AN ANALYSIS OF PURCHASE BEHAVIOUR TOWARDS ORGANIC PRODUCTS: EXPLORING THE MEDIATION IMPACT OF ATTITUDE ON PERSONALITY AND PURCHASE BEHAVIOUR

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Abstract: This paper examines the influence of attitude towards organic products, health consciousness, product knowledge, and personality on purchase behaviour towards organic products. The association between personality and buying behaviour for organic products was investigated with the mediation effect of attitude towards organic items. The current paper continues to add to the existing literature by postulating the linkage impact of attitude towards organic products on the relationship between personality and purchase behaviour towards organic products. A primary survey was conducted in the Delhi-NCR region using a pre-designed Likert scale questionnaire. The respondents of the study were selected using the random sampling technique. The analysis was carried out using the statistical technique of multiple regression. Given the rising use of organic products, the study found that attitude towards organic products, health consciousness, product knowledge, and personality positively affect purchasing decisions. The study also noted that marketers must comprehend the significance of analysing buyers' behaviour as it positively influences purchasing decisions, and vice-versa.

Keywords: Attitude towards Organic Products, Health Consciousness, Product Knowledge, Personality, Purchase Behaviour

INTRODUCTION

In this COVID-19 pandemic era, people are trying to intake healthy and good quality food. People are now conscious about their health and inculcating habits that can help them build a good immune system. People tend to be inclined towards organic products to strengthen their immune system and build good health. Consumption of healthy and nutritious food is essential to one's life, especially after the pandemic. However, in the last decade, the demand for organic products has significantly expanded (Du et al., 2017), although human growth has led to deteriorating natural resources (Kleiner, 1991; Yam-Tang & Chan, 1998). Products classified as organic must be created using natural ingredients and in a manner that respects the soil, preserves its nutrients, and does not use chemicals. After this only can it be accredited and certified as an organic product (Martinez, 2020).

Many factors like ecological values, the safety of food, and taste and quality affirmation with the label of a certificate influence the purchase behaviour of organic products (Bryla, 2016). Very few studies have focussed, as per the literature gathered by the current study's research, on examining the impact of personality on the purchase behaviour of organic products. Personality is something which shapes our behaviour and our decisions. In the current study, BIG FIVE TRAITS are explored.

- Openness to experience,
- Conscientiousness,
- Extraversion,
- Agreeableness, and
- Neuroticism

The combined influence of all the five traits on the purchase behaviour towards organic products is explored. Personality exerts influence on buying decisions of any product in the market (Dunlap & Van Liere, 1986; Ranjbarian & Kia, 2010; Granzin & Olsen, 1991). Hence, this study tried to find out the influence of personality on purchase behaviour towards organic products.

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The present study focuses on investigating the impact of attitude towards organic products, health consciousness, product knowledge, and personality on purchase behaviour towards organic products. The researcher also tried to extract the mediating impact of attitude towards organic products on the association between personality and organic product purchase behaviour. The study concluded the results with the Delhi-NCR population only, as a diverse group of people is available there. This paper will focus on and survey organic products in general, and not any specific product.

LITERATURE REVIEW

Relationship between attitude towards organic products and purchase behaviour towards organic products.

Attitude is the tendency to behave and act in a particular manner in a specific situation. Attitude constitutes a tendency to act negatively or positively towards a certain object or situation a person faces (Allport, 1935; Blackwell et al., 2006; Moser, 2015). Factors like ethical concerns towards the environment (McEachern & McClean, 2002), and demographic factors like gender, age, and educational qualification along with children's existence in houses (Davis et al., 1995; Wandel & Bugge, 1997; Thompson & Kidwell, 1998; Gam et al., 2010; Magnusson et al., 2001; Wier et al., 2003) affect the attitude of consumers in purchasing organic products. Some studies have shown that attitude is a significant predictor of organic product purchase behaviour due to environmental concerns (Ajzen & Fishbein, 1980; Ellen et al., 1991; McEachern & McClean, 2002; Mohai, 1992; Weaver, 2002; Pooley & O'Connor, 2000).

Relationship between health consciousness and purchase behaviour towards organic products.

People nowadays are eager to buy organic products due to the various benefits; however, factors like price and availability deter them from buying organic products. Individuals purchase organic products because they consider them healthier and more environmentally friendly than regular products (Chen, 2007). Individuals who think organic food is healthier will buy more of it and be ready to pay more (Andersen, 2007).

Relationship between product knowledge and purchase behaviour towards organic products.

