A Framework For Studying Consumer Intention Towards Green Consumerism In India

Rámeč pro studium postojů indických spotřebitelů směrem k udržitelné spotřebě v Indii

Author: Ing. Anusua Saha
Degree programme: P 6208 Economics and Management
Degree course: 6208V038 Management and Economics
Supervisor: doc. Ing. Petr Briš, CSc.

Zlín, September 2017
Key words in English: Green consumerism, purchase intention, social value, environmental knowledge, Sustainability, environmental concern, Green products, Structural Equation Modelling (SEM), Green consumers, Theory of Planned behaviour (TBL), India

Key words in Czech: Zelený konzumerismus, nákupní záměr, sociální hodnota, znalosti o životním prostředí, udržitelnost, environmentální znepokojení, zelené výrobky, modelování strukturálních rovnic (SEM), zelení spotřebitelé, teorie plánovaného chování (TBL), Indie

Full text of the Doctoral thesis is available in the Library of TBU in Zlín.

ISBN 978-80-.........
DEDICATION

This dissertation is dedicated to my dearest late grandfather *Shri Brajendra Chandra Saha*, without whom my childhood would have been incomplete. Being a successful businessman, he has taught me the values of life, to be helpful and to face every difficulty of life with a positive attitude. I know your love and blessings is always with me wherever you are.

It is also dedicated to my parents *Dr. Anup Kumar Saha* and *Mrs. Bani Saha* for the right up bring with your love and care and providing me the foundation of my education, without which I wouldn’t have come this far. It is also dedicated to my sister *Anubhuti Saha* who has always been source of joy and encouragement to me.

I would also like to thank my special friend *Anindya Das*, who has been a constant support during the ups and downs of my journey and my uncle *Shri Tapas Saha* who have always encouraged me to fulfil all my aspirations with his unconditional love. I am thankful to my entire family, for counting me in your prayers and being there with me.
ACKNOWLEDGEMENTS

The contribution of many individuals has led to the successful completion of this doctoral thesis. I acknowledge the contribution of my supervisor, Doc. Ing. Petr Briš, CSc., who guided me through this study. I am grateful for his support and effort in reading my dissertation and suggesting constructive revisions. I am extremely grateful to entire department of Industrial engineering. Our H.O.D. prof. Ing. Felicita Chromjaková, PhD and Dean, doc.Ing. David Tuček, Ph.D. for giving the right platform to carry on my research efficiently.

I would like to convey my gratitude to Prof. Ing. Petr Sáha, CSc, Rector for his generous support and all my teachers and professors of TBU in Zlin, Czech Republic for their lessons, support and useful advices whenever required. Tomas Bata University has been a big part of my life and will always be.

I am extremely grateful to Anindya Das, MBA and Dr. Jay Saha, PhD who have helped me in the collection of the data from India.
I am grateful to Ing. Ján Dvorský, Ph.D., for assisting me to develop a strong base for analytical research methods. Also, I am grateful to Ing. Denisa Hrušecká, Ph.D. for proofreading my thesis.
Also, I would like to thank my aunt Dr. Nabanita Saha for her guidance and all my good friends and colleagues for their lovely company without whom my whole journey of my PhD studies would have been incomplete. Some of the names listed here are Ravindra Hewa Kurrupugge, MBA; Shantanu Kulkarni, PhD; Juan Carlos Beltrán Prieto, Ph.D., Mgr. Meenakshi Jha and Mgr. Sudhir Kumar and Thi Thanh Nhan.

Also, I would also like to acknowledge the support of staff of the PhD study office, especially Martina Drabkova and Pavla Bartosova for their readiness to advice whenever needed. Last but not the least I am thankful to the funding agencies from where I received various support to complete my doctoral study.
ABSTRACT

Over the last years, research about sustainability has been interesting due to growing importance of green orientation in the consumer purchasing process around the world. People are changing their trends and way of lifestyle in a more conscious way paying more attention towards green oriented behavior worldwide compared to in the past. Understanding consumer expectations and new purchasing trends related to green purchasing behavioral trends within the Indian consumers by means of identifying by Theory of Planned Behavior (TBP) constructs. The present research attempts to understand the consumers’ intention towards buying green consumerism in a developing nation, India. The study uses Theory of Planned Behaviour (TPB) as its theoretical framework and further attempted to extend the TPB model by incorporating additional constructs such as (social value, environmental knowledge, environmental concern and value for money) in it. Data was collected using survey based method using structured questionnaire among 339 consumers and was analyzed using Structural Equation Modeling (SEM) for testing the hypothesized model. The finding reported the utility of using TPB framework with additional constructs in predicting the consumers’ intention that will lead to purchase intention. The framework not only studies the independent relationship but also the relationship between all the constructs that might lead to change of consumers’ perception towards green purchase behavior. The author tested three models to testify the direct effects of the constructs with the purchase intention, then studied the mediating effects and lastly the relationship with all the constructs in the hypothesized model. The results of each constructed model have shown interesting outcomes. At the end, the implications for businesses and marketers and the policy makers has been discussed with further scope of research in this field.
V posledních letech byl výzkum v oblasti udržitelnosti zajímavý kvůli rostoucímu celosvětovému významu ekologické orientace v procesu nákupu spotřebitelů. Lidé pozitivně mění své trendy a životní styly s tím, že věnují více pozornosti celosvětově orientovanému udržitelnému chování ve srovnání s minulostí. Pochopení očekávání spotřebitelů a nových nákupních trendů, souvisejících s trendy chování v oblasti ekologických nákupů v rámci indických spotřebitelů je možné prostřednictvím identifikace konstrukce Teorie plánovaného chování (TBP). Prezentovaný výzkum se snaží porozumět záměrům spotřebitelů při nakupování zelených produktů v rozvíjející se Indii. Studie využívá jako teoretický rámec teorii plánovaného chování (TPB) a dále se pokouší rozšířit model TPB o začlenění dalších prvků, jako jsou sociální hodnota, znalosti o životním prostředí, environmentální znepokojení a peněžní hodnota. Data byla shromážděna metodou průzkumu pomocí strukturovaného dotazníku mezi 339 spotřebiteli a byla analyzována pomocí modelování strukturálních rovnic (SEM) pro testování hypothetického modelu. Závěry potvrzují užitečnost používání rámce TPB s dalšími prvkými prvků při předvídaní záměrů spotřebitelů při nakupování. Rámec studuje nejenom nezávislý vztah, ale také vztahy mezi všemi prvkými prvkými prvků, které by mohly vést ke změně vnímání spotřebitelského chování při zelených nákupech. Autorka testovala tři modely, které potvrdily přímé vlivy prvků na spotřebitelské nakupování, poté byly zkoumány zprostředkované efekty a nakonec vztah mezi všemi prvkými prvkými prvkými prvků v hypotézovém modelu. Výsledkem každého modelu byly zajímavé výstupy. V závěru jsou diskutovány další dopady výzkumu v této oblasti a důsledky pro podniky, obchodníky a tvůrce politik ve firmách.
# Table of Contents

DEDICATION ................................................................................................................. 3
ACKNOWLEDGEMENTS ............................................................................................. 4
LIST OF FIGURES ....................................................................................................... 9
LIST OF TABLES ......................................................................................................... 10
LIST OF ABBREVIATIONS ......................................................................................... 11

1. INTRODUCTION ................................................................................................... 12

2. THE GREEN MARKETING EVOLUTION ................................................................ 17
   2.1. Green consumers ............................................................................................ 18
   2.2. Green initiatives by companies ...................................................................... 19

3. PROSPECT FOR GREEN CONSUMERISM AND SUSTAINABILITY ..................... 21
   3.1 Consumer spending ......................................................................................... 21
   3.2 Shift of the brands towards sustainability ......................................................... 22

4. RETAIL SECTOR SCENARIO ............................................................................... 24
   4.1 India’s retail sector .......................................................................................... 24
   4.2 India’s Marketing Drivers ................................................................................ 27
      4.2.1 The 4 A’s Model ....................................................................................... 28

5. THE LACK OF DECISION MAKING TOWARDS PRO-ENVIRONMENTAL ACTIONS .... 29

6. THEORY OF PLANNED BEHAVIOUR .................................................................. 31

7. DEVELOPMENT OF THE CONCEPTUAL FRAMEWORK CONSTRUCTS ............... 33
   7.1 Consumer Values: Theoretical support for including additional constructs in the TPB model 34
      7.1.1. Inclusion of Social Values ....................................................................... 34
      7.1.2. Inclusion of Environmental Concern ...................................................... 35
      7.1.3. Inclusion of Environmental knowledge ................................................... 35
      7.1.4. Inclusion of Value for Money .................................................................. 36
      7.1.5. Purchase behavior intention .................................................................... 37

8. RESEARCH PROBLEM AND RESEARCH OBJECTIVE OF THE THESIS .......... 38
   8.1. Research Objective ........................................................................................ 39
   8.2. Research conceptualization and the outputs expected .................................... 39
   8.3 Key objectives ................................................................................................ 40

9. CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT .................. 43
   9.1. Conceptual framework ................................................................................. 44
   9.2. Hypotheses Development ............................................................................. 45

10. METHODOLOGY ................................................................................................. 47
   10.1 Research approach ....................................................................................... 47
LIST OF FIGURES

Fig 1: Global Retail Development Index 2016: The window of opportunity country wise

Fig 2: GRDI 2016 Country wise market attractiveness

Fig 3: Tata Strategic Management Group (TSMG) - 4A’s model of critical drivers

Fig 4: Theory of planned behavior (TBP) model

Fig 5: Author’s interpretation of the study in relation to purchase intention

Fig 6: Author’s interpretation of the study in relation to value for money as a mediating factor

Fig 7: Author’s interpretation of the study constructs

Fig 8: The conceptual framework

Fig 9: Gender distribution graph of Indian consumers

Fig 10: Education Level of Indian consumers

Fig 11: Income Level of Indian consumers

Fig 12: The Measurement Model

Fig 13: The Structural Model parameters

Fig 14: The Structural Model results between the constructs
LIST OF TABLES

Table 1: Measuring items and constructs developed as per the conceptual framework

Table 2: Descriptive statistics

Table 3: Convergent validity

Table 4: Regression weights of Measurement model

Table 5: Discriminant validity

Table 6: CMIN

Table 7: Baseline comparison of measurement model

Table 8: RMR and GFI

Table 9: RMSEA of Measurement model

Table 10: CMIN

Table 11: Baseline comparison of Structural model

Table 12: RMR and GFI of Structural model

Table 13: RMSEA

Table 14: Regression weights of Default model
### LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRDI</td>
<td>Global Retail Development Index</td>
</tr>
<tr>
<td>TSMG</td>
<td>Tata Strategic Management Group</td>
</tr>
<tr>
<td>TPB</td>
<td>Theory of Planned Behaviour</td>
</tr>
<tr>
<td>SEM</td>
<td>Structural Equation Modelling</td>
</tr>
<tr>
<td>AVE</td>
<td>Average Variance Extracted</td>
</tr>
<tr>
<td>PI</td>
<td>Purchase Intention</td>
</tr>
<tr>
<td>SV</td>
<td>Social Value</td>
</tr>
<tr>
<td>VM</td>
<td>Value for Money</td>
</tr>
<tr>
<td>EC</td>
<td>Environmental Concern</td>
</tr>
<tr>
<td>EK</td>
<td>Environmental Knowledge</td>
</tr>
<tr>
<td>CFA</td>
<td>Confirmatory Factor Analysis</td>
</tr>
<tr>
<td>NFI</td>
<td>Normed Fit Index</td>
</tr>
<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
</tr>
<tr>
<td>FMCG</td>
<td>Fast moving consumer goods</td>
</tr>
</tbody>
</table>
1. INTRODUCTION

In the recent times, the issue of environmental protection has gained popularity as awareness towards the destruction of natural resources has become important. Now consumers are motivated to make a contribution to sustainable development, especially environmental protection (Moser, 2015). If they shift their everyday consumption behavior towards green consumption, a crucial beginning can be made as excessive increase in consumption has led to higher production of solid waste (Koenig-Lewis et al., 2014). Green marketing is getting recognized as a broader concept by scientific and is defined in various terms all over the world. Polonsky (1995), in his research has defined green marketing as a marketer’s attempt to develop strategies targeting the environmental consumers. Green marketing is the holistic management process responsible for identifying and anticipating satisfying the needs of customers and society in a profitable and sustainable way (Peattie & Crane, 2005; Crane, 2002). Most importantly, it refers to the market products that are less toxic are more durable, contain reusable materials or are made of recyclable materials (Ottman, 1992). Environmentalism started to broaden with the increase acceptance of the concept of sustainable development: expanding economic growth to meet societal needs while protecting the environment for present future and generations. Nowadays, corporations are urged to play a role in achieving sustainable growth and building greener economy. Big brands have been influential forces in the retail sector, stimulating green consumerism through marketing and retail chains.

Environmentally sustainable or “green” purchasing decisions offer a chance to reduce the negative environmental impact by adopting environmentally friendly products (Leonidou et al., 2013). The term green is alternatively known as “ecofriendly”, “environmentally friendly”, or “sustainable” (Kim and Chung, 2011).

In the household consumption, groceries account for a substantial share, and up to one-third of the environmental impact is mainly due to packaging materials (Koenig-Lewis et al., 2014). This trend seems to be catching in India, which is generating waste products at a rather alarming rate, much faster than the natural degradation process and is using resources at a speed that exceeds the rate at which these materials are being replaced (Pagiaslis, 2014; Nandy et al., 2015). However,
Indian consumers are more conscious of their environmental impact than consumers from Brazil, China, Australia, Russia, Canada, America and Germany (Greendex, 2014).

Most of the Indian states have banned the use of plastic bags due to environmental degradation (Earth Policy Institute, 2013; Clapp and Swanston, 2009) and shopping malls are charging extra money for plastic bags (Yadav and Pathak, 2016). Thus, environmentally sustainable or “green” purchasing decisions in everyday buyer behavior will have a great impact if they can substitute high-impact products with the eco-friendly products.

Environment has become a persistent public issue (Baumann & Rex, 2007) with some calling in the 1990s as the “Earth decade”, or “the decade of the environment” (Bradley, 2007). Some environmental problems have been link to human consumption, and this has brought the environmental awareness in many parts of this world has increased and this has been further translated into their attitude towards purchasing green products (Pagiaslis, 2014). Consumers are demanding green options and are willing to pay a premium price (Charter & Polonsky, 1999). This has resulted in the trend of environmental sustainability, which in turn has brought changes in consumer demands and behavior (Mendleson and Polonsky, 1995). For environmental protection, diverse types of behaviors can be opted and buying green products is among one of them (Laroche et al, 2001). By the time consumers have started showing concern for the environment and preferring eco-friendly products and services (Nimse et al., 2007) and such concerns and awareness about environment has created eco-friendly consumption called ‘green consumerism’ (Moisander, 2007).

