

Determinants of Green Purchase Intention among Young Consumers: An Empirical Study

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Abstract

Human race has begun to experience the repercussions of its irresponsible actions towards environment. Since we as consumers are becoming aware of the impact of our purchases on the environment; and have started showing interest in eco-friendly products despite their higher price, companies have also responded by formulating their marketing strategy towards 'Green Marketing'. What is more important to know is that how the younger generation looks at this problem of environment degradation. The aim of this study is to assess the attitude, awareness, perception and preferences of young Indian consumers towards the green marketing practices and the 'green consumption'. Data were collected from 241 students pursuing undergraduate and post-graduate courses and belonging to various parts of India. Our results highlight that the young generation knows that there is only one planet, and they must not deteriorate it any further. They also understand the negative consequences of their irresponsible behavior towards their environment. Hence, marketers must devise those strategies and alternatives which are attractive enough for young consumers to make a move towards sustainable and responsible consumption.

Keywords: *green marketing, young consumers, sustainable development, eco-friendly products*

1. Introduction

Human race has begun to experience the repercussions of its irresponsible actions towards environment. Nature has started reprimanding for the same, and we are now bearing the brunt of our careless and greedy behavior. After a wakeup call from the nature shown through its fury, we have become concerned about our surroundings, our environment, and our planet. The issues such as air pollution, water pollution, waste management and global warming have come into spotlight. All the five Rs— Rethink, Reduce, Reuse, Recycle & Repair/Refill have become important for our own survival. Since we are becoming conscious of the impact of our purchase decisions on our environment; and have started showing interest in eco-friendly products despite their higher price, companies have also responded by formulating their marketing strategy

towards ‘Green Marketing’. The strategy is to fulfill the demands of those customers who are focusing on such ideas as eco-friendly, sustainable, green, organic, recyclable, etc. According to American Marketing Association, “Green Marketing is the marketing of the products that are presumed to be environmentally safe. Green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes as well as modifying advertising”. Because the negative impact of environmental damages are being experienced by the consumers directly, they show a greater willingness to behave in an environmentally responsible way and wish not to pollute the environment further.

Companies are also responding favorably to this phenomenon. The concepts of eco-friendly products, eco-friendly packaging, recyclable products, recyclable packaging, use of green energy in production process & transportation of goods, recycling the industrial waste, using local raw material, etc.; are gaining importance. Increased awareness towards the well being of our environment is leading to adoption of sustainable practices by the consumers and marketers both. Companies are not only adopting green practices, they are also educating their customers about the best practices they are adopting. Such companies tend to get an upper hand as far as gaining the satisfied and loyal customers are concerned. The “Green good” in manufacturing, packaging, transporting and promoting the product leads to a larger pool of environmentally conscious consumers. These consumers prefer to be associated with firms producing eco-friendly goods.

In this background, this study tries to assess the attitude, awareness, perception and preferences of young Indian consumers towards the green marketing practices, and understand the notion of ‘green or sustainable consumption’, by purchasing ecologically friendly products or services that have least damage to the environment(**Young, Hwang, McDonald, & Oates, 2010**). For this purpose, a number of questions are asked from the university students to investigate the green purchase intentions. The study begins with describing the green consumption and giving research background of green purchase intention. Next, the data is analyzed; the results are reported and discussed. Finally, discussion and conclusion are provided.

2. Review of Literature

The concept of green marketing is growing rapidly and conscious consumers are willing to spend a lot more for a green cause. Green marketing not only helps in protecting the environment, but also creates job opportunities and new markets.

In a quantitative study of young Turkish consumers, it is proved that perceived consumer effectiveness remains the most influential factor on green purchase intention(**Kabadayia, Dursunb, & Koçak, 2015**). Another study finds that the customers living with green life find it better for them and for the future generation. They are not only happy to buy green goods but are even ready to pay more for green goods as it enhanced their satisfaction(**Mkik & Mkik, 2020**). According to anterior theory, customer also chooses those firms which work with consciousness towards environment. Consumers usually first look for the green logo that attracts

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them to purchase green goods because they know that the green product is better in order to preserve the environment than other products (Woodruff, Cadotte, & Jenkins, 1983). Further research showed that though the consumers are concerned about the environment, they do not necessarily seek out or buy green products. "In terms of managerial implication, the profile of green product purchasers provides green marketers an indication of their target consumers. The traditional product attributes such as price, quality and brand are still the most important ones that consumers consider when making purchasing decision. In order to fulfill individual needs and wants, including ensuring customers' satisfaction, the marketers need to make sure that their products are of high quality and competitively priced. The marketers also need to adopt a better marketing mix for their products in order to change consumers' negative perception towards green products. Successful green marketing entails much more than simply adding an environmental attribute into a product. It is important that marketers integrate green marketing strategies carefully into the company's strategic plan" (Christopher, Han, Luzie, & Kao, 2008). "With the advent of Internet, global marketers need to focus on sustainable innovation and environmentally safe distribution channels. More involvement of college and school students in environmental activities can initiate a sense of responsibility too that can go a long way in promoting sustainable consumption behavior" (Fatah Uddin & Khan, 2016). There is a good scope for marketers of the green products if they design the marketing communication campaigns promoting green products. Consumers can be persuaded successfully to buy and prefer green products over conventional products (Bhatia & Jain, 2013).

