

Key Values Influence Consumer Intention towards Organic Food in Iran

Seyed Abolhasan Sadati and Yaser Mohammadi

Young Researchers Club, Islamic Azad University, Karaj Branch, Karaj, Iran

Abstract: This study examined the beliefs and attitudes of customers into the Theory of Planned Behavior (TPB)-model in predicting use intentions of organic foods. Customer intention was operationalised as a measure of the strength of one's willingness to try to use. Questionnaire data were gathered from 154 consumers in Golestan province from Iran country. Data were analyzed using Structural Equation Modeling by AMOS software. The results of study showed that respondents believe that organic products are priced a little high and the majority of them are dissatisfied from this price increase. In addition, Respondents' intentions to use organic foods are influenced by three key factors namely Attitude, subjective norm and perceived behavior control, which jointly explained 75% of the variance in intention. The result of model goodness of fit also showed that the model has high predictive power and was well fitted. Therefore, the results actually sustain TPB quite well.

Key words: Attitude, consumer intention, Iran, organic foods, Theory of Planned Behavior (TPB)

INTRODUCTION

One type of environmental and wider quality and health consciousness is the purchase of organic products. A total of 130 countries are now producing certified organic food, of which 90 are developing countries with ideal environmental conditions for the development of satisfactory organic produce (Krystallis and Chrysosoidis, 2005). The increase in health consciousness is one of the most important factors that affect the consumption of organic products. Recent scandals about product safety have played an important role in the purchase of organic products (Fotopoulos and Krystallis, 2002; Magnusson *et al.*, 2001; Winter and Davis, 2006). Intentions are generally good predictors of behavior.

Most of the studies on organic food have considered factors that facilitate or limit organic food consumption. They have dealt with motivations to purchase organic food, including health concern, environmental concern, food safety, sensory variables and ethical concerns or value structure (Chinnici *et al.*, 2002; Magnusson *et al.*, 2003; Baker *et al.*, 2004; Lockie *et al.*, 2004). Health concern is often found to be the most important factor motivating organic food purchase (Magnusson *et al.*, 2003). Environmental concern, including ecological aspects, is an important motive for buying organic food (Squires *et al.*, 2001). Personal values are one of the important factors found to influence organic food choice (Baker *et al.*, 2004; Dreezens *et al.*, 2005), as well as health issues.

Attitude towards consuming a product has been found to be one of the most important antecedents for predicting

and explaining consumers' choices across products and services, including food products (Cook *et al.*, 2002; Conner *et al.*, 2003).

Fishbein and Manfredo (1992) considered analysis of determinants of intention to perform behavior often to be identical to the analysis of the determinants of the behavior itself.

As in the original theory of reasoned action, a central factor in the theory of planned behavior is the individual's intention to perform a given behavior. Intentions are assumed to capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior. As a general rule, the stronger the intention to engage in a behavior, the more likely should be its performance (Ajzen, 1991).

Intention is an indication of a person's readiness to perform a given behavior and it is considered to be the immediate antecedent of behavior (Ajzen, 2006). Intention can be looked upon as '... a psychological construct distinct from attitude and it represents a person's motivation to carry out a behaviour' (Eagly and Chaiken, 1993). In marketing and consumer behavior literature, intention is often used as surrogate for buying behavior, choice and loyalty (Kozup *et al.*, 2003; Shaw and Shiu, 2003). There are two types of intention: choice intention and conditional intention. Choice intention occurs when a person chooses to engage in a behavior or selects from a variety of choices. Conditional intention measures the attempt to increase the accuracy of longer range predictions through the consideration of outside factors (Ajzen and Fishbein, 1980).

In Sapp's study, the knowledge construct was not directly related to attitudes, intentions, or behavior; but significantly correlated with social support constructs, including referent others, social acceptability and subjective norm, that do influence intentions and behavior (Sapp, 1991). Acceptability of consumption may influence the individual's intention to eat a certain food. Social acceptability measures the extent to which consumer food choices are driven by societal-wide opinions, fads and fashions in a manner similar to choices of other consumer products (Sapp and Harrod, 1989). Research suggests that the social acceptability associated with a food item does influence consumer intention and food consumption behavior (Adams *et al.*, 2000; Crockett, 1997; Sapp, 1991).

