

## A STUDY ON GREENISH PATTERN OF INDIAN CONSUMERS WITH SPECIAL REFERENCE TO THEIR PLASTIC BAG USAGE BEHAVIOR

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Received 13 June 2019; accepted 13 January 2021

**Abstract.** The Population explosion has led to excessive consumption and exploitation of natural resources resulting in degradation of the biophysical environment. Many agitations have gained momentum in various parts of the world to protect it from environmental degradation. Many governments have banned the usage of plastics in their endeavor to protect the environment. This descriptive research has attempted to study the greenish pattern of 320 Indian consumers with special reference to their plastic bag usage behavior while carrying their purchases back home. The Results of the study have revealed that customers accord importance to the environmental impact of goods and services before purchasing such goods and they prefer to visit shops that are eco-friendly while they do not attach much importance to the environmental reputation of companies dealing with such goods and services. They prefer green products due to their good quality and reliability and are willing to pay a premium price for such products.

Keywords: green consciousness, plastic bags, consumers, environment protection.

JEL Classification: M10, M14, Q5.

## Introduction

Human beings have forgotten the fact that this world belongs not only to them, but also to many other species comprising of flora and fauna. Human beings have developed high power to control the entire earth. Greedy people have started exploiting and looting natural resources for their narrow selfish end. Further, human beings have started using many hazardous things such as plastics for the sake of sheer convenience. Usage of such things has cast an adverse impact on human beings themselves as well as the other living things in the globe. Human beings have also forgotten that it is their responsibility to hand over the globe to their successors in the manner it was handed over to them by their predecessors. Pollution and preservation of the environment have become buzz words recently with the concepts being excessively emphasized by global bodies, media and the general public. Adoption of good practices to avoid degradation and ruining of the environment by all stakeholders constitute environment protection. Protecting the environment aims at conserving nature and repairing the harm infected with it. Many private agitations have gained momentum in various parts of the globe to protect it from environmental degradation. In this context, it is imperative not only to protect the natural environment, but also all the fauna and flora forming part of the globe. It is vital to educate future generations about the importance of a balanced eco-system.

Many nations have adopted voluntary environmental agreements for recognizing corporate moving beyond the minimum standards of environmental protection and following best practices in this direction. "Environment Improvement Trust" in India is a good example of such initiative aimed at conserving forests and the environment. The trust has been functioning since 1998 with the motto of "Green India Clean India" (Karamanos, 2001). These initiatives are more popular in the lesser developed nations such as the Latin American nations as corporates in such nations do not comply with statutory requirements (Blackman, 2008). The ecosystem approach engulfs the consorted efforts of all stakeholders such as government, private agencies, corporates and public at large to implement decisions targeting environmental protection (Nielsen et al., 2019).

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This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. Governments of many nations may come together and agree upon terms to be followed and refrained to safeguard the environment. International bodies such as the UN has also declared protocols to protect climatic conditions and preventing pollution of air, water and noise. Signatories to such agreements and protocols are bound to implement the terms and conditions with letter and spirit, failing which, they may have to confront adverse legal consequences (Mitchell, 2003).

Though there are many environment protection stakeholders responsible for safeguarding the environment, the government has to play a pivotal role in this regard. Many countries have constitutional provisions imposing obligations on people and the government to protect the environment (Verschuuren, 1995). For instance, Article 48-A of the Indian Constitution states that "The states shall endeavor to protect and improve the environment and safeguard the forest and wildlife of the country". Similarly, Article 51-A quotes that "It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and have compassion for living creatures". Article 21 of the Indian Constitution provides for the fundamental rights of Indian citizens which states that "No person shall be deprived of his life or personal liberty except according to the procedure established by law".

The corporate world has also recognized the importance of contributing to protecting and safeguarding the environment. They have realized the importance of avoiding deeds which will result in polluting the air, water or noise. They have also realized the consciousness of modern consumers towards preserving the environment and ignoring companies degrading the environment. Karna et al. (2003) have remarked that proactive businessmen generally take initiatives to launch green products and gain comparative advantage over their competitors. They have unearthed the prevalence of a substantial relationship between environmental marketing strategies, green values and structures, and functions. Considering the importance of green issues, the main objective of this research is to study the perception of Indian consumers towards greenish issues in India. Special focus have been made towards assessing the type of bag used by customers for carrying home their purchases. Based on the above objective the researcher conducted in-depth literature reviews on the topic that are exposed below.

