Examining the role of Environment Concerns and Health consciousness in forming the intention to purchase organic food products

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ABSTRACT

The concept and consumption of organic food are still in the infant stage in India. Therefore, it is imperative to gain knowledge about the consumer’s behavior towards organic food products. The paper examines the roles of environment Concerns and health consciousness in predicting purchase intention within the context of organic food products. Regression analysis has been applied for the stated purpose. Data were collected through a survey of 108 respondents with the help of a structured questionnaire. All measurement items were adapted from existing scales found in the literature. Findings indicate environment Concerns and health consciousness as the important predictor of attitude while health consciousness appears to be more important predictor where in study find that the health-conscious consumers show a growing preference for organic food over the conventionally grown food. Consequently, the need to purchase organic food to improve the quality of life will have huge implications for the retail, distribution and marketing functions of business.

Keywords: environment Concerns, health consciousness, purchase intention, organic food products.

1. INTRODUCTION

The interest in organic food products is gaining momentum throughout the globe attributed to the concerns about traditional agriculture practices, food safety, concerns about health, and environmental concerns. Similarly, there is unprecedented surge in demand for organic food in
India thanks to the rising standard of living and purchasing power of the population and also to the increased penetration of education among masses which further leads to greater consciousness when it comes to food choices.

Over the time, the globe witnessed a paradigm shift in the penetration of education and in the attitude of people towards life. Consequently, there is a remarkable rise in the penchant toward organic food. Marketers, these days are keen to sell the organic food products in the untapped market as the awareness of issues such as environment, naturopathy and green world is mushrooming among masses. Environment friendly products are becoming all the rage among consumers because they are more than ever aware about their health and protection of the environmental concerns. Myriad of factors can be cited responsible for the inclination of consumers towards environment, explained by numerous studies. A variety of factors have contributed to the increasing popularity of organic food products. Some of the causes are that organic food products tastes better than inorganically produced foods, nutrition, environmental concerns, concerns about health and concerns over the use of chemicals and pesticides in traditional farming, the dearth of confidence in factory and concerns over animal welfare (Squires, Juric and Cornwell, 2001). A study by The Nielson Company in 2005 demonstrated that around 60 per cent of Singaporean claimed to buy organic food products and the majority of the people cited personal health as their primary motivation (The Straits Times (Singapore), November 21, 2007). In a bid to push organic food products, it is imperative for marketers to study interrelationships among consumers buying behavior, demographics and psychographic factors. Such information can prove to be beneficial in formulating the marketing strategies. Apparently, marketing strategies should be targeted to consumers who have positive attitudes towards organic food products and mirror an increased willingness to pay higher price for these products. Many studies have been conducted in this regard. Coddington (1993) mentioned that there has been a change in the perspective of the consumers. Consumers are now worried about the effect of environmental deterioration on their health. Their anxiety propelled the marketers to entail environment issue in their decision making. Furthermore, two important attitudes, i.e. confidence in food and health consciousness have emerged as main attractions for the consumers towards organic food. This consciousness towards health is increasing gradually with the increase of age (Von Alvensleben, 1998). Furthermore, consumers are also aware and reckon that organic food is healthier, tastier, has no detrimental effects and is of higher quality than the
conventional food (Dipeolu et al., 2009). Consumers buy organic food mainly because of health benefits (Shepherd et al., 2005). Hence it is imperative for the corporations indulging in organic business to plan effective campaigns as they play crucial role in creating awareness in the consumers’ mindset and their willingness to pay more money for green products (Garci´a-Gallego and Georgantzi’s, 2011). In the wake of all these views, the present study endeavors to gain insights into the role of consumers’ values i.e. their inclination towards environmental concerns and health consciousness in determining their purchase intention towards organic food products.

2. THEORETICAL BACKGROUND

The analysis of literature shows that, among psychographic variables, health concerns, food safety, impact on the environment and animal welfare as the primary causes behind motivations of consumers to buy organic food products (e.g. Mintel, 1999; Soil Association, 2000, as cited in Harper and Makatouni, 2000, p.287). This finding is in line with the study by Wier and Calverley (2002) wherein they found that most of the studies indicate towards health benefits as the primary motives for purchasing organic food products, whilst concern for environment are mentioned first. Davies, Titterington, and Cochrane, (1995) revealed that health and environmental concerns are the two crucial motives for purchasing of organic products. The similar finding is also reported by O’Donavan and McCarty (2002) wherein it was found that consumers who purchased or had “intention” to purchase organic meat placed significant level of importance on health compared to those who did not buy or had “no intention” to buy organic meat. The study by Tsakiridou, Boutsouki, Zotos and Mattas (2008) also indicated that the environmental and health concerns are intense motivations for consumers and seem to affect organic food products consumption.