3. Objectives of the Study

The objectives of the present study are listed below.

1. To understand how the green marketing practices affect the environment.
2. To measure the awareness among young consumers as to what the green products and practices are.
3. To measure the attitude of young consumers towards the green marketing practices.
4. To analyze the intention of young buyers to buy green products in terms of green value of consumer and perception about green product.

4. Hypotheses of the Study

H₁: Young consumers are sufficiently aware about green products and practices.

H₂: The green marketing practices significantly affect the environment.

H₃: The consumer intention to buy green products depends on the green value of consumer and perception about green product.

H₄: The attitude of young consumers about green marketing practices is significantly positive.

5. Methodology

The primary data has been collected for this empirical study using a questionnaire which was administered on graduate and postgraduate students. The convenient sampling technique was used for collection of data. Due to limitations of time and cost, the data were collected via online mode. A total of 241 respondents were considered for the analysis. The questionnaire was pretested and revised to remove the ambiguity in questions and make them comprehensible. Multiple regression technique is used to find out the factors which determine the purchase intension of green products among young consumers. In the model, we have taken purchase intention of green product as the dependent variable and green value consumer (GVC), perception regarding green product (PGP), seriousness about environment concern (SEC), attitude of green purchasing (AtGP) and awareness regarding green product (AwGP) as the independent variable.

Purchase Intention of Green product= f (GVC, PGP, SEC, AtGP,AwGP)

5.1 Interpretation of Result

The data has been analysed using the SPSS software. Cross tabulation of the data was done with the variables- Gender, Qualification and Age. The reliability coefficient of the overall scale with 0.913 was found to be reliable. The Cronbach's alpha reliability coefficient was greater than 0.60. There were 58.5% female respondents and 41.5% male. 84% of respondents were in the age group of 18-21 years old and 14% were in 22-25 years. 65% of the respondents were pursuing undergraduate degree, while 35% were post-graduate students.

Table: 1 Demographic profile of the respondents

Characteristics		N	Percentage
Gender	Male	100	41.5
	Female	141	58.5
Age (years)	Below 18	3	1.2
	Between 18&21	202	83.8
	Between 22&25	33	13.7
	Above 25	3	1.2
Qualification	Undergraduate	157	65
	Post-graduate	84	35

5.2 Youngsters' Green Value

Table 2 results revealed that the overall mean score was 3.98; it indicates that the overall green value of the respondents was very high and the youth were concerned about the protection of the environment. The overall standard deviation was 0.89 which also indicated that there was less difference in opinion of respondents with respect to green values of the youngsters.

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As per the responses, the young generation strongly agreed that the product they use should not have negative impact on the environment and they were concerned that the limited resources of our planet must not be wasted. The mean score was found to be more than 4.27 on a 5-point scale. The standard deviation was 0.89 which indicated less difference in opinion of respondent with respect to green consumer values. 80% of the respondents strongly agreed to the fact that they make informed choices while purchasing a product and analyze the potential impact on the environment. Table 2 also shows that, mean score for “potential environmental impact of consumer actions” is 4.11 on a 5-point scale and standard deviation is 0.77, it indicates less difference in opinion of the respondents. In statement “my purchase habits are affected by my concern for the environment”, mean on 5-point scale is 3.71 and Standard Deviation is 0.89, it shows, respondents were very much aware about the relation between their habits and their impact on the environment. In the statement, “I am concerned about wasting the resources of our planet, and I would describe myself as environmentally responsible”, the mean values are 4.27 and 3.85; indicating their high concern about planet and environment and Standard Deviation 0.89 each indicate very less difference among youngsters responses.

Table: 2 Youngsters’ Green Values

Statement	Mean	S.D.
“It is important to me that the products I use do not harm the environment”.	4.29	0.85
“I consider the potential environmental impact of my actions while making choices”.	4.11	0.77
“My purchase habits are affected by my concern for the environment”.	3.71	0.89
“I am concerned about wasting the resources of our planet”.	4.27	0.89
“I would describe myself as environmentally responsible”.	3.85	0.89
“I am willing to be inconvenienced in order to take actions that are environment friendly”.	3.65	1.02
Total	3.98	0.87

When they were asked regarding “the willingness to be inconvenienced in order to take actions that are environment friendly”, majority of the respondents agreed to the above statements. Mean value is 3.65 and standard deviation of 1.02 show minimum difference in opinion of respondents with respect to the statement.