## 1. Review of literature

Oyewole (2001) stresses that the consciousness of consumers about environmental fairness and their readiness to additionally pay for it determines the success of green products while Kilbourne (1998) emphasizes that political, technological and economic dimensions need to be thoroughly scrutinized for green products to succeed. Braun and Traore (2015) interviewed 30 women vendors in Mali markets and exposed that the task of economic prosperity has injured the environment drastically and usage of plastic bags is one such instance. Donaldson (2005) reported that British consumers display a positive transformation of eco-attitude and trust towards commercial brands while Alsmadi (2007) found that though the good magnitude of environmental awareness is prevalent among consumers of Jordan, their loyalty towards conventional goods and high prices diminished their preference to purchase green products. Sanjay and Gurmeetkaur (2004) have found that corporates have also responded to green initiatives by launching green products with greenish marketing while Unruh and Ettenson (2010) have suggested three strategies of Accentuating, Acquiring and Architecting to corporates for aligning their green goals with competence.

Some researchers suggested the inclusion of emotional and arousing contents in ads of green products as the mere provision of details about environment preservation might not win consumer preference to the green environment. The emotionally appealing advertisements shall be effective in attracting consumers towards green products as consumers rely mostly on external information about green products before making a buying decision (Pooley & O'Connor, 2000; Naz, 2019). According to Menon and Menon (1997), eco marketing, which was earlier perceived as merely a determinant of decision-making, has now assumed the focal point of managerial strategy formulation and execution. Laroche et al. (2002) found that eco-conscious consumers have expressed their anguish over worsening scenarios of environment posing a serious threat to the very existence of the globe while those not sensitive to eco-related problems believe that eco-related tribulations shall automatically disappear with time. Their study has also revealed that consumer perception regarding eco-related problems don't always result in them being induced to make eco-friendly purchases.

Ohtomo and Hirose (2007) have found that people aware about environmental issues need not act eco-friendly and might imitate eco-adverse activities of those around them while Gan et al. (2008) established that eco-conscious consumers prefer purchasing greenish products, though they still place paramount weightage to the conventional features of brand, price and quality while deciding about purchases. Some authors expressed an optimistic finding that awareness and concern about eco-issues among consumers are gaining much significance (Nambirajan & Prabhu, 2011; Kabir et al., 2019). Wessells et al. (1999) have cautioned that the comparison of eco-related qualities of products with other simply visible characteristics is a complex phenomenon. Mishal et al. (2017) unearthed that environmental consciousness influenced green purchase attitude and perceived customer effectiveness; green purchase attitude influenced perceived customer effectiveness and green behaviour; green purchase intention influenced perceived customer effectiveness; green behaviour influenced green purchase behaviour.

Laroche et al. (2001) have established positive development among consumers and industry of developing incremental interest towards environmental issues with due recognition of influence which their respective behavioral aspects might exert. The eco-conscious consumers as constantly endeavoring to curtail their activities which might adversely impact the eco-system, consciously striving to keep utilization of resources and energy at the bare minimum, avoid the utilization of toxic materials and minimize wastage (Kollmuss & Agyeman, 2002; Dangelico & Vocalelli, 2017). These factors were again identified as strongly influencing purchase decisions of eco-friendly products (Nurse et al., 2010; O'Brien & Thondhlana, 2019).

Laroche et al. (2002) highlighted an interesting point that eco-friendliness doesn't always result in green purchases. D'Souza et al. (2006) found that consumers are willing to sacrifice quality of goods for their eco-friendliness while Thøgersen et al. (2010) found that ability of consumers substantially affected their preference of green products. Rokka and Uusitaloo (2008), Devinney et al. (2011) also pointed that price is a major factor considered by consumers making green purchases.