Consumers tend to acquire knowledge about the products they consume. According to a study, 65 per cent of respondents said that certifications were necessary to ensure the quality of organic products, particularly those sold in local markets (Piyasiri, 2002). Knowledge is the main factor that influences the purchase of organic products (Hill & Lynchehaun, 2002). However, consumers do not trust the labelling of organic items, which impacts their knowledge of organic products (Padel & Foster, 2005).

Relationship between personality and purchase behaviour towards organic products.

The most effective measure to identify personality traits is the Big Five Inventory (BFI). All five features, that is, a) openness to experience, b) conscientiousness, c) extraversion, d) agreeableness, and e) neuroticism, are related in nature (Goldberg, 1990). Verma et al. (2020, 2021) found that personality influences purchase behaviour towards green products. The mediation impact of attitude on the association between personality and purchase behaviour towards organic products is also seen (Verma et al., 2020).

With the above discussion, the study examines the following hypotheses:

H₁: Attitude towards organic products positively influences the purchase behaviour towards organic products.

H₂: Health consciousness positively and significantly affects purchase behaviour towards organic products.

H₃: Product knowledge influences purchase behaviour towards organic products.

H₄: Personality significantly influences purchase behaviour towards organic products.

 H_5 : Attitude mediates the relationship between personality and purchase behaviour towards organic products.

The above mentioned hypotheses could be represented with the following framework:



Source: Author's compilation.

METHODOLOGY

Participants

This quantitative research relies on a survey method to collect data with the help of random sampling. The data was collected from Delhi-NCR, as people from different states reside in Delhi-NCR. Consumers coming out of the grocery shops were approached and requested to fill the questionnaire. Though some of the consumers did not fill the questionnaire, a good number agreed. An aggregate of 500 questionnaires was disseminated among consumers. Among the 500 questionnaires, only 385 were returned. However, after a further check, only 298 questionnaires were filled. Of these 298 questionnaires, 18 were filled carelessly and were not included in the final analysis. Among the respondents, 68 per cent were female. Moreover, most participants were around 25-35 years (72 per cent), and around 82 per cent of the respondents were post-graduates.

Measures

A five-point Likert scale is used in the questionnaire, with '1' denoting a strong disagreement and '5' denoting a strong agreement. The reliability of the scale was examined and found to be acquired at .919. Nunnally et al. (1967) suggest that a reliability value exceeding 0.70 is acceptable. All the measures were taken from the scales that were previously developed in the literature.

Attitude towards Organic Products

The previously developed scale of Gill (2000) was used to measure attitude towards organic products. For example, 'Organic products are healthier'.

Product Knowledge

A scale developed by Park and Lessig (1985) was used

to measure product knowledge of organic products. An exemplary statement used in this study is 'I know a lot about organic products'.

Health Consciousness

Health consciousness was measured using the scale given by Michaelidou N. and Hassan L. M. (2008). A sample statement is 'I take responsibility for the state of my health'.

Personality

Donnellan et al. (2006) posited a 20-item scale to measure personality traits used in this study. A sample of the item is 'I am the life of the party'.

Purchase Behaviour towards Organic Products

A scale evolved by Lee (2009) is considered in the present study to determine the purchase behaviour towards organic products. A sample item is 'I normally buy products that contain no or fewer chemical ingredients'.

DATA ANALYSIS AND DATA FINDINGS

To test various hypothesis (that is, H_1 , H_2 , H_3 , H_4 , and H_5), multiple regression analysis was used, with purchase behaviour towards organic products as the dependent variable of the study. Attitude towards organic products, product knowledge, health consciousness, and personality are predictors of purchase behaviour towards organic products (dependent variable). The present study found that the model explains 35.8% (R²) (Table 1) of the total variance and that the model came out to be a significant predictor of PB, F (2,278) = 31.253, p = 0.000 for p < 0.05 (Table 2).

Model	R	R	Adjusted	Std. Error of the	Change Statistics				
		Square	R Square	Estimate	R Square	F			Sig. F
					Change	Change	df1	df2	Change
1	.555 ^a	.358	.298	3.126	.358	31.253	2	278	.000

Table 1: Model Summary^b

a. Predictors: (Constant), Attitude, Health, Knowledge, Personality.

b. Dependent variable: Purchase behaviour.

The model of the study suggests that H_1 , H_2 , H_3 , and H_4 are accepted. This depicts that attitude towards organic products, health consciousness, product knowledge, and personality are potential predictors of purchase behaviour towards organic products. Furthermore, the study found that attitude towards organic products is the strongest predictor of purchase behaviour towards organic products.

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	629.953	2	414.976	31.253	.000 ^b
	Residual	1417.372	278	9.645		
	Total	2047.324	280			

Table 2: ANOVA

a. Dependent variable: Purchase behaviour.

b. Predictors: (Constant), attitude, health, knowledge, personality.

