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Influence of Demographic Variables Towards Purchase of Organic Personal-Care Products

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ABSTRACT

The rising concern for the environment has made the companies realize the importance of incorporating sustainability into their business activities, and it resulted in the emergence of new concepts of green, or sustainable, or environmental marketing. There are three components of sustainable development i.e. economical, ecological, and human. The present study is focused on how the ecological problems can be minimized through the consumption of sustainable products. One of the way of minimising the adverse impact on the environment is through the use of environmental or green products. In this study, organic personal-care product is considered to study the buying behaviour of consumers for such green product category. Current study is focused on understanding the impact of demographic profiles of consumers (gender, age, income, and education) towards purchase of organic personal-care product. The research methodology followed a survey method to collect data from 509 respondents from Delhi-NCR. Analysis of Variance (ANOVA) and Multianalysis of Variance (MANOVA) was conducted to test the hypotheses and results were interpreted. Limitation and research scope of the study was discussed.

Keywords: Organic personal-care product; Green products; Buying behaviour; Demographics.

1.0 Introduction

The environmental problems are increasing day-by-day and people around the world are conscious towards its degradation. The issue of environmental concern is gaining more and more importance in business and academia.

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This movement is because of unsustainable manufacturing and consumption processes by the industry and consumers respectively. According to a study by Grunert et. al (1995), thirty percent of the environmental problems are as a result of unsustainable consumption practices by the consumers. It is unfortunate that efforts to permanently change people's environmentally destructive behaviour through interventions has typically not been met with success, Franson and Garling (1999).

The present study is focused on minimising the adverse effects on the environment through the consumption of green and sustainable products. The key feature of sustainability is that it comprises of three elements i.e. environment, society and economy or sometimes it is called three Ps of sustainability: people, planet and profit. We have focused our study on environmental aspects of sustainability and emphasized on understanding the behaviour of consumers towards the purchase of organic personalcare product. Current study selected organic personal-care products as green product category and used the variables of the Theory of Planned Behaviour model of Ajzen (1991) to understand the buying behaviour of consumers for organic personal-care product. The study aimed to understand the impact of demographic variables (gender, age, income, and education) on buying behaviour of consumers for organic personal-care products.

As per the research of TNS market research company (2014), it was found that a majority of Indian consumers are familiar with green products, have confidence that green products are better for the environment and feel that bio-based ingredients enhance the desirability of a product.

Figure 1: Consumer Confidence in Green Products

Country		Canada USA		India	China
Percentage Low		22	24	37	57
	High	78	76	63	43

Source: DUPONT Green Living Survey: India 2014

Figure 2: Consumer Confidence in Green Products

Country		Canada	USA	India	China
Percentage Low		35	30	15	40
	High	65	70	85	60

Source: DUPONT Green Living Survey: India 2014

We can figure out that India is ranked third with respect to level of awareness and first with consumer confident level that green products is good for the environment among three countries i.e. Canada, USA, and China. Analyzing the purchasing trends of Indian consumers, we found that 67percent of consumers are likely to purchase green food, apparel, personal cares, house hold products made from ingredients that offer environmental benefits. With respect to demographic profile of consumers, it was found that 69percent of young consumers (30 years old and below) have shown higher level of familiarity with green products as compared to their counterparts. The research concludes that there is a huge potential for green products as nearly 50 percent of India's current population is below the age of 25 years and they are more committed to protection of environment.

2.0 Literature Review

Consumers' willingness to buy organic personal-care product is both influenced by attitude and perceived subjective norm with attitude having the largest predictive power, Hansel et al. (2012). Grundey (2010) aimed to understand the impact of packaging on developing the attitude of consumers for purchase of organic personal-care product. It was found that safety and soft materials used for packaging are important features for packaging of organic personal-care product. Consumers are in general price sensitive while comparing organic personal-care product with conventional personal cares, Thompson and Kidwell (1998). As per the study of Kim and Chung (2011), concern for the environment and appearance consciousness significantly influence consumers' attitude concerning the purchase of organic personal-care products.

The present study theoretically reviewed the background of the study and selected the variables of the Theory of Planned Behaviour model of Ajzen (1991) to understand the buying behaviour of consumers for various categories of green products. The results are summarised and presented in the following table:

Table 1: Theoretical Review of Consumers Buying Behaviour of Green Products

S.no	Author	Year	Research	
1.	Magnusson et al	2003	Health concern is better predictor than concern for the environment as a predictor of attitude to purchase organic food indicates that egoistic motives seems to be stronger than altruistic motives.	

