A STUDY ON CONSUMERS' MOTIVATIONS TOWARDS ORGANIC FOOD PRODUCTS IN INDIA

Dasari Panduranga Rao, IBT College, Toronto Ramanjaneyulu Mogili, National Institute of Technology, Tiruchirappalli Samala Nagaraj, Woxsen School of Business, Hyderabad

ABSTRACT

Purpose: The purpose of this research is to examine what factors motivate consumers to buy organic food products and how motives affect the consumers' intention to purchase and actual purchase of organic food products.

Design/methodology/approach: The respondents were carefully chosen for data collection with mall intercept method and approached buyers with the questionnaire at the outlets of large Indian organic food selling stores in selected two metro cities. A total of 580 valid questionnaires were obtained, wherein responses were recorded on Likert-type scale anchoring five-points where 1 indicates strongly disagree and 5 indicates strongly agree. Then, the analysis was carried out by using Exploratory Factor Analysis and Multiple Regression Analysis.

Findings: The findings implied that, Health consciousness, Environmental and Animal welfare concerns are key motives and the organic food consumption motives positively affect the consumers' intention to purchase and actual purchase of organic food products.

Research limitations/implications: The study limited to analyse few motivating factors such as health, environmental and animal concern.

Practical implications: This research provides valuable insights for organic food retailers and manufacturers by indicating consumption motives (health consciousness, environmental motives and animal welfare concerns) are the most important determinant of purchase intention and actual purchase behavior among the several predictors.

Originality/value: This study is one among the very few studies which addressed the research on consumption motives, intention to purchase and actual purchase behavior toward organic food products in Indian context.

Keywords: Motives, Intention to Purchase, Actual Purchase, Organic Food Products.

INTRODUCTION

Motivation is the driving force or arousal within individuals that impel them to specific action or attainment of goal objects. This driving force is formed by a state of tension, which exists as the result of an unfulfilled need(s) such as physiological (food, water, air, etc.). Previous studies have extensively discussed and documented organic food consumption motives from the perspectives of socio/cultural reasons, economic reasons, and product reasons, personal reasons (Yiridoe et al., 2005; Michaelidou & Hasan, 2010; Hemmerling et al., 2015). A large number of studies demonstrated that organic consumption motives have a positive impact on purchase intention and consumer decision (Honkanen et al., 2006; Pino, Peluso and select organic consumption motives for the present study to identify the important motives related to purchase

intention. The review summary identified health including food safety¹, sensory characteristics (i.e. taste and freshness), and ethical properties such as environmental protection and animal welfare are considered to be the most important organic consumption motives. It appears that purchase motivations for organic food hugely depend on the degree of commitment of the individual in the organic dynamics (Wier et al., 2008; Foster et al., 2005). Some studies mention that regular consumers are mostly motivated by ethical reasons, whereas for occasional buyers health considerations remain the main driving factors (Pino et al., 2012; Michaelidou et al., 2008).

Another study (e.g., Pearson et al., 2013) revealed that regular and occasional consumers had both high concerns for environment. Several studies in different contexts (Europe, Australia, Asia and America) specified that health consciousness is the major motives for organic consumption. Becker (1977) defined health consciousness as the readiness to undertake health actions. Health consciousness can also be defined as the degree to which health concerns are integrated into person's daily activities (Jayanti & Burns, 1998). Previous studies in different contexts (e.g., Sirieix, Kledal, and Sulitang 2011 in China; Tsakiridou et al., 2008 in Thailand) identified the significance of food safety and environmental protection to be the main organic motives related to organic consumption and buying organic. Cass (2001) mentioned that individuals' motive related to health benefits of organic food consumption would elicit out their involvement² with organic purchase decision, as the health image of organic foods is closely associated with their strong health awareness. Earlier research considered health concern is one of the major factors that motivates the consumer attitude and intention towards the purchase of organic foods (Chakrabarti, 2010) while Harper & Makatouni (2002) claimed that consumers with ecological motives try to not harm the environment and incline to choose products that are environmentally friendly and respectful to animal welfare. Here, Environmental conscious refers to the degree of emotional involvement in environmental issues, and it taps the individuals' affective response towards environmental protection (Lee, 2015). Consumers who have high environmental conscious will figure out how environmental quality can be improved and they will involve themselves with buying environmentally friendly products (Sinnappan & Rahman, 2011). Pagiaslis & Krontalis (2014) have also mentioned in their study that environmental concern has a direct and a positive influence on consumer's intention to buy eco-friendly products (Smith & Paladino, 2010) as buying organic food is considered as pro environmental behaviour (Yadav & Pathak, 2016). Some researchers also noted that ethical consumers are strongly adhered to social and environmental principles (Strong, 1996). Therefore, several studies have consistently provided evidence that consumers hold multi-faceted motives to purchase organic food, including health concern, environmental concern, food safety, sensory variables, ethical concerns or value structure (Baker et al., 2004; Lockie et al., 2004). By and large, health concern is often found to be the most important factor motivating organic food purchase (Chinnici et al., 2002; Magnusson et al., 2003).

