On a global level, there is an increased awareness of global warming and adverse climate conditions and as a result there is a spur in interest toward environmental protection and sustainable development.

One type of environmentally conscious behaviour is environmental consumerism (green buying)--purchasing and consuming products that are benign towards the environment. The rising number of consumers who prefer and are willing to buy eco-friendly products are creating opportunity for businesses that are using "eco-friendly" or "environmentally friendly" as a component of their value proposition.

The present research paper assesses Indian consumers' pro-environmental concerns, knowledge of environmental issues, awareness of eco-friendly products, effects of income level and educational levels and any potential effect that these factors may have on green buying behaviour.

Today, environmental or green marketing, a strategic marketing approach is a recent focus in business endeavours (Ottman, 1998). Increasing focus on environmental issues can be seen as an indication that pro-environmental concerns have emerged as a potential strategic concern for businesses (Polonsky & Kilbourne, 2005; Menon & Menon, 1997). The belief is that the consumer's pro-environmental concern is one of the determinants of their "green buying" behaviour i.e., buying and consuming products that are environmentally beneficial (Mainieri et al., 1997).

Green marketing is considered as one of the major trends in modem businesses (Kassaye,
Environmental ecological or green marketing are similar terms used in literature, is a way to use the environmental benefits of a product or service to promote sales. Belz & Peattie (2008) stated that green marketing and environmental marketing in the late 1980's focused on green consumers who would be willing to pay premium prices for more environmentally friendly products. Many consumers choose products that do not damage the environment over less environmentally friendly products, even if they cost more. With green marketing, advertisers focus on environmental benefits to sell products such as biodegradable diapers, energy-efficient light bulbs, and environmentally safe detergents. Green marketing encourages consumers to use eco-friendly products and manufacturers to develop more environmentally beneficial products.

OBJECTIVE AND METHODOLOGY

OBJECTIVES

1. To assess if consumers' pro-environmental concerns, awareness of eco-friendly products and knowledge of environmental issues affect their buying of eco-friendly products.
2. To identify if consumers are willing to pay more for eco-friendly products.

3. To identify if education level and income levels affect the buying behaviour on consumers for eco-friendly products.
HYPOTHESIS:

H0: Consumers are not willing to buy eco-friendly products if they are priced at a premium to normal products.

H1: There is no difference in buying behaviour of environmentally concerned consumers and those who are not.

H2: Education level of a consumer does not affect his buying of eco-friendly products.

H3: There is no significant difference in buying of eco-friendly products across all income levels.

IMPLICATIONS

- The study suggests that pro-environmental concern is a likely predictor of green buying behaviour. This creates an opportunity for developing green market focusing on more educated consumers—the same proposition that has worked in the West. Also, consumers want eco-friendly products for green finns or companies which project their image as being green. The right mix of eco-friendly products and service, sales, marketing, PR and management expertise is needed to target and attract the consumers who may be willing to buy eco-friendly products.

- Green marketers should identify such segment of consumers and accordingly design and market products at suitable price levels. Since eco-friendly attributes motivate consumers, hence companies should focus on advertising eco-friendly brand labels, in-store displays and pamphlets. Advertisements campaigns may be used to further promote the use of eco-friendly products.

- Pro-environmental concerns can be raised by advertising that individual buying
behaviour can make a difference and can have an impact on the welfare of the environment. It is also important that companies aiming at developing new eco-friendly products should ensure that products perform competitively.

- Findings from this work also suggest that the segment of consumers willing to pay more for eco-friendly products in India may not be very large. Even in an educated segment like the one chosen for this study, willing to pay premium receives an underwhelming response.

SCOPE OF THE STUDY

Sample size

80 questionnaires were distributed to a conveniently generated sample.

69 total questionnaires were returned with a response rate of 87.25 per cent

Type of Sampling

The samples were selected through Convenience sampling.


Nationality of Sample

The respondents were Indians, mainly residents of Delhi/NCR.

Age group of sample

Age ranging from 15 years to 60 years

RESEARCH METHODOLOGY

Methods of Data Collection: It details the procedure necessary for obtaining the information needed to structure or solve marketing research problems. The present study is a descriptive research and involves the use of “Survey Method”. Quantitative data collection will be achieved via self-administration of the questionnaire. Both the personal and electronic survey methods can be used as the mode of administration. In personal method, we will use in-home and mall intercept method. In electronic method, links will be sent to respondents; also internet can be used as a medium to conduct the survey.

Questionnaire Development
The questionnaire was structured as follows.

The first part contained 8 dichotomous questions with Yes and No as two possible responses. These questions measured general consumers' knowledge about environmental issues, awareness of eco-friendly products, trust in performance of eco-friendly products and their willingness to pay more for such products.

The second part of the questionnaire consisted of a 5-point scale, used to explore and assess pro-environmental concerns and any potential effect of such concerns on consumers' green buying behaviour. The survey scale consisted of 11 items. Scores on the scale items varied from a low of 1 (strongly disagree) to a high of 5 (strongly agree), with disagree, neutral, and agree as interval points.

The questionnaire also included general demographic questions such as age, gender education.

DATA ANALYSIS

TESTS APPLIED

- One way ANOVA
- Reliability (Chronbach alpha)
- Correlation
- Factor analysis
<table>
<thead>
<tr>
<th>Case Processing Summary</th>
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<table>
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<tr>
<th>N</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Valid</td>
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<td>Excluded</td>
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Note: a indicates a footnote or additional information.
a. List-wise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha

N of Items
The questionnaire was tested for its reliability. The Cronbach Alpha reliability coefficient for all items in the questionnaire was found to be 0.807, which is considered good for analysis.

