CHAPTER 5
DISCUSSIONS, INTERPRETATIONS AND SUGGESTIONS

The results derived from the study held statistical reliability and validity. This chapter takes up objective wise discussion on the explorations of the study done by the researcher and compares it with earlier researches so as to determine the extent to which it supports or negates the findings of the same. The chapter concludes by articulating the suggestions that emerge from the conclusions drawn by way of developing a model of Determinants of GPB of Indian customers towards electronic products and finally identifies the scope for future research in this area.

5.1 Findings related to the first objective of tracing out the developments in the adoption of green marketing concept in electronic companies in India

This objective was achieved through both primary and secondary sources of information. The findings are as follows:

1) All the companies which are international in nature are performing well towards ecological cause through their policies, raw material acquisition, manufacturing processes, energy efficacy, e- waste handling etc.

   A clear comparison of the companies (table 39) reveals that the ruling brands in the market (like Wipro, Nokia, HP etc.) have adopted the green concept with meagre differences amongst them but some of the core Indian companies still lag behind like Videocon, Bajaj, Orient, Voltas, Micromax.
Table 39: Summary of Progress of Green Marketing in Multinational and Indian Electronic Firms

**Multinational Companies**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the Company</th>
<th>Major Green Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hewlett Packard</td>
<td>The HP Eco Solutions program makes it easier for the customers than ever to identify HP innovations, products and services. They communicate well about how their products and services can reduce environmental impact and save money while delivering the high quality that is expected. They continually work to reduce energy consumption, green house gas emissions, paper use, water consumption, and waste. Efficient and productive operations that use less energy and reduce associated green house gas emissions are adopted. They also help recapture value from existing equipment by trading it in for new HP technology.</td>
</tr>
<tr>
<td>2.</td>
<td>Nokia</td>
<td>Nokia has been named one of the ‘Best Global Green Brands’ of 2012 in a report from brand consultancy Interbrand. At Nokia, they have reduced the emissions of own facilities and those of suppliers. They have been successful in increasing energy efficiency throughout operations and using green energy where possible. They have not only saved resources through simple initiatives such as cutting down on packaging and using sustainable, ethically sourced materials in products but they are also using their global reach and mobile technology expertise to encourage customers to adopt greener, more sustainable lifestyles. They are involved with the organisations such as WWF and IUCN (International Union for Conservation of Nature) to develop and implement environmental projects around the world.</td>
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<tr>
<td>Sr. No.</td>
<td>Name of the Company</td>
<td>Major Green Initiatives</td>
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<tr>
<td>3.</td>
<td>Acer (Australian Council for Educational Research)</td>
<td>They have developed an environmental management system that not only helps in saving energy and ensuring appropriate treatment of waste in all of their offices, but also work to raise the environmental awareness of employees. Their products embody the concepts of the precautionary principle and individual producer responsibility (IPR) as they endeavour to reduce their environmental impact at each stage of the product lifecycle and provide appropriate recycling channels to help consumers perform their part for the environment.</td>
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<td>4.</td>
<td>Dell</td>
<td>Dell adopts the world’s toughest environmental standards such as Europe’s RoHS (Restriction of Hazardous substances) and REACH (Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals) and goes beyond these standards with chemical use policy by reducing or eliminating other substances even if they are not restricted. They also endeavour to achieve environment friendly life cycle of the products with smarter material, lesser energy consumption, end of life disposal and recycling.</td>
</tr>
<tr>
<td>5.</td>
<td>Apple</td>
<td>Apple reports environmental impact comprehensively. Apple has also eliminated harmful chemicals from thousands of components, putting their efforts ahead of others in their industry. They use environmentally conscious materials, smaller packaging and every single Apple product not only meets but exceeds the United States Environmental Protection Agency’s strict ENERGY STAR guidelines for efficiency with longer product life and recyclability.</td>
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### Indian Companies