H1: Organic food consumption motives positively influence the consumers' intention to purchase organic food products in relation to:

H1a: Health consciousness motives; H1b: Environmental motives; and

¹Food safety concern refers to consumers' concern for pesticide residues, fertilizers, artificial additives, and preservatives in foods, as well as food production methods and agricultural practices

²Involvement refers to a person's perceived relevance of the object based on inherent needs, values, and interests.

H1c: Animal welfare concerns.

H2: Organic food consumption motives positively influence the consumers' actual purchase behaviour towards organic food products in relation to:

H2a: Health consciousness motives

H2b: Environmental motives

H2c: Animal welfare concerns

RESEARCH METHODOLOGY

The population frame would be Organic food consumers in the twin cities of Hyderabad and Secunderabad in the state of Telangana in India. The convenience sampling technique was selected for the present study. A structured questionnaire is distributed to the customers visiting to selected organic food stores in the twin cities. Through this method of data collection, the study ensures that the sample respondent is a purchaser of the organic food. A total of 580 responses have been collected. To test the effect of organic food consumption motives such as health consciousness motives, environmental motives, and animal welfare concerns on consumer's intention to purchase and actual purchase organic food products, stepwise multiple linear regressions analysis (MLRA) was used.

Data Analysis

To test the effect of organic food consumption motives such as health consciousness motives, environmental motives, and animal welfare concerns on consumer's intention to purchase organic food products, stepwise multiple linear regressions analysis (MLRA) was used. The resulting regressing models and their significance including distinct predictors at varying ' α ' levels were presented in the following paragraphs.

The regression models shown in Table 1 contributed significantly and predicted 19.8 percent variation (adjusted R²) by health consciousness motives (HCM) in mode-1, 25.8 percent variation (adjusted R²) by health consciousness motives (HCM) & environmental motives (ENVM) in model-2 and 27.7 percent variation (adjusted R²) by health consciousness motives (HCM) & environmental motives (ENVM) & animal welfare concerns (AWC) in model-3 towards intention to purchase of organic food products. The three evolved regression models for intention to purchase organic food products yielded a significant statistic (F=144.133, p=0.000; F=101.781, p=0.000 and F=75.03, p=0.000) with health consciousness motives (β = 0.447, t=12.006, p=0.000), health consciousness motives & environmental motives (β = 0.442, t=12.346, p=0.000 & β = 0.247 t=6.911, p=0.000) and health consciousness motives, environmental motives and animal welfare concerns (β = 429, t=12.073, p=0.000; β = 0.246, t=6.971, p=0.000 & β = 0.227, t=6.125, p=0.001) as its significant predictors shown in Table 2. It indicated that independent variables such as and health consciousness motives, environmental motives and animal welfare concerns were related to dependent variable i.e., intention to purchase organic food products. The positive and high value of beta (β) which depicts that organic food consumption motives explains high degree of intention to purchase organic food products and generates the following regression equations:

```
Y = 1.989 + 0.447X_1 - (1)
Y = 1.169 + 0.442X_1 + 0.247X_2 - (2)
Y = 41.651 + 0.429 X_1 + 0.246X_2 + 0.227X_3 - (3)
```

Whereas, Y= Intention to purchase of organic food products; X_1 =Health consciousness motives; X_2 = Environmental motives; and X_3 =Animal welfare concerns.