	*****	2007	Consumers have knowledge and awareness about
2.	Yiridoe et al.	2005	organic products but they are not consistent in their
			interpretation of what is organic.
			Only direct energy conservation programs are focused
			and other half i.e. indirect conservation program is
3.	Benders et al.	2006	ignored and study focused to overcome this barrier by
			introducing web based tools to address direct as well
			as indirect energy requirements.
			For food products, attitudes were best predictor of
			behavioural intention, subjective norms were
4.	Mahon et al.	2005	important for ready meals but not for takeaways while
			perceived behavioural control was not a predictor for
	Chen		either food.
			Food-related personality traits of food neophobia and
5.		2007	food involvement exert moderating effects on the
3.			relationships between some of the food choice
		2007	motives and the consumer's attitude to organic foods.
			Influence of subjective norm, beliefs, attitude, and
	Arvola et al.		intent varied between the countries, such that in the
6.			United Kingdom and Italy moral attitude rather than
			subjective norms had stronger in predicting purchase
			intentions of organic foods.
	Owens and Driffil	2008	With respect to sustainable energy, there is a need to
			take account of the physical, social, cultural and
7.			institutional contexts that shape and constrain
			people's choices, and for a richer understanding of
			opposition to energy facility siting.
	Schobesberger et al.	2008	Main reasons for purchasing organic food products
8.			are that the consumer expect them to be healthier, that
			organic products are environmentally friendly.
9.	Pieniak et al.	2010	Attitudes towards Organic vegetables have a direct

			positive relationship with organic vegetable consumption.				
10.	Young et al.	2010	Most common green criteria that respondents mentioned when they were deciding which consumer electronics products to purchase were product environmental factors, product manufacturing factors, and product availability.				
11.	Grundey	2010	Producers of organic personal-care products have been working towards brand positioning quite effectively, as half or over of the surveyed respondents are familiar with current packaging policies of the their brands.				
12.	Paul and Rana	2012	Health, availability and education positively influence the consumer's attitude towards buying organic food and overall satisfaction of consumers for organic food is more than inorganic foods.				
13.	Hartmann & Ibanez	2012	Three distinct psychological benefit categories potentially enhancing consumer attitudes toward green energy brands and increasing purchase intentions are warm glow, self-expressive benefits, and nature experiences.				
14.	Hsu et al.	2013	occurrence of a regulatory fit leads to a more positive attitude and a greater intention to purchase organic food than when no regulatory fit occurs.				

Source: Compiled by author

3.0 Research Hypotheses

Based on the review of literature, it was found that there is a scope of research on understanding the buying behaviour of Indian consumers for organic personal-care product across their demographic variables. So, the hypotheses of the study are stated as

- H01: The attitude of consumers for organic personal-care product do not remain same across demographics (gender, age, income, education).
- **H02:** The subjective norm of consumers for organic personal-care product do not remain same across demographics (gender, age, income, education).
- **H03:** The perceived behavioural control of consumers for organic personal-care product do not remain same across demographics (gender, age, income, education).
- H04: The purchase intention of consumers for organic personal-care product do not remain same across demographics (gender, age, income, education).
- **H05:** The purchase behaviour of consumers for organic personal-care product do not remain same across demographics (gender, age, income, education).

4.0 Methodology

A two-way research design is employed for our study. In order to understand the basic research problems, an exploratory research method is used where research papers from the year 1996 to 2015 are exhaustively reviewed from various data sources such as EBSCO, JSTOR, EMERALD, SAGE, Google Scholar etc. Through comprehensive theoretical review, we found that the Theory of Planned Behaviour is extensively used to understand the behaviour of consumers towards the green products and hence we have used this model based on the need of our study. In the second stage of our study, we have collected data from 509 respondents to understand the impact of demographic variables in buying behaviour of consumers towards organic personal-care product. We have conducted Analysis of variance (ANOVA), and Multivariate analysis of variance (MANOVA) to analyse and interpret the results of the collected data.