Green environmental issues and green awareness in terms of food choice, green management, green branding, and green consumer choices have been of topical interest worldwide for some time now (Lin & Huang, 2012).

Although the research on green awareness or green orientation is relatively limited, especially in developing countries such as India. India is big economy where the education level is relatively high and the economic condition is growing at a steady rate. Also, India is fast growing economy due to its huge market base and that is the reason, it attracts lots of industrialists and foreign companies. Interestingly, India once upon an agricultural based economy but it has advanced to a technologically advance economy in recent years as well.
Also, the whole retail industry has lived an intense evolution over the past three decades due to the strong growth in international markets to rising of new competitors and to the continuous and evolving change in consumer behavior (Ajzen, 1991, 2002 & 2005). The green orientation is not just limited to environmental issues now, it is widely being recognized in the food and retail sectors as well; because now not just the taste matters but the health, quality standards and awareness about the product and surroundings has a crucial role to play in it. That can satisfy more complex needs such as the hedonic and emotional aspects plus the utility, healthy and the respect for environment (Crescimanno and Galati, 2014; Naidoo, V., 2010). In this context, marketing innovation can be considered as tool for maintaining competitive advantage and achieving growth (Chen, 2006) as well as a strategy to overcome market crisis (Naidoo, 2010). This has attributed to the rise of the “green” consumer marking shift in the pattern of consumer purchasing towards a more sustainable consumption and awareness about the surroundings (Ristovska, 2010). In this context, marketing innovation can be considered as a tool for maintaining competitive advantage and achieving growth (Chen, 2006) as well as a strategy to overcome market crisis (Naidoo, 2010). Numerous studies have been conducted to establish the influence of consumer attitude towards green products and its impact on customer satisfaction in the Western countries but few studies of consumer green marketing awareness and purchase intention have been done in Asian countries, including India (Haytko & Matulich, 2008; Menichelli et al., 2014).

Consumer awareness varies across the cultural framework and consumer attitude. Therefore, conceptualization of effective consumption pattern in the event of emerging themes of green consumerism and to create a framework about consumers perception about green products would immensely help to maintain responsible consumption and production processes in the future (Antil, 2005).

At the same time, the beginning of the 21st century is reported by a rapid increase of consumer’s ecological awareness of products due to the association of consumption negative impacts in several environmental problems such as global warming and pollution (Leonidou et al., 2010; Svensson and Wagner, 2012). Consumers became more oriented in purchasing environmentally sustained products due to above global crisis. The definition and measurements of sustainability concept in current research studies are not stable and disagreements amongst researchers can be seen heavily (Ottman, 1993). Sustainability in case of products has been defined such as eco-
friendly, being environmentalism, social corporate responsibility, being green or green products (OECD, 2009). However, such environmental considerations are barely understood in the literature despite the fact that the notion of sustainability is crucial for achieving a market-orientation (Crittenden et al., 2011; Hult, 2011). Fortunately, consumers are gradually changing their attitude, behavior and approach in matters of consumption. From 1990s onwards, substantial research has been undertaken to analyze consumers' buying behavior of environment friendly products (Davis, 1992; Ottman, 1993). However, previous studies have developed theoretical frameworks to explain consumer consumption patterns (Asiegbu et al, 2016). Normally, the selected variables for study are product or service quality, price of the product, consumer interests, pressure from civil societies and pressure from governments.

As discussed before, green movement has expanded rapidly in the developed countries, but with the time an increased receptiveness is seen among consumers about going green in developing nations such as India (Raghavan and Vahanvati, 2008). However, the research on environmental issues and green purchasing is at nascent stage in the Indian context in comparison to other developing nation (Khare, 2015). Therefore, understanding the consumer intention toward green products is crucial for the marketers. In marketing, academicians and researchers are mainly interested about identifying the antecedents or factors of green purchase intention (Chan, 2014 ; Lin-Hi & Muller,2013) but studying the green awareness will help in developing suitable strategies for green products. In the past, numerous studies on consumer purchase intention and behavior towards a wide range of green products have been done in the context of developed nation (Ha and Janda, 2012; Han et al., 2010; Kalafatis et al., 1999; Kim et al., 2011; Kun-Shan and Teng, 2011). However, a very few studies (Biswas and Roy, 2015; Khare, 2015) have focused on the consumers' responses and consumer intentions towards green/eco-friendly products in the Indian context; a developing nation.

However, none of the studies have measured the consumer's antecedents leading to purchase intention with respect to social value, environmental knowledge and environmental concern with the mediating variable ‘value for money’ towards purchase intention towards green products in Indian context using any social psychological model.

The literature review or the theoretical part of the thesis has been categorized into several chapters, giving the worldwide scenario and progress of green products and
the later chapters discusses the evolution of green marketing, its prospects for future sustainability, green consumers’ spending power and the retail sector scenario in India. All these chapters will give an insight and a solid foundation into the India’s growth prospects as a potential market and good base for this research.

With the gap of understanding the consumer mindset and to study different parameters related to consumer intention about green consumerism. The authors attempt to develop a framework which is the practical part of the thesis which is based on the primary research conducted with the help of self-administered questionnaire. The researcher has used ‘theory of planned behavior’ for studying the consumers’ purchase intention and their direct and indirect relationships with the factors responsible as per the extended TPB model.
2. THE GREEN MARKETING EVOLUTION

Green marketing received some attention in the 1970s. For instance, the American Marketing Association (AMA) held the first workshop on green marketing issues dubbed “Ecological Marketing” in 1975, the proceedings of which resulted in one of the first books on green marketing entitled “Ecological Marketing” (Henion & Kinnear, 1976). However, green marketing came into prominence in the late 1980s and early 1990s. Several authors since then have produced and published several other books on the same topic (Coddington, 1993; Ottman, 1993). According to Kassaye (2001), green marketing issues are a major trend and of major concern in today’s business environment. The increase in consumer awareness about environmental challenges and stricter regulations and control regimes introduced by various governments, especially in the advanced economies brought the demand for green products into sharp focus (Polonsky et al., 1998; Prothero, 1990). According to Peattie and Crane (2005), early academic treatments of green marketing spoke of the rapid increase in green consumerism and this they considered to be a dramatic and inevitable shift in consumption towards green brands (Prothero, 1990; Vandermerwe & Oliff, 1990). This generated a lot of interest in academic research. Peattie and Crane (2005) contends that a lot of research evidence from reputable research bodies was cited to confirm perceptions that there was a heightened environmental awareness and a growing consumer interest in green products, as well as a willingness to pay for green features (Roper Organization, 1990; Mintel, 1991; Worcester, 1993). Elkington and Hailes, (1988) argued that the highly effective global consumer boycott of CFC-driven aerosols, and the success of publications such as “The Green Consumer Guide” for example were practical evidence of the heightened state of the world about green issues. They contend that there was a burst of corporate activity in the area of green marketing and an upsurge in research and writing amongst academics about green business. Green marketing has been variously described. According to Polonsky (1994), green marketing incorporates a broad range of activities which includes product modification and changes to the production process. It also involves packaging changes, as well as modifying advertising. Davis (1992) observed that green consumerism is often discussed as a
form of ‘pro-social’ consumer behavior. Green consumerism may be viewed as a specific type of socially conscious or socially responsible consumer behaviors involving an ‘environmentalist’ perspective. It could therefore be referred to as an ‘environmentally concerned consumption’ (Antil, 1984; Henion, 1976). In fact, Henion (1976) described green consumers as ‘environmentally concerned consumers’. Others see green marketing as the promotion of products with environmental characteristics (Polonsky, 1994). Polonsky (1994) argued that some people see green marketing as the promotion of products with environmental characteristics, and maintains that consumers’ usually associate green marketing with terms like recyclable, ozone friendly, and environmentally friendly. Grove et al., (1996) argued that there is a huge array of activities that organizations that choose to practice green marketing can pursue. When the efforts an organization puts in the production, pricing, promotion and distribution of its offerings to the market is done in such a way as not to be harmful to the environment, such efforts can be described as green marketing (Pride and Ferrel, 1993). The development of products and services that conserve energy and other natural resources, offerings that consider consumer sensitivity to cost and their willingness to pay for environmental safety are examples of green marketing practice (Porter 1991).

2.1. Green consumers

Modern consumers are more concerned about the future and the quality of life than our ancestors and are more likely to opt for environmentally friendly products. This trend in consumer preferences is evident not only in developed countries but also in developing countries such as India. As per the Commission of the European Communities defines ‘green’ products as those that use less resources, have lower impacts and the risks to the environment and prevent waste generation already at the conception stage” (2001, p.3). Green products are reusable, and recyclable are produced without using toxic chemicals, packaged in environment- friendly material and have a minimal impact on the environment throughout the lifecycle of the product (Organization for Economic Co-operation and Development, 2009).

The green aspects of a product relate not only to its consumption and risks, but also to its design and development and also its manufacturing from procurement and distribution.
Peattie and Crane (2005) argue that it is quite difficult to isolate green consumer attributes of a green product. It is even more difficult to study the consumer based on just the demographic characteristics such as age, income and gender. In order to study from the marketing perspective in depth, marketers and research & development teams need to know what exactly consumers look for in a green product and position their products accordingly. Therefore, increasing public awareness of environmental concerns presents numerous opportunities of growth in the industry (Shrivastava and Hart, 1995; Palevich, 2012). Also, companies need to understand who the green consumers are and what motivates their green buying behaviour (Lin & Huang, 2012). In this way, companies can create and promote products that respond to their green consumers' needs through the use of green marketing activities (Peattie, 2010) that can result in better performance.

In the near future, more companies will begin to launch marketing strategies that appeal to consumers’ attitude to the environment. Ferrell and Hartline (2010) show that the use of green labelling to differentiate such products has increased sales in Europe and the US. Kotler (2003) reports that 42% of consumers are willing to pay premium prices for green products in the US.

Studies on the US and Europe reveal that many factors influence consumer perception of green products, including their functional, epistemic, social, conditional and environmental value. However, very few studies have looked at this in the context of developing economies (see, for example, Boztepe, 2012; Saxena and Khandelwal, 2010).

2.2. Green initiatives by companies

Many marketers now grow their business and attempt to minimize their environmental and health-related risks by addressing the specific environmental and social issues most relevant to their consumers and other stakeholders. In the process, they often save money and enhance brand image while ensuring future sales for existing and new products. As per Ottman (2011), plethora of strategies, ideally considered as part of a holistic effort to manage one’s brand rather than incorporated in isolation, exist to inspire profitable new packages that address the new rules of ‘balancing consumer’ needs with sustainability considerations. As for example, most of the Indian states have banned the use of plastic bags due to environmental degradation and shopping malls are charging extra money for plastic bags (Yadav and Pathak, 2016) (Earth Policy Institute, 2013).
Various Indian companies have adopted green practices for the sake of environmental protection and sustainability. HCL launched ME eco-friendly notebook range, Tata launched green ranged inverters and batteries which can be 90 percent recycled and MRF have also launched eco-friendly tyres. Therefore, eco-friendly packaging is slowly taking its pace to gain its popularity in India.

The importance of packaging and the use of packaging as a vehicle for communication can affect the popularity of the brands gaining importance mainly in the consumer goods sector. Initiatives like Mc Donald using bio-degradable paper for packaging of stores in India is also small initiative which consumers are noticing. Also, Dell India for their laptops are changing their packaging materials to eco-friendly materials.

Also, Walmart have taken a positive initiative which will have a great impact on setting the trend of 4Rs strategies (reduce, reuse, recycle and rethink). It priorities will follow to implement ‘Optimize Design’, ‘Source Sustainability’ and ‘Support Recycling’. These initiatives have initiated the change of attitude of the consumers towards the selection of the particular brand which directly impacts their purchase behavior (Han et al., 2009).
3. PROSPECT FOR GREEN CONSUMERISM AND SUSTAINABILITY

Eco business become such a valuable and effective strategy for retailers and brand manufacturers (Strijbos et al, 2016). The main stream environmentalism and the growing power of retail companies are contributing factors. Together they are contributing to a global business setting where pursuing corporate sustainability is of interest not only to a select few firms selling eco-products, but is also increasingly a highly efficient tool for big brands looking for ways to project an image of responsibility while simultaneously delivering business returns (Vaccaro, 2010). Three trends in the world economy are creating incentives for companies to embrace eco-business: continuing globalization of production and a rapidly growing middle class across the developing world. India is considered to be among largest developing economy in the world (Dauvergne and Lister, 2013).

In this setting, eco business can help big brands to manage risks within supply chains and enhance brand loyalty and reach new and emerging markets (Saeed, 2012). In view of the win-win prospects for brands, the turn toward eco-business is likely to keep accelerating along with the continuing growth and shift of brand retail into developing countries (Velásquez, 2012). This trend will further concentrate global power in the hands of big brands on global power in the hands of big-brand companies. The conclusion here is compelling that the big brands on global sustainability is set to keep rising even with greater speed and intensity.

Sweeney (2001) said that Environmentalism started to broaden with the increase acceptance of the concept of sustainable development: expanding economic growth to meet societal needs while protecting the environment for present future and generations. Nowadays, corporations are urged to play a role in achieving sustainable growth and building greener economy. Big brands have been influential forces in the retail sector, stimulating consumerism through marketing and retail chains.

3.1 Consumer spending

Consumer spending now accounts for 70 percent of all employment and economic activity in developed economies (Saxena, 2014). In account to the worldwide
consumers were spending at the rate of $5.4 million per minute and this rate has been increasing annually (Deloitte Touche Tohmatsu and STORES Media 2007)

Retail stores are not just getting bigger; they are increasingly ubiquitous and they are changing people’s shopping habits. Retail chain are continuing to grow quickly and to concentrate, fewer companies capturing and increasing share of consumer goods market. With the context of India where there is big share of emerging middle class consumers has a huge prospect of growth in green consumerism (Hopkins 2007).

Big brands are using eco-business to gain more access to these jurisdictions and reach the many new middle-class consumers with enough discretionary income to able to afford higher-end consumer goods. From 2010 to 2020 another billion people are set to join this income group; in which 60 percent will live in the emerging countries. By 2015 the number of middle class consumers living in Asia is set to equal those in North America and Europe (Makower 2010). The changes and prospects in emerging countries like India over the recent years have been dramatic. A.T Kearney’s annual Global Retail Development Index (GRDI), which assesses the top thirty developing countries for retail expansion, captures this well. In particular China, India, Vietnam and Chile have demonstrated consistently high retail prospects on the GRDI ranking (Kearney 2013).

Household consumption and per capita resource continue to rise steadily in developed countries and increase rapidly in emerging and developing economies. Mc Kinsey have projected that over the next decade the spending of 2 billion middle-class consumers across a dozen emerging will increase from $6.9 trillion to $20 trillion (twice the United States current consumption).

In India alone, the Business Monitor International had predicted that between 2011 and 2015 retail sale will almost double, to about $800 billion (McKinsey 2010).

