



Awareness of consumers regarding environmental sustainability and green consumerism

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Abstract

The ecology and natural resources are deteriorating quickly impacting the sustainability of life on earth. Climate change, global warming, and other serious catastrophes are reconfiguring the ecosystem in various ways. One of the primary sectors that have significantly worsened the environment is the industrial sector. Environmental effects are one of the unfortunate byproduct of the consumption of goods and services by the consumers viz. food, mobility, housing and household products as well as the appliances. Looking at the current scenario, a study was undertaken on "Awareness of consumers regarding Environmental Sustainability and Green Consumerism." The objectives were to find the awareness of the consumers regarding consumption of goods that cause harm to the environment and human health and to impart knowledge about importance of green consumerism. In the present study 120 urban customers were selected randomly and the data gathered through a structured questionnaire was analyzed. The results revealed that the respondents believed green consumerism can save our ecosystem and were well aware of their own duties as consumers. The respondents were of the opinion that green consumerism could save our ecosystem and that plastic was one of the most hazardous sources of environmental deterioration.

Keywords: regarding environmental sustainability, green consumerism, environmental degradation

Introduction

Currently, the world is dealing with a variety of environmental issues that collectively point to an ecosystem change brought by human activity and pose a threat to our way of life. We are faced with an array of environmental problems, which together indicate a change in the ecosystem caused by human activities and challenge our present lifestyles (Bamberg & Moser, 2007) ^[1]. Globally, concerns about issues including climate change, ozone layer depletion, extensive use of natural resources, rising air, water and soil contamination, and rising carbon emissions are only becoming worse. Some gases, such as carbon dioxide, methane, nitrous oxide, water vapour, and chlorofluorocarbons, prevent heat from escaping the atmosphere and react chemically or physically to changes in surface temperature. We refer to these as greenhouse gases. According to a research, these greenhouse gases are responsible for more than 95 percent of the observed rise in Earth's temperature during the past 40–50 years (United States Global Change Research Program). The environment and natural resources are deteriorating rapidly. The earth's limited resources are crucial because it is expected that they will soon exhaust themselves.

The industrial sector is one of the main economic sectors that considerably worsen the environment. Over the past 150 years, the industrial activity on which our modern society depends has increased atmospheric carbon dioxide concentrations from 280 ppm to 412 ppm.

Fortunately, in recent years, there has been a noticeable rise in academic and commercial interest in environmental sustainability. All of these difficulties are causing people to worry about protecting the environment and creating sustainable practices. Concerns about environmental

protection and developing sustainable methods are being raised by all of these challenges. This situation has given rise to the concept of "green consumerism." Consumer's desire for products and services created with environment friendly methods, such as recycling and conserving natural resources, is referred to as "green consumerism." (www.conserve-energy-future.com). Consumer behaviour has evolved in favor of sustainable goods and services as a result of growing consumer awareness of environmental issues (Yang, 2017) ^[2]. Thus, it's critical to know the awareness of the consumers regarding green consumerism and impart the necessary knowledge to maintain environmental sustainability through consumption of green products and services that will help to protect the environment over time.

Importance of green consumerism

Green consumerism is a collective term for the identification and maintenance of both consumer needs and environmental problems. According to Sharma *et al.* (2014), green consumerism is a concept that a consumer would adopt if their daily activities satisfied their desires and requirements while causing little to no harm to the environment. According to Shukla (2015), green consumerism is a strategy for boosting sales by highlighting a product or service's positive environmental effects.

The importance of green consumerism includes

- Reducing the amount of waste generated in the production, packaging and consumption of goods by encouraging reuse-reduce-recycle process
- Reducing emissions produced during the transit of the products as well as releases of pollutants from the industrial sector

- It increases the need for consumption of more environmentally friendly and healthful food sources, which in turn aids in boosting the use of and consumption of locally and organically farmed products
- It all adds up to energy efficiency which eventually boosts savings by lowering utility costs
- It contributes to protecting the environment for foreseeable future.

Objectives of the study

- To find the awareness of the respondents regarding environmental sustainability and consumerism.
- To develop IEC (Information, Education and Communication) material for enhancement of knowledge of the respondents.

Materials and methods

The study was carried out in the Nainital district of Uttarakhand state. A sample of 120 consumers was selected at random, with 60 male and 60 female consumers. Data were gathered using a structured questionnaire that covered questions related to environmental deterioration factors, consumer’s knowledge of how products and services affect the environment, obligations of consumers to safeguard the environment, etc. The data were statistically analyzed using frequency, percentage, and correlation.

Results and discussion

The sustainable development of the ecosystem greatly depends on consumers. Consumerism in today’s world is being impacted by marketing and global needs. However, it is seen as one of the main reasons for the environment’s decline. In order to preserve a sustainable environment, it is imperative to educate consumers about the idea of green consumerism and inspire them to adopt it. The findings and analysis of the information obtained from the respondent’s survey regarding the current study are as follows:

1. Awareness of the consumer’s regarding Environmental Sustainability and Consumerism

1.1 Consumerism and its Impact on Environment

Consumerism is harming the environment by increasing pollutant emissions, destroying forests, eliminating biodiversity, causing climate change, and increasing the amount of waste that is accumulated on Earth.