Results: Null hypotheses: $H1_{0a}$, $H1_{0b}$, and $H1_{0c}$ were disproved. Therefore, alternative hypotheses, customers' health consciousness motives ($H1_a$), environmental motives ($H1_b$), and animal welfare concerns ($H1_c$) were proved to be the significant predictors of intention to purchase of organic food products. The findings implied that the organic food consumption motives positively affect the consumers' intention to purchase of organic food products.

To test the effect of organic food consumption motives such as health consciousness motives, environmental motives, and animal welfare motives on consumer's actual purchase of organic food products, stepwise multiple linear regressions analysis (MLRA) was applied. The resulting regressing models and their significance including distinct predictors at varying ' α ' levels were presented in the following paragraphs.

The regression models related to actual purchase of organic food products shown in Table 1 contributed significantly and predicted 12.0 percent variation (adjusted R²) by health consciousness motives (HCM) in mode-1, 17.5 percent variation (adjusted R²) by health consciousness motives (HCM) & environmental motives (ENVM) in model-2 and 22.4 percent variation (adjusted R²) by health consciousness motives (HCM) & environmental motives (ENVM) & animal welfare concerns (AWC) in model-3 towards intention to purchase of organic food products. The three evolved regression models for actual purchase behaviour towards organic food products yielded a significant statistic (F=79.693, p=0.000; F=62.273, p=0.000 and F=56.649, p=0.000) with health consciousness motives (β = 0.348, t= 8.927, p=0.000), health consciousness motives & environmental motives (β = 0.386, t=10.090, p=0.000 & β =0.240, t= 6.288, p=0.000) and health consciousness motives, environmental motives and animal welfare concerns (β =-0.369, t=9.938, p=0.000; β = 0.269, t=7.190, p=0.000 & β = 0.143, t= 4.028, p=0.021) as its significant predictors shown in Table 2. It indicated that independent variables such as and health consciousness motives, environmental motives and animal welfare concerns were related to dependent variable i.e., actual purchase organic food products. The positive and high value of beta (β) which depicts that organic food consumption motives explains high degree of actual purchase behaviour towards organic food products and generates the following regression equations:

```
Y = 4.651 + 0.348X_{1} - ... (1)
Y = 5.465 + 0.386X_{1} + 0.240X_{2} - ... (2)
Y = 6.407 + 0.369X_{1} + 0.269X_{2} + 0.143X_{3} - ... (3)
```

Whereas, Y= Actual purchase of organic food products; X_1 =Health consciousness motives; X_2 = Environmental motives; and X_3 =Animal welfare concerns.

Results: Null hypotheses: $H2_{0a}$, $H2_{0b}$, and $H2_{0c}$ were disproved. Therefore, alternative hypotheses, customers' health consciousness motives ($H2_a$), environmental motives ($H2_b$), and animal welfare concerns ($H2_c$) were proved to be the significant predictors of actual purchase of

organic food products. The findings implied that the organic food consumption motives positively affect the consumers' actual purchase of organic food products.