3.2 Shift of the brands towards sustainability

As per Edelman’s 2012 global survey, expect brands to support good causes and the companies are responding. Big brand companies are using this strategy to help reach and expand markets. For example, Coca Cola is looking to, energize its brands in developing markets through its ‘Live Positively’ sustainability program investments. Similarly, Procter and Gamble now refers to its market- growth strategy as, purpose inspired growth, the company is promoting this as an effort to: touch and improve
the lives of new consumers around the world, with the goal of reaching a billion new consumers by 2015.

Particularly with the rise of corporate environmental movement is becoming less radical transformation and more market improvements (Atakan-Duman et al. 2016). This gradual of environmentalism in corporation has set the stage for the uptake green management by big brands. More than ever Eco- business is building upon extending and deepening a process that started decades ago. This explains its high time so that big brands stores realize it and start to extend eco business is rising and world retail economy is reinforcing.

In respect to the growth of the firms with the undoubted force towards moving eco-business. There are also complexities also involved with the consumer mindset across different cultures and consumer awareness (Aya Pastrana at el, 2013). This is indeed occurring; but the problem is, as growing number of population are not so aware which is the fundamental cause of it.

The rise of eco business relies on and indeed in some cases is the consumption trends and buying trends which is again directly relates to the consumer awareness that are overtaking the gains in scale and eco-efficiency.

It is also a responsibility of the multinational corporations must continuously adjust supply chains to optimize geographic advantages within the context of this shifting its progress towards green practices by improve resource efficiencies and resource access (Ramos, 2013). Eco- business or green marketing also is proving useful for reaching the growing number of middle class consumer’s especially in Asia (Thresh, 2014).
4. RETAIL SECTOR SCENARIO

Retail sector according to Kearney report (2016) Global Retail Development Index (GRDI) has guided global retailers with their strategic investments since 2002, a period in which the retail environment in developing markets has undergone massive transformation. The 2016 GRDI study finds that retail in developing markets will continue to grow, following the path it has been on since first GRDI 15 years ago. Avoiding the pitfalls of shifting retail markets, however, will require a strategic mindset about expansion. Each market has unique challenges and unique opportunities.

In the past, retailers used to enter smaller, prosperous markets as well as large ones but usually doing what other big brands were doing once dominated big box retailers has now opened up to a great variety of specialty retailers. International retailers are also now more adept at tackling the individual challenges of each market, which require different strategies for success (Sharma, 2012). Retailers' increased understanding of developing countries is more important today than ever before, as these markets struggle with shifting economic and political trends—sometimes in an extremely short timeframe (Lombart, 2014).

The GRDI ranks of the top 30 developing countries for retail investment (see appendix: About the Global Retail Development Index). Using more than 20 macroeconomic and retail-specific variables, identifying not only the markets that are most successful today, but also those that offer future potential. In the ranking India ranks at number two, which is suggests India has a huge market potential (Kearney, 2016).

4.1 India’s retail sector

GDP growth, improved ease of doing business, and better clarity regarding foreign direct investment (FDI) regulations puts India in 2nd place. India is now the world’s fastest-growing major economy, overtaking China. Retail demand is increasingly driven by urbanization, an expanding middle class, and more women entering the workforce.
India with a population of 1.31 trillion accounts for $1.01 trillion retail sales and the CAGR retail sales of during 2013-2015. As per the GRDI window of opportunity from the year 2016, clearly shows that India is among the peak countries for the retail opportunity since 2009. As per the reports and the characteristics of Indian consumers, they seek organized formats and greater exposure to global brands. It means, that they are open to experience new brands and new trends provided with systemized exposure in an organized manner. In other words, consumer awareness is an important factor for a new trend.

As per the table below, India as a country which is highly versatile and is open to new trends when provided with proper facts and information. Reports shows that now India seeks the need of more organic way of doing business and so as the customers are getting conscious of this trend. India is a tricky market, the only way to untapped the market is by trend setting and by letting know the availability, awareness and the value it carries are the critical drivers.

The GRDI window of opportunity

<table>
<thead>
<tr>
<th>Definition</th>
<th>Mode of entry</th>
<th>Labor strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle class is growing; consumers are willing to explore organized formats; government is relaxing restrictions</td>
<td>Minority investment in local retailer</td>
<td>Identify local skilled labor for management</td>
</tr>
<tr>
<td>Consumers seek organized formats and greater exposure to global brands; retail shopping districts are being developed; real estate is affordable and available</td>
<td>Organic, such as through directly operated stores</td>
<td>Hire and train local talent and balance expatriate mix</td>
</tr>
<tr>
<td>Consumer spending has expanded significantly; desirable real estate is more difficult to secure; local competition has become more sophisticated</td>
<td>Typically, organic, but focused on Tier 1 and 2 cities</td>
<td>Change balance from expatriate to local staff</td>
</tr>
<tr>
<td>Consumers are more used to modern retail; discretionary spending is higher; competition is fierce both from local and foreign retailers; real estate is expensive and not readily available</td>
<td>Acquisitions</td>
<td>Use mostly local staff</td>
</tr>
</tbody>
</table>

Fig 1: GRDI 2016 The window of opportunity country wise, Source: AT Kearney 2016 report)

Various Indian companies adopted green practices for the sake of environmental protection and sustainability. HCL launched HCL ME eco-friendly notebook range, Tata launched green ranged air conditioners and MRF launched eco-friendly tyers
(Yadav and Pathak, 2016). Researches suggest that companies with a green orientation achieve higher profitability and market shares (Menguc and Ozanne, 2005). However, India still remains a challenging and complex market for foreign retailers, where there are 29 states, understanding dynamics at the state level is important for doing business in India including archaic labor laws and complex regulations which differs in different state. However, India’s strong ranking reflects foreign retailers increased optimism in $1 trillion retail market asper AT Kearney report (2016)

Kearney report (2013) manifested Indian retail market as a high-potential market with accelerated growth of 14 to 15% per year expected through 2015. Strong microeconomic conditions including a 6 to 7% rise in GDP, higher disposable incomes and rapid urbanization are the antecedents favoring this growth in Indian retail environment (Kearney report, 2012). Retailer are expanding their businesses in tier 2 and 3 cities rapidly. The changing landscape in India has changed Indian customers’ spending and shopping habits (Sengupta, 2008). The present scenario of Indian organized retailing is noteworthy. The new policy of foreign direct investment (FDI) encourages many players to invest in Indian market. Emergence of e-commerce has made consumer decision making process easy. Tata Strategic Management Group (TSMG) (2013) projects that organized food and grocery retail in India can grow to INR1750Bn (at current prices) by 2015 representing approximate 11% of overall food and grocery sales. Due to increasing mass consumerism on account of rising GDP, a high-growth rate, along with the increasing spending power of Indians, emergence of private labels and e-commerce, the food retailing is turning out to be highly profitable segment and has significant potential to growing years to come.

In terms of formats, the cash-and-carry model is thriving and profitable, with existing players like Walmart and Metro seeking to expand their store bases, targeting 70 and 50 stores, respectively, by 2020.

Meanwhile e-commerce is accelerating as Internet and smartphone penetration increases toward the end of 2015 India surpassed the United States to become the world’s second-largest Internet market, trailing only China. Consumers are growing more comfortable shopping online, and venture capital and private equity firms are making investments. Attracted by the growth prospects, Alibaba plans to enter in 2016 either organically or through acquisitions (Kearney 2016).
4.2 India’s Marketing Drivers

India ranks at second position in term of market attractiveness. As per Kearney (2016) India consumers are trading up and willing to pay for better quality, health and convenience driven products, as well as enhanced product features and designs. An increased focus on fitness and health will benefit retailers across all sectors including nutrition, personal care and food. Additionally, India’s GDP growth improved the ease of doing business and better clarity regarding foreign direct investment (FDI). India is the fastest growing economy, overtaking China. According to Patten (2014), retail demand is increasingly driven by urbanization, an expanding middle class and more women entering the workforce.

Fig 2: GRDI 2016 Country wise market attractiveness, Source: AT Kearney 2016 report

India’s packaged food and beverage sector provides and consumer goods items provides an attractive market opportunity with multiple challenges and multiple
rewards. India packaged food and beverage market trend has seen a growth of 14-15% during the last five years from 2010 to 2015 projected by Tata Strategic Management Group (TSMG) in the recent past. The implementation of the Food Safety and Standards acted is expected to facilitate delivery of good quality to all consumers.

4.2.1 The 4 A’s Model

According to TSMG report, the growth of packaged food has been driven by multiple demographic shifts. However, a complete perspective is obtained only when we look at applicable supply side trends also. Underlying the critical 4 A’s to understand the India’s critical growth drivers:

Fig 3: Tata Strategic Management Group (TSMG)- 4A’s model of critical drivers, Source: TSMG report 2016

1. Higher Affordability – Led by increasing incomes across urban and rural India to purchase the goods
2. Increased Acceptability – Greater consumer acceptance of newer products and developing strongly held and favorably evaluated and imply superiority over others influenced by the factors like younger population, quality of the goods, urbanization, greater education level etc.
3. Improved Availability – Better distribution by FMCG players coupled with organized and systemized retail channels
4. Greater Awareness – Generating awareness so the consumers believes its utility and claims backed up by data and proper propagation by companies to get a better understanding amongst their consumers
5. THE LACK OF DECISION MAKING TOWARDS PRO-ENVIRONMENTAL ACTIONS

The degree to which consumers believe environmental issues are or will become problematic, is possibly related to the disagreement regarding the cause and effect, responses and timeframes in which remedial action must be taken. Unfortunately, in many of these cases, consumers do know about the environmental problems but it’s neglected in reaching the whole mass of consumers (Wossen Kassaye, 2001). Most of the environmental problems are somewhere left for the future. It is often noticed that for environmental issues, there is not enough propaganda or advertising or media promotion on the same. In order to have a systemized thinking, consumers need to understand the value of green products. There are possibilities by which the mindset of the people can be changed. Like leading authors (e.g., Kilbourne et al., 2002; Kilbourne and Carlson, 2008) mentioned that there is a need to change the anthropocentric view of the consumption cycle.

There are several reasons of barriers which hinders the system thinking like for example consumers don’t tend to foresee the future impacts of some activity which is in the long run is harmful. For example, the fact that millions of people continue to take up smoking is surprising given the evidence that smoking is bad for one's health, but consumers simply discount the future health consequences (Rindfleisch and Crockett, 1999). Therefore, they fail to make effective marketing decisions when there some long-term outputs.

Consumers also tend to think What difference will it add to the environment, if an individual changes his or her attitude towards the environment while the whole world is not paying attention (Scholder-Ellen et al., 1991). This attitude is a barrier to system thinking and transforming the effective green marketing strategies. Also, the consumer behavior for satisfaction and the human behavior which promote ownership to achieve satisfaction is also a barrier which promote the purchase of goods which might not be very necessary but will depreciate over time. Therefore, consumers do not necessarily have to own the want satisfying goods to extract want-satisfying value. Research even suggests that one's quality of life (as measured by happiness) and increased consumption can impede sustainable development (Zagata,
Various models have been developed to explain sustainable consumption behavior or green choice behaviors (Young et al., 2010) and pro-environmental behavior (Dietz et al., 1998). The Theory of Planned Behavior (TBP) has been applied for future trends of environmental behaviors such as food consumption (Vermier and Verbeke, 2008) and in general pro-environmental behavior (Kaiser et al., 1996).
6. THEORY OF PLANNED BEHAVIOUR

While trying to explain green consumerism also known as ‘sustainable consumerism’ prior studies have concentrated on describing the underlying consumer values, attitudes and behavioral intentions towards environmentally friendly products (Benson and Hiller Connell, 2014; Vermeir and Verbeke, 2008). The theory of reasoned action (TRA) (Ajzen and Fishbein, 1980) and the theory of planned behaviour (TPB) (Ajzen, 1985) were the two prominent theoretical approaches applied by the vast majority of studies. Other approaches considered are: Hines et al. (1987) model of responsible environmental behavior (REB), Stern and Dietz’s (1994) values–beliefs-norm (VBN) model, and motivation–opportunity–abilities (MOA) model (Olander and Thogersen’s, 1995).

Theory of Planned Behavior (TBP) was proposed by Ajzen in 1985. This model is quite renowned between academicians to understand the individual behaviour. TPB has been useful in predicting consumer intention as well as behavior in a wide range of green/pro-environmental areas, such as green hotels and restaurants (Chen and Tung, 2014; Kim et al., 2005), energy efficient products (Ha and Janda, 2012), green products (Kalafatis et al., 1999; Chan and Lau, 2002), organic products (Kim and Chung, 2011; Zagata, 2012) proved its applicability and robustness. Although the TPB is based on the assumption that behavioral intention is determined by three factors, namely; attitude, subjective norm and PBC, previous researches have mentioned that there are few domain specific factors which are not the included in this model (Armitage and Conner, 2001; Donald et al., 2014).

In recent times, an increasing evident has been noticed in the psychological literature to include additional constructs in the TPB (Read et al., 2013; Yazdanpanah and Forouzani, 2015) in various domains to improve the predictive power of the framework. Further, it was also suggested that TPB framework can be deepened and broadened by adding new constructs or altering the path of the variables in it (Ajzen, 1991; Perugini and Bagozzi, 2001).

TBP assumes that behavioral intention is determined by three factors, namely; attitude, subjective norm and perceived behavioral control (PBC) are described as under:
**Attitude** toward behavior refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in the question (Ajzen, 1991). More favorable the attitude toward the behavior of an individual, the more individual will be likely to perform a certain behavior. An individual tends to possess a favorable attitude when the outcomes are positively evaluated and, thus is likely to engage in that specific behavior (Ajzen, 1991; Han et al., 2010). TPB has been found very useful in predicting consumer intention and behavior in a wide range of fields (Sheppard et al., 1988) and it appears a very powerful model in explaining the environmental friendly behavior (Bamberg, 2003).

**Subjective norm** is defined as ‘perceived social pressure to perform or not perform the behavior’ (Ajzen, 1991). In other words, subjective norm is the opinion of others who are important to an individual and influence in one's decision making (Hee, 2000). If an individual believes that people significant to his or her approval or disapproval of the behavior they are more or less likely intend to perform the behavior (Conner and Armitage, 1998).

**Perceived behavioral control (PBC)** is ‘an individual perceived ease or difficulty or performing the particular behavior’. Those who have a higher degree of control over themselves have stronger intention to perform a particular behavior (Ajzen, 1991). PBC is an individual perception, whether the individual has all available means and opportunities to perform a certain behavior (Ajzen, 2005; Conner and Armitage, 1998).