**FACTOR ANALYSIS:**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.

0.863

Bartlett's Test of Sphericity
Factor Analysis Interpretation:

Scree Plot:

The Scree Plot shows that 2 components have been extracted (those which have Eigen values
KMO & Bartlett Test

The value comes out to be 0.583 which is considered acceptable.

From the factor analysis of the "statements we can state that 2 primary factors emerged. Thus, we name the first which asks questions on concern about environment as pro-environment concern. The statements which are now a part of pro-environmental concerns include

1. I would describe myself as environmentally responsible.
2. If I understand the potential damage to the environment that some products can cause, I do not purchase those products.
3. I have convinced members of my family or friends not to buy some products which are harmful to the environment
4. I am concerned about the current environmental state the world is in.
5. It is of no use worrying about environmental issues: I can't do anything about them.
6. I would walk an extra mile for purchasing an environment friendly product.

Similarly, second factor is associated with buying behaviours of consumers. Hence, we name it buying behaviour.

1. I care about buying environmentally friendly products.
2. When I purchase products, I try to make efforts to buy products that are low in pollutants.
3. I have purchased light bulbs that were more expensive but saved energy.
4. I make every effort to reduce the use of plastic bags.
5. I will not buy a product if the company which sells it is environmentally irresponsible.

Anova test on education level vs awareness level
Levene Statistic

<table>
<thead>
<tr>
<th>Sample Question</th>
<th>Do you think purchasing eco-friendly products will contribute to the sustainable future?</th>
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<tr>
<td>df2</td>
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<th>Sample Question</th>
<th>Do you consider your effect on the environment as a consumer before purchasing?</th>
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<tr>
<td>18.536</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>62</td>
<td></td>
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<td>.000</td>
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</table>
Sample Question 1 [Do you consider if the product and its package are designed to be recycled before making a purchase?]

ANOVA
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<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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<tbody>
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**Sample Question 1**: Do you think purchasing eco-friendly products will contribute to the sustainable future?

**Between Groups**

1.762

3
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<td>2.821</td>
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**Within Groups**

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<td>.208</td>
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**Total**

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<td>14.667</td>
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Sample Question 1: Do you consider your effect on the environment as a consumer before purchasing general day to day products?

Between Groups

.498

3

.166

.646

.588
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<tbody>
<tr>
<td></td>
<td>16.439</td>
</tr>
<tr>
<td></td>
<td>65</td>
</tr>
</tbody>
</table>
Sample Question 1: Do you consider if the product and its package are designed to be recycled before making a purchase?

Between Groups

.861

3

.287

1.155

.334

Within Groups

15.397

62
When ANOVA was applied on the Education Level versus Awareness level to check if there is a significant difference in awareness levels for all education levels {Matriculate, Graduate, Post-Graduate, Doctorate} with different Question of Awareness {as found by factor analysis of dichotomous questions}.

The result revealed that there is no significant difference in awareness levels for question
pertaining to contribution of Sustainable future for eco-friendly products {Significant Value 0.046}

However, when ANOVA was applied on “effect on environment for day to day purchases” and “Recycling of Products” it was found to have significant difference. Thus, we say education level plays a role in awareness level of Consumers

Correlation

The correlation between the pro-environment concern & the buying behaviour is found out to be taking out the average of similar variables and then the mean of these variables is correlated with each other. For pro-environment concern, the mean of the statements 1,4,7,9,10 and 11 were used. For buying behaviour the mean of statements 2,3,5,6 and 8 were taken. The correlation value came out to be 0.69 which is a strong correlation. Thus, we can say that if the consumer is environmentally concerned, then he buys eco-friendly products in Indian Context.

FINDINGS & SUGGESTIONS

One of the objectives of this study was to assess if pro-environmental concerns of consumers affect their green buying behaviour. The results indicate that overall environmental concerns is positively related with consumers' green buying or green purchase decisions in the context of their general purchasing behaviour. From the findings and results, it may be suggested that educated consumers tend to be aware of eco-friendly products and are also knowledgeable about environment related issues.

Within the sample frame of this study, it may also be suggested that consumers’
pro-environmental concern is a likely predictor of their green buying behaviour, although such conclusions may only be drawn after a more rigorous analysis based of a randomly generated dataset. The study suggests that educated Indian consumers are concerned about the environment and such pro-environmental concerns influence their green buying behaviour to some extent, thereby leading to purchase of eco-friendly products.

It is worth noting that respondents exhibit low levels of willingness to pay a premium price for eco-friendly products, suggesting that green marketers in India may likely consider cost cutting strategies. The results also show that fewer respondents know about environmental problems and their solutions. Environmental concern is still not a strong motive for majority of these well-educated respondents to purchase eco-friendly products.

**Limitations:**

1. This research was conducted by generating a non-random sample and hence the results may not be generalized beyond the sample frame.
2. Results support a generally prevailing notion that more educated people tend to be green buyers and hence warrant a larger study conducted on a randomly selected sample
3. The present research was conducted using a self-reporting questionnaire and hence respondents' bias may be a concern, especially in regard to the willingness to pay premium.

**Recommendations:**

- Demographics are less important than attitude. A key result of this study is that a higher income or education level does not predict which eco-grouping consumers fell into -
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eco-considerate or eco-wary - although it should be underscored that our survey population did not dip below the $50,000 annual household income mark.

- This is an important insight for marketers. The higher a decision-maker climbs financially does not necessarily affect environmental purchase consideration. Once households pass the median income, income and education are a wash in the green consideration landscape.

References


This article has been authored by Rohit Nema from LBSIM