

Consumer behaviour related to Green products

A case study on Attitudes, purchase intentions and Awareness of consumers in Kurnool.

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Abstract

The condition of the earth's environment today is the result of human interactions with the nature. Over the past few decades, concerns about environmental safety have been growing substantially in many areas of life. Unprecedentedly, a greater number of people and organizations all over the world today are trying to reduce their impact on the environment. These concerns of ecological safety are only evolving, but not widespread. The objective of this study is to assess the awareness levels, attitudes and purchase intentions of consumers in the city Kurnool with regard to green products available in the market. For this purpose, a cross-sectional study was conducted gathering 93 individual responses from the location. Convenience sampling method was chosen to collect the data. A pretested semi-structured questionnaire is used to assess awareness, attitudes and purchase intentions of consumers. In order to measure the relationship between the variables and to test the reliability of the data the trial version of IBM SPSS version 26 software is used on Windows 10. Majority of the participants in this study were male. Out of 93 participants, 58 were male and 35 were female. Of these, 70% of the sample population fall within the age bracket of 25 and 35. This study shows that even though men were more aware about the importance of environmental safety than women, women are more eco-friendly than men based on their attitudes and purchase intentions.

Keywords: Green products, Environmental safety, Consumer behaviour

Introduction

One of the greatest challenges posing the world today is conserving the natural-environment for the current and forthcoming generations. With a population of nearly 1.4 billion people, India is struggling to contain pollution at every level for the past two decades. Being home to top 10 cities with the worst air quality, India in 2017 had witnessed 1.24 million people killed due to deadly haze. According to the Lancet Planetary Health journal, a study conducted by Lancet in 2018 revealed that 77% of the total population in India are exposed to toxic air levels. Another disturbing fact from the study is that the worst hit among those are the weaker sections of the society. In the name of Economic Improvement there is rapid urbanisation and Industrialization alongside changes in lifestyles which led to drastic changes in the way, the pattern of the usage of land in the country. Since Independence, India has had a target of 33% of its total land area to be covered under forests. But as of 2017, according to State Forest report, the country was struggling to get above 22%. The rate of decrease in cultivable land in India is 0.3 Lakh hectares per annum, which is unfortunately not an alarming issue for many. On the other hand, the ever-increasing population poses a bigger challenge to the country's economic conditions, medical conditions and pollution problems. In states like Andhra Pradesh and Tamilnadu, energy crisis and water crisis are more than prevalent. Increasing rural distress due to urbanisation and looming water crisis in areas like Kurnool, Chennai, and other places have affected lakhs of lives.

Extensive usage of pesticides in cultivation, over-population, soil degradation, deforestation, over-usage of plastic, air pollution from excessive vehicle usage are some of the major causes of environmental woes in the state. According to the Andhra Pradesh pollution control board the estimated plastic waste generation by the general populace per annum in the year 2019 is 63,714 TPM (tons per annum). And the industrial plastic waste generated in the state is more than one lakh ton. Out of this only 30% is being recycled. Despite getting a backlash from the government as well as the public, the issue of plastic is looming in the state. The level of groundwater is also declining with time due to indiscriminate usage and increasing temperatures. The Rabi acreage in the state of Andhra is shrunk by 7 lakh hectares in 2017 and more than two and a half lakh hectares of kharif acreage is uncultivated in 2016 mainly due to water woes.

From a vantage point of view, this problem can be solved through "Green purchasing". It means buying products and services which show negligible

detrimental effects on the natural environment and human health. These products are known as green products. People who buy such products are called Green consumers. “The green consumer has been described as an individual looking to protect themselves and their world through the power of purchasing decisions” (Bergin-Seers & Mair, 2009; Ottoman, 1992). Green Consumers exist in Green markets where Green Business takes place. “Green business” as defined by Smith and Friend (2009) are business practices which are ecologically sound. They form strict norms against emissions and embrace eco-friendly procedures for procurement, these businesses build factories using natural or organic products. “Green marketing, alternatively called as sustainable marketing or environmental marketing involves designing, promoting, pricing and distributing products and services according to the customer’s wants and needs, with minimal detrimental impact on the natural environment” (Grant, 2008; Jain and Kaur, 2004; Kangis 1992).