Table 1 SUMMARY REGRESSION MODELS FOR EFFECT OF ORGANIC FOOD CONSUMPTION MOTIVES ON INTENTION TO PURCHASE AND ACTUAL PURCHASE OF ORGANIC FOOD PRODUCTS											
Dependent variable	Model	R	R^2	Adj. R ²	S. E of Estimate	Regression Model	Sum of Squares	df	Mean Square	F-value	Sig. (p-value)
Intention to purchase of organic food products a. Predictors: (Constant), HCM b. Predictors: (Constant), HCM, ENVM concerns c. Predictors: (Constant), HCM, ENVM	1.	0.447ª	0.200	0.198	1.079	Regression Residual Total	167.940 673.472 841.412	1 578 579	167.940 1.165	144.133	0.000ª
	2.	0.511 ^b	0.261	0.258	1.038	Regression Residual Total	219.431 621.982 841.412	2 577 579	109.715 1.078	101.781	0.000 ^b
	3.	0.530°	0.281	0.277	1.025	Regression Residual Total	236.474 604.938 841.412	3 576 579	78.825 1.050	75.05	0.000°
Actual purchase of organic food	1.	0.348ª	0.121	0.120	1.131	Regression Residual Total	101.954 739.458 41.412	1 578 579	101.954 1.279	79.693	0.000ª
products a. Predictors: (Constant), HCM	2.	0.421 ^b	0.178	0.175	1.095	Regression Residual Total	149.376 692.036 841.412	2 577 579	74.688 1.199	62.273	0.000 ^b
b. Predictors: (Constant), HCM, ENVM concerns c. Predictors: (Constant), HCM, ENVM & AWC	3.	0.477°	0.228	0.224	1.062	Regression Residual Total	191.697 649.715 841.412	3 576 579	63.899 1.128	56.649	0.000°

Table 2 PREDICTOR EFFECTS AND BETA ESTIMATES FOR ORGANIC FOOD CONSUMPTION MOTIVES ON INTENTION TO PURCHASE AND ACTUAL PURCHASE OF ORGANIC FOOD PRODUCTS										
Dependent variable	Model	Unstandardised Coefficients Beta (β)	Std. Error	Standardised coefficients Beta (β)	t-value	Sig. (p-value)				
Intention to purchase of organic food products	(Constant) Health consciousness motives	1.989 0.506	0.120 0.042	0.447	16.561 12.006	0.000				
	(Constant) Health consciousness motives	1.169 0.500	0.166 0.041	0.442	7.062 12.346	0.000				
	Environmental motives 3. (Constant) Health	0.305 1.651	0.044 0.202	0.247	6.911 8.153	0.000***				
	consciousness motives Environmental motives Animal welfare concerns	0.485 0.303	0.040 0.044	0.429 0.246	12.073 6.971	0.000***				
Actual purchase of organic food products	(Constant) Health consciousness motives	0.249 4.651 0.376	0.041 0.156 0.042	0.227	6.125 29.867 8.927	0.01** 0.000 0.000***				
	2. (Constant) Health consciousness motives	5.465 0.417	0.199 0.041	0.386	27.507 10.090	0.000				
	Environmental motives 3. (Constant) Health consciousness motives	0.223 6.407 0.399	0.036 0.246 0.040	0.240	6.288 25.991 9.938	0.000*** 0.000 0.000***				
	Environmental motives Animal welfare concerns	0.250 0.150	0.035 0.037	0.269 0.143	7.190 4.028	0.000***				

Note: $\alpha < 0.05$, * $\alpha < 0.01$, * * $\alpha < 0.001$; Source: Primary Data

DISCUSSION OF RESULTS

The findings from the three stepwise regression models indicated that health consciousness motive was the utmost important significant predictor followed by environmental concerns and animal welfare concerns for intention to purchase and actual purchase of organic food products. Further analysis of estimates of consumption motives indicates that the positive β estimates of health consciousness, environmental concerns and animal welfare concerns indicate that as respondents' said consumption motives increases by one unit, the intention to purchase and actual purchase of organic food products increases. More importantly, it is pertinent to mention that the beta values of consumption motives for actual purchase behaviour towards organic food products is moderate compared to intention to purchase of organic food products due to various exogenous factors such as situational, time, store environmental factors.

The safety and health conscious motives have a positive influence on consumers' intention to purchase and actual purchase of organic food products since the common belief of consumers on organic products is that they have no pesticides, no artificial fertilizers, and are residue-free safe products. The importance of health and safety in determining consumers' purchasing decisions also confirms the results from most previous studies on organic food products that stated the motives for Indian consumers in purchasing organic foods are safety and health concerns (Chakrabarti, 2010; Arunkumar & Elangovan, 2016).

