect of in green trust on organic purchase behavior will be mediated by green pu
	chasing intention.
	H7a: The stronger the perceived consumer effectiveness, the more likely a consumer will inter
	to purchase organic food products.
Perceived consumer	H7b: The stronger the consumer self-effectiveness, the more likely a consumer will purchase
effectiveness	organic food products.
	H7c: The effect of perceived consumer effectiveness on organic purchase behavior will be m
	diated by green purchasing intentions.
Availability	H8a: An increase in availability will increase consumer's intention to purchase organic food produc
	H8b: An increase in availability will increase consumer's purchase behavior of organic food produc
	H8c: The effect of in availability on organic purchase behavior will be mediated by green pu
	chasing intention
Relative advantage	H9a: The greater the perceived relative advantage, the more likely a consumer will intend
	purchase organic food products.
	H9b: The greater perceived relative advantage, the more likely a consumer will purchase organ
	food products.
	H9c: The effect of stronger perceived relative advantage on organic purchase behavior will l
	mediated by green purchasing intentions.

(Smith &Paladino, 2010), green trust (Harris & Goode, 2010; Chen & Chang, 2012, Lee, 2009), perceived consumer effectiveness (Albayrak et al., 2011), availability (Smith & Paladino, 2010), and perceived relative advantage. These constructs are considered as antecedents that effect intention to purchase organic food and through this mediator variable effect on purchase behavior.

Based on what were mentioned above, conceptual framework and propositions of this study represented in Figure 1 and Table 1.

MATERIALS ADN METHODS

This study used a survey method to achieve research objectives. The main tool for gathering data was a questionnaire. The questionnaire included 31 closed-end items based on the



Figure 1. Proposed Conceptual Model

five-point Likert type scale. The validity of the questionnaire was confirmed by a panel of the university professors. Cronbach's Alpha coefficient test was used to determine the reliability of the research. It was estimated as 0.95 for the whole questionnaire, indicating that the questionnaire was reliable enough. The statistical population of the research comprised Iranians who had bought or consumed organic products at least once. Nonprobability sampling method was used. For selecting the states we use purposive sampling and judgment sampling; five provinces of Iran (Khorasan, Guilan, Mazandaran, Qazvin, Tehran), which have centers of producing and selling organic food products was selected. For distributing questionnaire, convenience sampling was used. Thequestionnaires, were distributed between customers of chain stores and organic food store. Given the very few number of organic food consumers in Iran, only 192 out of 240 questionnaires were

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response rate was 0.80; accordingly, non-re-
sponse bias did not pose a problem. In order
to analysis the data and test the hypotheses,
multiple regression analysis method was used
via SPSS software. Multiple regression analy-
sis is a powerful technique used for predicting
the unknown value of a variable from the
known value of two or more variables- also
called the predictors. Multiple regression is
an extension of simple linear regression. It is
used when we want to predict the value of a
variable based on the value of two or more
other variables.

filled and then used as samples of research. The

RESULTS

General descriptive results of green food purchase behavior and intention to purchase and as well their antecedents are shown in Table 2. The mean value of all variable are above 4 that indicate consumers are willing to purchase organic food.

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Variable	Number of items	Mean	SD	α
Purchase behavior	4	4.26	0.44	0.69
Intention to purchase	3	4.32	0.52	0.81
Organic knowledge	3	4.34	0.45	0.60
Perceived consequences	5	4.46	0.50	0.85
Subjective norms	2	4.31	0.50	0.54
Price	3	4.29	0.49	0.67
Green trust	4	4.23	0.45	0.74
Perceived consumer effectiveness	2	4.28	0.58	0.78
Availability	2	4.25	0.50	0.55
Relative advantage	3	4.49	0.50	0.78

Table 2Descriptive Statistics

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Analysis1 Dependent variable: Purchase intention; R²=0.51			Analysis 2 Dependent variable: Purchase behavior; R²=0.41				
Independent variable	Beta	t	p-value	Independent variable	Beta	t	p-value
Organic knowledge	0.057	0.685	0.494	Organic knowledge	0.194	2.892	0.004**
Perceived consequences	0.280	2.717	0.007**	Perceived consequences	0.133	1.599	0.111
Subjective norms	0.134	1.660	0.099	Subjective norms	0.051	0.785	0.434
Price	0.211	2.578	0.011*	Price	0.201	3.034	0.003**
Availability	-0.057	-0.712	0.477	Availability	0.021	0.329	0.743
Trust	-0.104	-1.251	0.213	Trust	0.142	2.099	0.037*
Perceived consumer effectiveness	0.177	2.146	0.033*	Perceived consumer effectiveness	0.190	2.845	0.005**
Relative advantage	0.105	1.102	0.272	Relative advantage Intention	0.045 0.643	0.581 11.564	0.562 0.000**

Table 3 Multiple Regression Results

**P<0.01, *p<0.05

Multiple regression analysis Stage 1 analysis

Stage 1 regression examines the influence of the antecedents on organic purchase intention. As indicated in Table 3, 51 percent of the variance in intention to buy organic food products was explained by the independent variables. Perceived consequences, price, and self-effectiveness were all significant, supporting H3a, H5a, and H7a, respectively.