Green Marketing is a powerful tool that can eradicate the atrocities of pollution in all forms. It is the responsibility of the government and the corporate sector to educate the consumer about the potential gains of green products. However, the consumers are gaining exposure to environmental issues through social media and other forms of communication. This exposure has encouraged a majority of consumers to go pro-environmental, instigated a positive attitude towards green products, and may have developed an intention to purchase them (Bergin-Seers & Mair, 2009; Peattie, 2010). But, on the contrary various case studies have revealed that it is doubtful whether the pro-environmental attitude of consumers may actually translate into real green purchase intentions.

There is a growing prominence of Green Marketing in the business world. The emphasis on green market practices is a result of genuine concerns expressed by consumers regarding the diminishing natural resources that are limited which were adequate hitherto. In an effort, to share the concerns of the consumers towards environment, many companies are moving towards implementing eco-friendly procedures in their day-to-day business operations. In a bid to boost their credibility, companies today are showing interest in sustainable business practices. On the brighter side, Governments have been taking many initiatives to improve the eco-friendly marketing both on the consumer and business fronts, by making necessary regulations to protect the environment. Green or sustainable or eco-friendly marketing involves all the promotional and developmental activities of goods that satisfy the consumer needs and wants without

compromising on the environmental performance. Here, the apparent assumption is that the product's green features are attractive to consumers and they show a positive purchase intention in buying them. But a not-so-apparent assumption is that will the consumers pay a premium price for these products?

'Humans are a tiny fraction of the weight of living things and have a disproportionately large impact on our environment' (Williamson, Satre-Meloy, Velasco, & Green, 2018, p. 12). However, studies have shown that a number of Consumers are drifting towards eco-friendly products and services from the non-eco-friendly ones. Issues concerning ecological safety have become a quite passionate subject these days to pretty much everyone, to the society, to the governments across the globe. Business organizations observed this phenomenon in the market environment and are trying to gain a competitive edge in the market by exploring the concept of Green marketing. In this modern era of globalization, it is a challenge for companies to keep the Consumers in fold and the environment safe. Many of the companies neglect the environmental aspect while trying to achieve the consumer folds. Today it has become a need and responsibility for these companies to become environment-friendly in order to sustain in the market.

Location of study:

Kurnool is a growing urban centre and is the fifth largest city in the state of Andhra Pradesh. It also serves as the district headquarters of the Kurnool district. It is the present Judicial capital of the state and is known for being the first capital of the united Andhra Pradesh during 1953-56. Kurnool is known as the gateway of Rayalaseema, a typical geographical region in the state. The world-famous rice variety called the Kurnool Sona masuri is cultivated from the Kurnool district. This premium variety rice is also exported to many countries. The city is very old and has historical relations with Vijayanagar rulers and Mughal rulers in the past. The district ranks 10th in population with 40,53,463 People accounting for 4.63 % of the total Population of the state as per 2011 Population Census, while in the area it occupies the 3rd place with 17658 Sq. Kms., which account for 6.41 % of the total area of the state. The literacy rate of Kurnool was 77.37% during the 2011 census. The major economic sectors in the district are Agriculture, Food processing and Mineral based Industries. The GDDP of the district during 2013-14 was Rs 34,359 crores. The city of Kurnool is also a famous tourist destination with famous pilgrimages, historical monuments and wildlife sanctuaries. The chief occupation and source of livelihood for the district is agriculture. More than

70% of the 4.04 million people in the Kurnool district engage in farming. The district promotes Eco-tourism in the forests of Nallamala.

Objectives of the study:

- Assess the levels of awareness, attitudes and purchase intentions of consumers of Kurnool city with regard to green products.
- To examine the relationship between environmental attitude, environmental awareness and eco-friendly purchase intentions of consumers in the city.

