

A STUDY ON CONSUMERS' SUSTAINABLE PURCHASE BEHAVIOUR IN GUWAHATI CITY

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ABSTRACT

Humans are widely believed to be insatiable beings who actively engage in determining their wants and making intelligent purchasing decisions to meet those requirements. Since the 'Trade Concept Era' (Pre-Industrial revolution), individuals have been observed making intelligent purchasing decisions, but in the current 'Digitization Era,' it has been observed that people's shopping behavior has changed from routine purchases to sustainable purchases. A notion known as sustainable purchasing behavior refers to choosing things that are socially, economically, and environmentally responsible. In other words, it is the study of consumer behavior with regard to the justification for buying a product as well as the usage and disposal of that thing. The purpose of the current study is to better understand the variables that affect consumers' sustainable purchasing behaviors. It will also try to find if demographic factors such as age, gender and income have any correlation with the purchase decision towards sustainable products and will further explore how consumers' feelings of spirituality affect their choice to buy green products rather than conventional ones. With the help of literature reviews, the researchers tried to identify the variables influencing sustainable buying behavior or purchase behavior towards sustainable products. Primary data has been collected with the help of a well-structured questionnaire and collected data has been analyzed with the help of SPSS to fulfill the objectives of the study.

KEYWORDS: Sustainable Purchase, Green Products, Spirituality, Conventional Goods.

Introduction

The Latin word *sustinere*, which means to hold, is the source of the English word sustainability. Sustainability can be referred as the capacity to constantly support or maintain a process across time. It contains a variety of strategies for satisfying the needs of the current generation while preserving the harmony between social progress, environmental preservation, and economic growth.

In the context of marketing, needs, wants, and the pursuit of monetary and spiritual interests are the main factors influencing customer behavior when it comes to making purchases. A number of factors, including situational, cultural, psychological, demographic, and sociological ones, affect changes in consumer behavior.

Considering dynamism as a universal truth, people's purchasing habits change throughout time. Recent research and polls on the public's perception of sustainability have amply demonstrated that people are becoming more aware of the effects that their choices will have on the environment and have started seeking out products that are eco-friendly.

In today's digitally advanced society, people are conscious of every minute detail that will not only effect their present, but also their future, including the next generation. As a result, there has been a significant movement in purchasing behavior from quantity purchase to sustainable purchase while maintaining quality as a constant feature.

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Sustainable consumer behavior can be characterized as utilizing goods and services and making purchases in a way that reduces environmental effect and protects the needs of future generation. Majority of millennial generation are adopting sustainable purchase behaviour which involves procuring sustainable products that possess social, economic, and environmentally friendly attributes

Since premium raw materials required to produce sustainable products are more expensive than those needed to produce conventional products, corporate entities must contend with the challenge of manufacturing eco-friendly products at a reasonable price, keeping in mind people's evolving preferences for sustainable over conventional products.

Review of Literature

Nordlund and Garvill, 2002 stated that building enduring relationships with clients or creating a sustainable environment require more than just being green. According to the study, until and unless customers understand the value of green marketing and purchase product/service components, firms' one-sided responsibility will not be adequate to guarantee the sustainability of green marketing success. The survey has revealed, that even those customers, who identify themselves as environmentally conscious do not always make the most ethical decisions when making purchases.

Nath, Nayak et al. (2014) stated that environmental management is essential for sustainable growth and is applicable to both manufacturing industrialists and financial intermediaries that aid the industry financially. The goal of the study was to ascertain the RBI's requirements for green practices that should be adhered to when making investments and conducting banking operations. It has been mentioned that Green finance offers an active means of achieving sustainability in the future. In order to penetrate Western markets and the global economy, Indian banks need to be aware of their responsibilities as global corporate citizens. The findings of the study indicate that, banks should follow the guidelines for LEED-certified green buildings, which include harvesting renewable energy from solar power plants, using motion sensors, energy-efficient lighting, sewage treatment facilities that recycle wastewater, sensors for urinals and washbasins, rainwater collection systems, recycling of dry waste, etc.