Stage 2 analysis

Stage 2 regression examined the impact of organic purchase intentions on organic food purchase. Table 3 lists the details of the results. Forty-one percent of the variance (R^2) in organic food purchase was captured by the intention to purchase organic food. This suggests that intention to purchase organic food have strong explanatory

Table 4

power over purchase behavior. The results indicated that the intention to purchase organic food was positively related to the purchase of organic food products, supporting 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 supportive evidence for H2b, H5b, H6b, and H7b, respectively.

Mediation Effect

Stage 3 regression is concerned with examining mediation effect. The procedure used is outlined in Smith and Paladino's (2010) study and is based on Baron and Kenny's (1986) accepted procedures. Briefly put, correlations were examined to ensure that the relationships between constructs were significant. If the new relationship, which included the mediating variable,

Mediation Analysis			
Independent variable	Beta	t	p-value
Organic knowledge	0.186	2.802	0.006**
Perceived consequences	0.090	1.082	0.281
Subjective norms	0.031	0.475	0.635
Price	0.169	2.541	0.012*
Availability	0.030	0.470	0.639
Trust	0.158	2.361	0.019*
Perceived consumer effectiveness	0.163	2.447	0.015*
Relative advantage	0.029	0.377	0.706

Dependent variable: Purchase behavior; Mediator: Purchase intention **<0.01, *<0.05

Table 5 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 pur- chase behavior of organic food products.	confirmed
	H2c: The effect of organic knowledge on organic purchase behavior will be mediated by green purchasing intention.	Rejected
Perceived consequences	H3a: An increase in perception of consequences will increase con- sumer's intention to purchase organic food products.	confirmed
·	H3b: An increase in perception of consequences will increase con- sumer'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

diation would be said not to be supported. If it was reduced but was still significant, then partial

remained significant and unchanged, then me- mediation would be said to exist. However, if it were reduced to the point of insignificance, then full mediation would be said to be 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 Tables 3 and 4 show that organic knowledgeremains significant but relatively unchanged. The p-value for organic knowledge varied from 0.004 to 0.006. Therefore, mediation was not found and H2c was not supported by the results. The relationship with price remains significant but increases from a p-value of 0.003 to 0.012. Therefore, mediation is not present and H5c is not supported. In addition, the relationship with perceived consumer effectiveness remains significant but increases from a p-value of 0.005 to 0.015. Therefore, mediation is not present and H7c is not supported. Trust has been reduced but is still significant; therefore, partial mediation is present, providing partial support for H6c. Results are depicted in Tables 3-5.

DISCUSSION

Intention towards organic food products

This research was concerned with determining factors influencing purchasing organic food. Accordance to the TPB model, purchase intention is the most immediate relevant predictor of corresponding behavior as reflected in H1. H1 was supported, suggesting that the intention to purchase organic food does influence the purchase behavior. This relationship is corroborated by a correlation coefficient of 0.41 and a p-value of 0. This finding is also consistent with those of previous research studies (Smith & Paladino, 2010).

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, which pertains to the relationship between organic knowledge and intention, was not supported. Yet, H2b, assuming that a relationship exists 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 purchase behavior.

Hypotheses H3a-b were associated with perceived consequences. H3a, which investigated the relationship between perceived consequences and intention to organic food products, was found to be positive and significant. This suggests that an increase in perceived of consequences does 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 did not substantiate all hypotheses. This result is inconsistent with Smith and Paladino's research that shows subjective norms is a significant variable in the organic purchase (Smith & Paladino, 2010). This finding may imply that Iranian consumers are not affected by social pressure in food choices. Further studies are needed to substantiate this claim.

Price was investigated in H5a-b. H5a was supported by the finding with the p-value of 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, suggesting a relationship between willingness to pay a premium price and purchase behavior. These results are consistent with the findings of Padel and Foster's (2005).

Green trust was investigated in 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 behavior 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 (Harris & Goode, 2010).

H7a-b examined the influence of perceived consumer effectiveness on intention to purchase organic food products. Both hypotheses were supported and significant (p-values = 0.033 and 0.005, respectively). It suggests that the stronger the perceived consumer effectiveness, the more likely a consumer's intention to purchase organic food products. This finding is consistent with past studies (Albayrak et al., 2011; Tan & Lau, 2011).

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

Perceived relative advantage was investigated in H9a-b. Both hypotheses were not supported. It implies that the relative advantages like flavor, appearance, nutritional value, and quality as a whole may not influence purchase intention and behavior in Iran. Further studies are needed to corroboratethis claim.

Mediation effect

Mediation was tested in terms of the mediation effects of purchase intentions on the antecedents and purchase behavior. Results 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 reveals that consumer trust with organic products is important. All other antecedent resulted in no mediation by intention, which is largely inconsistent with the TPB.

CONCLUSION

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. The specific focus of future research will be discussed in the 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 with regards to organic agriculture produce. It has addressed these concerns in the Iranian context, thus filling a gap in the current literature which mostly consists of organic research in foreign countries. By looking specifically at Iranian consumers, the present paper provides implications for marketers that are specifically relevant to the Iranian market.