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the Company</th>
<th>Major Green Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Wipro</td>
<td>Wipro is the top Scorer on the 18th edition of Greenpeace Guide to Greener Electronics (November, 2012). It performs outstandingly on disclosing and setting targets for operational and supply chain green house gas emissions and renewable energy supply, clean energy policy advocacy, recycling efforts, product energy efficiency, avoidance of hazardous substances, environment friendly product life cycle. Wipro is the top scorer for committing to reduce its absolute emissions by 44 per cent by 2015 from a base year of 2008 (highest among top Indian and international companies). Wipro provides a detailed action plan to meet its annual reduction targets, including energy efficiency measures and investment in renewable energy through direct generation and purchase. <strong>Wipro</strong> has 80 per cent of its total products free from PVC and BFR. All of Wipro’s new products currently meet latest Energy Star compliance, while 52 per cent of their products exceed ES 5.0 standards. Wipro continues to receive the maximum score for its effective take-back policy and performance on the collection and recycling of post-consumer e-waste.</td>
</tr>
<tr>
<td>2.</td>
<td>Hindustan Computer Limited (HCL) Infosystems</td>
<td>HCL Infosystems is included in the global release of the 18th edition of the Greenpeace Guide to Greener Electronics for the first time and secures 13th position (sharing with SHARP). HCL scores well on the disclosure of greenhouse gas emissions from its entire operations, although the company fails to provide information about its employees’ travel and setting an ambitious target for renewable energy use. They provide convenient information to their customers in India to enable them to access its take-back service. But somehow, they lack clarity on energy</td>
</tr>
<tr>
<td>Sr. No.</td>
<td>Name of the Company</td>
<td>Major Green Initiatives</td>
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<tr>
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<tr>
<td>3.</td>
<td>Videocon</td>
<td>Under the aegis of the Ministry of Environment and Forest, Government of India, End of Life Cycle (EOL) product recycling program, applicable from 1st May 2012 onwards they have initiated their rigorous e-waste recycling efforts.</td>
</tr>
<tr>
<td>4.</td>
<td>Godrej</td>
<td>Although they have no major green initiatives as reported in their public domain, they have bagged some laurels on the national front such as National Green Governance Award in 2005 for conservation of 1750 acres mangroves forest, LEEDs Platinum Rating for CII- Sohrabji Godrej Green Business Centre, Green guard Certification for Stallion Green workstations, Spacio Green workstations and Unite Green storages. They design and keep updating their environmental policy over the years and strive towards achieving the environment protection goals.</td>
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<tr>
<td>5.</td>
<td>Onida</td>
<td>The company gives special emphasis to green initiatives in their policies and meet the mandatory environmental regulations and rules.</td>
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<tr>
<td>6.</td>
<td>Bajaj</td>
<td>The Company is committed to prevent the wasteful use of natural resources and minimize any hazardous impact of their activities on the ecological environment but have not reported green accomplishments as such.</td>
</tr>
</tbody>
</table>
2) The reporting mechanism lacks uniformity and regularity. It can be viewed through a glimpse of the companies under study:

**Table 40: Checklist of the Companies which are Reporting Their Green Performances**

<table>
<thead>
<tr>
<th>Electronic Companies reporting on their green efforts</th>
<th>Electronic Companies not reporting on their green efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Wipro</td>
<td>*Bajaj</td>
</tr>
<tr>
<td>*HCL</td>
<td>*Videocon</td>
</tr>
<tr>
<td>Nokia</td>
<td>*Onida</td>
</tr>
<tr>
<td>Samsung</td>
<td>*Godrej</td>
</tr>
<tr>
<td>LGE</td>
<td>*Micromax</td>
</tr>
<tr>
<td>Apple</td>
<td>*Voltas</td>
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<tr>
<td>Dell</td>
<td></td>
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<tr>
<td>Sony</td>
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<td>Philips</td>
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<td>Toshiba</td>
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<td>HP</td>
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<td>Panasonic</td>
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<td>Toshiba</td>
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<tr>
<td>Lenovo</td>
<td></td>
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<tr>
<td>Acer</td>
<td></td>
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<tr>
<td>Sharp</td>
<td></td>
</tr>
<tr>
<td>Microsoft</td>
<td></td>
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</tbody>
</table>