![Theory of planned behavior (TBP)](image)

Fig 4: Theory of planned behavior (TBP), Source: adopted from Ajzen, 1991
7. DEVELOPMENT OF THE CONCEPTUAL FRAMEWORK CONSTRUCTS

This section addresses the theoretical perspectives on consumer choice regarding environmental friendly products and postulates the effective behavioral studies and models used regarding purchase decisions. Various models have been developed to explain consumer behavior or green choice behavior in terms of purchase intention and pro – environmental behavior (Young et al., 2010, Dietz et al., 1998). Theory of Planned Behavior (TPB) stemming from the Theory of Reasoned Action (TRA) (Ajzen, 1991) have been applied in explaining environmental behavior based on attitudes and subjective norms, mediated by behavioral intentions with perceived behavioral control included in the theoretical framework.

The Theory of Planned Behavior have been applied for prognosticating various facets of environmental behaviors such as food consumption (Vermeir and Verbeke, 2008), household recycling (Kaiser and Gutscher, 2003), general pro-environmental behavior (Kaiser et al., 1996) and more. Norm-Activation-Model (NAM) and Value-Belief-Norm (VBN) theory are other theories applied in explaining environmental behaviors and citizenship (Stern et al., 1999).

Sheth et al. (1991) applied this theory on consumers' buying decisions, product decisions and brand decisions.

Bei and Simpson (1995) identified value-for-money and quality perceptions as important determinants for choice behavior of recycled products. This theory of consumption values has been applied by Long and Schiffman (2000) for analyzing consumer motivation, choice behavior and segmentation according to their values and relationships.

Value meaning; is a personal, subjective concept including some intrinsic needs such as emotional aspects, knowledge concern as well as some implicit factors such as experiential need or prestige associated with the component purchase.

Consumption value is the degree of fulfillment of consumer need by overall assessment of consumers' net utility or satisfaction from a product after comparing the gains with the gives (Chen, 2014). The value or utility of green products if higher than that of traditional substitutes will become a critical condition for green purchase.
decision. Assuming consumers as value optimizers, then higher the value of green products, the stronger the purchase intention will be.

The theoretical underpinnings are drawn from the Theory of Planned Behavior with an integrated model incorporating components from ‘Theory of planned behavior model based on the assumption that consumer choice is a function of multiple values. As per our model these are categorized as social value, environment concern, environment knowledge and value for money in order to perform purchase behavior as additional constructs.

7.1 Consumer Values: Theoretical support for including additional constructs in the TPB model

Consumer values refer to the beliefs and concepts that govern a specific desirable state and, in turn, influence behavior (Schwartz and Bilsky, 1987). They shape our actions, mold our attitudes and help us differentiate between specific events, objects and situations (Long and Schiffman, 2000). Values play a significant role in developing beliefs, attitudes and behaviors related to environmental concerns (Kilbourne and Pickett, 2008).

On the basis of supporting evidence from the literature, the study attempts to include additional constructs in TPB in the case of green products i.e. social value, environmental concern, environmental knowledge, value for money and finally leading to purchase intention.

7.1.1. Inclusion of Social Values

Social value is defined as specific utility or behavior derived from an unconventional association with a social group of people who become specific in terms of precise aspects (Lin & Huang, 2012). This behavior can be further identified as subjective based on the concern which shows that at adapting and approving the style of behavior. This behavior leads to personal perceptions of what peers think an individual should do (Arvola et al., 2008). Social value measures the perceived utility of a product or service associated with specific social, demographic, socioeconomic or cultural groups (Sheth et al., 1991). It is related to self-image (Sweeney and Soutar, 2001) in that the extent to which a product is seen to improve self-image has a significant impact on green consumer behavior (Finch, 2006). Consumers want more
information when faced with a social risk to avert a negative outcome: their perception of risk can be greatly reduced by what they perceive as expert opinions (Aqueveque, 2006). Lin and Huang (2012) argue that social value does not have a significant positive impact on green product consumer choice behavior in Taiwan. In a research in India, it is found to have a positive effect on sustainable consumption behavior in India (Biswas and Roy, 2015) and in Portugal (Gonçalves et al., 2016). It will be interesting to test the relationship through TBP in different states in India. If that also have a positive relation with other variables.

**7.1.2. Inclusion of Environmental Concern**

According to Crosby et al. (1981) environmental concern is defined as ‘strong attitude for protecting the environment’. To better understand the receptiveness of green movement in a nation, examining the consumer view about issues related to the environment and how these views are reflected in their green purchase can be a good starting point (Chan and Lau, 2000). Environmental value measures a consumer’s attitude towards environmental concerns such as increasing population, pollution, energy conservation, resource waste and the effect of toxic agents on the atmosphere and natural habitats (Kim and Choi, 2005). Environmental value is found to have a positive effect on sustainable consumption behavior in India (Biswas and Roy, 2015). According to Kilbourne and Pickett (2008) consumers are more likely to adopt green consumption patterns as their concern for the environment grows.

Research on green energy has shown, those who consume green energy were more concerned about the environment as compared to the general population (Clark et al., 2003; Salmela and Varho, 2006). Few studies have reported that environmental concern significantly influences the consumer's attitude towards the eco-friendly products and services (Aman et al., 2012; Han et al., 2009; Hartmann and Apaolaza, 2012). Le (2008) also found that environmental concern was a strong determinant of environmental behavior. Therefore, it will be quite interesting to see if there are any positive relation with consumers’ perception with other constructs as per the TPB model towards green consumerism in India.

**7.1.3. Inclusion of Environmental knowledge**

Environmental knowledge defined by Fryxell and Lo (2003) as “people knowledge about environment, key relationship leading to environmental impact and collective
responsibilities of individual necessary for sustainable development”. When environmental issues are concerned, knowledge about environment changes environmental attitude and individuals buying behavior is also influenced by environmental knowledge (Scott and Vigar-Ellis, 2014). Knowledge about environmental issues results into pro-environmental/eco-friendly behavior and also influences consumers’ purchase intentions towards eco-friendly products (Peattie, 2010). Also, the findings of Wang et al. (2014) showed a significant positive influence of environmental knowledge on consumers’ intention to buy environmentally friendly products. While a couple of studies have demonstrated a rather weak relationship between environmental knowledge and behavior (Bang et al., 2000; Wolsink, 2007).

Young et al. (2010) and Mostafa (2006) emphasized environmental knowledge is necessary to take suitable action towards environmental and environmental protection and more importantly, consumers with higher environmental knowledge have the tendency to demonstrate sustainable purchase which implies pro-environmental awareness as a result in green purchase behavior.

7.1.4. Inclusion of Value for Money

‘Value-for-Money’ is measured by consumers' perception about the product performance with respect to price. It is assessed as the primary driver of consumer choice behavior with regard to green product purchase decision (Sheth et al., 1991; Bei and Simpson, 1995; Biswas and Roy, 2015).

‘Value-for-Money’ for green products is the degree of fulfillment of consumer need by overall assessment of consumers' perceived net utility from green product consumption based on their perception about the price concern of green products.

On the contrary, for selection of high-priced products other factors exclusive of price are also found to be influential (Lin and Huang, 2012). Beverage consumers in Germany perceive high value-for-money for products with environmentally compatible packaging (Van et al., 2009) whereas higher income group of Taiwanese consumers having high perceived value-for money about green products, were willing to pay the green price premium (Tsay, 2010).

Consumers' extreme price sensitivity or weak perception about green products' price exhibits lack of environmental attitude and responsibility (Malhotra and Maheshwari, 2011). However, there are not enough evidences to prove how the price sensitivity or
the value of money will reflect depending upon different circumstantial factors based on ‘Theory of planned behavior’ constructs in the backdrop of developing country like India where the affordability rate is quite high and has a huge consumer base when comes to consumer market.

7.1.5. Purchase behavior intention

Consumers' willingness to pay or the purchase intention denotes the maximum price consumer may be inclined to pay for a product from a seller (Li and Meshkova, 2013). There are number of studies which has encompassed willingness-to-pay for green alternatives in developed economies (Hansla et al., 2008; Galarraga et al., 2011; Reynolds et al., 2012).

Studies have shown that environmentally conscious consumers are inclined to pay the green price premium (Brandon and Lewis, 1999; Laroche et al., 2001; Lung, 2010). Behavioral intention to pay the green price premium is related to consumers' past experience with the product. This research study aims to identify the positive intention to pay the green price or exhibiting purchase behavioral intention of green product. It will be interesting to see the relationship with the willingness to pay is dependent on which other constructs and to know the relationship among other constructs that will lead to purchase intention.
Green marketing also known as green consumerism is related to companies’ understanding of their accountability for the quality of the environment while meeting customer needs, demands and satisfaction (Chan et al., 2012; Soonthonsmai, 2007). Scholars like Boztepe (2012), Haws et al. (2010), Kai et al. (2013), Maniatis (2015), Tseng and Hung (2013), Thogersen et al. (2012), Yang et al. (2015) have investigated about customers' attitudes and behaviors concerning green consumerism. According to Boztepe (2012) the key influencers of consumers' selection of a green product are green features of the product, and environmental concern related to the particular product (Boztepe, 2012; Thogersen et al., 2012). Wheeler et al. (2013) noted that rejection of ‘green’ brands is due to a lack of awareness where a ‘green’ message is not sufficient to influence the shoppers’ consideration set. Several previous studies have observed a weak relationship between consumers’ positive attitude towards sustainable purchase practices and their actual purchase behavior, which is generally referred to as the ‘attitude–behavior gap’ (Tanner and WölfingKast, 2003; Vermeir and Verbeke, 2006). While there are limited studies on sustainable purchasing that have investigated the impact of individual factors on consumers’ environmentally and socially responsible consumption behavior. Moreover, Haws et al. (2010) identified environmental consciousness like -consciousness about impact of products on environment, considering impacts of personal actions on environment, linking purchase habits with environmental protection, concerned about waste, commitment to environmental protection, and willing to take environment friendly actions. However environmental concern can be considered one such factor and has been observed in previous researches as a key determinant of the choice to purchase organic food (Grunert,1993). Bang et al. (2000) found that consumers’ emotional involvement with environmental issues has a positive association with high willingness to pay for renewable energy. Le (2008) also found that environmental concern was a strong determinant of environmental behavior. Ha and Janda (2012) found that consumers’ specific attitudes towards
energy efficient products positively influence their purchase intention. Earlier studies which have used the TPB model for green/eco-friendly purchase intention, have neglected the impact of environmental concern and environmental knowledge on consumer purchase decision. However, concern for the environment (Diamantopoulos et al., 2003) and environmental knowledge (Scott and Vigar-Ellis, 2014) are considered equally important while making decisions for eco-friendly/green products. According to Biswas and Roy (2015) value-for-money’ is assessed as the primary driver of consumer choice behavior with regard to green product purchase decision. Also, as (Malhotra and Maheshwari, 2011) pointed out that ‘by overall assessment of consumers' perceived net utility from green product consumption based on their perception about the price concern of green products is prevalent in India.

Gilg et al. (2005) also pointed out that green consumption is relatively a new area in the research and as such definitive results and conclusion are lacking regarding the role of environmental concern on green consumption.

However, there are not many studies which have considered behavioral variables as determining variables to understand the relationship between one another.

8.1. Research Objective
The objective of the dissertation thesis is to understand the impact of influential factors leading to consumer expectations related to green purchase intention within the Indian consumers and to examine the relationships on how it is related to social value, environmental knowledge, environmental concern, and value for money leading to green consumerism or the green purchase intention.

8.2. Research conceptualization and the outputs expected
In addition, from the previous conceptualizations about credentials, none of the studies have analyzed the systematic pathway that might lead to green purchase intention behavior with the help of each individual constructs. The proper understanding and systematic progress to analyze each factor will facilitate better understanding of the consumers’ mindset to encourage green consumerism in India.
As per our model these are categorized as social value, environment concern, environment knowledge and value for money in order to perform purchase behavior intention summarized as under in different aspects and possible relationships will be determined on the basis of these three conceptual diagrams. In order to carry on this study, mediating variable is also examined as in figure to understand what leads to what and to get a synchronized idea of consumer perception and behavior in a specific context.

8.3 Key objectives

Conceptualizing research objective into three main testing models that will give the breakdown of the whole process and the relationships that exist between them. The whole thesis will be compiled together studying the underlying three main objectives categorized under:

1st: Testing the direct effects of all other constructs with purchase intention

![Diagram](image)

Fig 5: Author’s own interpretation of study constructs in relation to purchase intention, Source: own

The author wants to study if there are any direct effect of the three variables social value, environmental concern and environmental knowledge with purchase intention. If there are any direct relationships found, it will make the hypothesized model stronger and will have a new approach and impact in decision making of the consumers’ purchase intention.
2nd: Testing the mediating effects of value for money constructs with other constructs

The inclusion of ‘value for money’ is used as mediating construct in testing the hypothesized model with other constructs such as (social value, environ. concern and environ. knowledge) will be interesting to observe because at the end of any decision making or before the purchase behavior intention, the underlying factor can be considered as the utility or the cost you pay for a product or service.

It can be a new perspective for the research in this field and it make sense when you consider the value you received for the cost you pay before making purchasing decision.

3rd: Understand more the relationship between social value, environmental knowledge and environmental concern.

As per the authors’ understanding from the previous studies, it is found that there exists a strong relationship between social value with the consumers’ purchase behavior. With an attempt to the fact, the author is trying to establish a relationship to address a systematic process between the constructs. Assuming, there might be a relationship that social value will lead to environmental concern, then environmental concern will lead to environmental knowledge.
This concept makes sense that when you care about the society, meaning if your social value (SV) is more w.r.t. practicing green behavior, you will automatically will be more concern about the environment i.e. (EC) and when you are concern about the environment, you want to learn or gain more environmental knowledge (EK) to practice a certain behavior. It can be said that environmental concern is the mediating variable for social value and environmental knowledge in this study.
9. CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

Based on the theoretical context and scope of study, a conceptualization of effective behavioural pattern in the event of emerging themes of green consumerism and to create a framework for better understanding between all the constructs of the model. This research attempts to addresses the theoretical as well as practical perspective on the relationship between the constructs of consumer choice regarding green purchasing within the Indian context using the constructs as social value, environmental concern, environmental knowledge and value for money leading to purchase intention.

It will help to create a framework about better understanding of consumers of green products. If this conceptual framework is validated, the author thinks it would immensely help the companies to understand the consumer mindset and to facilitate and innovate marketing plans accordingly. This will also help to boost green consumerism and in the long run to maintain responsible consumption and for firms to align its production processes accordingly.

The theoretical underpinnings for our hypotheses are drawn from the Theory of Planned Behavior with an integrated model incorporating components from ‘Theory of planned behavior models based on the assumption that consumer choice is a function of multiple values (attitude, subjective norm and perceived behavioral control to perform a certain behavior). As per our model these are categorized as social value, environment concern, environment knowledge and value for money in order to perform purchase behavior summarized as under:
9.1. CONCEPTUAL FRAMEWORK

Fig 8: Author’s own interpretation of study constructs in one model, Source: own
9.2. Hypotheses Development

1st Hypotheses: Testing the direct effects of all constructs with purchase intentions

The researcher wants to investigate if there are any direct effect of the three variables social value, environmental concern and environmental knowledge with purchase intention. According to the first research objective, the first hypotheses has been laid and is subdivided into three hypotheses.