Limitations of the study:

Due to the lockdown situation in the entire country owing to COVID-19 pandemic, the scope of this research has been narrowed down. Although the problem of environmental crisis, consumer behaviour and green product awareness are a global situation this research has been confined to the city of Kurnool in Andhra Pradesh, a state in India. The study does not focus on any particular product, rather than it focuses on the Green Market as a whole. Respondents are native Telugu speaking population of Kurnool also regarded as local consumers.

Methodology:

This is a cross sectional study conducted in the city of Kurnool belonging to Kurnool district, Andhra Pradesh, India in 2020. This study chose to follow a mixed research method to embark on a social survey. Choosing an appropriate sampling method is a key step for a research (Bryman & Bell, 2011, p. 175).

Data Sampling process:

This study followed a convenience non-probability sampling method to collect the data. The data was primarily collected through online surveys. With the help of online google forms a survey is created. The questionnaire was shared through Facebook, Instagram and WhatsApp in the form of a hyperlink, created with the help of google forms. E-mails were also sent inviting participants to the survey. The link was posted with invitation in popular Facebook groups and WhatsApp groups with the permission of group admins in the Kurnool city.

Data Collection:

A semi-structured questionnaire consisting of core questions based on concepts of pro-environment behaviour such as Theory of Planned behaviour by Ajzen (1985) and ABC model of attitude in marketing is used. These concepts are widely accepted to analyse the consumer behaviour with respect to attitudes, awareness and purchase intentions. This questionnaire was modified according to prevailing conditions preceded by a pilot study. Participants who are above the age of 18 are considered to be a potential participant for this study.

Statistical Analysis:

For data analysis, SPSS software version 26 is used. The collected data was compiled on MS Excel 2016 then analysed with SPSS. Spearman's correlation analysis (two tailed test) was conducted among the variables to analyse the strength of association between ranked variables.

Analysis Outcome:

The sample population consists of 93 respondents from the city of Kurnool. Even though efforts were taken to approach all genders equally, a clear disproportionate rate of participation in the survey is observed. Out of ninety-three respondents, 58 are male and 35 are female. A gender difference of 24% exists between the participants. All responses are recorded down in an excel file, which is an output from google forms. The male to female ratio is 62:38, all of whom fall within the age bracket of 18 to 45. Almost, three fourths of the respondents fall into the age bracket of 25 to 35 which is around 71%. While, the age bracket of 36-45 accounts for 20%, the age bracket of 18-24 constitutes about only 9% of the total respondents.

Table: 1 – PI, Attitudes and Awareness table

	Frequency	Percent
Male	65	65.0
Female	35	35.0
Age		
18-24	10	10.0
25-35	70	70.0
35-45	20	20.0
Awareness levels		
positive Awareness	52	55.9
Negative awareness	41	44.08
Attitude levels		
+ve attitude	55	59.13978
-ve attitude	38	40.86022
Purchase Intention		
+ve PI	49	52.68817
-ve PI	44	47.31183

As evident from the sample that the male respondents are more aware than the female respondents. Around 52% of the sample seem to be well aware about the environmental problems, while 41% account for poorly aware about the eco-friendly measures and products. This describes the level of immaturity exists among people regarding environmental safety. Attitude wise, this sample shows 59% of the people express positive attitude to use green products which is a good sign for ecological safety. Whereas, 41% express a negative attitude. On the other hand, purchase intentions of consumers are quite amusing in relation to their attitudes and awareness. 49% of the population willing to purchase eco-friendly products while, 44% of people are unwilling to buy eco-friendly products.

