A STUDY ON GREEN PRODUCTS PURCHASE INTENTION AMONG URBAN **CONSUMERS IN NAGAPATTINAM DISTRICT**

Dr. I. SUNDAR

Associate Professor of Economics Directorate of Distance Education Annamalai University Annamalainagar – 608 002, Tamil Nadu

Dr.K.SIVAKUMAR

Assistant Professor of Economics Government Arts College for Men Krishnagiri - 635 001, Tamil Nadu

Abstract

Green products are those that have less of an impact on the environment or less detrimental to human health than traditional equivalents. Green product is designed and manufactured in such a manner as to minimize the adverse environmental impact involved in its production, distribution and consumption. This could involve the use of recyclable materials, biodegradable elements and components such as catalytic converters in motor cars, which reduce emissions. This paper deals with green products purchase intention among urban consumers in Nagapattinam district. It outlines the indicators on green products purchase intention, and such indicators are measured on the basis of 5 point rating scale.

Key words: Green products, purchase intention, environmental sustainability, etc.

1. Introduction

Green products are environmentally preferred goods. In general, green products are non-toxic in nature. Green products are developed on the basis of green chemistry principles. The green products are manufactured with renewable resources and such of goods have no problem of sustainability. The production of green products does not pollute the environment. The need for green products has been emerged to overcome the negative externalities in production of goods. The production of green products can address the issue of environmental degradation. It could be noted that green products production process reduces the carbon output. Now days the consumers are aware of consumption of green products and their health benefits.

2. Review on the subject

Tanja Krsteva (2018) analyzed the green marketing methods and factors attract the firms. The literature analysis concentrates on green products and their prices, green products promotion, green products distribution and green products production.

Wenge Zhu and Yuanjie He (2017) made an analysis on green products supply chain and factors influencing supply chain structure. The authors pointed out the presence of green competition and green products market equilibrium.

Gauri Joshi and Gurudas Nulkar (2016) examined the environmental concern among consumers' in their purchase behaviour on personal care product. The authors made an analysis of consumers' willingness to buy eco-friendly green products according to the product attributes. The authors identified the presence of environmental awareness among consumers and such situation enables them to buy green products.

Kashef Abdul Majid and Cristel Antonia Russell (2015) made an analysis of retention value of green products during the period 2004 to 2011. The authors analyzed the green products, their utility, technological innovation and brands development.

Hossein Nezakati and Masoumeh Hosseinpour (2015) examined the green products purchase behaviour among Malaysian consumers. The authors analyzed the Malaysian consumers' awareness on green products and their intention towards purchase of green products.

Yu-Shan Chen and Ching-Hsun Chan (2013) examined the characteristics of green products and their development status along with green creativity. The authors pointed out the presence of positive relationship between performance of green product development and green dynamic process and green transformation stages.

Fanbin Kong, et al. (2011) hold the view that green product development is a major focus of many modern companies. The green products have been manufactured with the need of modularity technology and this technology promotes the better performance of green products.

Wander Jager and Marco A. Janssen (2002) proposed a model on green products and their low impact on environment representing both producers and consumers. This model points out the factor behind the consumers' switch over from conventional products to the green products.

3. Methods and materials

This paper makes an exploratory analysis of urban consumers rating on green products purchase intension. This study has been conducted in urban areas in Nagapattinam district, Tamil Nadu. In this urban area, 150 consumer respondents are selected as sample representing various occupational groups under stratified random sampling method. The relevant data are collected from the respondents with the help of interview schedule method. The indicators on purchase intension of green products are obtained through qualitative 5 point rating scale method. The collected data are classified and tabulated with the help of computer programming. The data analysis has been carried out with the help of mean, ranking method and analysis of variance.

4. Results and discussion

This section deals with the respondents' rating on purchase intension of green products. It can be assessed with the help of 17 factors on a 5 point rating scale.

TABLE 1 Age of the Respondents and Purchase Intension of Green Products

Source of Variation	SS	df	MS	F	F crit.
Variation due to purchase intension of green products	32.27515	16	2.017197	933.1252	1.859167
Variation due to age structure	1.458435	3	0.486145	224.8834	2.798061
Error	0.103765	48	0.002162		
Total	33.83735	67			

The computed F value (933.12) is greater than its tabulated value at 5 per cent level of significance. Hence, the variation among the indicators on purchase intension of green products is statistically identified as significant. In another point, the computed F value (224.88) is greater than its table value at 5 per cent level of significance. Hence, the variation among the age groups is statistically identified as significant as per the respondents' rating on purchase intension of green products.