D'Souza et al. (2007) studied Australian consumers and found that their profile characteristics had substantial relationship with their outlook towards eco-friendly goods. They found that female, older and educated consumers had more concern for eco-friendly goods and derived better satisfaction by using such goods. Thøgersen et al. (2010) found that women were more concerned about eco-friendly goods and they tried to explore such goods through their labels. However, D'Souza et al. (2007) highlighted that consumer outlook towards green products did not differ among the male and female consumers. Straughan and Roberts (1999), Fransson and Gärling (1999), Devinney et al. (2011) found that education had only a weak relationship with environment concern of consumers. Past studies have highlighted the mixed role played by demographic factors in greenish pattern of consumers. It would be interesting to explore the association between the demographic characteristics of consumers and their perception about green issues as perception would lead to action.

Sjaifuddin (2018) pointed out that industrialization has exerted a positive impact on grounds of better economic growth but at the cost of environmental degradation. To address the menace of environmental degradation, an "environmental management prospect of Modern Cikande Industrial Estate" has been proposed for the Indonesian province of Banten. Results revealed that investment security, pollution control, competitiveness of industry, industrial tourism and availability of infrastructure were the five vital factors determining success of the mechanism. Vanapalli et al. (2020) have highlighted the increased demand for protective equipments and disposable plastic equipments for packing food to be consumed by the COVID patients which has led to an environmental crisis due to ineffective waste management mechanism to take care of these waste dumped. Unless properly managed, excessive waste would lead to transmission of the COVID to sanitary workers. The authors have suggested effective research to evolve good substitute for plastic materials and ensure that the epidermic doesn't result in yet another disaster. have given details of initiatives of West African countries to preserve environment by minimizing usage of plastics by banning their usage and imposing heavy fines and imprisonment for those still using plastics.

However, 4 of the 16 West African countries still have no strategies to implement ban on usage of plastics and the authors have suggested the government not just to impose ban but come out with viable alternative to plastic materials. Khan et al. (2020) have quoted NASA reports that global temperature since the 19th century by almost 1.62F due to excessive emissions to the atmosphere stressing the importance of transforming consumer behavior into consumer green behavior by minimizing usage of plastic bags. The study revealed that ban on plastic bags, knowledge and outlook exerted substantial positive influence on consumer green behavior. Hence, it is imperative for the government to come out with effective regulatory machinery to ensure that plastics are avoided by consumers.

Singh and Cooper (2017) evolved a business model to minimise the usage of plastic bags during shopping by Swedish nationals by collecting and recycling abandoned bags efficiently. The evolved mechanism results in substantial reduction in consumption of water, energy and carbon which would contribute to preservation of the environment. Nevertheless, success of this model will largely depend on the effectiveness with which the bags are collected, awareness of people about environment protection and willingness of retailers to take the bags deposited by people. Arı and Yılmaz (2017) exposed that eco-conscious consumers and those socially pressurised minimise usage of plastic bags by switching to cloth bags.

This study tries to explore the importance accorded by consumers towards green issues and the association of their gender, age and educational qualifications with perception towards green issues. Further, it is well known that all people make extensive purchases throughout the year and they need bags to carry home these purchases (Zambrano-Monserrate & Ruano, 2020). The entire world is facing the problem of undisposable plastics which are usable only one time.

The ocean is filled with plastics. The major culprit to these instances is the usage of undisposable plastic bags while purchasing fruits, vegetables and groceries all around the world. Bagss made of plastics are usually got by people from super markets and shops to carry home their purchases. Availability of plastic bags free of cost from shops for the buyers, people adverse to using recycled products and inconsistent outlook of consumers substantially contribute to excessive usage of bags made of plastics (Knussen & Yule, 2008; Ohtomo & Ohnuma, 2014). Despite the convenience associated with usage of bags made of plastics, their usage is highly hazardous for environment due to absence of biodegradability (Zen et al., 2013). Plastic materials pollute water and soil. They do not allow water to enter the soil, thereby reducing the ground water level. Resetar-Deac et al. (2015) pointed out that plastics are largely used by the food industry due to safety and convenience aspects, disregarding the adverse implications on the environment and this needs to be addressed urgently by inculcating awareness among the general people through education programmes about the dangers associated with the usage of plastics. Recognising the importance of eliminating plastics usage, Convery