* Companies of Indian origin

3) The companies are improving on their environmental efforts year by year (as explained in the chapter on Green Footprints of Electronic Companies in India)
It is very clear from above revelations that companies have come long way to reduce the environmental degradation by their products from the manufacturing to the disposal. But still more efforts are required to achieve the desired results. Manufacturing is under the control of the company but not the sales and the disposal of their products. Some strata of Indian customers want to associate themselves with companies and electronic products that are eco-friendly and they are also willing to pay more for these (Aswal C. and Kadyan A., 2013). But they are not able to do so because majority of people suffer from cynicism, lack of awareness and believe companies leverage on green products (Kumar, S., Garg, R., & Makkar, A., 2012).

5.2 Recommendations to make the green efforts by the electronic companies in India robust and more fruitful

The following recommendations are made by the researcher in context to the above:

1) Developing the Institutional and Government Agencies to authenticate the Environmental claims by the Electronic Companies

Some agencies through the consortium of government, industry and non government organizations should be developed to adopt stricter check mechanism over the environmental claims of the electronic companies so that they do not go the way of Green wash. This would help in inculcating the green purchase trust and intention amongst the Indian customers. It was found that majority of respondents are aware of eco- friendly products and tend to choose these products but are not very confident about the quality and therefore, do not trust eco- friendly products (Ishaswini and Saroj Kumar Datta, 2011). Green purchase trust and intention are directly related to GPB (Yu- Shan Chen, Ching- Hsun Chang, 2012). Thus, an effort towards authentication would also help in increasing the customers’ trust in the information on green achievements of the companies over the years which in turn can increase the demand for their products.

Also, there should be regularity in verification of the manufacturing practices of the companies and the environmental claims made by them. This would also help in increasing the trust of the customers in companies and their messages.

2) Financial and Infrastructural Support by the Local Authorities

The recyclability, recycling arrangements and reuse options should be supported by the local authorities to make the endeavour a success. This would provide ease to the
people who face problems in carrying the products to the recycling centres. Such scrap sellers and local vendors should be paid well to motivate their participation in the recycling efforts.

3) **Corporate initiatives towards educating the society about the critical environmental issues**

Companies should work towards educating the customers about the criticality of the growing environmental problems, and motivating the customers to increase green purchases through educating them about the role they can play in sustaining the environment. Environmental awareness will pave the way to increased green purchases in India (Sahu T. and Nagendra A., 2013). If more and more customers will be aware and convinced regarding the societal and environment issues; the more they shall be involved in pro-environmental and pro-social behaviour (Panni, 2006; Mostafa, 2009).

4) **Recognizing and rewarding the green customers**

As it was revealed in case of HCL that the company has failed to achieve the desired level of purchases and recycling because of non cooperation of Indian customers to some extent, the company can improve their green efforts through proper motivation of its customers. One such strategy can be of rewarding and developing a recognition mechanism for those who are availing the product righteously in an environment friendly manner throughout the life cycle of the product. This will help in motivating the customers to keep intact with the companies in sustaining and improving the environment. It may include the exchange offers, cash coupons, certificates and similar other systems.

5) **Globalised Evaluation and Reporting Regulations**

Rules should be framed for obligatory and uniform reporting of environmental performances. The governments and environment agencies across the globe (as suggested to be developed in point 1 above) should formulate uniform rules and regulations defining the parameters on which the companies shall be evaluated. This will make the reporting procedure mandatory, comparable and easy to implement.
6) **Greater focus on research towards greener practices**

Financial and infrastructural help from the Industrial associations, government agencies should be given to Indian electronic firms to give impetus to innovations governed by the motives of environmental protection and improvement in the electronics industry. Governmental, Non Government Organisations and middlemen support to the national electronic companies will go a long way to enhance their environmental initiatives and adoption of the green concept in its true sense.

7) **Advanced energy efficacy rating agencies**

More specialized rating agencies for electronic companies and other such measures should be taken at both national and international level to increase the morale of the organisations towards adoption of green concept.