The data of the present research revealed that 98 percent of the respondents were aware of green products available. Approximately 63 percent of them were identified as eco-conscious shoppers and 96 percent of the respondents were aware of green personal care and beauty products, the majority of which were female respondents. All respondents (100 percent) had heard of organic food products, disposable flatware, and solar energy equipment. Additionally, the research showed that 92 percent of respondents were aware of the connection between green products and the environment. Among all respondents, 97percent were environmentally conscious and 100percent agreed that using green products contributes to environmental protection.

According to Table 1, the majority of respondents (about 98percent) ranked environmental pollution as the most important problem caused due to consumerism. Approximately 93percent of respondents thought that health was a huge concern followed by 90percent who thought that deforestation and trash accumulation were the issues caused

due to consumerism. Greenhouse gas protection (89 percent), resource depletion (85 percent) and increase in global warming (82 percent) were also major problems as indicated by the respondents. Besides these there is damage to bio-diversity and a release of toxic byproducts in the environment is impact of consumerism.

Table 1: Consumerism and its Impact on Environment (N=120)

Impact on Environment	Male	Female	Total
Pollutes the Environment	60 (50.00 %)	57 (47.50%)	117 (97.50%)
Degrade the health	66 (46.66%)	56 (46.66%)	112 (93.33%)
Leads to deforestation	58 (48.33%)	50 (41.66%)	108 (90.00%)
Accumulates waste on Earth	60 (50.00%)	48 (40.00%)	108 (90.00%)
Greenhouse gas production	57 (47.56%)	50 (41.66%)	107 (89.16%)
Resource depletion	53 (44.16%)	49 (40.83%)	102 (85.00%)
Increase Global Warming	46 (38.33%)	52 (43.33%)	98 (81.66%)
Damage to biodiversity	47 (39.16%)	39 (32.50%)	86 (71.66%)
Toxic by-products	41 (34.16%)	37 (30.83%)	78 (65.00%)

1.2 Causes of Environmental Degradation

Degradation of the environment includes the loss of ecosystems, natural resources, a surge in pollution, the extinction of wildlife, etc. Environmental degradation is the term for any harm to the environment and natural resources. The disruption brought on by human activity is the main factor contributing to the environment’s degradation. Urbanization and industrialization, population growth, and the rapid rise in energy and natural resource use have a negative influence on both the environment and humankind. According to the data shown in Table 2, it can be concluded that 100 percent of respondents agree that plastic was the main reason for environmental degradation, followed by roughly 98 percent and 89 percent who believed that industrial waste and greenhouse gases were the cause of environmental degradation, respectively. More than 80 percent of respondents opined that smoking and carbon dioxide emissions were the contributing factors, while 47 percent indicated domestic garbage as one of the factor that is causing harm to the environment.

Table 2: Causes of Environmental Degradation (N=120)

Things that cause harm	Male	Female	Total
Plastic	60 (50.00%)	60 (50.00%)	120 (100%)
Smoke/CO2 emissions, etc.	49 (40.83%)	49 (40.83%)	98 (81.66%)
Domestic Waste	25 (20.83%)	31 (25.83%)	56 (46.66%)
Greenhouse Gases	55 (45.83%)	52 (43.33%)	107 (89.16%)
Industrial Waste	59 (49.16%)	58 (48.33%)	117 (97.50%)

1.3 Environmental Responsibility of the Respondents

According to Stone *et al.* (1995) ^[3], environmental responsibility refers to the condition in which a person expresses his intention to take action in the remediation of

environmental problems while acting as a responsible citizen with the concept of societal environmental wellbeing rather than as a sole consumer with his own economic interests. The environment and natural resources are deteriorating at an extremely rapid rate, thus consumers, who control the market, must take greater responsibility for their purchasing decisions and engage in behaviors that cause the least amount of environmental damage possible. This led to the discovery of the respondent's sense of environmental responsibility.

Majority of respondents i.e., 97 percent agreed that energy-efficient technology should be utilized in homes and offices, according to the data shown in Table 3. A whopping 94 percent of the respondents were of the opinion that it is vital to choose organically cultivated food over processed food. Approximately 84 percent of the respondents said that changing one's lifestyle was a major duty for the next generation and had a pro-environmental attitude, followed by respondents who preferred to purchase high-quality products with warranties against failure or deterioration. Only 5 percent of respondents thought that sharing community resources was crucial.

According to Rex and Baumann (2007) [5], a person's increased environmental concern unquestionably influences his or her propensity for green purchasing. According to Sinnapan and Rehman's (2011) [6] research, consumers would intervene if environmental dangers had a significant negative impact on their health and quality of life.