Table :2 Spearman's correlation analysis

Correlations				
			attitude	Price Intention
Spearman's rho	attitude	Correlation Coefficient	1.000	.030
		Sig. (2-tailed)		.800
		N	100	73
	Price Intention	Correlation Coefficient	.030	1.000
		Sig. (2-tailed)	.800	
		N	73	100
			attitude	awareness
Spearman's rho	attitude	Correlation Coefficient	1.000	-.094
		Sig. (2-tailed)		.354
		N	100	100
	awareness	Correlation Coefficient	-.094	1.000
		Sig. (2-tailed)	.354	
		N	100	127
Correlations				
			awareness	Price Intention
Spearman's rho	awareness	Correlation Coefficient	1.000	-.100
		Sig. (2-tailed)		.325
		N	127	100
	Price Intention	Correlation Coefficient	-.100	1.000
		Sig. (2-tailed)	.325	
		N	100	100

Notes:

- $p \leq 0.05$ – significant; $p > 0.05$ - insignificant

- Correlation of the coefficient (r) lies between -1 and $+1$, where -1 indicates perfect negative correlation and $+1$ indicates perfect positive correlation between variables.
- Spearman rho (ρ) implies statistical significance, that exists between a variable relationship.

After analysing the variables with Spearman Rank correlation method, it is found that there is a mild to moderate positive relationship exists between consumer purchase intentions and consumer attitudes towards green products. Based on the results it is possible to say that, the Kurnool consumer attitudes influence their purchase intentions towards green products.

It was also found that the population of the study exhibits a strong negative relationship between the awareness and attitudes of consumers, which means if awareness of consumers increases the attitude of consumers decreases. In this case, it can be said that the awareness of Kurnool consumers is not positively but significantly related to their attitudes.

Results show that the relationship between awareness and purchase intention of consumers is strongly negative, which means as awareness increases, purchase intention decreases.

Discussion

It is observed that the percentage of people from the sample who are aware and has a positive purchase intention towards green products are less than those who are aware but has a negative purchase intention. Even though consumers are aware about the environmental problems, the majority of them are not willing to purchase green products. This indicates that there is some latent problem associated with respect to green products available in this location. Or, people are more habituated to use products that are more appealing to them. On the other hand, the percentage of people from the sample population, who are not aware about the environmental impacts has a good purchase intention to buy green products. Almost 58% of unaware people from the population sample are willing to buy green products. Whereas, 43.2% of the population are not aware and do not intend to buy any eco-friendly products.

Another noticeable feature of this study is that around 60% of the population sample who are aware about environmental impacts has a pro-environmental attitude. Although, nearly 40% of the well aware population have a negative attitude towards green products available in the market. This relationship can be attributed to various reasons owing to circumstances surrounding the consumer. Even the most contemporary environmental problems can potentially make these consumers develop pro-environmental attitudes and provoke them to purchase

green products aggressively. On the other hand, from the same population sample, who are not aware, there are nearly 43% of people who do not have pro-environmental attitudes. It can be plausibly inferred from this data that, if this percentage of the population are exposed to environmental problems by making them more aware, there is a possibility that they can develop positive eco-friendly attitudes which may consequently lead to express green consumerism.

Conclusion

This study made an effort to unveil the nature of the imbalance that exists between consumer behaviour and natural-environment. It is proved from the study that if pro-environmental attitudes are developed by the consumers their purchase intentions can significantly improve to buy green products. This study assumed that awareness will have a substantial impact on purchase intentions, but the result of the study proved that the most significant predictor of purchase intentions is attitude of consumers. Price is one factor that inhibits the consumers from the use of green products. As consumers develop a good attitude towards eco-friendly products, they also expect to get the products for reasonable prices. Similarly, it can be determined that consumers are willing to show positive purchase intentions if they develop a good attitude towards green products. If the price of the green products is not in par with the other alternatives of the same product line, then consumers are more inclined towards non-green products. This is a significant factor to be considered by the companies and the government to improve the pricing model of green products. Around 40% of the people who participated in the study said that they would be more willing to buy products that combine eco-friendly nature and better prices. In order to improve the attitudes of consumers the solution is to create a positive notion about the green products in their minds. Consumers should be made to learn that green products can significantly improve their health and lifestyles, their positive impact on the environment, and product availability. The majority of consumers are already using conventional products and they are habituated in using them repeatedly with minimal complaints. Extensive advertising and rigorous promotional activities, creation of brand image by companies which produce conventional products have created a long-lasting impact on consumer minds. So naturally, when a consumer has to shift from using one product to another, they expect additional value from the new product.

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