2.1. Environmental concern

Environmental attitudes influence a consumer’s buying intentions towards eco friendly products, such as organic products (Alwitt and Pitts, 1996). Environmental concern is often quoted as a intense motivator for purchase (Hutchins and Greenhalgh, 1997). Nevertheless, specifically to Tregear et al. (1994) showed environmental concerns explained only a minimal part of organic purchases. Further, research has demonstrated that the consumers of organic food products are inclined toward natural and environmentally safe production methods and preserving the
environment (Squires et al., 2001). In his study, Huang (1996) showed that the increased consumption of organic produce is positively related to an increased concern for environmental issues in the society. This notion is also supported by Tregear et al. (1994) who revealed that purchasers of organic food products were highly likely to indulge in eco friendly activities like recycling. In addition to this, environmentally consciousness motivates people to make buying decisions that are greener and organic (Peattie, 2001; Schlegelmilch et al., 1996). Environmentally conscious individuals are likely to alter their buying behaviors to enhance the environment (Chase, 1991). Along with the findings that an individual’s environmental awareness is seen as a pre-requisite for organic consumption (Dembkowski, 1998; Polonsky and Mintu-Wimsatt, 1995), environmental concern is a vital determinant of consumer behavior towards organic products (Paladino, 2005).

2.2. Health consciousness

Organic products are perceived as healthier than inorganic alternatives (Lea and Worsley, 2005; Magnusson et al., 2001; Radman, 2005). Earlier studies have come up with the findings that individuals perceive organic food of superior quality food (Radman, 2005) and distinguish it as having a higher nutritional value than conventional products (Lea and Worsley, 2005). Myriad of studies have recognized health as the strongest inducement for buying organic products; revealing that the majority consumers buy organic products for the health reasons (Chinnici et al., 2002; Squires et al., 2001; Tregear et al., 1994; Davies et al., 1995; Hutchins and Greenhalgh, 1997; Makatouni, 2002; Padel and Foster, 2005). Padel and Foster (2005) distinguished between the individual and family health and suggested that individual, rather than family health is the strongest inducement for buying organic products. Research concerning the influence of health consciousness on organic purchase intentions has shown mixed bag of responses. Squires et al. (2001) further revealed that consumers who are more conscious about health are highly likely to buy organic products than those who are not much health conscious. Another study revealed that the relationship between health and purchase intention towards organic products was not significant for bread and flour products; nevertheless, the study proposed that various product categories may engender different outcomes (Tarkiainen and Sundqvist, 2005). (Lockie et al., 2004) has found that respondents’ health consciousness had no significant effect on their organic purchase, in fact, the study revealed that the health
consciousness alone may not be suffice to estimate organic purchases (Kristensen and Grunert, 1991).

3. PROPOSED CONCEPTUAL MODEL AND HYPOTHESES

The primary objective of this study is to determine the effects of environmental concerns and health consciousness on the purchase intention regarding organic food products.

![Conceptual framework of the study](image)

Following are the hypotheses proposed to be tested:

H1: Environmental concerns have a significant effect purchase intention of organic food products.

H2: Health consciousness has a significant effect purchase intention of organic food products.

4. METHODOLOGY

4.1. Questionnaire Design

Most of the scales used to measure the constructs used in the present study has been derived from the previous studies. Because the validity of many of these scales has been already supported, so the present study reaffirmed the reliability of these scales in the scale purification process. The internal consistency of each scale item and the overall alpha score for constructs was assessed using Cronbach’s alpha which was lying very well within the accepted limits.
The questionnaire starts with asking respondents to provide some background information regarding their purchases. Next section of the questionnaire included the questions regarding the perception of respondents regarding organic products where in items related to health consciousness were adapted from Gould (1990) and from Cash and Labarge (1996). Items related to environmental concerns have been adapted from Maloney and Ward (1973). The last section of the questionnaire requested the respondents to provide demographic details.

4.2. Sampling technique, data collection and data analysis

A convenience sample of 108 respondents was used for this study and data were collected using self-completion questionnaire. Visitors to the organic shops in the state of Punjab have been identified as the target group to be studied. The data obtained from the survey were analyzed using regression analysis to examine possible results that brings to the understanding of consumer knowledge, belief and intention to purchase organic food products.