Some researchers have found that intentions lead to requisite behaviors (Chan and Lau, 2000, 2001), other researchers have found that intentions do not always translate into green purchasing behaviors. Studies concerned with actual behaviors are not only called for by Zinkhan and Carlson (1995) they are necessary, if we are to improve uptake of green products such as organic food.

Researchers seeking to understand organic food purchasing behaviors have largely focused on understanding attitudes towards green purchasing behavior and their relation to purchase intentions (Harper and Makatouni, 2002; Padel and Foster, 2005; Paladino, 2005) and on willingness to pay (perceived behavioral control) and its relation to purchase intentions (Krystallis and Chryssohoidis, 2003; Sanjuan *et al.*, 2003). Intentions to purchase do not always lead to purchasing behaviors and alternate methods are required in order to predict behavior.

Arvola *et al.* (2008), used the Theory of Planned Behaviour (TPB)-model in predicting purchase intentions of organic foods. The results showed that, along with attitudes, moral attitude and subjective norms explained considerable shares of variances in intentions Arvola *et al.*, 2008). The predictive power of the model has been demonstrated in a number of meta-analyses mentioned above. Armitage and Conner (2001) analysed 185 studies and found that the TPB accounted for 27 and 39% of the variance in behaviour and intention, respectively. Sheeran (2002) found that the overall correlation between intentions and behavior was 0.53. In marketing and consumer behavior literature, intention is often used as a surrogate for buying behavior, choice and loyalty (Kozup *et al.*, 2003; Shaw and Shiu, 2003).

In many studies on food, attitudes are found to be the most important predictor of intention to buy that food (Povey *et al.*, 2001). Dreezens *et al.* (2005) found that beliefs about organic food mediate the relation between values and attitudes. Eagly and Chaiken (1993) viewed cognitive, affective and conative responses to an attitude object as independent constructs that is beliefs as a cognitive component, attitude as an affective component and behavioural intention as a conative component.

Sheeran (2002) found that the overall correlation between intentions and behavior. Attitudes are the most important predictor of intention to buy that food (povey *et al.*, 2001).

A Danish study found that the choosing of food was associated with feelings of insecurity, confusion and mistrust in the products, as well as guilt about the lack of consistency between intentions on the one hand and actual choices made on the other (Holm and Kildevang, 1996). Similar conclusions are also drawn in Norwegian studies of organic food (Torjusen *et al.*, 2001).

Sparks and Shepherd (1992) focused on self-identity and the theory of planned behavior in assessing the role of identification with green consumerism. They found that attitudes correlated significantly with intentions. They found a measure of self-identity to be useful in predicting intention and that self-identity correlated with attitude. In a survey among 800 households in Southern England, the Fishbein and Ajzen model for behavior prediction was used to observe consumer attitudes to organic meat by measuring attitudes, beliefs, intention and past behavior. They concluded that the subjective norm component correlated with intention suggesting that social pressures do have an effect on this particular food choice (Kirk *et al.*, 2001).

Iran country is one of the country which people have been solicitous about food consumption, hence the Agricultural Jihad Ministry try to develop the agricultural organic food. Therefore, the main propose of this research was to study about how some factors like creating knowledge, beliefs, referent others, social acceptability, attitudes, subjective norms and intentions have significant direct and indirect effects on people intention to consume organic food products?

METHODOLOGY

The study was carried out in 2010 through survey technique. The statistical population of the study was consisted of whom settlement in Golestan. Sample size included 154 of consumers.

A questionnaire was assessed for content and face validity by a panel of experts consisting of faculty members in University of Tehran. The instrument was pilot tested using faculty members (n = 30) out of statistical population. Minor changes were made to improve the clarity and readability of the instrument. Cronbach's alpha, an internal consistency measure, was used to estimate the reliability. The reliability for the items instrument was found to be acceptable ($\alpha > 0.70$).