All the above mentioned strategies and some other thoughtful actions can strengthen and broaden the environmental perspectives of electronic firms in India to a great extent.

5.3 **Findings related to the second objective of studying the level of awareness and sources of information about eco friendly electronic products.**

The objective was achieved through primary data collection. The findings reveal:

1) 61.2 per cent of the respondents acknowledge the fact they are aware about the eco friendly electronic products which means majority of customers in the sample claim that they have awareness about such products in general. This supports the earlier study in India by Ishaswini and Saroj Kumar Datta in 2011.

2) Whereas, 59.8 per cent respondents accept that they could identify eco friendly electronic products. This percentage is lower by meagrely 1.4 per cent than those who claimed that they are aware about the green electronic products. A study in Australia during 2010 by Macquarie University also revealed that although there has been increase in awareness and improvement in attitude towards eco friendly electronic products, there was still lack of knowledge about brands and products in eco friendly category. So, the study is replicated in context to India for necessary action to be taken.
3) 68.6 per cent of the respondents i.e. even a greater number than those who said that they are aware about eco friendly electronic products, agree that they look for energy saving stars before buying an electronic product. This gives a clear indication that knowingly or unknowingly people tend to look for at least energy saving stars and thus this is one of the most popular attribute of electronic products which is a step towards building green purchase behaviour.

4) 62.6 per cent respondents expressed that they check for bio safe emissions before buying electronic products which shows that they were well aware of this attribute of green products. This percentage is still higher than those who claim to be aware of or being able to indentify eco friendly electronic products but lesser than those who look for energy saving stars before buying eco friendly electronic products.

5) Therefore, the order of awareness levels, as responded by the respondents reveal that maximum number of customer look for energy saving stars followed by bio safe emissions, further followed by the number of respondents agreeing upon the general awareness of the products and finally the respondents who think that they can identify such products. All these above mentioned revelations indicate that although most of the people claim to be aware of such products, some of them are still not confident on being able to identify such products.

6) Next, the overall level of awareness was measured using Confirmatory Factor Analysis and factor scores. According to which, 64.35 per cent have high level of awareness, whereas 30.56 per cent have moderate level of awareness and only 5.09 per cent have low level of awareness. That means majority of people are well aware about the green electronic products.

7) Regarding the sources of information about the green electronic products, the responses reveal that electronic media (45.50 per cent) is the most popular source of information followed by friends (38.20 per cent), print media (37.69 per cent), dealer (32.76 per cent), colleagues (28.35 per cent) and family (28.35 per cent). The other sources (3.90 per cent) include students, teachers and neighbours primarily. Although the level of awareness has been studied earlier but there is no
supportive study as to the sources of information, therefore, it serves as an important clue to marketers to develop their information strategies.

5.4 Recommendations to improve the awareness level of customers and escalating the sources of information for green electronic products

On the basis of above findings the suggestions put forward are:

1) *Rigorous informative campaigns through media and educational institutions*

   The level of awareness among the customers can be improved and brought to hundred per cent with rigorous efforts by the companies in which media and education can play an important role.

2) *Developing the identification skills of customers*

   People need to develop confidence about their identification skills of green electronic products as they are skeptical about being able to judge the products on any other attributes other than energy star rating and bio safe emissions. They are ignorant about which ingredients and chemicals should be checked in electronic products to make an eco friendly purchase in true sense with confidence. A greater dissemination of knowledge about harmful chemicals will help the customers in developing confidence in their identifying skills. For the purpose, the information sources and educational literature should focus on inclusion of related subject matter in near future.

3) *Emphasis on e advertising*

   Electronic companies should invest more on electronic media advertising as it is the most informative source as per the results of this study. It derives double benefits of saving the costs of promotion and larger reach in terms of customers.