The results also indicated that respondents are really being concerned about the environment as the environment is now undergoing many threats like pollutions and global warming issues and hence there is a need for consumers to alter their ways of consumption. The consumers are aware of the impacts and consequences of old farming practices to the environment as well (Saleki & Seyedsaleki, 2012). Growth of concern about nature can help to increase the purchase intention of organic foods produced are environmental friendly foods.

Previous research has also reported that health and environmental benefits are main motives for purchasing organic food products (Ahmad & Juhdi 2010; Magistris & Gracia, 2008; Tsakiridou et al., 2008). Animal welfare is considered to be another factor influencing consumer's intention to purchase organic food (Harper and Makatouni,2002) however, research shows that animal welfare is a less influential concern in purchasing organic food as compared to environmental concerns (Hughner et al., 2007).

Implications

This research provides valuable insights for organic food retailers and manufacturers by indicating consumption motives (health consciousness, environmental motives and animal welfare concerns) are the most important determinant of purchase intention and actual purchase behaviour among the seven predictors. The results confirmed that health is an important factor but not the only motive for buying organic products. The concern for the environment (ecological issues), and animal welfare have also been reported as drivers of organic food consumption. The results further imply that extending organic food consumption is a sound and sustainable solution for the environmental and health problems in Indian context. Organic food

marketers and policy makers need to draw special attention on improving awareness levels and promote the specific health benefits of organic food in order to stimulate actual purchasing decision

CONCLUSION

The critical factors influencing consumers purchase intentions and actual purchase of organic food products were organic food consumption motives (e.g., health consciousness motives, environmental concerns and animal welfare concerns). Customers' health consciousness motives, environmental motives, and animal welfare concerns were proved to be the significant predictors of intention to purchase and actual purchase of organic food products. The findings implied that the organic food consumption motives positively affect the consumers' intention to purchase and actual purchase of organic food products.

LIMITATION

The study is intended to examine the different motives that drive customers towards purchase of organic food. However, the study is suffering few limitations. Firstly, the study is restricted to only two cities in India due to researchers inconvenience to go other places, however, the twin cities selected are very heterogeneously populated in culture and almost represents India. The sample size also relatively small. The variables or motives considered to understand buying behaviour are also limited and other motives like food safety, personal norms, social and ethical norms can be considered in further studies.

REFERENCES

- Ahmad, S.N.B., & Juhdi, N. (2008). Consumer's perception and purchase intentions towards organic food products: Exploring the attitude among Malaysian consumers. In 16th Annual Conference on Pacific Basin Finance, Economics, Accounting and Management, Brisbane, Australia.
- Arunkumar, B., & Elangovan, D. (2016). CONSUMER ATTITUDE AND PREFERENCE FOR ORGANIC FOOD PRODUCTS IN COIMBATOE CITY. *Asia Pacific Journal of Research ISSN (Print)*, 2320, 5504.
- Baker, S.K.E. Thompson, J.E., & Karen, H. (2004). Mapping the values driving organic food choice: Germany vs the UK. *European Journal of Marketing*, *38*(8) 995-1012.
- Becker, M.H., Lois, A.M., John, P.K., Don P.H., & Robert H.D. (1977). The Health Belief Model and prediction of dietary compliance: a field experiment. *Journal of Health and Social Behavior*, 348-366.
- Chakrabarti, S. (2010). Factors influencing organic food purchase in India–expert survey insights. *British Food Journal*, 112(8), 902-915.
- Magistris, T., & Gracia, A. (2008). The decision to buy organic food products in Southern Italy. *British Food Journal*, 110(9), 929-947.
- Cass, A. (2001). Attributions of service switching: a study of consumers' and providers' perceptions of child-care service deliver, *Journal of Servives Marketing*, 15(4), 300-321
- Harper, G.C., & Makatouni, A. (2002). Consumer perception of organic food production and farm animal welfare. *British Food Journal*, 104(3/4/5), 287-299.
- Hemmerling, S., Hamm, U., & Spiller, A. (2015). Consumption behaviour regarding organic food from a marketing perspective a literature review. *Organic Agriculture*, 5(4), 277-313.
- Honkanen, P., Bas, V., & Svein, O. (2006). Ethical values and motives driving organic food choice. *Journal of Consumer Behaviour*, 5(5), 420-430.