5.3 Youngsters’ Perception about Green Products, Green Practices and Seriousness of Green Marketers

The overall mean score of the consumer perception regarding the green marketing practices is 4.23, given in Table 3, indicates that the respondents strongly agreed to the importance of green marketing practices, and standard deviation of 0.93 indicates less difference in opinion of the respondents regarding the importance of green marketing practices among consumers. Manufacturing eco-friendly product, through eco-friendly processes, product packaging to suit

environment and modifying product to make them eco-friendly are the most important green marketing practices with a mean score of more than 4.32. Other practices including product promotion using green modes of communication, green branding process and employing green supply chain for inward and outward movement of material and finished goods, are also considered important by the young buyers as all of the green marketing practices have scored equal to or higher than 4.10. This indicates that the youngsters care for the state of the environment and expect that the businesses must engage into the green marketing practices so as to save the environment.

Table: 3 *Youngsters' Perception regarding Green Marketing Practices*

Statement	Mean	S.D.
"Manufacturing Eco-friendly Product"	4.32	0.89
"Manufacturing products through eco-friendly process"	4.32	0.91
"Promoting products through eco-friendly modes of communication"	4.10	0.95
"Branding product associating with green process"	4.10	0.91
"Modifying products to make them environmental friendly"	4.30	0.95
"Product packaging to suit environment"	4.33	0.92
"Using green supply chain for procurement and distribution"	4.12	0.93
Total	4.23	0.93

Table:4 *Youngsters' Perception about Green Product*

Statement	Mean	S.D.
"I consider the ill effects of manufacturing and consumption on the environment".	3.74	0.87
"I prefer green products over conventional products".	3.88	0.85
"I feel that green products are priced higher as compared to conventional product".	3.95	0.93
"I feel that price of green product affects my purchase behavior".	3.79	0.98
Total	3.84	0.91

In Table 4, the result highlighted that the youngster consider the ill effect of manufacturing and consumption on the environment and its prices affect the purchase behavior of the young consumers with mean score of 3.74 and 3.79 respectively. They agree to this that they prefer green product over the conventional one (mean score 3.88) and the green products are more costly than normal products (mean score 3.95). The standard deviation of the perception regarding green product is 0.93 indicating there is less difference in opinion among the youth regarding the purchase of green products.

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5.4 Youngsters' Seriousness regarding the Environmental Concern

The youth are highly aware and concerned about the seriousness of the environmental concern relating to green marketing. In Table 5, they have rated the seriousness about the environment high. About 60% respondents are extremely serious regarding the environmental concern such as ozone depletion, drinking water contamination, industrial waste/air pollution, hazardous waste and warming up of the earth with an overall mean score of 4.23. This seriousness regarding the environment concern must be taken as important dimension by the marketers while promoting the green products in the market.

Table:5*Youngsters' Seriousness regarding Environment Concern*

Statement	Mean	S.D.
Destruction of Ozone	4.19	1.13
Industrial Water/Air Pollution	4.38	1.13
Pesticides on Food	4.07	1.16
Hazardous Waste	4.22	1.21
Drinking Water Contamination	4.32	1.12
Warming up of Earth	4.22	1.20
Total	4.23	1.15

5.5 Youngsters' Attitude about Green Products

Table 6 results show that the 55% of the young consumers are of the opinion that they buy green products occasionally, but are not engaged in any environmental activity. While 32.4% of the young consumers buy only green products and get engaged in environmental activities such as recycling, and are of the opinion that they can do much to promote the environment. Around 8% of the consumers buy green products but don't indulge in environmental activities and do not want to alter their lifestyle to save the environment. Only 3% of the respondents do not buy green products; and assume that business and government should fix environmental problems. 2 percent of the respondents told that they don't care about the environment. They were of the opinion that an individual cannot do much in solving environmental problems.

Table:6*Youngsters' Attitude regarding Green products*

Statements	N	Percentage
"I buy only green products. I spend time and effort in environmental activities such as recycling. I believe that an individual can do much to promote the environment".	78	32.4
"I am able to buy green products but I don't have time for environmental	20	8.3

activities. I do not want to change my lifestyles to promote the environment”.		
“I can buy green products from time to time but I am not involved in any environmental activity”.	131	54.4
“I do not buy green products. I believe that business and government should be fixing environmental problems”.	7	2.9
“I am the least involved in environmentalism. I believe that there is not much that an individual can do in solving environmental problems”.	5	2.1
Total	241	100.0

5.6 Youngsters’ Awareness about Green Product

Table 7 reveals that radio (131, 54.4%) and Television (78, 32.4%) are the main sources from where the respondents get the awareness regarding the green marketing practices in India. The young consumers were asked about the initiatives taken by the government and businesses for green products and practices in India. They were aware about the different initiatives taken by the government. Swachh Bharat Abhiyan mission (225, 93.4%), PUC (pollution under control) certificate (172, 71.4%) and green skill development programme (161, 66.8%) are the popular initiatives of the government.