4) *Strengthening the middlemen communications*

   The dealers who are the actual link between the manufacturer and the customers should contribute more towards educating the customers. Other channels of communication should also be worked upon to perform better.
5.5 *Findings related to measuring the level of willingness to purchase green electronic products and the factors affecting willingness to purchase such products.*

The level of willingness was measured in two ways: firstly through statements and secondly through an open ended question on how much extra were the respondents ready to pay. The findings were:

1) 57.5 per cent respondents showed their preference towards green products over ordinary products.

2) 57.7 per cent respondents stated that they would buy such products only if they won’t have to compromise on quality of the products. Only 30.6 per cent of the respondents were determined to purchase green electronic products even if they had to compromise on quality of the product, which is much lower to the percentage of respondents in the prior statement (57.5 per cent) which indicates that although more people were willing to purchase green electronic products, they won’t do so at the cost of compromising the quality of product. Earlier in Australia, D'Souza, C., Taghian, M., Lamb, P., & Peretiatkos, R. (2006) also found in their study that customers were not tolerant of lower quality and higher prices of green products. A study in Pakistan (Ali A., Khan A. A., 2011) revealed readiness to buy green products but without compromising on quality and prices. In India also, despite of awareness and positive attitude towards green products, people were not very confident about the quality and therefore, do not trust eco-friendly products (Ishaswini and Saroj Kumar Datta, 2011) which reduces their willingness to purchase such products.

3) 60.1 per cent of the respondents liked the idea of purchasing green electronic products which reveals a strong intention to purchase such products whereas 29.5 per cent disliked the idea of purchasing such products and 10.4 per cent had not made up their mind. This information is crucial for the industry as there are still around 39.9 per cent customers who can add to the market potential if taken care of through proper strategies.
4) As far as overall level of willingness is concerned, it was measured by using factor analysis.

<table>
<thead>
<tr>
<th>Level of Willingness</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>16.30</td>
</tr>
<tr>
<td>Moderate</td>
<td>55.18</td>
</tr>
<tr>
<td>Low</td>
<td>28.52</td>
</tr>
</tbody>
</table>

5) 57.9 per cent of the respondents were ready to pay more for green electronic products. Earlier a study on “Practice of green marketing in electronic industry” conducted in 2013 by Aswal and Kadyan also reveals that customers want to associate with companies and products that are eco friendly and they are also willing to pay more for these. The results of the present study reveal that amongst these 57.9 per cent people, the details of their willingness to pay more were as follows:

<table>
<thead>
<tr>
<th>Percentage in money to be paid extra</th>
<th>Percentage of respondents who are ready to pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 to 10</td>
<td>33.0</td>
</tr>
<tr>
<td>10 to 20</td>
<td>28.3</td>
</tr>
<tr>
<td>20 to 30</td>
<td>19.5</td>
</tr>
<tr>
<td>30 to 40</td>
<td>7.1</td>
</tr>
<tr>
<td>Above 40</td>
<td>12.1</td>
</tr>
</tbody>
</table>

This reveals that maximum customers are ready to bear only 10 per cent premium cost for the eco friendly electronic products and the number goes decreasing as the percentage goes up. Although the results are contradictory to the earlier study done in 2011 on highly educated Indian customers (Ihaswini, Datta, S. K., 2011), where it was found that consumers are willing to buy eco-friendly products but not many are willing to pay a higher price for such products. The current results may be due to the improvement in the standard of living of Indians over the span of three years due to the expanding size of middle income group in India. Also, the results support the study by Modi and Patel conducted in 2013.
Another important finding was that there exists a significant correlation between willingness to purchase and willingness to pay more for eco friendly electronic products. The results were similar to an earlier study in US during 2004, where the customers who placed greater importance to green labels in their purchase (which reveals willingness to purchase eco friendly products) were willing to pay more for certified forest products (Anderson R.C., Hansen, 2004). This finding can be utilised well in the electronic segments where the costs are difficult to be cut down. By arousing willingness to purchase among the customers, price premium can be charged for the high costs involved.