et al. (2007), Siddique et al. (2008) have highlighted that reducing plastics usage constitutes an important and effective environmental preservation activity. Estimates expose a staggering picture that one person managing not to use plastics in his life contributes to the reduction of carbon-dioxide getting emitted by almost 19 kgs. However, the unfortunate scenario is that globally, half to one billion bags made of plastics are used annually (National Geographic News, 2003). Statistics highlighted by Global Warming White Paper (2013) suggest that an individual uses more than 300 bags made of plastics in his life time while this figure is more than 312 in countries such as Turkey. Usage of bags made of plastics needs to be reduced drastically if not eliminated immediately and making plastic bags costly by imposing heavy taxes on them and educating the general public about the hazards associated with plastic bags and the availability of alternative bags as measures towards this end. Recognising the danger associated with the usage of bags made of plastics, their usage has been banned by many countries such as South Africa (in 2003), Somali (in 2005), Tanzania (in 2006), Kenya, Uganda and Belgium (in 2007), Italy and France (in 2010), San Francisco and California (in 2007), while countries such as Germany and Netherlands charge for plastic bags from customers wanting such bags for carrying their purchases (BBC NEWS, 2008). However, the scenario in India is pretty bad with excessive usage of bags made of black plastics. Using such bags pose severe threat to health and hygiene of human lives and other living species. Despite the government trying to ban usage of plastic bags, their usage is excessive by the buyers for carrying purchases made from super markets and these bags are also used by the people to dispose their household waste, posing another problem of segregating plastics and degradable waste.

Hence, the authors have derived interest to assess the type of bag preferred by the consumers to carry home their purchases.

### 2. Objectives of the study

- 1. To study the nature of bag used by consumers to take home their purchases;
- 2. To study the perception of consumers about green issues while effecting purchases;
- 3. To explore the prevalence of significant association between the profile of consumers and their consciousness towards environment-related issues.

## 3. Hypotheses

- 1. There is no significant association between gender of consumers and their consciousness towards ecorelated issues;
- 2. There is no significant association between age of consumers and their consciousness towards eco-related issues;
- 3. There is no significant association between educational qualifications of consumers and their consciousness towards eco-related issues.

### 4. Methodology

The proposed study is descriptive in nature, based purely on primary data, collected by administering a structured questionnaire to 320 respondents in the two Indian states of Tamilnadu and Pondicherry, selected using the convenience sampling method. The questionnaire comprises of two parts. The first part endeavors to collect information about the gender, age and educational qualifications of the respondents and the type of bag used by them for carrying home their purchases while the second part comprises of 12 questions in the form of statements in Likert' five-point scale, endeavored to collect consumer opinion about green issues. The collected data has been suitably coded and analyzed using the softwares of MS Excel and SPSS 16, applying the statistical tools of frequency, percentage, mean, cluster analysis, chi-square analysis and correspondence analysis. The questionnaire was arrived at after extensive discussion with different subject experts which ensured its content validity. Face validity of the questionnaire was also ensured by pilot testing, which also helped in the arriving of the sample size using the formula:

 $n = \left[ \left( \sigma \times 1.96 \right) / \left( \mu \times 0.05 \right) \right]^2.$ 

By applying this formula on all the statements in Likert's five-point scale, the desirable sample size was worked out as 314. Once the task of final data collection was completed, it was noted that 338 completed questionnaires were received. After cleaning the data by providing for outliers and unengaged responses, the final sample size got settled at 320. Reliability of the data was checked using Cronbach's Alpha, which yielded a coefficient score of 0.845, which is highly satisfactory to establish reliability of data (Nunnally, 1987). Hence, it can be said that the data possess a high degree of internal consistency. Further, the normality of the data was also checked using Skewness and Kurtosis. Values of Skewness and Kurtosis in respect of all the 12 statements were within the range of +1 to -1, which establishes the normality of the data. Hence, parametric tools can be used for data analysis.