Muhammad Amad Saeed, Ammara Farooq (2019) stated that intention of consumers in developed and developing nations to purchase sustainable products is greatly influenced by social media. The study has mentioned that consumers on social media represent a valuable market group that might be targeted as possible buyers of environmentally friendly goods. The study also emphasized the benefit of social media reliance for perceived trust i.e. favorable information about products related to sustainability. In order to influence consumers' attitudes and behaviors and assist businesses to build a positive brand image for their goods and brands, the study recommends that policymakers should focus on communicating their product's sustainability feature and thus shape customer's attitude and behaviours in a favourable way.

The International Journal of Environmental Research and Public Health, published in December 2022, offers insightful new information on how consumers view environmentally friendly items. Additionally, the research examines the benefits and drawbacks of a number of important variables that affect consumers' behavior toward environmentally friendly products, including social norms, natural environmental orientation, the company's perceived green image, green product characteristics, perceived risks and inconveniences of purchasing environmentally friendly products, socio-demographic characteristics, and consumer confidence. The study offered guidance to businesses on how to cultivate a positive institutional image and secure government backing in order to advance a green product culture.

Luthra, C, & Deshwal, P. (2022) highlighted that when customers were aware of the direct and indirect effects of their shopping choices on the environment and their health, the Green Purchase Behavior (GPB) movement gained traction. Study has mentioned that the majority of research on sustainable purchasing is focused on environmentally friendly products as a whole, rather than on specific product categories like organic food, clothes made of sustainable materials, household appliances that use less energy, electric cars powered by renewable energy, organic personal care products, etc. Thus, the study identifies different factors that business houses could possibly consider while formulating their marketing strategies.

Social Significance of Consumers Sustainable Purchase Behaviour

The main motivation for consumers choosing sustainable shopping to meet their daily requirements is the desire to protect the environment. Sustainable development, in Brundtland's view, is achieving our present goals without endangering the capacity of future generations and communities to achieve their own goals over time and space.

Sustainable practices have the potential to enhance community cohesion, elevate living standards, and inspire optimism for a brighter future from a social and environmental standpoint. They can also safeguard natural resources and encourage biodiversity.

Sustainable purchasing practices, sometimes known as "green purchasing," have the potential to improve social, health, and economic conditions in addition to lessening the direct environmental impact of human activity.

- **Environmental Benefits:** A number of environmental issues, including the wasteful use of primary resources, deforestation, pollution of the air, water, and soil, trash generation, and packaging waste, are addressed by sustainable purchasing. Its main goal is to lessen the harm that products cause to the environment.
- **Social and Health Benefits:** Buying environmentally friendly products contributes to a higher standard of living. Purchasing electrical vehicles, for instance, can help cut down on carbon emissions and assist the general public in managing various allergies and illnesses brought on by air pollution. Additionally, a rise in the market for novel sustainable products fosters the expansion of the green economy and the creation of new green jobs.
- **Economic Benefits:** When considering the expenses associated with operating a product and disposing of it after its useful life, applying the sustainability idea can result in financial savings. Examples of strategies to decrease disposal and perhaps increase revenue for the organization include targeted rubbish collection and recycling waste materials into new products.

Objectives

The research study has been carried out to fulfill the following factors:

- To find out if demographic factors like age, gender, income and education level has any correlation with the reasons for purchasing and using sustainable products and services.
- To understand if any significant difference exists between respondents on the basis of demographic variables with respect to their consciousness and awareness towards making purchasing decisions of sustainable goods and services.

Research Methodology

The present investigation is an empirical study and is based on survey method. For the purpose of investigation, convenience sampling technique has been adopted. Primary data has been collected with the help of a structured questionnaire consisting of only close ended questions. The questionnaire has been framed based on the principles of simplicity and understandability. Secondary sources of data include online source such as Google Scholar. The total sample size for the study is 107 respondents. The primary data collected have been analysed with the help of the SPSS software and statistical tools such as coefficient of correlation, regression analysis, mean and median have been used. A reliability test has been conducted to examine the consistency, accuracy and predictability of the scales in the questionnaire. The reliability of the scales of the questionnaire is Cronbach's Alpha = .822.