- Hughner, R.S., McDonagh, P., Prothero, A., Shultz, C.J., & Stanton, J. (2007). Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour*, 6(2-3), 94-110.
- Jayanti, R.K., & Burns, A.C. (1998). The antecedents of preventive health care behavior: An empirical study. *Journal of the Academy of Marketing Science*, 26(1), 6-15.
- Lee, H.J., & Yun, Z.S. (2015). Consumers' perceptions of organic food attributes and cognitive and affective attitudes as determinants of their purchase intentions toward organic food. *Food Quality and Preference*, 39, 259-267.
- Lockie, S., Lyons, K., Lawrence, G., & Grice, J. (2004). Choosing organics: a path analysis of factors underlying the selection of organic food among Australian consumers. *Appetite*, *43*(2), 135-146.
- Magnusson, M.K., Arvola, A., Hursti, U.K.K., Åberg, L., & Sjödén, P.O. (2003). Choice of organic foods is related to perceived consequences for human health and to environmentally friendly behaviour. *Appetite*, 40(2), 109-117.
- Michaelidou, N., & Hassan, L.M. (2008). The role of health consciousness, food safety concern and ethical identity on attitudes and intentions towards organic food. *International Journal of Consumer Studies*, 32(2), 163-170.
- Michaelidou, N., & Hassan, L.M. (2010). Modeling the factors affecting rural consumers' purchase of organic and free-range produce: A case study of consumers' from the Island of Arran in Scotland, UK. *Food Policy*, 35(2), 130-139.
- Pagiaslis, A., & Krontalis, A.K. (2014). Green consumption behavior antecedents: Environmental concern, knowledge, and beliefs. *Psychology & Marketing*, *31*(5), 335-348.
- Pearson, D., Henryks, J., Sultan, P., & Anisimova, T. (2013). Organic food: Exploring purchase frequency to explain consumer behavior. *Journal of Organic Systems*, 8(2), 50-63.
- Pino, G., Peluso, A.M., & Guido, G. (2012). Determinants of regular and occasional consumers' intentions to buy organic food. *Journal of Consumer Affairs*, 46(1), 157-169.
- Saleki, Z.S., Seyedeh, M.S., & Rahimi, M.R. (2012). Organic food purchasing behaviour in Iran. *International Journal of Business and Social Science*, 3(13).
- Sinnappan, P., & Rahman, A.A. (2011). Antecedents of green purchasing behavior among Malaysian consumers. *International Business Management*, 5(3), 129-139.
- Sirieix, L., Kledal, P.R., & Sulitang, T. (2011). Organic food consumers' trade-offs between local or imported, conventional or organic products: a qualitative study in Shanghai. *International Journal of Consumer Studies*, 35(6), 670-678.
- Smith, S., & Paladino, A. (2010). Eating clean and green? Investigating consumer motivations towards the purchase of organic food. *Australasian Marketing Journal (AMJ)*, 18(2), 93-104.
- Strong, C. (1997). The problems of translating fair trade principles into consumer purchase behaviour. *Marketing Intelligence & Planning*, 15(1), 32-37.
- Tsakiridou, E., Boutsouki, C., Zotos, Y., & Mattas, K. (2008). Attitudes and behaviour towards organic products: an exploratory study. *International Journal of Retail & Distribution Management*, *36*(2), 158-175.
- Wier, M., Jensen, K.O.D., Andersen, L.M., & Millock, K. (2008). The character of demand in mature organic food markets: Great Britain and Denmark compared. *Food Policy*, *33*(5), 406-421.
- Yadav, R., & Pathak, G.S. (2016). Intention to purchase organic food among young consumers: Evidences from a developing nation. *Appetite*, *96*, 122-128.
- Yiridoe, E.K., Bonti-Ankomah, S., & Martin, R.C. (2005). Comparison of consumer perceptions and preference toward organic versus conventionally produced foods: A review and update of the literature. *Renewable Agriculture and Food Systems*, 20(4), 193-205.