To analyse H_5 , that is, to examine the mediation impact of attitude on the relationship between personality and purchase behaviour towards organic products, HAYES PROCESS MACRO was used. It can be seen in Table 1 that both attitude towards organic products and personality explain purchase behaviour towards organic products. Moreover, when mediating impact was analysed, it was observed that:

- Personality is a positive and significant predictor of purchase behaviour towards organic products (b = 0.3150, t = 2.5677, p = 0.0071).
- Attitude towards organic products has a positive and significant impact on purchase behaviour towards organic products (b = 0.6275, t = 3.9227, p = 0.0082).
- Personality appears to be a positive and significant influencer of attitude towards organic products (b = 0.2450, t = 1.3276, p = 0.0089).
- Personality positively and significantly affects purchase behaviour towards organic products in the presence of attitude (b = 0.2180, t = 1.3532, p = 0.0030).

The above findings are shown in Table 3.

Effects	Estimates	t	P-Value
Personality \rightarrow Purchase behaviour (Direct effect)	0.3150	2.5677	0.0071
Attitude \rightarrow Purchase behaviour	0.6275	3.9227	0.0082
Personality \rightarrow Attitude	0.2450	1.3276	0.0089
Personality \rightarrow Purchase behaviour (Indirect effect)	0.2180	1.3532	0.0030

Table 3: Summary of Findings

This shows that in the presence of attitude, personality predicts purchase behaviour towards organic products. Hence, we accept H_5 , which suggests that attitude towards organic products mediates the relationship between personality and purchase behaviour towards organic products. Mediation impact can also be depicted with the presence of 0 between the class intervals. In the present study, 0 does not belong to the confidence intervals (LLCI = 0.0825, UICI = 0.7564). Hence, all the conditions of Barron and Kenny (1986) were fulfilled, with the help of which the present study can accept H_5 .

CONCLUSION

In this era, organic product consumption is increasing day by day. The present study offers a helpful vision for marketers of organic products. The current study concludes that attitude towards organic products, health consciousness, product knowledge, and personality predict purchase behaviour towards organic products. Attitude is something which may influence one's life. Attitude may shape our buying habits as well. Vermeir and Verbeke (2006) laid down that due to the functional and green characteristics of a product, attitude towards green products influences purchase behaviour. The study further supports that attitude towards organic products, similar to the results found in various studies conducted by Arbuthnott (2009), Tsakiridou et al. (2007), Zsoka et al. (2013), and Zsuzsanna et al. (2011).

Remarkably, the present study further posited that health consciousness also impacts the purchase behaviour towards organic products. The outbreak of the COVID-19 pandemic has led consumers to think about their health. This pandemic has shown that it is vital to take care of one's health. This study infers that consumers buy organic products because they are health conscious, as organic products seem to be healthier than non-organic ones (Lea & Worsley, 2005; Magnusson et al., 2001; Radman, 2005). A few earlier research discovered that people consume organic food because of its nutritional benefits, which is connected to people's propensity to buy organic goods (Jolly et al., 1989; Buzby & Skees, 1994; Bonti-Ankomah & Yiridoe, 2006; Megicks et al., 2008; Aygen, 2013; Kumar & Ali, 2011).

This study further states that product knowledge successfully influences purchase behaviour towards organic products in a positive direction. It depicts that the more the purchasers know about organic products, the more they will be inclined to purchase organic products, and vice-versa. Moreover, it was noted that when consumers purchase green products, they use their product knowledge to interrogate its environmental attributes and benefits (Brucks, 1985; Murray, 1991). This will enable marketers to learn whether increased consumer awareness of organic products, including their production methods and their benefits for human health and the environment, will encourage customers to buy more.

The study affirmed and proved that personality influences purchase behaviour towards organic products. In our literature review, we noted that openness to experience positively influences green purchase behaviour (Verma, 2021). However, the present study depicted that personality as a whole also influences organic product purchase behaviour (Verma, 2020). Additionally, the mediating impact of attitude towards organic products was also studied and found to be significant in the present research. This was very much in line with the results of Verma (2020).

Finally, it was concluded that attitude towards organic products, health consciousness, product knowledge, and personality positively influence the purchase behaviour towards organic products. This can help marketers work on generating a positive attitude towards organic products. If marketers know the level of health consciousness of buyers, then they may target the highly health-conscious consumers for buying organic products. Additionally, marketers can educate consumers about organic products to encourage them to purchase the same. Individual personality will develop purchase behaviour. As per the results of the study, marketers will have to understand that it is very important to analyse the personality of buyers, as a positive personality may positively impact purchase behaviour, and vice-versa.