Hypotheses

- H₀:** Significant association exist between the age of the respondents and reasons for purchasing and using sustainable products and services.
- H₀₁:** No Significant association exist between the age of the respondents and reasons for purchasing and using sustainable products and services.
- H₀:** Significant association exist between the gender of the respondents and reasons for purchasing and using sustainable products and services.
- H₀₂:** No Significant association exist between the gender of the respondents and reasons for purchasing and using sustainable products and services.

- H₀:** Significant association exist between the education of the respondents and reasons for purchasing and using sustainable products and services.
- H₀₃:** No Significant association exist between the education of the respondents and reasons for purchasing and using sustainable products and services.
- H₀:** Significant association exist between the income of the respondents and reasons for purchasing and using sustainable products and services.
- H₀₄:** No Significant association exist between the income of the respondents and reasons for purchasing and using sustainable products and services.
- H₀:** Significant difference exists between respondents on the basis of gender with respect to purchasing sustainable goods and services.
- H₀₅:** No significant difference exists between respondents on the basis of gender with respect to purchasing sustainable goods and services.
- H₀:** Significant difference exists between respondents on the basis of age with respect to purchasing sustainable goods and services.
- H₀₆:** No significant difference exists between respondents on the basis of age with respect to purchasing sustainable goods and services.
- H₀:** Significant difference exists between respondents on the basis of education with respect to purchasing sustainable goods and services.
- H₀₇:** No significant difference exists between respondents on the basis of education with respect to purchasing sustainable goods and services.
- H₀:** Significant difference exists between respondents on the basis of income with respect to purchasing sustainable goods and services.
- H₀₈:** No significant difference exists between respondents on the basis of income with respect to purchasing sustainable goods and services.

Results and Discussions

Table 1: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	35	32.7	32.7	32.7
	Female	72	67.3	67.3	100.0
	Total	107	100.0	100.0	

Source: Field Survey

Table 1: shows that 67.3% of the respondents are female and 32.7% are male.

Table 2: Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 years-25 years	38	35.5	35.5	35.5
	25 years-35 years	22	20.6	20.6	56.1
	35 years-45 years	34	31.8	31.8	87.9
	45 years-55 years	10	9.3	9.3	97.2
	55 and above	3	2.8	2.8	100.0
Total		107	100.0	100.0	

Source: Field Survey

35.5% of the respondents are in the age group of 18 years to 25 years and 31.8% of the respondents are in the age group of 35 years to 45 years.

Table 3: Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	HSLC	1	.9	.9	.9
	HS	13	12.1	12.1	13.1
	Graduate	33	30.8	30.8	43.9
	Post Graduate	60	56.1	56.1	100.0
	Total	107	100.0	100.0	

Source: Field Survey

Out of 107 respondents, 56.1% are post graduates and 30.8% are graduates.

Table 4: Annual_Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1lk-3lkhs	43	40.2	40.2	40.2
	3 lkhs-5 lkhs	18	16.8	16.8	57.0
	Above 5 lkhs	46	43.0	43.0	100.0
	Total	107	100.0	100.0	

Source: Field Survey

43% of the respondents have an annual income of above Rs.5 lakhs, whereas 40.2% of the respondent's annual income ranges between Rs. 1 lakh to Rs 3 lakhs.

Table 5: Awareness about Sustainable Products

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	78	72.9	72.9	72.9
	Somewhat	19	17.8	17.8	90.7
	Not Completely	9	8.4	8.4	99.1
	No	1	.9	.9	100.0
	Total	107	100.0	100.0	

Source: Field Survey

The researchers tried to know if the surveyed respondents are aware of the availability of the sustainable products in the market. 72.9% of the respondents are aware of the sustainable products whereas 17.8% of the respondents are somewhat aware of the same.