### 5. Data analysis and findings

### 5.1. Demographic profile of the respondents surveyed

Of the 321 respondents surveyed, 44.7% (143) are aged upto 25 years while 42.2% (135) are aged 26 to 40 Years and 13.1% (42) are aged 41 years and Above; 62.2% (199) are males while 37.8% (121) are females; 44.4% (142) possess educational qualifications of upto Higher Secondary (school level) while 38.8% (124) are graduates and 16.9% (54) possess post-graduation and more as their educational qualifications.

### 5.2. Perception of consumers about green issues

The perception of consumers about green issues have been obtained in Likert's five-point scale and the results are displayed in Table 1.

Table 1.	Consumer	perception	about	green issues	

Sl. no	Statement	Mean
1	I don't mind making an additional payment for eco-friendly goods/services	3.4344
2	I accord paramount importance to environment preservation while making any purchase decision	3.4469
3	I attach paramount importance to the impact of goods/services on the environment before using them	3.5562
4	Usually, the quality of eco-friendly goods/ services are good	3.8438
5	Eco-friendly goods/services are preferred due to their reliability	3.5062
6	I visit only eco-friendly shops for purchasing	3.3719
7	Identifying eco-friendly goods/services is much easier	3.3219
8	Green products are largely purchased due to their favorable impact on the environment	3.6531
9	I maintain facilities at my house for separating the trash	3.2688
10	Green products are the only option available for saving our earth	3.3062
11	Eco-friendly products make a significant contribution to saving energy consumption	3.3562
12	I always accord due recognition to the environmental reputation of companies before using their goods/services	2.6438

Table 1 suggests that consumers do not accord much importance to the environmental reputation of a company before deciding to purchase goods or services. The respondents think that green products will usually be of good quality and are preferred due to their favorable impact on environmental protection and reliability. The consumers have also hinted that they accord profound importance to the impact of goods and services on the environment before deciding to buy them while they have expressed willingness to pay more for products that are greenish. Consumers have also pointed out that they prefer visiting shops that are eco-friendly and think that green products save energy and it is quite easy to identify green products. They have an average level of agreement to the statement that green products are the only option available for saving the earth and availability of provision in their house to separate thrash.

# 5.3. Segmentation of respondent based on their perception about Green Issues

The respondents surveyed have been categorized into three groups using Cluster Analysis based on their perception towards green issues and the results are showcased in Table 2.

Table 2 showcases the formation of three distinct clusters based on the perception of respondents about green issues. All the 12 statements used to measure the perception of respondents plays a significant role in the grouping process as the F values in respect of all the statements are significant at one percent level. Based on the mean

Statement	Brand Conscious Group	Power Conscious Group	Energy Conservative Group	F	Sig.
I don't mind making additional payment for eco-friendly goods/services	3.98	1.96	4.29	180.30	0.000
I accord paramount importance to environment preservation while making any purchase decision	3.13	2.92	4.41	38.88	0.000
I attach paramount importance to the impact of goods/services on the environment before using them	4.34	3.02	3.11	44.80	0.000
Usually, quality of eco-friendly goods/services are good	3.98	3.68	3.84	3.193	0.042
Eco-friendly goods/services are preferred due to their reliability	3.10	3.31	4.24	21.42	0.000
I visit only eco-friendly shops for purchasing	2.98	3.27	3.99	12.46	0.000
Identifying eco-friendly goods/services is much easier	4.43	3.07	2.17	120.49	0.000
Green products are largely purchased due to their favorable impact on the environment	2.88	4.02	4.26	37.48	0.000
I maintain facilities at my house for separating the trash	2.46	4.05	3.49	58.03	0.000
Green products are the only option available for saving our earth	2.93	4.40	2.64	68.32	0.000
Eco-friendly products make a significant contribution to saving energy consumption	2.60	3.72	3.94	71.05	0.000
I always accord due recognition to the environmental reputation of companies before using their goods/services	2.52	2.95	2.48	35.15	0.000
Average	3.28	3.36	3.57	3.40	0.035
No. of Cases	123	101	96		

Table 2. Segmenting respondents based on their perception towards Green Issues

values, the three clusters so formed are labeled as "Brand Conscious Group", "Power Conscious Group" and "Energy Conservative Group", each encompassing 123, 101 and 96 respondents respectively.