Also, the Theory of Planned Behavior (TPB) served as the theoretical framework of this study as well as supplying the basic model for the questionnaire and interpretation of the results. The 27-item instrument utilized in this research elicited responses, directly and indirectly, based on the constructs of the model, as well as several factors outside the model used for profiling the

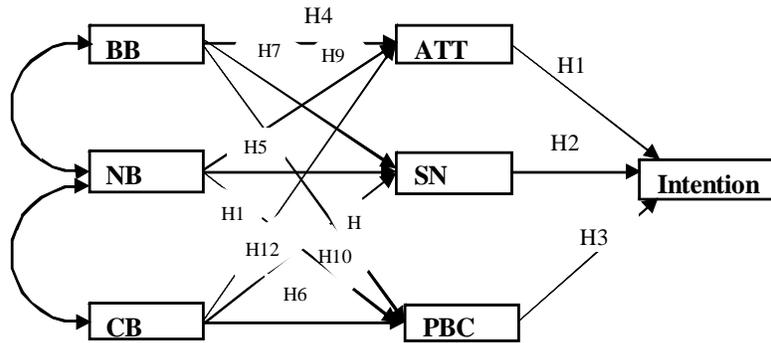


Fig. 1: Research model

Table 1: Research hypothesis

Hypothesis 1	Attitude will positively affect behavioral intention
Hypothesis 2	Subjective norm will positively affect behavioral intention
Hypothesis 3	Perceived behavior control will positively affect behavioral intention
Hypothesis 4	Behavioral beliefs will positively affect attitude
Hypothesis 5	Normative beliefs will positively affect subject norm
Hypothesis 6	Control beliefs Will negatively affect Perceived behavior control
Hypothesis 7	Behavioral beliefs will positively affect subjective norm
Hypothesis 8	Behavioral beliefs will positively affect Perceived behavior control
Hypothesis 9	Normative beliefs will positively affect Attitude
Hypothesis 10	Normative beliefs will positively affect Perceived behavior control
Hypothesis 11	Control beliefs Will negatively affect Attitude
Hypothesis 12	Control beliefs Will negatively affect subjective norm

Table 2: Ranking of characterize of organic fo

Variable	Mean	S.D.	C.V.	Rank
They are essential	4.10	0.727	0.177	1
They are healthy	4.22	0.769	0.182	2
They are beneficial	4.20	0.770	0.183	3
They are valuable	4.14	0.787	0.190	4
They are pleasant	3.73	0.767	0.207	5
They are interesting	3.55	0.801	0.227	6
They are good	3.70	0.914	0.247	7
They are satisfactory	3.92	3.354	0.856	8
They are wise	4.66	4.174	0.889	9
They are tasty	4.22	4.056	0.889	10

consumers (age, gender, garden area etc.). Answers were given using a 5- point Likert scale where responses ranged from 1 = Strongly Agree to 5 = Strongly Disagree.

The second section refers to the questions about the respondents' intention of organic food. The purpose of the second section is to understand the purchase behavior-the dependent variable and, understand how significance of those three value dimensions related to consumer purchase intention. Behavioral intention construct was measured by responses to three 5-point Likert scale items in a form of questioning suggested by Ajzen and Fishbein (1980).

Then, last section includes demographic data which analyzed for using descriptive statistics. Data collected was analyzed using the Statistical Package for the Social Sciences (SPSS) and AMOS. Appropriate statistical procedures for description were used.

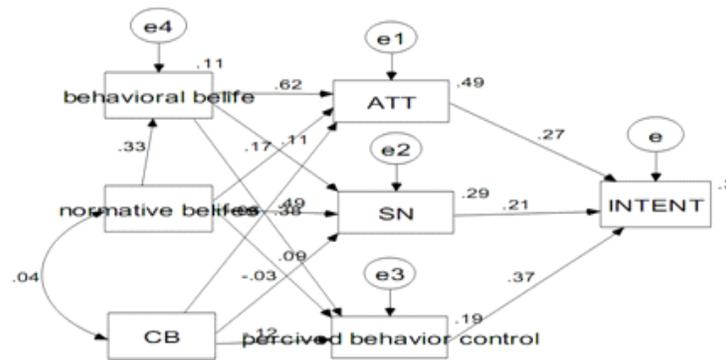
Research model: The research model with all theoretical constructs is provided in Fig. 1, whereas the hypothetical relationships among theoretical constructs are summarized in Table 1.