As far as the factors affecting willingness to purchase are concerned, Structural Equation Modelling was used to develop a model. The model deduced from the study as discussed in the earlier chapter revealed that Environment Knowledge and Awareness, Social Effect, Environmental Attitude, Knowledge about the Eco Friendly Electronic Products, Perception towards the Eco Friendly Electronic Products and Perceived Consumer Effectiveness affect the Willingness to purchase eco friendly electronic products significantly (Sahu T., Nagendra A., 2013; Bhatia, Mayank, Jain, Amit, 2013).

Similar to the fundamental study by Y.K. Ricky Chan (2001) in China, where it was found that subject’s man nature orientation, ecological effect and knowledge affected attitude towards green purchase which in turn affected the green purchase intention, the model in the present study reveals a significant positive effect of Environmental Knowledge and awareness, perceived consumer effectiveness and environment attitude on green purchase intention i.e. willingness to purchase green electronic products. Another study in Switzerland related to purchase of washing machines and bulbs revealed that environmentally aware customers preferred eco labelled products. The results of the present study are also supportive to the study by Han H., Hsu L. et. al. (2009) which claims that overall image perception significantly affects the willingness to pay more. But as contrary to many of the earlier studies which state that social influence or word of mouth or collectivism has positive impact on willingness to purchase; the study reveals that social effect had significant negative impact on willingness to purchase. The
reason for this may be that, the customers are more agile and rational in making their buying decisions rather than following the stampede of buying whatever others suggest to buy or they actually buy. Customers now-a-days study the features of products before they buy any product. This is a good signal to the marketers since, the experience and perception of dissatisfied customer or brand conscious customer would not hamper the willingness to buy green electronic product by another customer who would follow his own rational, cognizant approach to buy an eco friendly electronic product.

Among the various factors affecting Willingness to purchase green electronic products, Perception towards the green electronic product had the most significant impact on willingness to purchase green electronic products as per the results of the present study. This was in conformity to the various earlier studies done in various nations (Terenggana, Supit et. al., 2013, Ahmad and Juhdi, 2008; D’ Souza, Taghian et. al., 2006; Anderson and Hansen, 2004; Blend and Ravenswaay, 1999; Bhattacherjee,2002; Gefen, 2002).

Perceived Consumer effectiveness was the second strongest predictor of willingness to purchase of Indian customers. Kinnear et al., 1974; Balderjahn, 1998; Ellen et al., 1991; Berger and Corbin, 1992; Roberts, 1996; Roberts and Bacon, 1997; Straughan and Roberts, 1999; Lee, 2008; Punitha Sinappan and Rahman, 2011; Awad, 2011; Hans Ruediger Kaufmann, Mohammad Fateh Aliu Khan Panni and et al., 2012; Albayrak T., Caber M. et. al., 2013 also found that Perception is the most important predictor of green purchase behaviour.

It was followed by Environmental Knowledge and awareness, Environmental attitude, Knowledge about the green electronic product and lastly Social effect. The present study hence supports that psychographic variables are more important as compared to demographic variables in determining the willingness to purchase (Kassarjian, 1971; Anderson and Cunningham, 1972; Banerjee and McKeage, 1994; Chan, 1999; Awad, 2011; Roberts, 1996; Straughan and Roberts, 1999; Jain, S. K., & Kaur, G., 2006; Akehurst, Afonso et. al., 2012).
Government efforts were not found to affect the willingness to purchase green electronic products. Although an Indian study in 2013 with businessmen in Ankleshwar revealed that perceived government legislation significantly affected the attitude towards green electronic products (Pandya, Amit R.; Mavani, Pratik M., 2013); but, since the focus of study was only on businessmen’s attitude and that too of a particular city, the results ought to vary for a larger sample with wider geographical area (as it is in the case of present study). Similarly, environmental concern was not found to be a significant predictor of green purchase behaviour of Indian customers towards electronic products. The results of present study support the results of study done in Turkey where influence of Environmental concern was decreased by mediating variable of scepticism as it was found that since the Indian customers did not have much trust in the company’s messages, environment concern did not affect the willingness to purchase significantly (Albayrak T., Aksoy, Caber M., 2013)

The demographic variables do not affect the willingness to purchase significantly according to the result of the present study. Only income and age had a meagrely significant impact on willingness to purchase green electronic products. Gender also was not significantly relevant (Chen and Chai, 2010).