5. FINDINGS AND RESULTS

A multiple linear regression was calculated to predict intention to purchase organic products based on of environmental concerns and health consciousness.

The model summary table shown below tells us about dependent variable and independent variable. Dependent variable is the Outcome variable and the independent variable is the predictor variable in the model 1.

As it can be seen from the table below which consists of 6 columns. First column gives the Model no. Second column gives the value of R which here represents the simple correlation and is 0.659, which indicates a high degree of correlation coefficient between the predictors and the outcome.
Table 5.1: Model summary for the effect of environmental concerns and health consciousness on Purchase intention

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.659a</td>
<td>.435</td>
<td>.424</td>
<td>.776</td>
<td>1.429</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Health consciousness, Environment concerns
b. Dependent Variable: Purchase intention

The value of adjusted R square value is 0.435 which means that Health consciousness and Environment concerns account for around 44 percent of the variance in “Purchase intention”. The value of adjusted R2 is preferred to be equal to or close to the value of R2.

Next Output table is the ANOVA table. Anova tests if the model is significantly better at predicting the outcome than using the mean as a ‘best guess’. The F-ratio indicates the ratio of the enhancement in prediction of those results from fitting the model.

Table 5.2: ANOVA statistics for the effect of environmental concerns and health consciousness on Purchase intention

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>49.116</td>
<td>2</td>
<td>24.558</td>
<td>40.742</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>63.893</td>
<td>106</td>
<td>.603</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>113.009</td>
<td>108</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ANOVA table shows that environmental concerns and health consciousness were statistically significant (p < 0.05). Hence this regression model predicts the purchase intention of organic products significantly well. The higher the beta coefficient, more is the contribution of factors in explaining purchase intention. As shown in the following table, purchase intention was
influenced by both the factors with “health consciousness” as the more important dimension, beta coefficient = 0.605.

Table 5.3: Coefficients statistics for the effect of perceived justice dimensions on Customer loyalty

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th></th>
<th></th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Unstandardized Coefficients</td>
<td>Standardized Coefficients</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td></td>
<td>1.900</td>
<td>.293</td>
<td></td>
<td>6.477</td>
<td>.000</td>
</tr>
<tr>
<td>Environment concerns (EC)</td>
<td>.215</td>
<td>.049</td>
<td>.319</td>
<td>4.365</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health consciousness (HC)</td>
<td>.346</td>
<td>.044</td>
<td>.573</td>
<td>7.842</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A significant regression equation was found (F (2,106) = 40.742, p < .000), with an R2 of .432. Participants’ predicted purchase intention is equal to 1.900 + .215 (EC) + .346 (HC). Further, the table shows the overall significance of the model. For this purpose, the Analysis of Variance (ANOVA) or F-Test approach is used. This shows that model is statistically fit and shows that approximately 44% of total variance in purchase intention is explained by Environment concerns (EC) and Health consciousness (HC), suggesting a very good fit of the model. The standardized coefficients were respectively .215 and .346. These confirm that Health consciousness (HC) makes more contribution to purchase intention than that of Environment concerns (EC).

6. DISCUSSION AND CONCLUSION

Findings in this study indicate that both environmental concerns and health consciousness have significant relationship with purchase intention in context of organic food products. However, health consciousness has been found to be the more important motive in shaping intention to purchase of organic food products in comparison to environmental concerns (health improvement) with organic produce with little to no influence on motivation to purchase.
addition, the relationship between health consciousness and intention and relationship between environmental concerns is not significant. Like many other previous research these findings may suggest that respondents are conscious about their health and possibly alert to any changes and responsible for the state of their health, they associate a lot of health benefits (e.g. health preservation) with the consumption of organic products. This research can act as a guiding light and provide insights to concerned parties especially the marketers to formulate suitable and effective strategies to enhance sales which will further boost the organic industry. However, one limitation of the present study is that it was confined to the visitors of organic shops who may inherently hold more positive attitude and favourable purchase intention toward organic foods. Therefore more studies will be required to better distinguish between consumer group to ascertain which segments of consumer are most suitable to market and to enforce organic food as a way of building sustainable consumption pattern. Furthermore, the present study takes into account only two aspects of consumer values in consideration i.e. environmental concerns and health consciousness. However, there are others possible factors that influence organic food consumptions which future research can focus upon.

References:


BHARDWAJ, R. Health Concern is the Prime Motive for Buying Organic Food Products.