5.0 Results of the Study

In order to test the impact of gender (male, female), age (below 25 years, 25-40 years, 41-55 years, and above 55 years), income (below 25000, 25001-45000, 45001-65000, and above 65000) and education (high school, graduate, post-graduate, and others) on attitude, subjective norm, perceived behavioural control, purchase intention and purchase behaviour of consumers, one-way ANOVA and MANOVA was performed and the results are summarised in the following table:

Table 2: Results of the Study

			Gender	Age	Income	Education
1	Attitude of consumers towards organic personal-care product	H01	F(1,408)=.07 1, p=.700 Failed to reject (H01A)	F(3,406)=4. 33, p=.005* Rejected (H01B)	F(3,406)= 3.55, p=.014* Rejected (H01C)	F(3,406)=5. 93, p=.001* Rejected (H01D)
2	Subjective norm of consumers towards organic personal-care product	Н02	F(1,408)=3.8 9, p=.049* Rejected (H02A)	F(3,406)=1. 12, p=.340 Failed to reject (H02B)	F(3,406)= 3.67, p=.012* Rejected (H02C)	F(3,406)=4. 10, p=.007* Rejected (H02D)
3	Perceived behavioural control of consumers towards organic personal-care product		F(1,408)=6.8 1, p=.009* Rejected (H03A)	F(3,406)=3. 70, p=.012* Rejected (H03B)	F(3,406)= 2.53, p=.050* Rejected (H03C)	F(3,406)=1. 48, p=.219 Failed to reject (H03D)
4	Purchase intention of consumers towards organic personal-care product	H04	F(1,408)=2.1 6, p=.142 Failed to reject (H04A)	F(3,406)=4. 92, p=.002* Rejected (H04B)	F(3,406)= 3.09, p=.045* Rejected (H03C)	F(3,406)=3. 39, p=.018* Rejected (H04D)
5	Purchase behaviour of consumers towards organic personal-care product		F(1,408)=.71 , p=.400 Failed to reject (H05A)	F(3,406)=3. 22, p=.035* Rejected (H05B)	F(3,406)= 5.19, p=.002* Rejected (H05C)	F(3,406)=3. 13, p=.044* Rejected (H05D)

* Significant at 0.05. Source: Compiled by author

It can be interpreted from the above table that there is no significance difference between male and female respondents with respect to their attitude towards the purchase of organic personal-care product. Whereas the attitude of consumers towards purchase of organic personal-care product found significant across their age, income and education. Subjective norm of consumers for purchase of organic personal-care product found significantly different across gender, income and education but across age, it was found non-significant. Consumers' perceived behavioural control for purchase of organic personal-care product found significant across gender, age, and income but with respect to education, it was non-significant. Both male and female respondents are different for their purchase intention and purchase behaviour for organic personal-care product. Whereas, the results found significant for age, income, and education for purchase intention and purchase behaviour of consumers for organic personal-care products.

6.0 Conclusions and Implications of Study

The purpose of the study was to understand the impact of demographic variables (gender, age, income, and education) on buying behaviour of consumers for organic personal-care product. The results of the study showed that consumers' attitude for the purchase of organic personal-care product across demographic variable is significant. The respondents from different demographic categories i.e. age, income, and education are significantly different from each other except for gender. The results depicted that the respondents are significantly different in terms of their gender, income, and education but with respect to age, they are not significant with respect to their subjective norm for purchase of organic personal-care product. It was found that respondents' perceived behavioural control for purchase of organic personal-care product found significant for age, gender and income but for education it was found non-significant. Similar results were found for purchase intention and purchase behaviour of consumers for organic personal-care product. Respondents' are statistically different across their age, income, and education with respect to purchase intention and purchase behaviour of organic personal-care products.

The results of the study can be helpful for the marketers of the organic personalcare product to effectively target the consumers based on their demographic profiles. Green marketers and policy makers can use this study to understand whether male or female customers are more likely to buy their organic personal-care products? what age group of customers they can target for their organic personal-care product? whether different income group of respondents have same or varying buying behaviour for organic personal-care product? if education play important role in buying decision for the organic personal-care product or not?

7.0 Limitations and Future Research Scope

The present research has assessed the behaviour of consumers for organic personal-care product for one product category only i.e. organic personal-care product. The results of the study are confined to the metropolitan area of Delhi-NCR only. In future, a researcher can study the behaviour of consumers for different categories of green products i.e. organic food products, energy-efficient products, green automobile, green buildings etc.

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