## 5.4. Demographic characteristics of clusters formed on the basis of perception of respondents about Green Issues

The demographic characteristics of clusters formed on the basis of respondents' perception about green issues has been explored using Chi-square Analysis and the outcome is displayed in Table 3.

Profile		Brand Cons- cious Group	Power Cons- cious Group	Energy Con- servative Group	Active Margin
Age	Upto – 25 years	69	48	26	143
	26 to 40 Years	43	29	63	135
	41 and Above	11	24	7	42
Gen-	Males	71	74	54	199
der	Females	52	27	42	121
Edu- ca- tion	School Level	39	62	41	142
	Degree	46	30	48	124
	PG and Above	38	9	7	54
Total		123	101	96	320

Table 3. Demographic characteristics of clusters formed on the basis of respondents perception about Green Issues

Table 3 showcases that larger number of respondents aged less than 25 years are brand conscious followed by those who are power conscious and finally, by those who are Energy Conservative while larger number of respondents aged 26–40 years are Energy Conservative followed by those who are brand conscious and finally, by those who are power conscious. However, larger number of respondents aged more than 40 years are power conscious followed by those who are brand conscious and finally, by those who are Energy Conservative.

Larger number of male respondents are power conscious followed closely by those who are brand conscious and finally, by those who are Energy Conservative while larger number of female respondents are brand conscious followed by those who are Energy Conservative and finally, by those who are power conscious. Larger number of respondents possessing school level educational qualifications are power conscious followed by those who are Energy Conservative and very closely by those who are brand conscious while larger number of respondents with degree educational qualifications are Energy Conservative followed very closely by those who are brand conscious and finally, by those who are power conscious. Larger number of respondents with post-graduation as educational qualifications are brand conscious followed by those who are Energy Conservative and power conscious.

## 5.5. Prevalence of significant association between profile of respondents and clusters formed on the basis of their perception about Green Issues

Prevalence of significant association between profile of respondents and the clusters formed on the basis of their perception about green issues has been explored using Chi-square Analysis and the results of Pearson Chi-Square values are portrayed in Table 4. Table 4: Prevalence of Significant Association between Profile of Respondents and Clusters formed on the basis of their Perception about Green Issues.

Table 4. Pearson Chi-Square values

Profile	Value	df	Asymp. Sig. (2-sided)
Age	41.628 <sup>a</sup>	4	0.000
Gender	7.754 <sup>a</sup>	2	0.021
Education	39.768 <sup>a</sup>	4	0.000

Table 4 highlights that all profile variables of the respondents are significantly associated with the clusters formed on the basis of their perception about green issues. Hence, the three null hypotheses formulated stands rejected. The nature of association prevalent among profile of respondents and clusters formed on the basis of their perception towards green issues has been unearthed using Correspondence Analysis and the results are portrayed in Figures 1 and 2.

Figures 1 and 2 showcases that Post-graduate respondents and those aged upto 25 years are brand conscious while respondents possessing school level educational qualifications and those aged 41 years and above are power conscious. Finally, respondents possessing degree as educational qualifications and those aged 26–40 years are energy conservative.