Table 6: Correlation between Age and Reasons for purchasing Sustainable Products

	Particulars	Age
Age	Pearson Correlation	1
	Sig. (2-tailed)	
	N	107
Product Features	Pearson Correlation	-.219*
	Sig. (2-tailed)	.023
	N	107
Packaging	Pearson Correlation	-.375**
	Sig. (2-tailed)	.000
	N	107
Concern for Environment	Pearson Correlation	.081
	Sig. (2-tailed)	.405
	N	107
Promotional Campaign	Pearson Correlation	.048
	Sig. (2-tailed)	.624
	N	107
Price	Pearson Correlation	-.056
	Sig. (2-tailed)	.564
	N	107

Source: SPSS output

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

The investigators tried to understand if age has any correlation with the various reasons behind purchasing sustainable products. The above table clearly shows that product features of the sustainable product and packaging of the same has a correlation with the age of the respondents. But the other reasons have no correlation with age. As such we reject H_0 and accept H_{01} .

Table 7: Correlation between Gender and Reasons for purchasing Sustainable Products

	Particulars	Annual Income
Gender	Pearson Correlation	1
	Sig. (2-tailed)	

	N	107
Product Features	Pearson Correlation	.055
	Sig. (2-tailed)	.573
	N	107
Packaging	Pearson Correlation	.020
	Sig. (2-tailed)	.835
	N	107
Concern for Environment	Pearson Correlation	-.034
	Sig. (2-tailed)	.726
	N	107
Promotional Campaign	Pearson Correlation	-.118
	Sig. (2-tailed)	.225
	N	107
Price	Pearson Correlation	.034
	Sig. (2-tailed)	.726
	N	107

Source: SPSS output

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

In the above table the researcher tried to find if any correlation exists between gender of the respondents and the reasons for purchasing the sustainable products. The table clearly reveals that no correlation exists between the two variables. Thus, we reject H_0 and accept H_{02} .

Table 8: Correlation between Education and Reasons for purchasing Sustainable Products

	Particulars	Education
Education	Pearson Correlation	1
	Sig. (2-tailed)	
	N	107
Product Features	Pearson Correlation	-.224*
	Sig. (2-tailed)	.020
	N	107
Packaging	Pearson Correlation	-.151
	Sig. (2-tailed)	.120
	N	107
Concern for Environment	Pearson Correlation	-.042
	Sig. (2-tailed)	.669
	N	107
Promotional Campaign	Pearson Correlation	-.009
	Sig. (2-tailed)	.927
	N	107
Price	Pearson Correlation	.004
	Sig. (2-tailed)	.966
	N	107

Source: SPSS output

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The researchers also tried to investigate if level of formal education has any relationship with the reasons for buying sustainable products. The table reveals that product features have a significant level of relationship with the education of the respondents with r value (-.224) which is significant at 0.05 level. But the other reasons of purchasing have no significant relationship. That is why we accept H_0 and reject H_{03} .

Table 9: Correlation between Income and Reasons for purchasing Sustainable Products

	Particulars	Annual Income
Annual Income	Pearson Correlation	1
	Sig. (2-tailed)	
	N	107

Product Features	Pearson Correlation	-.048
	Sig. (2-tailed)	.624
	N	107
Packaging	Pearson Correlation	-.020
	Sig. (2-tailed)	.837
	N	107
Concern for Environment	Pearson Correlation	-.049
	Sig. (2-tailed)	.617
	N	107
Promotional Campaign	Pearson Correlation	-.010
	Sig. (2-tailed)	.920
	N	107
Price	Pearson Correlation	-.012
	Sig. (2-tailed)	.903
	N	107

Source: SPSS output

*. Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Table 9 tries to understand if annual income of the respondents has any influence on various reasons for purchasing sustainable products. But no correlation among various variables for purchasing sustainable products has been found. We accept H_0 and reject H_{04}

Table 10: Gender and Sustainable Purchase Decision

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
EnvConcern_PurDecision	Male	35	3.71	.893	.151
	Female	72	3.60	.914	.108
Conscious_effort	Male	35	3.66	1.027	.174
	Female	72	3.72	.859	.101

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
EnvConcern_PurDecision	Equal variances assumed	.656	.420	.626	105	.533	.117	.187	-.254	.488
	Equal variances not assumed			.631	68.860	.530	.117	.186	-.253	.487
Conscious_effort	Equal variances assumed	1.206	.275	-.344	105	.731	-.065	.189	-.440	.310
	Equal variances not assumed			-.324	57.862	.747	-.065	.201	-.468	.337

Source: SPSS output

To understand whether the male and female respondents in the investigation has any significant difference with regard to their purchase behaviour of sustainable products and services, t test has been conducted. The results of t test clearly shows that there is no significant difference between the two groups of respondents as significant value is more than 0.05. Thus, we accept alternative hypothesis H_{05} and reject null hypothesis H_0 .