**H1A:** Social value is positively related to purchase intention

**H1B:** Environmental knowledge is positively related to purchase intention

**H1C:** Environmental concern is positively related to purchase intention

2nd Hypotheses: The second set of hypotheses is about the mediating effects of value for money

The inclusion of ‘value for money’ is used as mediating construct in testing the hypothesized model with other constructs such as (social value, environ. concern and environ. knowledge) will be interesting to observe because at the end of any decision making or before the purchase behavior intention, the underlying factor can be considered as the utility or the cost you pay for a product or service.

It can be a new perspective for the research in this field and it make sense when you consider the value you received for the cost you pay before making purchasing decision.

**H2A:** The value for money mediates the relationship between social value and purchase intention

**H2B:** The value for money mediates the relationship between environmental knowledge and purchase intention

**H2C:** The value for money mediates the relationship between the environmental concern and purchase intention
Hypotheses: The third hypotheses is about the relationship between all the three variables (social value, environmental knowledge and environmental concern)

As per the authors’ understanding from the previous studies, it is found that there exists a strong relationship between social value with the consumers’ purchase behavior. With an attempt to the fact, the author is trying to establish a relationship to address a systematic process between the constructs. Assuming, there might be a relationship that social value will lead to environmental concern, then environmental concern will lead to environmental knowledge.

H3A: Social value is positively related to environmental knowledge

H3B: Social value is positively related to environmental concern

H3C: Environmental concern mediates the relationship between social value and environmental knowledge
10. METHODOLOGY

10.1 Research approach

Analysis of theoretical and empirical research was used to set up the research framework and elaborate the structure for empirical research. All research questions derived from the objectives in this study were aimed at describing and developing a more detailed understanding within the area. Thus, the research objectives were in line with the multiple case studies which were also an essential part of the survey. Overall, the research had two approaches: quantitative and qualitative, both of which had their own objectives and methods.

10.1.1 Qualitative research

Bryman (2004) defined qualitative research strategy as one that “can be construed as a research approach that usually emphasizes words rather than quantification in the collection and analysis of data.” Qualitative research method in a research seeks to understand and identify the various dimensions of a phenomenon based on in-depth observations and analyses. Often, it is focused on how various consumers view and understand the experiences and occurrences in the business world and construct meanings out of their experiences (Silverman, 2001).

Qualitative research is done through an in-depth research that explores the background and context for the purpose of reporting the findings as it occurs from the interviewees. Qualitative methods offer an internal view which seeks to shed light on the why of an issue, bringing insights to more quantitative analysis and findings. Hence, “qualitative studies have the goal of eliciting understanding meanings; where the researcher is the 'primary instrument' of data collection and analysis; it makes use of fieldwork and an inductive orientation to analysis, and findings that are richly descriptive” (Merriam, 1998). It is an exploratory research method and it involves using unstructured techniques. Qualitative analysis is more explicitly interpretive, creative and personal than quantitative analysis. The strengths of qualitative research methods are derived primarily from its inductive, interpretivism and constructionism approach and its focus on specific situations or people (Patton, 2002).
In this research, it is assumed that, because the buying practices and approaches of different individuals is very distinct and varies from each other, it can therefore not be reduced entirely to figures or numbers as in a case of quantitative research. The qualitative aspect of the research was exploratory, explanatory and descriptive in nature and it involved sampling views from respondents.

10.1.2 Quantitative Research

Bryman (2004) defined quantitative research as a “research strategy that emphasizes the quantification in the analysis and collection of data.” Bryman noted that quantitative research is more objective and focuses on imbibing the practices of natural science models with figures and mathematical equations. Unlike qualitative research, quantitative research method indicates that social reality is an external and objective reality and that society is static and not dynamic. Quantitative research deals with the measuring of a phenomenon and quantifying such measurement with figures or statistics. The aim was to collect detailed information through various data collection procedures over a sustained period of time.

10.2 Research design and sampling method

10.2.1 Research relationships

The exploratory descriptive design was utilized to survey views from customers. The use of the exploratory descriptive design facilitates and makes for flexibility in enabling the researcher to examine all aspects of the objectives. In this design, the interviewee usually ‘leads’ the interviewer as data or information unfolds. Follow up questions and clarified concepts ensure that information collected is exhaustive of the topic of the dissertation. The exploratory design will make it possible to have an in-depth knowledge of the perceptions of relevant stakeholders in the various aspects practicing green marketing and sustainable development in Indian context. The flexibility that comes with the exploratory method makes it appropriate to use especially because of the target population and the topic of my dissertation.
10.2.2 Target Population
The researcher designed the selection of Indian consumers to determine consumer’s awareness of the green products within a specified region. Also, the consumers or customers who are of 20 and above 20 years of age regardless of being a male or a female with the ability and willingness to make purchase decisions are taken into account as the decision makers. All the target respondents are decision makers who are chosen are educated and have minimum qualifications and have a buying capacity. The researcher wants to find out a link within three parameters across the population and driving buying decision making reasons and the influencing factors. Besides the fact that there is insufficient time and money and labor to collect information from all the members of the population. Therefore, the goal becomes difficult in finding the sample size that is the representative of that population. The minimum size of the sample for the study is based on the sample size formula which commonly used in carrying out marketing research.

10.3 Data collection methods

10.3.1 Primary data
Primary data was generated from in-depth studies or surveys. Each survey therefore was based on raw data gathered through individual questionnaire (Hague, 2006). This research was highly dependent on primary data. Primary data collection approach is used to gather information about consumer perceptions and behavior by highlighting on their attitude on green consumerism. It is useful to know the consumer mindset and built up beliefs and prejudices that governs the decision making. Primary data is collected through questionnaire and online interviews. The data collection tools were designed in English in order to make easy for the respondents in India, as all the consumers are literate and educated keeping the clarity of the text simple to ensure so as not to change the content of the question.

10.3.2 Questionnaire
The questionnaire was developed by the author based on the validity of previous studies. The collection of data was gathered from day to day consumers of India who
are regular shoppers. Emails with a survey instrument were sent and distributed to a total 430 customers out of which 357 respondents participated in the research. Among all the responds returned, 339 actual respondents were considered for research and 18 responses were eliminated because of incomplete answers. Finally, there were 339 responses were used which makes 78% of successful response rate.

A large part of the information was collected through online questionnaire. The questionnaire dealt with the target population who are the customers generally buying decision makers of the country was selected with the combination of probability & non-probability sampling method. The proposed sample size was studied, and the proposed research instrument is self-administrated questionnaire, E-mail/campaign and face to face interviews with customers was conducted. Out of the number of responses gathered, there were 41% of female and 59% were male belonging mostly within the age group of 20-35 years of age.

The data employed in this thesis come from a survey conducted among consumers in the in West Bengal. Mainly, a structured questionnaire which was developed by previous researchers based on validated questions was used to collect data. Cooper (2002) points out that a direct interview is more reliable approach in contingent valuation studies. The author offered one-on-one interactions with the consumers and provided an opportunity to explain some of the questions to respondents with average literacy levels. This method was vital to ensure high reliability and accuracy of the data collected. Using convenient sampling, 339 consumers were selected from these three urban areas to participate in the survey as these areas are representatives of the major urban consumer market in West Bengal. Primary data were collected for the purpose of this research. As per that, primary survey was conducted in May to August 2017 targeting consumers who most often visit shopping malls and do regular shopping by themselves. Covering all the measurements of the study, a comprehensive questionnaire was sent individually to consumers who have purchased products which come under all consumer goods. The measuring constructs and the questions for each construct is described in Table1.
Table 1. Measuring items and constructs developed as per the conceptualized model

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Measuring items (17 items)</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Value (SV)</strong></td>
<td>SV1 Purchase of eco-friendly products will help me gain social approval</td>
<td>A.Biswas,M.Roy (2015)</td>
</tr>
<tr>
<td></td>
<td>SV2 I would buy eco-friendly products on peer’s suggestions or preference to buy them</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SV3 Purchasing environmentally friendly or green labelled products will make a positive impression on peer groups</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SV4 Consumption of eco-friendly products will improve the way I am perceived</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental Knowledge (EK)</strong></td>
<td>EK1 I would buy eco-friendly products on peer’s suggestions or preference to buy them</td>
<td>Mostafa(2007)</td>
</tr>
<tr>
<td></td>
<td>EK2 I know to select products and packages that reduce the amount waste dumping</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EK3 I understand various phrases and symbols related to environment on product packages</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EK4 Features rating green labels like totally organic or eco-labels in a product gives me assurance and satisfaction because of the environmental knowledge I have</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental Concern (EC)</strong></td>
<td>EC1 I would avoid buying a product if it had potentially harmful environmental effects</td>
<td>A.Biswas,M.Roy (2015)</td>
</tr>
<tr>
<td></td>
<td>EC2 I am concerned about wasting the resources of our planet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC3 I consider the potential environmental impact of my actions when making many of consumption decisions</td>
<td></td>
</tr>
<tr>
<td><strong>Value for money (VM)</strong></td>
<td>VM1 Environment friendly products are considered good products for the price in India</td>
<td>A. Biswas, M. Roy (2015)</td>
</tr>
</tbody>
</table>

51
<table>
<thead>
<tr>
<th>VM2</th>
<th>Eco friendly products have an expectable standard quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>VM3</td>
<td>Environmentally friendly products are economical for the attributes they offer</td>
</tr>
</tbody>
</table>

**Purchase intention (PI)**

| PI 1 | To me, it deserves to consume environment friendly products despite their premium pricing |
| PI2  | I am willing to buy environment friendly products at a higher price for their environmental benefits |
| PI3  | Given a choice between two substitute products, I intend to choose the one having less environmentally hazardous substances in future |

A. Biswas, M. Roy (2015); Jang et al. (2011)
10.3.3 Pre-testing

The questionnaire was pre-tested using response of potential respondents in India. The pre-testing enables the researcher to ensure that the questions are rid of any form of ambiguity and that the set of questions effectively measures the subject of interest. According to Burns and Bush (2002) and Zikmund (2000), pre-testing is necessary because it ensures that the questions provides the expected responses and reveal ambiguous wording or errors before the research begins. The questionnaire for the consumers was pre-tested by 30 respondents from India.

10.3.4 Response format

In order to obtain information about the respondents from the consumers, both close ended and labelled scale response format is used to know the consumer preferences about green products and to measure their perception. Labelled questions are considered appropriate because it allows respondents to provide answer to the attitudinal questions in various degrees that explains the individual dimension of interest in the specific subject (Aaker, et al. 2000; Kinnear, Taylor and Armstrong, 1993).

In this research, the Likert scale were used because it generates a higher reliability coefficient with lesser items than other scales that are developed with other methods (Hayes, 1998). Likert scale provides a high tendency of receiving responses that accurately portrays the opinions of respondents in a research which contributes the spread of variance of feedbacks.

For approximate accuracy, the respondents were asked to give their agreement or disagreement with the statements as the indicators for measuring the mentioned statements and their views regarding their experience and knowhow. Respondents gave their opinion for each statement through 7-point Likert scale with 1 to indicate “strongly disagree” and 7 to indicate “strongly agree”. The sources of used measurement instruments in this study are presented in the Table1.
10.3.5 Secondary data

Secondary data as per Bryman and Bell (2007), secondary data refers to information that has been collected for another purpose by other people other than the researcher. Secondary data used in this dissertation came from authentic sources and market research organizations such as AT Kearney report, GRDI index and Tata Strategic Management Group (TSMG) to make the ground of the research more solid. Apart from that internal data within different research firms, research journals, articles, books, reports and online databases and websites of the companies were researched for examples. The quality of secondary data is usually good and authentic. In this research, secondary research was particularly useful in the analysis of the market structure of the global FMCG firms taking sustainable initiatives development through environment friendly ways.

Also, to determine the present worldwide rankings and running activities and awareness in the world and country wise scenarios. However, it is important while using secondary sources, the researcher should know to segregate which data to include and exclude what are the valid information which might be useful for research.

10.4 Sampling Method

In both quantitative and qualitative research, sampling is one of the important steps for researchers (Bryman, 2006). Given the objective of the dissertation, both the stratified simple random sampling and purposive sampling method are considered suitable in selecting respondents. Stratified simple random sampling is a variation of simple random sampling where the population is divided into mutually exclusive and relatively homogeneous groups called (Shukla, 2008).

In this research, the purposive sampling method was used. Purposive sampling is a sampling method where the researcher selects a sample with a purpose in mind and the sample is thus selected to include people of interest and exclude those who do not suit the purpose. This sampling technique is necessary for this research because the researcher would want to reach the target group quickly. In effect, this type of sampling makes it possible to select interviewees whose qualities or experiences permit an understanding of the phenomena in question, and hence are valuable. This is the strength of purposive sampling.
Instead of going for the typical cross-section data or a balanced choice, the researcher will be able to concentrate on instances which display wide variety possible even focus on extreme cases to shed more light on the research objectives. In this regard, it might not only be economical but it could also be informative in a way that conventional probability sampling methods cannot be.

**Sample size calculation:**

To fit the sample size to conduct the analysis, 339 respondents were chosen fitting the criteria of the research objective. As per Sekaran (2003) sample size larger than 30 and less than 500 are appropriate for most of the research. In order to confirm the appropriate sample size, Kline (2011) also suggested that there should be a minimum of 10 cases per parameter/ items required in a statistical estimate. In our analysis, there are 17 items considered. Therefore, a sample size of minimum 170 responses is required. Moreover, in our case we have a sample size of 339 responses which is a good fit to conduct the analysis.

### 10.4.1 Sampling characteristics

In this case for the dissertation thesis, we use 339 actual respondents to test our hypotheses. This research goes beyond the minimum sample size required for conducting the studies. An increase in the sample size beyond what is recommended therefore increases the validity of generalizability of the findings. The sample size will be divided into strata according to age to cover the part of the population that can make decisions to take part in the market process. This allows ease in the gathering of data given that a critical observation will used to identify the environmentally conscious consumers on their awareness level. In effect, this type of sampling makes it possible to select interviewees whose qualities or experiences permit an understanding of the phenomena in question, and hence are valuable. This is the strength of purposive sampling. Efforts were made to reduce the likelihood of using lot of people from one sub-group in the population. The sampling therefore cut across individuals with wide demographic attributes. In order to achieve external validity, the research ensured that a range from one extreme to another in included in terms of grouping and respondents size.
10.5 Analytical techniques

10.5.1 Structural Equation Modeling

Structural Equation modelling (SEM) is a multivariate technique, which estimates a series of inter-related dependence relationships. In this study, all the three hypothesized models are tested statistically in a simultaneous analysis between all the variables in the entire system to test the entire conceptual framework to determine the extent to which it is consistent with the data. If the goodness of fit is adequate, then it means that there is a postulated relation among the variables. In this thesis, all the 17 constructs are tested through SEM. A Structural Equation Modeling was applied to test the overall model fit indices. Data analysis was done through the application of AMOS 22.0.