#### Row and Column Points



Figure 1. Education & clusters

○ Age Green Issues

### Row and Column Points



Figure 2. Age & clusters

### 5.6. Type of bags used for carrying purchases

Purchases made have to be carried home which requires a bag. In the past, grocery products were packed using papers and consumers brought their canvas bags or those made of tubes to carry home their purchases. However, the trend has changed drastically and departmental stores are using plastic materials to pack their products and consumers are offered plastic bags by these stores to carry these products back home. Using plastic bags pose a serious threat to the environment and lives of animals and birds. These bags have a horrible look and they kill thousands of birds and animals eating them mistakenly. Furthermore, these plastic materials are not recyclable and biodegradable and if thrown on the soil, they block entry of water into the ground, thus reducing groundwater level. People use plastic bags without knowing the negative effects they cause to the environment. China banned the usage of ultra-thin plastic bags just before the 2008 Olympics as an attempt to protect the environment. Some cities have banned the usage of plastic bags while some countries have used taxation policy to discourage its usage. Many departmental stores have started charging plastic bags demanded by customers to carry their purchases. They have implemented a green bag policy. Many campaigns have also been instituted to educate people about the adverse impact posed by plastic bags and one such effort is that of Agrima KC of Nepal. These initiatives have diminished the usage of plastic bags. Still, plastic bags occupy an integral part of carrying purchases with almost 500 billion to one trillion such bags being used in the world annually.

Prevalence of Association between Clusters Formed based on Perception about Green Issues and Type of Bag used by them Proceeding further, an attempt has been made to check whether substantial association prevail between the clusters of respondents formed on the basis of their perception about green issues and the type of bag used by them for carrying home their purchases using Pearson Chi-Square and the outcome is portrayed in Table 5.

Table 5. Prevalence of association between clusters formed based on perception about Green Issues and type of bag used by them

	Value	df	Sig
Pearson Chi-Square	17.855 <sup>a</sup>	4	0.001

Table 5 exposes the prevalence of significant association between the two category variables of type of bags preferred by the respondents to carry their purchases and the three clusters of respondents formed on the basis of their perception about green issues. Nature of such association has been explored using Correspondence Analysis and the results are portrayed in Figure 1.



Figure 3. Type of bags used by the three clusters of respondents

Figure 3 showcases that respondents who are brand conscious largely use paper bags for carrying their purchases while those who are power conscious prefer plastic bags and those who are energy conservative prefer reusable bags for carrying their purchases.

### 6. Discussion of results

This study has revealed that customers accord importance to the environmental impact of goods and services before purchasing such goods and they prefer to visit shops that are eco-friendly while they do not attach much importance to the environmental reputation of companies dealing with such goods and services. They prefer green products due to their good quality and reliability and are willing to pay a premium price for such products. However, this result contravenes to the results of studies of Thøgersen et al. (2010), Rokka and Uusitaloo (2008), Devinney et al. (2011) which revealed that consumers attach importance to price of the green products before effecting the purchase.

Further, the consumers think that green products can easily be identified and such products save energy, which is indispensable given the current scenario. However, the respondents do not have provision for separating trash at their house. There are reasonably good number of respondents who are conscious about saving power and energy while using green products. However, there is a larger number of respondents who are highly conscious about the brand value of products before deciding about using green products. Hence, eco-products coupled with reasonable brand image can attract more consumers.

Gender, educational qualifications and age of consumers have significant association with their outlook towards green issues. This result is consistent with the results of study conducted by D'Souza et al. (2007). It is quite unfortunate to note that a sizeable number of customers still prefer plastic bags for carrying their purchases. Despite many regulations, this sorry plight persists and it can be avoided not by fines or penalties but by educating people about the adverse implications of using plastics. Hence, the government must organize many programs to educate people about the ill effects of using plastics on the environment, themselves and other living beings.

### Conclusions

Environmental sustainability is a complex but critical goal for corporates and they have started recognizing this and are executing measures towards preserving the environment at a slow but steady pace. They have started implementing consorted efforts such as utilizing recycled inputs for their manufacturing, installing effective pollution control mechanism and minimizing energy consumption. Corporates can charge a premium price for their eco-friendly products whereby they can save the earth as well as make good profits. With environmental concepts such as global warming, unseasonal heat, cold and rains and increasing natural disasters getting due recognition and attention of people all over the globe, companies can survive in the future only if they display more responsive behavior towards saving the environment. Government rules and procedures have also become strict to protect the earth from environmental degradation. People have also been educated about the importance of saving the environment. Taking all these points into perspective, the corporate world should also accord due importance to eco-friendliness and protection and preservation of the environment if they wish to excel in this competitive business environment characterized by the presence of a larger number of knowledgeable customers.

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