Trust in company’s messages also did not reveal a significant impact on willingness to purchase. In an earlier study, Tang & Chi (2005) had found that trust has no significant effect on purchase intention among Taiwanese customers. In a similar study in Australia, it was found that customers’ corporate perception related to their prior objective of profit maximization than giving much importance to reducing environmental impact were the significant predictors of customers’ negative perception whereas their past experience with the product motivated them to buy such products (D’ Souza C., Taghian M., Lamb P. and Peretiakos R., 2006). In the Indian context, the distrust may be due to the reason that the customers do not have a confidence over themselves in identifying green electronic products completely. But due to the positive perception they have about such products with the little knowledge that they have about the product and their perceived consumer effectiveness regarding doing something good for the
environment through buying of such products, they become willing to purchase such products. Although the impact of trust on willingness to purchase green electronic products has not been studied in context of India exclusively, study by Terngganna C.A., Supit H. et. al. in 2013 in Indonesia contradicts the present results. This may be due to differences in the trust level of the customers in the two nations.

5.6 Findings related to identifying factors determining the purchase behaviour of Indian customers towards green electronic products

Finally, the model of factors affecting Green Purchase Behaviour (GPB) (by using Structural Equation Modelling) was developed and analysed to accomplish the objective of identifying factors determining the purchase behaviour of Indian customers towards green electronic products.

The analysis of the model reveals that in continuation to the earlier model of factors affecting willingness to purchase green electronic products, all the factors of the previous model were significant in explaining GPB with the mediating effect of Willingness to purchase green electronic products. Many of the similar models have been developed by scholars from various countries where different factors were studied to have an impact on green purchase intention which in turn had its impact on green purchase behaviour (Chan Ricky Y. K., 2001; Blend and Van, 1999; Finisterra do Paco, A. M. et. al.; 2008; Young, Hwang et. al., 2008; Mostafa Mohamed M., 2009; Sinnappan, Rahman, 2011; Wahid, Rahbar, 2011; Cheah and Phau, 2011). But through this study an attempt was made to develop a comprehensive model which considers all the factors which were previously studied in fractions in one way or the other.

Apart from the willingness to purchase green electronic products, Concern for eco friendliness (i.e. environmental friendly behaviours in general related to disposals, purchase of other category of products, raising environmental awareness, need for more environmental rules and regulations) had a significant direct effect on GPB.

Trust did not have significant effect on green purchase behaviour of Indian customers. Although the customers are still sceptical on truth behind the green claims made by the electronic companies but due to the other relevant factors like Perception about the product, Environmental Knowledge and Awareness, Knowledge about the
product etc, Indian customers purchase green electronic products (as discussed earlier in the previous pages).

Age is the only demographical variable which was found to affect Green Purchase Behaviour significantly although the impact is very less. Therefore, the results of the study support the various earlier studies conducted by Punitha Sinnappan and Azmawani abd Rehmaan, 2011; Christopher Gan et. al., 2008; D’Souza et al., 2007; Ottman et al., 2006; Roberts, 1996 which revealed that age showed significant relationship with green purchasing behaviour. Further, Soonthonsmai (2009) noted that consumer’s green purchase intention has positive correlation with different age and income group but education did not influence intention to purchase green products. In the present study also, although income seems to have meagre effect on GPB, it is extremely weak to be justified as a predictor of GPB. No other demographic variable other than age and income, revealed to have a significant effect on GPB in the study.

Some of the earlier studies revealed that psychographic variables are more important than demographic variables which was further validated by this study (Kassarjian, 1971; Anderson and Cunningham, 1972; Banerjee and McKeage, 1994; Chan, 1999; Awad, 2011; Roberts, 1996; Straughan and Roberts, 1999; Jain, S. K., & Kaur, G., 2006; Akehurst, Afonso et. al., 2012.