SEM has some notable features which match with the statistical analysis of this thesis.

SEM can be used as a more powerful alternative to multiple regression, path analysis for examining the complex interrelationships between constructs which consists of multiple direct and indirect relationships like in our research models (Fornell and Larcker, 1981). Advantages of SEM compared to multiple regressions and path analysis include more flexible assumptions; allowing interpretation even in the face of multicollinearity; use of confirmatory factor analysis (CFA) to reduce measurement error; testing models overall rather than testing coefficients individually; testing models with multiple dependent variables; modeling complex causal paths taken by mediating variables.

In this thesis, the confirmatory factor analysis (CFA), reliability and validity analysis are performed to assess the adequacy of the measurement model for each research model. And if the models have adequate fit with data, the structural models are tested to assess the significant of relationships within each research models. Then, the bootstrapping technique are employed to test the significant of direct effect and indirect effect between factors to reject or not to reject the hypotheses of mediating effects.
11. SAMPLE BACKGROUND AND DEMOGRAPHICS

11.1 Background of Consumers

The demographic and socio-economic background of respondents are important for research findings. Such information allows better understanding of the patterns and results arising from the analysis of the data. In align with the study, the background information and characteristics of the consumers were pursued to provide the overview of the demographic specifications. All together 339 respondents (consumers) participated in the survey.

11.1.1 Male and Female distribution of the consumers

The male and female distribution across the number the respondents is important to know to understand if it is well distributed among both the genders who have participated in the survey. In this case, relative close approximation has been achieved with distribution of questionnaire between both the genders. Also, keeping in view, it is important to know different opinions or perception between different genders to get more realistic results from the general population.

![Gender Distribution of the Respondents](image)

Fig 9: Gender distribution of the respondents
Source: author’s consumer survey

As per the graph above, 200 males and 139 females participated in the survey which accounts to 59 percent of male and 41 percent of female participants.
11.1.2 Education level of the respondents

The education background of respondents was of interest to the researcher; therefore it was explored in the study to be sure about all the consumers (respondents) have a decent qualification to understand the meaning and relevance of green products or eco-friendly products. From the data gathered below, it is interesting to see the outputs. Only 9 of them have completed high school and are studying further to complete their graduation. Whereas, 122 respondents have completed their bachelor’s studies and 175 respondents hold a master’s degree and 33 out of them are doctorate. Therefore, the analysis from the level of education gives us a brief overview that among all the respondents have a reasonable qualification standard.

![Education Level of the Respondents](chart.png)

**Fig 10:** Education level of the respondents  
**Source:** author’s consumer survey

11.1.3 Income level of the respondents

The income level of the consumers was of interest to the researcher to study the purchasing power categorized with the range of (less than 3 Lakh to the max. which
goes above 11 Lakh). This graphical representation will give the background information of all the consumers who participated in the survey and their respective income levels. From the graph, it is evident that most of the respondents have a decent annual income with the max. number 82 belonging to the (above 11 lakh) and (from 5 Lakh to 7 lakh) which is 70. The min. range belongs to (less than 3 Lakh) which is 31.

**Fig 11: Income level of the respondents**

Source: author’s consumer survey

The income level of the consumers shows their capacity to afford a given product that is why it was important to know the income levels of the respondents taking part in the survey.
12. RELIABILITY AND ANALYSIS

12.1. Descriptive overview

The descriptive statistics for each construct in the measurement instrument are provided in the Table 2. The mean of all constructs ranges from 4.25 to 5.40 which are above average value according to 7-point Likert scale. With 1 as “strongly disagree” and 7 as “strongly agree” and 4 as “neutral”. As it is evident from the table of the descriptive analysis, most of the consumers are toward more positive or ‘Agree’ continuum with statements in the measurement scale.

Purchase intention (PI) is the constructs with the highest mean of 5.4. This might suggest that most of the consumers have an overall positive attitude for green purchase intention. Environmental knowledge (EK) seems to have more positive impact on consumers than environmental concern (EC) among the Indian consumers. Among the social value (SV) and value for money (VM), Social value seems to have more impact among the consumers’ over the value for money of total mean 4.2 compared to social value is (4.7). Other details about descriptive can be seen from Table 2.

12.2. Constructs reliability and validity

Construct reliability refers to the degree to which a set of indicators, the questions are consistent and reflects stability across all the constructs such as (social value, environment knowledge, environment construct, value for money and purchase intention) in our study of interpretation. It is the classical model of test validity which measures the appropriateness of the intended constructs in the conceptualized framework.

Cronbach’s alpha is the most commonly used for assessing the reliability of a construct. The Cronbach’s alpha of each construct in the research model is presented in Table 3. As indicated in Table 3, all the Cronbach’s alpha for all constructs exceeds 0.80, satisfying the general recommended level of 0.70 for the research indicators (Cronbach, 1951). Therefore, all the constructs show a good reliability. It means all the questions perfectly fits and actually describes the given constructs as shown in Table 3.
Between all the scores calculated, the Cronbach’s alpha score of purchase intention (PI) is the maximum of (0.934) and the minimum is of value for money (VM) of (0.882) which is also a good score.

Convergence validity refers to how well different indicators using for measuring a construct converge, indicating that a single dimension of meaning is being measured. Convergent validity can be assessed by examining the factor loading and the average variance extracted (AVE) of the constructs (Fornell and Larcker, 1981).

All the indicators have significant loading onto the constructs which they expected to measure (p < 0.01) as in Table 4. (Regression weights) which is a good fit and matches all the constructs with the appropriate variable.

Moreover, as presented in Table 3., the AVE for each construct is greater than 0.50, which confirms the convergence validity of all the constructs.

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s alpha</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialvalue</td>
<td>0.919</td>
<td>0.740</td>
</tr>
<tr>
<td>Envir.Knowledged</td>
<td>0.909</td>
<td>0.715</td>
</tr>
<tr>
<td>Environ.Concern</td>
<td>0.912</td>
<td>0.777</td>
</tr>
<tr>
<td>Value for money</td>
<td>0.882</td>
<td>0.715</td>
</tr>
<tr>
<td>Purchase intention</td>
<td>0.934</td>
<td>0.824</td>
</tr>
</tbody>
</table>

Discriminant validity refers to the fact that indicators for different constructs should not be so highly correlated across constructs which can be lead to the constructs overlap. Discriminant can be examined by comparing the construct’s square root of AVE with its square correlation with other constructs (Fornell and Larcker, 1981).

As presented in Table 5, the square root AVE value of each construct is greater than its square correlation with other constructs, which support the discriminant validity of the constructs.
Table 5. Discriminant Validity

<table>
<thead>
<tr>
<th>Socialvalue</th>
<th>Envir.Knolwkedge</th>
<th>Environ.Concern</th>
<th>Valueformoney</th>
<th>Purchase intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.862</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.816</td>
<td>0.845</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.779</td>
<td>0.805</td>
<td>0.881</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.547</td>
<td>0.419</td>
<td>0.399</td>
<td>0.846</td>
<td></td>
</tr>
<tr>
<td>0.861</td>
<td>0.795</td>
<td>0.879</td>
<td>0.545</td>
<td>0.908</td>
</tr>
</tbody>
</table>
### Table 2. Descriptive Statistics

<table>
<thead>
<tr>
<th>Label</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Analysis N</th>
</tr>
</thead>
<tbody>
<tr>
<td>SV1</td>
<td>4.82</td>
<td>1.175</td>
<td>339</td>
</tr>
<tr>
<td>SV2</td>
<td>4.58</td>
<td>1.083</td>
<td>339</td>
</tr>
<tr>
<td>SV3</td>
<td>4.79</td>
<td>1.267</td>
<td>339</td>
</tr>
<tr>
<td>SV4</td>
<td>4.67</td>
<td>1.100</td>
<td>339</td>
</tr>
<tr>
<td>EK1</td>
<td>5.28</td>
<td>1.041</td>
<td>339</td>
</tr>
<tr>
<td>EK2</td>
<td>5.26</td>
<td>1.145</td>
<td>339</td>
</tr>
<tr>
<td>EK3</td>
<td>5.24</td>
<td>0.965</td>
<td>339</td>
</tr>
<tr>
<td>EK4</td>
<td>5.16</td>
<td>0.982</td>
<td>339</td>
</tr>
<tr>
<td>EC1</td>
<td>5.02</td>
<td>1.288</td>
<td>339</td>
</tr>
<tr>
<td>EC2</td>
<td>5.10</td>
<td>1.279</td>
<td>339</td>
</tr>
<tr>
<td>EC3</td>
<td>4.94</td>
<td>1.242</td>
<td>339</td>
</tr>
<tr>
<td>VM1</td>
<td>4.25</td>
<td>1.737</td>
<td>339</td>
</tr>
<tr>
<td>VM2</td>
<td>4.09</td>
<td>1.713</td>
<td>339</td>
</tr>
<tr>
<td>VM3</td>
<td>4.31</td>
<td>1.682</td>
<td>339</td>
</tr>
<tr>
<td>PI1</td>
<td>5.40</td>
<td>1.256</td>
<td>339</td>
</tr>
<tr>
<td>PI2</td>
<td>5.01</td>
<td>1.308</td>
<td>339</td>
</tr>
<tr>
<td>PI3</td>
<td>5.08</td>
<td>1.382</td>
<td>339</td>
</tr>
</tbody>
</table>

### Table 4. Regression Weights of the measurement model:
(Group number 1 - Default model)

<table>
<thead>
<tr>
<th>Label</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4 - Socialvalue</td>
<td>.945</td>
<td>.049</td>
<td>19.438</td>
<td>***</td>
<td>par_1</td>
</tr>
<tr>
<td>Q3 - Socialvalue</td>
<td>1.141</td>
<td>.054</td>
<td>21.166</td>
<td>***</td>
<td>par_2</td>
</tr>
<tr>
<td>Q2 - Socialvalue</td>
<td>.894</td>
<td>.036</td>
<td>24.788</td>
<td>***</td>
<td>par_3</td>
</tr>
<tr>
<td>Q1 - Socialvalue</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q8 - Envir.Knolwkedge</td>
<td>.859</td>
<td>.050</td>
<td>17.336</td>
<td>***</td>
<td>par_4</td>
</tr>
<tr>
<td>Q7 - Envir.Knolwkedge</td>
<td>.866</td>
<td>.041</td>
<td>21.264</td>
<td>***</td>
<td>par_5</td>
</tr>
<tr>
<td>Q6 - Envir.Knolwkedge</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q17 - purchaseintention</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q16 - purchaseintention</td>
<td>.918</td>
<td>.035</td>
<td>25.895</td>
<td>***</td>
<td>par_6</td>
</tr>
<tr>
<td>Q15 - purchaseintention</td>
<td>.913</td>
<td>.032</td>
<td>28.477</td>
<td>***</td>
<td>par_7</td>
</tr>
<tr>
<td>Q13 - Valueformoney</td>
<td>.895</td>
<td>.049</td>
<td>18.128</td>
<td>***</td>
<td>par_8</td>
</tr>
<tr>
<td>Q12 - Valueformoney</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q10 - Environ.Concern</td>
<td>1.047</td>
<td>.045</td>
<td>23.535</td>
<td>***</td>
<td>par_9</td>
</tr>
<tr>
<td>Q9 - Environ.Concern</td>
<td>.994</td>
<td>.048</td>
<td>20.737</td>
<td>***</td>
<td>par_10</td>
</tr>
<tr>
<td>Q5 - Envir.Knolwkedge</td>
<td>.953</td>
<td>.049</td>
<td>19.338</td>
<td>***</td>
<td>par_21</td>
</tr>
<tr>
<td>Q11 - Environ.Concern</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q14 - Valueformoney</td>
<td>.884</td>
<td>.048</td>
<td>18.263</td>
<td>***</td>
<td>par_22</td>
</tr>
</tbody>
</table>
12.3. Testing the measurement model

Measurement model validity depends on establishing acceptable levels of goodness-of-fit for the measurement model and finding specific evidence of construct validity. After validation of the measurement instrument was satisfied, the results of the Confirmatory Factor Analysis (CFA) using *Amos 22* was used to evaluate the model fit of the measurement model to confirm the hypothesized structure. The measurement model shown in Figure 12. comprises of five factors. Each factor is measured by a minimum of three to a maximum of four observed variables, the reliability of which is influenced by random measurement error, as indicated by the associated error term. Each of these observed variables is regressed into its respective factor. Finally, all the five factors are shown to be inter-correlated.

Confirmatory Factor Analysis (CFA) is executed to assess how the proposed research model as shown in Figure 12. fits with the data collected from the samples. Previous studies suggest using more than one goodness-of-fit index to evaluate the model fit of the proposed model (Fornell and Larcker, 1981). Therefore, in this study set of goodness-of-fit indices are used.

The Chi-square is significant $\chi^2 = 199.104$ ($p = 0.00$), the relative Chi-square ($\chi^2/df = 1.94$) (smaller than 2) show the acceptable fit with large sample as shown in Table 6.

**Table 6. CMIN**

<table>
<thead>
<tr>
<th>Model</th>
<th>NPAR</th>
<th>CMIN</th>
<th>DF</th>
<th>P</th>
<th>CMIN/DF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>49</td>
<td>199.104</td>
<td>104</td>
<td>.000</td>
<td>1.914</td>
</tr>
<tr>
<td>Saturated model</td>
<td>153</td>
<td>.000</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence model</td>
<td>17</td>
<td>5561.709</td>
<td>136</td>
<td>.000</td>
<td>40.895</td>
</tr>
</tbody>
</table>

Other indices also show the good fit for the research model according to the conventional thresholds. The normed fit index (NFI) = 0.964, the comparative fit index (CFI) = 0.982, the Tucker-Lewis coefficient index (TLI) = 0.977 (NFI, CFI, TLI all > 0.95); where (0.95) is considered the threshold as shown in Table 7 while conducting baseline comparisons.
Table 7. Baseline Comparisons

<table>
<thead>
<tr>
<th>Model</th>
<th>NFI</th>
<th>RFI</th>
<th>IFI</th>
<th>TLI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Delta1</td>
<td>rho1</td>
<td>Delta2</td>
<td>rho2</td>
<td></td>
</tr>
<tr>
<td>Default model</td>
<td>.964</td>
<td>.953</td>
<td>.983</td>
<td>.977</td>
<td>.982</td>
</tr>
<tr>
<td>Saturated model</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence model</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Normed Fit Index (NFI)**

The NFI is one of the original incremental fit indices introduced by Bentler and Bonnet (1980). It is a ratio of the difference in the value for the fitted model and the null model divided by the value for the null model. It ranges between zero to one. A Normed fit index of one indicates perfect fit.