RESULTS AND DISCUSSION

A total of 154 complete questionnaires were collected. There are 49.3% females and 50.7% males respondents. The average age of respondents were 39, most of the respondents are in the age from 17-70. Most respondents have a normal income level that the average monthly income was 5153\$, min were 2000\$ and max were 40000\$. Thirteen percent of respondents considered that price of organic foods are "much more" than conventional foods. 60.9% considered that the price of organic foods are "little more" than other foods and 20.7, 3.3 and 2.2 considered organic food's price respectively are "as cost as other food's price", "lower" and "more lower" than other foods. Intentions mean score was 4.05 on a scale score of 1-5 when respondents were asked if they intend to (4.10), will try to (4.08), or plan to (3.45) consume organic food next month.

Respondents believed that the most important characterize of organic farming was "They are essential". The second major characterize was "They are healthy" and third characterize was "they are beneficial" (Table 2).

Hypotheses testing: The structured equation model (SEM) was used to test the 6 hypotheses proposed in this study. The hypothetical model was depicted using visual tools provided by AMOS. Each indicator was connected to its theoretical construct in a reflective manner as well as linked accordingly to the hypothesis (Fig. 2).



chi-square = 26.195 (7 df)
 p = 0.000. RMSEA = 0.134 . CFI = 0.932, NFI = 0.913

Fig. 2: Result of research

The results showed that, all hypotheses were tested and accepted. This means that theoretical model was completed correctly using previous theories and studies.

Behavioral intention towards Organic Food is predicted by Attitude ($\beta = 0.55$), subjective norm ($\beta = 0.17$) and perceived behavior control ($\beta = 0.13$), which jointly explained 75% of the variance in intention.

Comparing the results with prior studies, the impact of attitude and subjective norm on intention are similar to what had been indicated in (Povey *et al.*, 2001; Cook *et al.*, 2002; Conner *et al.*, 2003; Arvola *et al.*, 2008).

Attitude is predicted by behavioral beliefs ($\beta = 0.78$), normative beliefs ($\beta = 0.78$) and control beliefs ($\beta = 0.20$) with 82% of the total variance explained. This result is obviously inconsistent with the finding of Dreezens *et al.* (2005), which indicated that beliefs should have a significant impact on customer Attitude.

Subjective norms is determined by behavioral beliefs ($\beta = 0.74$), normative beliefs ($\beta = 0.74$) and control beliefs ($\beta = 0.17$) which jointly explain 50% of variance in subjective norms. This result is consistent with prior studies (Arvola *et al.*, 2008) which indicate subjective norms are significant motivators of intention to use.

Also, perceived behavioral control is predicted by behavioral beliefs ($\beta = 0.77$), normative beliefs ($\beta = 0.78$) and control beliefs ($\beta = 0.23$) with 83% of the total variance explained.

Model goodness of fit: To evaluation of the estimative model, Firstly, the theoretical model shell has goodness of fit to the empirical data while the same fit indexes applied in assessing measurement model were met.

For the hypothetic SEM model, χ^2/df is 0.080, CFI is 0.94, NFI is 0.92 and RMSE is 0.050, respectively. All fit indexes have suggested adequate model fit between the research model and the empirical data. The results actually sustain TPB quite well.

CONCLUSION

Generally, respondents believe that organic products are priced a little high and the majority of them are dissatisfied from this price increase. However, from their perspective, the most important priority in buying the product is the price of goods. Health and quality are next priority respectively. Respondents' intentions to purchase organic products are influenced by three key factors namely Attitude, subjective norm and perceived behavior control, which jointly explained 75% of the variance in intention. Attitude, itself is affected by behavioral beliefs, normative beliefs and control beliefs. Subjective norm is determined by behavioral beliefs, normative beliefs and control beliefs. Also, perceived behavioral control is predicted by behavioral beliefs, normative beliefs and control beliefs.

The result of model goodness of fit showed that the model has high predictive power and was well fitted. Therefore, the results actually sustain TPB quite well.

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