Willingness is more powerful predictor of GPB than Concern for eco friendliness which means that although the people have an eco conscious behaviour in general life, they also need to have strong willingness to purchase eco friendly electronic products to actualize into GPB.

5.7 Recommendations to improve willingness to purchase green electronic products and actual purchase behaviour

Keeping in view the above findings, following recommendations are suggested in Indian scenario:

1) Greater focus on customers with low or no willingness

There are 39.9 per cent customers who can add to the market potential if taken care of through proper strategies. This data provides future market potential for the companies dealing in green electronic products. The companies should focus on these customers by developing better communication and marketing strategies.
During the study it was found that Indian customers do not trust the companies’ messages and some of them have poor perception towards such products. Since, perception is the strongest predictor of willingness to purchase green electronic products; companies will have to make rigorous well planned efforts to improve the faith of people in the companies’ efforts and claims. Some of the earlier recommendations in the study regarding authentication of reporting on green achievements and their further certification would further help in doing so.

2) **Greater focus on quality improvement and price reduction**
As, is revealed from the present study, the customers are rarely ready to compromise on quality while taking purchase decisions towards green electronic products. Also, majority of the customers are ready to pay only upto 10 per cent premium price. The company should focus on technologies and mechanisms which reduce the overall costs without foregoing the quality of products. This becomes even more important because of the finding that most of the customers are ready to buy only cost effective products.

3) **Improving the perception towards green electronic products**
In the light of the results from the model of willingness to purchase green electronic products, perception towards the green electronic products is the strongest factor affecting willingness to purchase such products. Companies should increase the frequency of communications and improve the content in order to perk up the company’s goodwill and in turn the customer’s perception towards the product. The transparency in companies working should be enhanced so that the people are able to understand the product well in the right sense and in turn build a better perception about the product.

4) **Customer recognition and retention**
The second major predictor affecting the willingness was perceived consumer effectiveness which can be improved through giving recognition to the customer on buying such products through monetary and non monetary measures like issuing a green certificate or cash coupons on each sale or convincing the
customers on how the use of such product is going to contribute and improve environmental state.

5) **Improving the green IQ**
   Next predictor environmental knowledge and awareness can be improved through greater focus on environmental issues and green marketing in education, developing more elaborated advertisements and organizing more events on common platforms regarding discussions on the impact of electronic products on environment along with solutions. This strategy would also help in improving knowledge about the product.

6) **Law of Inheritance**
   Environmental attitude can be improved through making the people realize the importance of environment in their personal life and law of inheritance which states, to leave a better world for their younger generation.

7) **Imbibing love for nature**
   It is the willingness to buy which affects the purchase behaviour the most, but concern for eco friendliness is the factor which affects the purchase behaviour along with willingness to purchase such products, it is therefore recommended that concerted efforts be made through the social bodies to imbibe values to preserve the nature and be environment conscious at an early age.

8) **Innovations**
   Also, the shelf space of such products should be increased through efforts by companies and government support in research and development This will increase eco friendly innovations and solutions.

5.8 **Scope for future Research**
   The present study has successfully developed a model of Determinants of GPB of Indian customers towards electronic products however it is not the exhaustive study on the subject. There is a scope for future research in some of the areas which have not been extensively investigated in the present research.
1. The present research covers only electronic product sector. Study can be taken up regarding other sectors also to generalize the results for GPB regarding other sectors also.

2. Since, the study has been taken up in Delhi- NCR to get a representative sample of Indian customers due to cosmopolitan outlook of Delhi; the results of the study can further be validated through taking up empirical studies with different samples across the country. It is further suggested that comparative studies may also be done with Indian customers who belong to different groups on the basis of per capita income, age which have been revealed as significant predictors of green purchase behaviour although meagerly as per the results of the present study.

3. Green Purchase Behaviour means buying, using, repurchasing, recycling, reusing and disposing the products in an eco friendly manner. In the present study, the aspects related to purchase, repurchase have been focused more as compared to the post purchase behaviour regarding disposal since it has some variants like recycling, disposing, reusing which can also be studied exclusively. Thus, an elaborative study on each variant can be done in future.
References