**Relative Fit Index (RFI)**

The relative Fit Index (RFI) represents a derivative of the NFI; as with both the NFI and CFI, the RFI coefficient values range from zero to one with values close to one indicating superior fit (Hu and Bentler, 1999).

**Tucker Lewis Index (TLI)**

The Tucker Lewis Index (Tucker and Lewis, 1973) is conceptually similar to the NFI, but varies in that it is actually a comparison of the Normed chi-square values for the null and specified model, which to some degree takes into account model complexity. Models with good fit have values that approach one (Hu and Bentler, 1999), and a model with a higher value suggests a better fit than a model with a lower value.

**Comparative Fit Index (CFI)**

The CFI is an incremental fit index that is an improved version of the NFI (Bentler, 1990; Bentler and Bonnet, 1980; Hu and Bentler, 1999). The CFI is Normed so that values range between zero to one, with higher values indicating better fit. Because the CFI has many desirable properties, including its relative, but not complete, insensitivity to model complexity, it is among the widely used indices. CFI values above 0.90 are usually associated with a model that fits well. But a revised cut off value close to 0.95 was suggested by Hu and Bentler (1999).
**Tucker Lewis Index (TLI)**
The Tucker Lewis Index (Tucker and Lewis, 1973) is conceptually similar to the NFI, but varies in that it is actually a comparison of the Normed chi-square values for the null and specified model, which to some degree takes into account model complexity. Models with good fit have values that approach one (Hu and Bentler, 1999), and a model with a higher value suggests a better fit than a model with a lower value.
Fig 12. Measurement model: Testing the direct effects of all constructs with purchase intentions; Source: Own study
The root mean square residual (RMR) = 0.061 and root mean square error of approximation (RMSEA) = 0.052 (both < 0.08) as shown in Table 8 and Table 9.

The Goodness-of-fit Index (GFI & AGFI)
The goodness-of-fit index (GFI) was the very first standardized fit index (Joreskog & Sorbom, 1981). It is analogous to a squared multiple correlation except that the GFI is a kind of matrix proportion of explained variance. Thus, GFI = 1.0 indicates perfect model fit, GFI > .90 may indicate good fit, and values close to zero indicate very poor fit. However, values of the GFI can fall outside the range 0–1.0. Values greater than 1.0 can be found with just identified models or with over identified models with almost perfect fit; negative values are most likely to happen when the sample size is small or when model fit is extremely poor.

Table 8: RMR, GFI

<table>
<thead>
<tr>
<th>Model</th>
<th>RMR</th>
<th>GFI</th>
<th>AGFI</th>
<th>PGFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>.061</td>
<td>.936</td>
<td>.906</td>
<td>.636</td>
</tr>
<tr>
<td>Saturated model</td>
<td>.000</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence model</td>
<td>.868</td>
<td>.155</td>
<td>.050</td>
<td>.138</td>
</tr>
</tbody>
</table>

Root Mean Square Error of Approximation (RMSEA)
Root Mean Square Error Approximation (RMSEA) was first proposed by Steiger and Lind (1980). It is one of the most widely used measures that attempts to correct for the tendency of the GOF test statistic to reject models with a large sample or a large number of observed variables. Thus, it better represents how well a model fits a population, not just the sample used for estimation. Lower RMSEA values indicate better fit. Earlier research suggest values of <0.05 (Browne and Cudeck, 1993), Hu and Bentler (1999) have suggested value of <0.06 to be indicative of good fit.

Table 9: RMSEA

<table>
<thead>
<tr>
<th>Model</th>
<th>RMSEA</th>
<th>LO 90</th>
<th>HI 90</th>
<th>PCLOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>.052</td>
<td>.041</td>
<td>.063</td>
<td>.367</td>
</tr>
<tr>
<td>Independence model</td>
<td>.344</td>
<td>.336</td>
<td>.351</td>
<td>.000</td>
</tr>
</tbody>
</table>
In sum, the data collected from the consumers are fitting well with the proposed conceptual model of testing the direct effects of all constructs with purchase intentions from goodness of fits indexes for the research model.

12.4. Testing the Structural model

Confirmatory Factor Analysis (CFA) is executed to assess how the proposed research model as shown in Figure 13. fits with the data collected from the samples. Previous studies have suggested to use more than one goodness-of-fit index to evaluate the model fit of the proposed model (Fornell and Larcker, 1981) as it has been done in the previous measurement model. To provide with the good fitness model, this study has included the set of goodness-of-fit indices.

The Chi-square is significant $\chi^2 = 196.992$ (p = 0.00), the relative Chi-square ($\chi^2/df = 1.876$) (smaller than 2) show the acceptable fit with large sample as shown in Table 10.

<table>
<thead>
<tr>
<th>Model</th>
<th>NPAR</th>
<th>CMIN</th>
<th>DF</th>
<th>P</th>
<th>CMIN/DF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>48</td>
<td>196.992</td>
<td>105</td>
<td>.000</td>
<td>1.876</td>
</tr>
<tr>
<td>Saturated model</td>
<td>153</td>
<td>.000</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence model</td>
<td>17</td>
<td>5561.709</td>
<td>136</td>
<td>.000</td>
<td>40.895</td>
</tr>
</tbody>
</table>

Other indices also show the good fit for the research model according to the conventional thresholds. The normed fit index (NFI) = 0.965, the comparative fit index (CFI) = 0.983, the Tucker-Lewis coefficient index (TLI) = 0.977 (NFI, CFI, TLI all > 0.95); where (0.95) is considered the threshold as shown in Table 11 while conducting baseline comparisons.
Table 11: Baseline Comparisons

<table>
<thead>
<tr>
<th>Model</th>
<th>NFI Delta1</th>
<th>RFI rho1</th>
<th>IFI Delta2</th>
<th>TLI rho2</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>.965</td>
<td>.954</td>
<td>.983</td>
<td>.978</td>
<td>.983</td>
</tr>
<tr>
<td>Saturated model</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence model</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table 12: RMR, GFI

<table>
<thead>
<tr>
<th>Model</th>
<th>RMR</th>
<th>GFI</th>
<th>AGFI</th>
<th>PGFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>.061</td>
<td>.937</td>
<td>.909</td>
<td>.643</td>
</tr>
<tr>
<td>Saturated model</td>
<td>.000</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independence model</td>
<td>.868</td>
<td>.155</td>
<td>.050</td>
<td>.138</td>
</tr>
</tbody>
</table>

The root mean square residual (RMR) = 0.061 and root mean square error of approximation (RMSEA) = 0.051 (both < 0.08) as shown in Table 12 and Table 13.

Table 13: RMSEA

<table>
<thead>
<tr>
<th>Model</th>
<th>RMSEA</th>
<th>LO 90</th>
<th>HI 90</th>
<th>PCLOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>.051</td>
<td>.040</td>
<td>.062</td>
<td>.431</td>
</tr>
<tr>
<td>Independence model</td>
<td>.344</td>
<td>.336</td>
<td>.351</td>
<td>.000</td>
</tr>
</tbody>
</table>

In sum, the data collected from the consumers are fitting well with the proposed structural model of testing the direct effects of all constructs with purchase intentions from goodness of fits indexes for the research model.
Fig 13. The Structural Model parameters, Source: Own study
In order to get a better understanding and interpretation of the values if structural modeling is used to test the model fitness to the various variable in the hypothesized model as in Figure 13. Before running the model, we need to know why SEM Is important.

As per Bryne (2013), Structural Equation Modeling (SEM) is a multivariate technique, which estimates a series of inter-related dependence relationships simultaneously. The term Structural Equation Modeling conveys that the causal processes under study are represented by a series of structural (i.e. regression) equations, and that these can be modeled pictorially to enable a clearer conceptualization of the study. The hypothesized model can be tested statistically in a simultaneous analysis of the entire system of variables to determine the extent to which it is consistent with the data. If the goodness-of-fit is adequate, the model argues for the plausibility of postulated relations among the variables. In our results all the goodness of fits has been achieved. the structural model defines relations among the unobserved variables. Accordingly, it specifies the manner by which particular latent variables directly or indirectly influence (i.e. ‘cause’) changes in the values of certain other latent variables in the model. Therefore, it is concerned with how constructs are associated with each other and is used for hypotheses testing. In this study data was analyzed using Fornell and Larcker (1981) two step approach whereby the estimation of the confirmatory measurement model precedes the estimation of the structural model.

The SEM is used to interpret the results from of a complex model and then generalizes to give s meaningful result. After running our model in SEM, we found the results as interpreted below and the model has achieved a high effective rate of ‘purchase intention ‘PI’ to 89% The results after between each construct can be found in Figure 14. described below.
Fig 14. The Structural Model results between the constructs, Source: Own study
### 1st Hypotheses: Testing the direct effects of all constructs with purchase intentions

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Supported/Not supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1A: Social value is positively related to purchase intention</td>
<td>Supported</td>
</tr>
<tr>
<td>H1B: Environmental knowledge is positively related to purchase intention</td>
<td>Not supported</td>
</tr>
<tr>
<td>H1C: Environmental concern is positively related to purchase intention</td>
<td>Supported</td>
</tr>
</tbody>
</table>

### 2nd Hypotheses: The second set of hypotheses is about the mediating effects of value for money

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Supported/Not supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2A: The value for money mediates the relationship between social value and purchase intention</td>
<td>Supported</td>
</tr>
<tr>
<td>H2B: The value for money mediates the relationship between environmental knowledge and purchase intention</td>
<td>Not supported</td>
</tr>
<tr>
<td>H2C: The value for money mediates the relationship between the environmental concern and purchase intention</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

### 3rd Hypotheses: The third hypotheses is about the relationship between all the three variables (social value, environmental knowledge and environmental concern)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Supported/Not supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H3A: Social value is positively related to environmental knowledge</td>
<td>Supported</td>
</tr>
<tr>
<td>H3B: Social value is positively related to environmental concern</td>
<td>Supported</td>
</tr>
<tr>
<td>H3C: Environmental concern mediates the relationship between social value and environmental knowledge</td>
<td>Supported</td>
</tr>
</tbody>
</table>
12.4.1. Path analysis to test our proposed relationships

1st Hypotheses: Testing the direct effects of all constructs with purchase intentions

From the table 14 we can see:

✓ Social value has positive significant relationship with purchase intention
✓ Environmental concern has positive significant relationship with purchase intention
✓ Value for money has positive significant relationship with purchase intention
✘ But, environmental knowledge has insignificant relationship with purchase intention

2nd Hypotheses: The second set of hypotheses is about the mediating effects of value for money

Testing the mediating effects of value for money constructs. Whether value for money mediates the social value – purchase intention relationship, environmental concern – purchase intention relationship, and environmental knowledge – purchase intention relationship?

✓ Value for money has positive significant relationship with purchase intention
✓ Social value has positive significant relationship with value for money

➢ Value for money mediates the social value-purchase intention relationship, but partially, because the direct effect from social value to purchase intention is still significant.
✓ Environmental concern has insignificant relationship with value for money
✘ Environmental Knowledge has insignificant relationship with value for money
➢ Value for money does not mediate the environmental concern – purchase intention relationship, and environmental knowledge – purchase intention relationship.
✓ Environmental concern only has direct relationship with purchase intention.
✘ Environmental knowledge do not have any significant relationship with purchase intention, both indirect and direct.
3<sup>rd</sup> Hypotheses: The third hypotheses is about the relationship between all the three variables (social value, environmental knowledge and environmental concern)

Is to understand the relationships between social value, environmental knowledge and environmental concern. The idea here is to test, if social value will lead to the environmental concern and environmental concern will lead to environmental knowledge. If this happens, it means that when we care about our society, we will automatically will be concerned about the environment and if we are concerned about something, we intend to learn more about it and try to gain substantial knowledge to act accordingly. Here in this case, environmental concern can be the mediating variables for the social value – environmental knowledge relationship.

The findings from the interpretation shows

- ✓ Social value has positive significant relationship with environmental concern
- ✓ Social value has positive significant relationship with environmental knowledge
- ✓ Environmental concern has positive significant relationship with environmental knowledge

➢ Environmental concern mediates the social value-environmental knowledge relationship, but partially, because the direct effect from social value to environmental knowledge is still significant.

All the assumptions and hypotheses are confirmed and tested

- ✓ Positive significant
- ✗ No relationship
- ➢ Mediating effect exists
<table>
<thead>
<tr>
<th>Factor</th>
<th>Load</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environ.Concern</td>
<td>.858</td>
<td>.057</td>
<td>14.980</td>
<td>***</td>
<td>par_18</td>
<td></td>
</tr>
<tr>
<td>Eviron.Knowledge</td>
<td>.456</td>
<td>.066</td>
<td>6.924</td>
<td>***</td>
<td>par_19</td>
<td></td>
</tr>
<tr>
<td>Eviron.Knowledge</td>
<td>.369</td>
<td>.060</td>
<td>6.179</td>
<td>***</td>
<td>par_26</td>
<td></td>
</tr>
<tr>
<td>Valueformoney</td>
<td>.948</td>
<td>.170</td>
<td>5.562</td>
<td>***</td>
<td>par_20</td>
<td></td>
</tr>
<tr>
<td>Valueformoney</td>
<td>-.096</td>
<td>.150</td>
<td>-6.38</td>
<td>.523</td>
<td>par_24</td>
<td></td>
</tr>
<tr>
<td>Valueformoney</td>
<td>-.015</td>
<td>.171</td>
<td>-.089</td>
<td>.929</td>
<td>par_25</td>
<td></td>
</tr>
<tr>
<td>purchaseintention</td>
<td>-.014</td>
<td>.074</td>
<td>-.194</td>
<td>.846</td>
<td>par_15</td>
<td></td>
</tr>
<tr>
<td>purchaseintention</td>
<td>.691</td>
<td>.070</td>
<td>9.841</td>
<td>***</td>
<td>par_21</td>
<td></td>
</tr>
<tr>
<td>purchaseintention</td>
<td>.105</td>
<td>.028</td>
<td>3.716</td>
<td>***</td>
<td>par_22</td>
<td></td>
</tr>
<tr>
<td>purchaseintention</td>
<td>.416</td>
<td>.079</td>
<td>5.237</td>
<td>***</td>
<td>par_23</td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>.943</td>
<td>.049</td>
<td>19.382</td>
<td>***</td>
<td>par_1</td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>1.141</td>
<td>.054</td>
<td>21.171</td>
<td>***</td>
<td>par_2</td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>.894</td>
<td>.036</td>
<td>24.791</td>
<td>***</td>
<td>par_3</td>
<td></td>
</tr>
<tr>
<td>Q1</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q8</td>
<td>.829</td>
<td>.044</td>
<td>18.927</td>
<td>***</td>
<td>par_4</td>
<td></td>
</tr>
<tr>
<td>Q7</td>
<td>.893</td>
<td>.042</td>
<td>21.194</td>
<td>***</td>
<td>par_5</td>
<td></td>
</tr>
<tr>
<td>Q6</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q17</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q16</td>
<td>.917</td>
<td>.035</td>
<td>25.900</td>
<td>***</td>
<td>par_6</td>
<td></td>
</tr>
<tr>
<td>Q15</td>
<td>.913</td>
<td>.032</td>
<td>28.482</td>
<td>***</td>
<td>par_7</td>
<td></td>
</tr>
<tr>
<td>Q13</td>
<td>.894</td>
<td>.049</td>
<td>18.129</td>
<td>***</td>
<td>par_8</td>
<td></td>
</tr>
<tr>
<td>Q12</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Estimate</td>
<td>S.E.</td>
<td>C.R.</td>
<td>P</td>
<td>Label</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>----------</td>
<td>------</td>
<td>--------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>Q10</td>
<td>Environ.Concern</td>
<td>1.049</td>
<td>.045</td>
<td>23.536</td>
<td>***</td>
<td>par_9</td>
</tr>
<tr>
<td>Q9</td>
<td>Environ.Concern</td>
<td>.994</td>
<td>.048</td>
<td>20.700</td>
<td>***</td>
<td>par_10</td>
</tr>
<tr>
<td>Q5</td>
<td>Environ.Knowledge</td>
<td>.946</td>
<td>.046</td>
<td>20.489</td>
<td>***</td>
<td>par_11</td>
</tr>
<tr>
<td>Q11</td>
<td>Environ.Concern</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q14</td>
<td>Valueformoney</td>
<td>.883</td>
<td>.048</td>
<td>18.261</td>
<td>***</td>
<td>par_12</td>
</tr>
</tbody>
</table>
13. DISCUSSIONS AND FINDINGS

From the above-mentioned results and discussion on each hypothesis, we came into conclusion that Social value is positively related to consumer awareness in the Indian context. Meaning Indian consumers are influenced by how society reacts to green marketing.