LIMITATIONS OF THE STUDY

Every study has certain limitations as it cannot cover all the aspects in one single survey. The present study also has some limitations. The study was only conducted in Delhi-NCR; however, it might potentially be expanded to include all of India's states in the future. There are many other factors like price awareness and environmental awareness that influence purchase behaviour towards organic products, which may be studied along with personality. Additionally, the mediation effect of attitude towards organic products is analysed on the relationship between personality and purchase behaviour towards organic products. In the future, the moderation effect can also be examined.

As we are aware of the effect of COVID-19 on the health of people, the impact of COVID-19 on purchase behaviour towards organic products can also be analysed. Behaviour towards organic products pre- and post-COVID-19 can also be studied. The moderating or mediating impact of COVID-19 on the relationship between health consciousness and purchase behaviour, along with attitude before and after the COVID-19 era, can be explored in further studies.

REFERENCES

- Ajzen, I., Fishbein, M., (1980). Understanding attitudes and predicting social behavior. Englewoods-Cliffs, New Jersey: Prentice Hall.
- Allport, G. W. (1935). Attitudes: A handbook of social psychology. Worcester, MA: Clark University Press.
- Andersen, L. M. (2007). *Organic milk Who and why?* Paper Presented at iHEA 2007 6th World Congress: Explorations in Health Economics.
- Arbuthnott, K. D. (2009). Education for sustainable development beyond attitude change. *International Journal of Sustainability in Higher Education*, 10(2), 152-163.
- Baron, R. M., & Kenny, D. A. (1986). The moderatormediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Blackwell, R. D., Miniard, P. W., & Engel, J. F. (2006). Consumer behavior (1st ed.). South Melbourne: Thomson Learning Publishers.
- Bonti-Ankomah, S., & Yiridoe, E. K. (2006). Organic and conventional food: A literature review of the economics of consumer perceptions and preferences. Final Report. Organic Agriculture Centre of Canada, (OACC), Canada, Toronto.
- Brucks, M. (1984). The effects of product class knowledge on information search behavior. Unpublished dissertation, Graduate School of Industrial Administration, Pittsburgh, PA: Carnegie-Mellon University.
- Bryla, P. (2016). Organic food consumption in Poland: Motives and barriers. *Appetite*, *105*, 737-746.
- Buzby, J. C., & Skees, J. (1994). Consumers want reduced exposure to pesticides on food. *Food Review*, 17(2), 19-22.
- Cachero-Martínez, S. (2020). Consumer behaviour towards organic products: The moderating role of environmental concern. *Journal of Risk and Financial Management*, 13(12), 330.
- Chen, M. F. (2007). Consumer attitudes and purchase intentions in relation to organic foods in Taiwan: Moderating effects of food-related personality traits. *Food Quality and Preference*, 19(7), 1008-1021.
- Davis, A., Titterington, A. J., & Cochrane, C. (1995). Who buys organic food? A profile of the purchasers of organic food in N. Ireland. *British Food Journal*, 97(10), 17-23.

- Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. (2006). The mini-IPIP scales: Tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment*, 18(2), 192-203.
- Du, S., Bartels, J., Reinders, M., & Sen, S. (2017). Organic consumption behavior: A social identification perspective. *Food Quality and Preference 62*, 190-198.
- Ellen, S. P., Wiener, J., & Cobb-Walgren, C. (1991). The role of perceived consumer effectiveness in motivating environmentally conscious behaviors. *Journal of Public Policy and Marketing*, *10*(2), 77-101.
- Gam, H. J., Cao, H., Farr, C., & Kang, M. (2010). Quest for the eco-apparel market: A study of mothers' willingness to purchase organic cotton clothing for their children. *International Journal of Consumer Studies*, 34(6), 648-656.
- Gil, J., Gracia, A., & Sánchez, M. (2000). Market segmentation and willingness to pay for organic products in Spain. *International Food and Agribusiness Management Review*, 3(2), 207-226.
- Goldberg, L. R. (1990). An alternative description of personality: The big-five factor structure. *Journal of Personality and Social Psychology*, 59(6), 1216.
- Hayes, A. F. (2012). Process: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling (pp. 1-39). Guilford Press.
- Hill, H., & Lynchehaun, F. (2002). Organic milk: Attitudes and consumption patterns. *British Food Journal*, 104(7), 526-542.
- Jolly, D. A. (1991). Differences between buyers and nonbuyers of organic produce and willingness to pay organic price premiums. *Journal of Agribusiness*, 9(1), 97-111.
- Kleiner, A. (1991). What does it mean to be green? *Harvard Business Review*, 69(4), 38-42.
- Lee, K. (2008). Opportunities for green marketing: Young consumers. *Marketing Intelligence & Planning*, 26(6), 573-586.
- Lee, K. (2009). Gender differences in Hong Kong adolescent consumers' green purchasing behavior. *Journal of Consumer Marketing*, 26(2), 87-96.
- 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 behavior. *Appetite*, 40(2), 109-117.