Table 3: Environmental Responsibility of the Respondents (N=120)

Particulars	Male	Female	Total
Buying quality products warranted against failure or wearing out.	47 (39.16%)	51 (42.50%)	98 (81.66%)
Learning about the materials that are used for manufacturing.	13 (10.83%)	25 (20.83%)	38 (31.66%)
Use of energy efficient equipment in homes/offices	58 (48.33%)	58 (48.33%)	116 (96.66%)
Purchasing products that can be reused/recycle	12 (10.00%)	23 (19.16%)	35 (29.16%)
Community resource sharing	3 (2.50%)	3 (2.50%)	6 (5.00%)
Looking for new and safe ways of waste disposal	39 (32.50%)	40 (33.33%)	79 (65.83%)
Buying local products rather than global products	54 (45.00%)	56 (46.66%)	110 (91.66%)
Seeking for organic/eco-friendly products	42 (35.00%)	54 (45.00%)	96 (80.00%)
Making changes in lifestyle to support future generation	50 (41.66%)	50 (41.66%)	100 (83.33%)
Having a pro-environmental attitude	52 (43.33%)	49 (40.83%)	101 (84.16%)
Using organically grown food rather than processed food	53 (44.16%)	60 (50.00%)	113 (94.16%)
Less use of meat/pork etc. as it require more water during processing	49 (40.83%)	38 (31.66%)	87 (72.50%)
Use of renewable energy sources	39 (32.59%)	23 (19.16%)	62 (51.66%)

1.4 Sources of Information about Green Products

According to data in Table 4, internet was the primary source of knowledge about green products for majority of the respondents followed by magazines (92 percent), T.V. (81.66 percent) and advertisements (80 percent). Besides these newspaper, friends/relatives as well as mobile

messages were the other sources of information about green products. Tomasz Hermaniuk (2015) performed a survey at Rzeszow University to learn more about the primary sources of information for customers concerning green products and the findings showed that 83.08percent of the respondents cited internet as their primary source of information on green products.

Table 4: Source of Information about Green Products (N=120)

Sources of information	Male	Female	Total
Television	44 (10.46%)	54 (45%)	98 (81.66%)
Radio	2 (1.66%)	1 (0.83%)	3 (2.50%)
Newspaper	42 (35.00%)	35 (29.16%)	77 (64.15%)
Magazines	51 (42.50%)	59 (49.16%)	110 (91.66%)
Internet	58 (48.33%)	60 (50%)	118 (98.33%)
Advertisements	41 (34.16%)	55 (45.83%)	96 (80%)
Friends/Relatives	23 (19.16%)	51 (42.50%)	74 (61.66%)
Outdoor media	4 (3.33%)	7 (5.83%)	11 (9.16%)
Mobile messages	24 (20%)	28 (23.33%)	52 (43.33%)

Development of IEC (information, education and communication) material for knowledge enhancement of the respondents

The present study made it evident that consumer, whether male and female, were aware of the environmental damage that products and services they use on a regular basis were causing. To enhance the knowledge of the consumers regarding the importance of green consumer behaviour Information, Education and Communication (IEC) material was developed. It included a comprehensive folder and two poster covering details of the current environmental risks, the idea and advantages of green consumerism, environmental sustainability, green marketing, the availability of green products, etc. The posters were entitled "Reduce, Reuse, Recycle" and "Consumerism and the Environment" and the folder was entitled "Greener Home Managing Skills." The IEC material was then adjudged by a panel of experts and the suggestions given by them were included in this material. The folder and posters were then circulated among the respondents and feedback was taken which revealed that the material prepared was rated excellent as it provided all the important information for environmental safety and greener home managing skills.

Summary and conclusion

It is imperative to conserve natural resources and act sustainably in order to protect the environment and human health from the harmful impacts of industrial pollutants and further economic growth. This situation has given rise to a novel concept of consumption known as "Green Consumerism" of products and services. Consumer desires for goods and services that are being produced using environmentally friendly practices, such as recycling and resource conservation. Consumer's perception towards commodities and services has altered somewhat in recent

years. At least they are well aware about the hazards to the environment that are caused by these good and services. Given the current state of the environment's degradation, it has become imperative to create a sustainable environment, hence it is vital to focus in this area. The data of the present study revealed that majority of the respondents were aware about the causes of environmental degradation among which plastic was one of the most hazardous cause. The respondents were of the opinion that green consumerism can save our ecosystem and were well aware about their own responsibilities as consumers. Therefore, in order to protect environmental sustainability along with human health, it is essential to provide consumers with a wealth of real information about the advantages of embracing green consumerism and becoming green consumers.

References

1. Bamberg Moser. A new meta-analysis of psycho-social determinants of pro- environmental behavior. *Journal of Environmental Psychology*,2007:27:14-25.
2. Yang. Consumer behavior towards green products. *Journal of Economics, Business and Management*,2017:5:160-167.
3. Stone A, Smolen J. Environmental responsibility. *Journal of Environmental Sciences and Technology*, 1995, 46.
4. Tomaz L, Pereira G, Borchardt M, Sellitto M. How can the sales of green products in the Brazilian supply chain be increased? *Journal of Cleaner Production*,2015:47:274-282.
5. Rex E, Baumann H. Beyond eco-labels: what green marketing can learn from conventional marketing. *Journal of Cleaner Production*,2007:15:567-576.
6. Rehman H. Green consumerism. *Journal of Consumer Behavior*,2011:2:43-54.