Managerial implications

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 a premium are probably people with higher income. Accordingly, in the first step, marketers can target this segment of the market. Perceived consumer effectiveness influenced both purchase intention and behaviors, too. This finding also suggests that education and increasing knowledge about the environment and organic agriculture areimportant to make consumers more aware of the environment, organics and, therefore, the self-effectiveness and consequences. The television programs and information communication through magazines and newspapers on the theme of recycling and how to do it, the negative effects of pesticides, and the impact of organic farming on the environment can help increasing consumer knowledge and awareness about the environment. Increasing organic knowledge is likely to increase the 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 build a unified industry and enhance 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. To increase the trust of consumers'in these products in terms of

being environmental, consumer protection organizations, environmental groups, and the government can monitor the production process of these products and can help build trust in this field by granting certification or confirmation ID about the environmental approval of these products.

Finally, it is recommended to supply organic products in all stores including the chain stores and non-chainstores regularly and permanently stores across the country. Alternatively, a certain shop can be selected and publicized in each area as the supply center for these products. Having the Internet and online sales can also help simplify the purchasing process and increase the ease and speed of purchase.

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REFERENCES

- Aertsens, J., Verbeke, W., Mondelaers, K., & Van Huylenbroeck, G. (2009). Personal determinants of organic food consumption: a review. *British Food Journal*, 111 (10), 1140-67.
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Prentice Hall, Englewoods-Cliffs, New Jersey.
- 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(3), 189-197
- Ali, A., & Ahmad, I. (2012). Environment friendly products: factors that influence the green purchase intention of Pakistani consumers. *Pakistan Journal of Engineering Technology* and Science, 2(1), 84-117.
- Baron, J., & Kenny, D. (1986). The moderatormediator variable distinction in social psychological research: conceptual, strategic and statistical consideration. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182.
- 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(7), 470-481.

- Cheah, I., & Phau, I. (2011). Attitudes towards environmentally friendly products: The influence of eco-literacy, interpersonal influence and value orientation. *Marketing Intelligence and Planning*, 29(5), 452-472.
- Chen, M. F. (2007). Consumer attitudes and purchase intentions in relation to organic foods in Taiwan: Moderating effects of foodrelated personality traits. *Food Quality and Preference*, 18(7), 1008-1021.
- Chen, M.F. (2009). Attitude toward organic foods among Taiwanese as related to health consciousness, environmental attitudes, and the mediating effect of a healthy lifestyle. *British Food Journal*, 3(2), 165-178.
- Chen, Y.S., & Chang, C.H. (2012). Enhance green purchase Intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision*, 50(3), 502-520.
- Dean, M., Raats, M. M., & Shepherd, R. (2008). Moral concerns and consumer choice of fresh and processed organic foods. *Journal* of Applied Social Psychology, 38(8), 2088-2107.
- Harris, L.C. & Goode, M.M.H. (2010). Online services-capes, trust, and purchase intentions. *Journal of Services Marketing*, 24(3), 230-43.
- Kim, Y.J., 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.
- Lee, K. (2009). Gender differences in Hong Kong adolescent consumer: green purchasing behavior. *Journal of Consumer Marketing*, 26(2), 87-96.
- Padel, S & Foster, C. (2005). Exploring the gap between attitudes and behavior: understanding why consumers buy or do not buy organic food. *British Food Journal*, 107(8), 606–625.
- Partidario, P.J., 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(6), 513–524.

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M. & Chirani, E. (2015). Determinants of organic food products acceptance in emerging economy. *BARS Journal*, *5*(1), 58-75.

- Rajabi, A., Shabanali Fami, H., & Pouratashi, M. (2013). Investigating adoption component of agricultural organic product from the viewpoints of consumers. *Journal of Food Science and Technology*, 10(38), 33-43.
- Samarasinghe, R. (2012). The Influence of Cultural Values and Environmental Attitudes on Green Consumer Behavior. *International Journal of Behavioral Science*, 7(1), 83-98.
- Seyed Saleki, Z., & SeyedSaleki, S.M. (2012). The main factors influencing purchase behavior of organic products in Malaysia. *Interdisciplinary Journal of Contemporary Research in Business*, 4(1), 98-116.
- Smith, S., & Paladino, A. (2010). Eating clean and green? Investigating consumer motivations towards the purchase of organic food. *Australasian Marketing Journal*, 18, 93-104.
- Tan, B.C., & Lau, T.C. (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(8), 559-567
- Tseng, S. C., & Huang, S.W. (2013). A framework identifying the gaps between customers' expectations and their perceptions in green products. *Journal of Cleaner Production*, 1-11.
- Wang, P., Liu, Q., & Qi, Y. (2014). Factors influencing sustainable consumption behaviors: a survey of the rural residents in China. *Journal of Cleaner Production*, 63, 152-165
- Werner, J., & Alvensleben, R.V. (2011). Consumer attitudes towards organic food in Germany (F.R.). Symposium on Horticultural Economics, VIII (155).

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