- Magnusson, M. K., Arvola, A., Hursti, U. K. K., Åberg, L., & Sjödén, P. O. (2001). Attitudes towards organic foods among Swedish consumers. *British Food Journal*, 103(3), 209-227.
- McEachern, M. G., & McClean, P. (2002). Organic purchasing motivations and attitudes: Are they ethical? *International Journal of Consumer Studies*, 26(2), 85-92.
- Megicks, P., Memery, J., & Williams, J. (2008). Influences on ethical and socially responsible shopping: Evidence from the UK grocery sector. *Journal of Marketing Management*, 24(5-6), 637-659.
- Michaelidou, N., & Hassan, M. L. (2007). The role of health consciousness, food safety concern and ethical identity on attitudes and intentions towards organic food. *International Journal of Consumer Studies*, 163-170.
- Mohai, P. (1992). Men, women, and the environment: An examination of the gender gap in environmental concern and activism. *Society and Natural Resources*, *5*, 1-19.
- Murray, K. B. (1991). A test of services marketing theory: Consumer information acquisition activities. *Journal of Marketing*, 55(1), 10-25.
- Nunnally, J. C. (1967). *Psychometric theory* (2nd ed.). New York-McGraw-Hill, New York.
- Park, C. W., & Lessig, V. P. (1981). Familiarity and its impact on consumer decision biases and heuristics. *Journal of Consumer Research*, 8(2), 223-230.
- Piyasiri, A. G. S. A., & Ariyawardana, A. (2002). Market potential and willingness to pay for selected organic vegetables in Kandy. *Sri Lankan Journal of Agricultural Economics*, 1(1), 107-119.
- Ranjbarian, K., & Kia, M. (2010). The influence of personality traits on consideration set size. *European Journal of Social Sciences*, 15(2), 96-103.
- Thompson, G. D., & Kidwell, J. (1998). Explaining the choice of organic produce: Cosmetic defects, prices, and consumer preferences. *American Journal of Agricultural Economics*, 80(2), 277-287.
- Tsakiridou, E., Mattas, K., & Tzimitra-Kalogianni, I. (2006). The influence of consumer characteristics and attitudes on the demand for organic olive oil. *Journal of International Food & Agribusiness Marketing*, *18*(3-4), 23-31.
- Verma, S., Bhatnagar, A., & Kanojeya, S. (2019). Precursors of green purchase behaviour: A study on generation Y. *Think India Journal*, 22(10), 1559-1567.
- Verma, S., Bhatnagar, A., & Singh, V. K. (2021). Impact of environmental knowledge and awareness and openness

to experience on green purchase behaviour: A mediation moderation analysis. *World Review of Entrepreneurship, Management and Sustainable Development, 17*(6), 838-850.

- Verma, S., Bhatnagar, A., Kanojeya, S. K., & Singh, V. K. (2020). Relationship between green purchase behaviour, attitude and personality traits: A mediation analysis. *Journal of Critical Reviews*, 7(13), 3611-3622.
- Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: Exploring the consumer attitude-behavioral intention' gap. *Journal of Agricultural and Environmental Ethics*, 19(2), 169-194.
- Wandel, M., & Bugge, A. (1997). Environmental concern in consumer evaluation of food quality. *Food Quality and Preference*, 8(1), 19-26.
- Weaver, A. A. (2002). Determinants of environmental attitudes: A five country comparison. *International Journal of Sociology*, 32, 77-108.

- 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.
- Yam-Tang, E. P., & Chan, R. Y. (1998). Purchasing behaviours and perceptions of environmentally harmful products. *Marketing Intelligence & Planning*, 16(6), 356-362.
- Zsoka, A., Szerenyi, Z., Szechy, A., & Kocsis, T. (2013). Greening due to environmental education? Environmental knowledge, attitudes, consumer behaviour and everyday pro-environmental activities of Hungarian high school and university students. *Journal of Cleaner Production*, *48*, 126-138.
- Zsuzsanna, S., Zsoka, A., & Szechy, A. (2011). Consumer behaviour and lifestyle patterns of Hungarian students with regard to environmental awareness. *Society and Economy*, 33(1), 89-110.