Table 11: Age and Sustainable Purchase Behaviour

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
EnvConcern_PurDecision	Between Groups	4.461	4	1.115	1.382	.246
	Within Groups	82.324	102	.807		
	Total	86.785	106			
Conscious_effort	Between Groups	8.515	4	2.129	2.717	.034
	Within Groups	79.915	102	.783		
	Total	88.430	106			

Source: SPSS output

To find out if significant difference exists between respondents on the basis of age with respect to purchasing sustainable goods and services, one-way ANOVA test has been done. The above table reveals that significant difference exists between different age groups with respect to their conscious effort to purchase sustainable products and services, the significant value being $.034 < .05$. Thus, we accept H_0 and reject H_{06} .

Table 12: Education and Sustainable Purchase Behaviour

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
EnvConcern_PurDecision	Between Groups	2.299	3	.766	.934	.427
	Within Groups	84.486	103	.820		
	Total	86.785	106			
Conscious_effort	Between Groups	2.198	3	.733	.875	.457
	Within Groups	86.232	103	.837		
	Total	88.430	106			

Source: SPSS output

An attempt has been made to find if significant difference exists between respondents on the basis of education with respect to purchasing sustainable goods and services. The above table clearly reveals that no such difference exist. So H_0 is accepted and H_{07} is rejected.

Table 13: Income and Sustainable Purchase Behaviour

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
EnvConcern_PurDecision	Between Groups	.499	2	.250	.301	.741
	Within Groups	86.286	104	.830		
	Total	86.785	106			
Conscious_effort	Between Groups	1.408	2	.704	.841	.434
	Within Groups	87.022	104	.837		
	Total	88.430	106			

Source: SPSS output

Effort has been put by the researchers to find out if significant difference exists between respondents on the basis of income with respect to purchasing sustainable goods and services. The above table shows that the significant values are above 0.05. Thus we reject null hypothesis (H_0) and accept alternative hypothesis (H_{08}).

Implications of the Investigation

The current study tried to understand consumer purchase behaviour towards sustainable products and services and find out if demographic variables have any associations with reasons behind the purchase decision and if any difference exist between the demographic variables with respect to sustainable purchase decision. The findings of the investigation will provide insights to future investigators to do a more in-depth study in the area. The analysis made in the study will strengthen the existing literature available on sustainable purchase behaviour.

Conclusion

Humans typically choose economical purchases to meet their basic necessities and constantly evolving requirements. In order to meet our expectations, marketers must also stay up with our preferences while striking a balance between supply and demand. Numerous studies have shown that the demographic effects of population growth are causing demand for goods to rise faster than supply, which forces businesses to switch from using the highest-quality raw materials to those of moderate quality in order to produce finished goods. Although using raw materials of average or moderate grade won't have a direct impact on human health, but it will eventually have an impact on the environment. Thus to keep our future generation safe from various environmental calamities, we should be conscious towards our purchasing and must include eco-friendly products in our product list.

Based on research conducted on the different factors influencing consumers' inclination to buy sustainable products, we can draw the conclusion that, of the specific hypothetical variables considered in the study, only the sustainable product's feature and packaging have a positive correlation with the respondents' age and educational attainment. In simple words, customers' age and educational attainment prompted them to examine the product's packaging and features before being persuaded to buy sustainable goods, while in contrast, gender, income, and awareness of green products have no bearing on the buying habits of consumers with regard to sustainable goods.

To sum up, we can say that although consumers are aware that organic products are available on the market and have many advantages, they are not eager to buy them. Consequently, it is imperative that both governmental and corporate entities take the lead in implementing initiatives to raise knowledge about sustainable products and encourage their sale at a reasonable price.

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