When the awareness about the initiatives taken by businesses were asked from the respondents, they were more aware about the Wipro Green Wares (127, 52.4%), Nerolac lead free paint (127, 52.7%), SBI green Banking (126, 52.3%) and Phillips Marathon CFL Bulbs (112, 46.5%) and Greenply zero Emission (35.36%). Awareness was very less in the case of ACC concrete+cement (17%) and Godrej Chotukool Refrigerator (27.4%).

Table:7 Awareness regarding the Green Product Practices and Initiatives by Business & Government

Characteristic/Statement		N	Percentage
1. Information About Green Marketing Practices	Television	78	32.4
	Newspapers	20	8.3
	Radio	131	54.4
	College	7	2.9
	Social Media	5	2.1
2. Awareness regarding Initiative taken by Government	Namami Gange Programme	117	48.5
	Swachh Bharat Abhiyan	225	93.4
	Green Skill Development Programme	161	66.8
	Compensatory Afforestation Fund Act	132	54.8
	Paperless Banking	116	48.1

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	PUC Certificate for Vehicle	172	71.4
	Star Rating for Electrical Appliances	120	49.8
	Eco Mark from BIS for Green Product	91	37.8
	CNG run Public Transport	43	17.8
3. Awareness regarding Initiative taken by Business	WIPRO Green Wares	127	52.7
	ACC Concrete + Cement	41	17
	GREENPLY Zero-Emission Plywood	80	33.2
	NEROLAC Lead-free Paint	127	52.7
	SBI Green Banking	126	52.3
	PHILLIPS 'Marathon' CFL Bulbs	112	46.5
	GODREJ Chotukool Refrigerator	56	27.4

5.7 Result of Regression Analysis

The model formulated to study the factors impacting the purchase intention of green products in among the youth is given below.

Purchase Intention of Green product = $f(\text{GVC, PGP, SEC, AtGP, AwGP})$

Where GVC is Green Value Consumer, PGP is Perception regarding Green Product, SEC is Seriousness about environment concern, AtGP is Attitude towards Green Product and AwGP is Awareness towards Green Products.

Table: 8 Regression Coefficient of Independent variable on purchase intention of green products

Variables	β	SE	t-value	p	Tolerance	VIF
Constant	2.99	0.95	3.14	0.002		
Green value consumer	0.41	0.04	10.79	0.000	0.71	1.418
Perception regarding green product	0.08	0.03	3.05	0.003	0.72	1.397
Seriousness regarding environment	-0.03	0.02	-1.55	0.100	0.87	1.151
Attitude toward green purchasing	0.18	0.06	2.83	0.005	0.95	1.052
Awareness regarding green product	-.012	0.01	-1.64	0.102	0.99	1.013

Table 8 indicates the impact of green value of consumer, perception regarding green product, seriousness regarding environment concern, attitude toward green purchasing and awareness regarding green product on the purchase intention of green product. The R-square value of 0.503 reveals that the predictors explained 50.3% variation in the outcome variable with $F(5, 235) = 47.474$, $p < .0001$. The findings revealed that green value of consumer (GVC), perception regarding green product and attitude of the youth positively predicted purchase intention of green products whereas seriousness regarding environment and green product awareness has non-significant effect on the purchase intention of green products. The VIF value is found to be below 10 indicating the absence of multi-collinearity.

6. Discussion and Conclusion

Post this survey and data analysis, it is immensely clear that the youth of today are well aware and responsible about the well-being of environment. The young generation knows that there is only one planet, and they must not deteriorate it any further. They also understand the negative consequences of their irresponsible behavior towards their environment. Supporting this analysis, we find that all four hypotheses have been approved. Results indicate that young consumers are not only sufficiently aware about green products and practices (H_1), but also their attitude about green marketing practices is significantly positive (H_4). They know that green marketing practices significantly affect the environment (H_2). Their green value and perception about green product ultimately affects their intention to buy green products (H_3).

Our research suggests that young consumers have the inclination to convert their pro-environmental preference into final choice if they are provided with alternatives at competitive prices. In this background, marketers must develop the effective green marketing strategies and sufficient product options to attract young consumers towards sustainable and responsible purchases. Themes like “Ever green is Young” can be successfully used for offering green products to the youth. Also, the societal benefits must be highlighted to ensure that the positive attitude of youngsters towards green solutions results into actual purchases. Thus, the potential for green solutions is huge which can be effectively harnessed by earning trust of young consumers. The focus should be on ecological conservation and sustainable consumption. Marketers must utilize the full potential of environmental concern of modern youth. It will ultimately be a win-win situation for everyone.

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