TABLE 2 **Education of the Respondents and Purchase Intension of Green Products**

Source of Variation	SS	df	MS	F	F crit.
Variation due to purchase intension of green products	40.32643	16	2.520402	83.85442	1.804179
Variation due to educational status	17.77644	4	4.44411	147.8567	2.515318
Error	1.92364	64	0.030057		
Total	60.02651	84			

At one point, the computed F value (83.85) is greater than its table value at 5 per cent level of significance. Hence, the variation among the indicators on purchase intension of green products is statistically identified as significant. In another point, the computed F value (147.85) is greater than its table value at 5 per cent level of significance. Hence, the variation among educational groups is statistically identified as significant as per the rating of the respondents.

TABLE 3 Occupation and Purchase Intension of Green Products

Source of Variation	SS	df	MS	F	F crit.
Variation due to					
purchase intension of	40.14712	16	2.509195	93.97087	1.804179
green products					
Variation due to	15.66828	4	3.917071	146.6967	2.515318
occupational status	13.00828	4	3.91/0/1	140.0907	2.313316
Error	1.708918	64	0.026702		
Total	57.52432	84			

At one point, the computed F value (93.97) is greater than its table value at 5 per cent level of significance. Hence, the variation among the indicators on purchase intension of green products is statistically identified as significant. In another point, the computed F value (146.69) is greater than its table value at 5 per cent level of significance. Hence, the variation among occupational groups is statistically identified as significant as per the rating of the respondents.

TABLE 4 **Income and Purchase Intension of Green Products**

Source of Variation	SS	df	MS	F	F crit.
Variation due to					
purchase intension of	37.2057	16	2.325356	15.30886	1.771557
green products					
Variation due to	7.149264	149264 5	1 420952	9.413362	2 229721
income status	7.149204	3	1.429633	9.413302	2.326721
Error	12.15169	80	0.151896		
Total	56.5066 <mark>5</mark>	101			

At one point, the computed F value (15.30) is greater than its table value at 5 per cent level of significance. Hence, the variation among the rated indicators on purchase intension of green products is statistically identified as significant as per the rating of the respondents. In another point, the computed F value (9.41) is greater than its table value at 5 per cent level of significance. Hence, the variation among the income groups is statistically identified as significant as per the rating of the respondents.

5. Conclusion

The 20-30 years age group respondents rank the first position in their overall rated indicators on green products purchase intension, respondents' grouped in the age bracket 30-40 years the second, respondents' come under the age group 40-50 years the third and respondents come under the 50-60 age bracket respondents the last. The result of income wise analysis reveals that the highest household income group respondents rank the first position in their overall rated indicators on green products purchase intension, respondents come under the household income group Rs.20,000-25,000 the second, respondents under the household income group Rs.15,000-20,000 the third, respondents classified in the

household income group Rs.10,000-15,000 the fourth, respondents come under the household income group Rs.5,000-10,000 the fifth and lowest household income group respondents the last.

6. Reference

- Agnieszka Leszczynska (2014). Willingness to Pay for Green Products vs. Ecological Value System. *International Journal of Synergy and Research*, 3 (1), 67-77.
- Chitravathi, M., & Natarajan, C. (2018). Role of Green Banking on the Environmental Sustainability from the Customers' Perspective. International Journal of Business and Administration Research Review, 1 (21), 48-51.
- Gabriela Capatina., & Roxana-Denisa Stoenescu (2015). Marketing Programs for Green Products in Achieving Ecological Sustainability. SEA - Practical Application of Science, 7, 129-134.
- Gauri Joshi., & Gurudas Nulkar (2016). Looking Good and Thinking Green: Can Green Personal Care Products Be Promoted? *International Journal of Asian Business and Information Management*, 7 (4), 49-62.
- Vijai, C., & Natarajan, C. (2015). "Customers' Awareness towards Green Banking Products of the Select Commercial Banks in Cuddalore District: An Empirical Assessment. International Journal of Management Research, 3 (10), 1-5.
- Tanja Krsteva (2018). Green Marketing Strategies. Economics and Management, 14 (2), 177-181.
- Wander Jager., & Marco A. Janssen (2002). Stimulating Diffusion of Green Products. Journal of Evolutionary Economics, 12 (3), 283-306.
- Wenge Zhu., & Yuanjie He (2017). Green Product Design in Supply Chains under Competition. European Journal of Operational Research, 258 (1), 165-180.