The result suggested that consumers' intention to buy green products can be predicted by the determinants factors such as social value, environmental knowledge, environmental concern and value for money has a significant influence on consumer's purchase intention.

As per the results from our analysis it is found that social value plays a significant role while making a green purchase intention behavior. Also, environmental concern has a significant influence on consumer's purchase intention which shows Indian consumers are also concerned about the issues related to the environment and considering it while purchasing the green products like their developed counterparts. The result appears to validate the Hartmann and Apaolaza (2012); Mostafa (2007, 2009) in determining the importance of environmental concern while opting for eco-friendly behavior. Further, environmental knowledge also reported a significant impact on the purchase intention of green products as per the findings of Mostafa (2007, 2009), Peattie (2010).

However, in our study the direct implication of environmental knowledge has an insignificant result with purchase intention which contradicts the previous study of Mostafa (2009) and Peattie (2010). Still the environmental knowledge is comparatively descent having a mean value of (5.235) out of 7 which is higher than the mean value of environmental concern (EC) is (5.019) out of 7 which justifies that the Indian consumers have a likely concern for both (EK) and (EC) and have a further scope of understanding and developing interests towards the environment and in future are likely to get more aware and conscious about it. Overall from all the factors studied social value (SV) has the strongest direct implication with purchase intention behavior as per our hypothesized model and value for money also has positive significance with (PI), which means Indian consumers’ will be ready to invest in green products, if they see the worth of investing in it. Although the mean value for
value for money is (4.21) which is comparatively lower than (EC). However, it is interesting to see that (SV) has a positive significant relationship with both environmental concern (EC) and environmental knowledge (EK). So, it means if (SV) of an individual increase it will result in the increase of both (EK) and (EC).

In addition, (SV) also has a positive significant relation with value for money (VM) as well and VM actually mediates the relationship between social value (SV) and (PI).

According to the results, supported the inclusion of social value, environmental concern and value for money to have direct relation with purchase intention, when it comes to the Indian context in the framework.
14. CONTRIBUTION TO MANAGERIAL PRACTICE

The findings have significant implication which may help the marketers to develop suitable strategies for green products and its purchasing behavior. Based on the findings, the marketers are suggested to emphasize on the providing information to the consumers, how they can still consume the products being eco-friendly in nature. The social value (SV) environmental concern (EC), value for money (VM) and environmental Knowledge (EK) were identified as the influencing factors in the broadened or extended framework of the model of green purchase intention among Indian consumers.

So, the need arises to create awareness among consumers by labeling the eco-friendly products with green certification and environmental claims that may positively influence their attitude and intention regarding green products. In a way, the marketers should find ways and alternative that will add the social value quotient to its consumers. With our results interpreted, it is found that if the product is socially accepted within the consumers that will lead to effective purchase behavior. Therefore, marketers should target on good word of mouth and effective communication of environmental related benefits of the products among consumer is crucial for marketers as social value, environmental concern and environmental knowledge and value for money significantly influences the consumer's intention to purchase green products. The findings also suggest that green marketers may want to target the people having higher concern for the environment and having a positive attitude towards making change by purchasing green/eco-friendly products (Lee et al., 2014).

Consistent with TPB, subjective norms and perceived behavioral control emerged as significant positive predictors of purchasing green products. The empirical finding reported that social value exerts a stronger influence on the intention to purchase green products in comparison to the environmental knowledge and environmental concern. In view of this, the marketers should effectively communicate their messages claiming environmental benefit of products among the society which in turn may strongly influence the individual intention towards green products due to persuasive influence of social group (Chan and Lau, 2002).

Also, the results show that Indian consumers are mostly educated and this can further enhance better receptiveness and will has a good scope to generate interests in going green, one of the means is by providing transparent information and effective
communication and provide accessible product information portfolio, with all the
description that will make customer feel that whatever, they are investing in is really
worth it and is adding some value to them. Also, the green/eco-friendly products
should be widely distributed at most of the places that may save the time, effort that
will increase the opportunity to buy green products. In fact, the Indian government
should also take initiative, to promote and run schemes to engage consumers to be
more pro-active towards environment friendly ways.
15. CONCLUSION

This study is one of the preliminary attempts in the Indian context that has developed a framework with robustness for determining consumers' intention to buy green products which is influenced by the determinants factors such as social value, environmental knowledge, environmental concern and value for money related to consumer's purchase intention behavior and to study the mediating variable that impact the flow of the process.

This study suggested nine findings based on the hypotheses laid into three main hypotheses. Firstly, to test the direct effects of all constructs with purchase intentions. Secondly, is about testing the mediating effects of value for money and thirdly, to test the relationship between all the three variables (social value, environmental knowledge and environmental concern). The findings have proved the usefulness of the interpreted model which will help to understand the consumers’ perception towards green marketing in India.

The result suggested that consumers' intention to buy green products can be predicted by the determinants factors such as social value, environmental knowledge, environmental concern and value for money which has a significant influence on consumer's purchase intention.

As per the results from our analysis it is found that social value plays a significant role while making a green purchase intention behavior. Also, environmental concern has a significant influence on consumer's purchase intention which shows Indian consumers are also concerned about the issues related to the environment and considering it while purchasing the green products like their developed counterparts. Further, environmental knowledge is reported to have insignificant direct relationship with purchase intention. However, the environmental knowledge of Indian respondents is found to comparatively descent having a mean value of (5.235) out of 7 which is higher than the mean value of environmental concern (EC) is (5.019) out of 7 which justifies that the Indian consumers have a likely concern for both (EK) and (EC) and have a further scope of understanding and developing interests towards the environment and in future are likely to get more aware and conscious about it. Overall from all the factors studied social value (SV) has the strongest direct implication with purchase intention behavior as per our hypothesized model and value for money also has positive significance with (PI), which means Indian
consumers’ will be ready to invest in green products, if they see the worth of investing in it. Although the mean value for value for money is (4.21) which is comparatively lower than (EC). However, it is interesting to see that (SV) has a positive significant relationship with both environmental concern (EC) and environmental knowledge (EK). So, it means if (SV) of an individual increase it will result in the increase of both (EK) and (EC). In addition, (SV) also has a positive significant relation with value for money (VM) as well and VM actually mediates the relationship between social value (SV) and (PI). Social value, environmental concern among individuals and attitude towards green products were identified as the main determinants of purchase intention towards green products among young consumers. Overall, it can be inferred that Indian young consumers are concerned about the current environmental problems and have a positive scope of expansion for purchasing green products in near future use.
16. LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

The study has some limitations that should be addressed in further researches. The study limits itself to the educated consumers who are either studying or working. Most of the consumers have a decent income, which may bias the result and educated consumers may be more prone to socially desirable response (Kaiser et al., 2008).

The self-selection biases of the respondents may bias the result as those who have a knowledge about pro-environment might have taken the initiative to respond which in turn has over represented such people in the study (Hage et al., 2009). Further, the study is limited to measuring intention not actual behavior. So, future studies may report the actual behavior regarding green purchases that will help to link the relationship between purchase intention and actual buying behavior. The explanatory power of the proposed framework of PI is 89% (i.e. $R^2 = 0.89$) which is a good result but it still has the possibilities to improve the predictive power of the framework by integrating additional construct from past literature.

Further, the study has used only subjective knowledge to analyze the environmental knowledge which might vary the results. According to Barber et al. (2009) suggests that both i.e. subjective as well as objective knowledge should be used for measuring environmental knowledge. India, being a collectivist society, the influence of the subjective norms may be higher. Therefore, future studies may use both subjective as well as objective knowledge to measure environmental knowledge. Further researches, can be done for a particular green product and then to study the factors related to purchase behavior and to study all the determining factors that makes consumers buy the green product using this developed predictive framework to analyze the actual result.

Moreover, the study has only measures the intention of educated consumers, so the findings of the study cannot be generalized. The future studies may include the sample from a diverse demographic population that will help to report generalized findings. Moreover, the conceptual framework consisted only of four main variables namely social value, environmental knowledge, environmental concern and value for money. There might be other factors which may affect the consumer purchase
intention behavior, but our conceptual framework might not have adequately addressed the other factors. Removing above limitations would open the path for further research.
REFERENCES


CRANE, Andrew and John DESMOND. Societal marketing and morality. European Journal of Marketing [online]. 2002, vol. 36, issue 5/6, pp. 548-569 [viewed 2016-


DELOITTE Touche Tohmatsu and STORES Media, 2007 Global Powers of Retailing. NRF Stores. [viewed 2016-8-28].


LAROCHE, Michel, BERGERON, Jasmin and BARBARO-FORLEO, Guido Targeting consumers who are willing to pay more for environmentally friendly products. Journal of Consumer Marketing [online]. November 2001. vol. 18, issue 6,


MAKOWER, Joel, State of Green Business. 2010


95


PUBLICATIONS

Publication in International Conferences


Publication in International Conferences (available in web of science)


Publication in Jimp Journal (available in Scopus)


CURRICULUM VITAE

Personal Information
Name: Anusua Saha
Nationality: Indian
Email:anusua08@yahoo.com
Phone: +420-776275502

EDUCATION
Tomas Bata University in Zlin, Czech Republic
PhD in Economics and Management 2012 – present
Tomas Bata University in Zlin, Czech Republic
Master’s in Economics and Management 2009 – 2011
Tomas Bata University in Zlin, Czech Republic
Bachelor’s in English for Business Administration 2006 – 2009

PROFESSIONAL CONFERENCE & EXHIBITION
- Green Events Workshop and Conference for Sustainable development (Bonn, Germany) - 2013
- Multidisciplinary Academic Conference (MAC-EMM) (Prague, Czech Republic) - 2013
- European Conference on Management Leadership and Governance (ECMLG 2014) (Zagreb, Croatia 2014)
- DOKBAT Conference at Tomas Bata University (Zlin, Czech Republic) - 2014
- MJSS (Mediterranean Journal of Social Sciences) (Rome, Italy) – 2015
- DOKBAT Conference at Tomas Bata University (Zlin, Czech Republic) – 2016

RESEARCH PROJECTS
Project Coordinator (Internal Grant Project) – Tomas Bata University in Zlin
March 2013 – January 2015

Master’s Thesis – Tomas Bata University
September 2009 – June 2011
Thesis Topic: Project on Marketing Strategy of Nokia in India

Bachelor’s Thesis – Tomas Bata University
September 2006 - June 2009
Thesis Topic: Bottom of the Pyramid: A novel approach of Marketing Strategy

LANGUAGES
- English (Full professional proficiency) - Bengali (Native)
- Hindi (Full professional proficiency) - Czech (B2 level certified; limited working proficiency)
APPENDICES

Questionnaire for consumers

Green products also termed as eco friendly products are energy efficient, durable and often have low maintenance requirements. Free of chemicals, toxic compounds and don’t produce toxic by-products. Often made of recycled materials or contents or from organic, renewable and sustainable sources.

Please specify the state you belong in India?

Short answer text

Please indicate your age bracket

☐ 20-34
☐ 35-49
☐ Over 50

Please specify your gender

☐ Male
☐ Female
Please specify your level of education

○ High school education
○ Bachelor's degree
○ Master's degree
○ Doctoral degree
○ Other Specify
○ Other...

Please specify the range of your annual income

○ Less than 300,000 INR - Less than 3 Lakh
○ From 300,000 - 500,000 INR - 3 Lakh to 5 Lakh
○ From 500,001 - 700,000 INR - More than 5 Lakh to 7 Lakh
○ From 700,001 - 900,000 INR - More than 7 Lakh to 9 Lakh
○ From 900,001 - 1,100,000 - More than 9 lakh to 11 Lakh
○ Above 11 Lakh
How do you rate environmentally friendly products as in cosmetics (made from natural ingredients), food and beverage (with less or no added chemicals), natural oils, electronic appliances that reduces carbon footprint: like air conditioners etc?

1. Purchasing of eco-friendly products will help me gain social approval

2. I would buy eco-friendly products on peer’s suggestions or preference to buy them
3. Purchasing environmentally friendly or green labelled products will make a positive impression on peer groups

1 2 3 4 5 6 7
Totally disagree

4. Consumption of eco-friendly products will improve the way I am perceived

1 2 3 4 5 6 7
Totally disagree

5. I would prefer to gain substantial information on eco-friendly products before purchase

1 2 3 4 5 6 7
Extremely disinterested

6. I know to select products and packages that reduce the amount of waste dumping

1 2 3 4 5 6 7
Totally disagree

7. I understand various phrases and symbols related to environment on product packages

1 2 3 4 5 6 7
Totally disagree
8. Features rating green labels like totally organic or eco-labels in a product gives me assurance and satisfaction because of the environmental knowledge I have

9. I would avoid buying a product if it had potentially harmful environment effects

10. I am concerned about wasting the resources of our planet

11. I consider the potential environmental impact of my actions when making many of my consumption decisions

12. Environment friendly products are considered good products for the price in India
13. Green products or eco-friendly products have an expectable standard quality

1 2 3 4 5 6 7
Totally disagree ☐ ☐ ☐ ☐ ☐ ☐ ○ Totally agree

14. Environmentally friendly products are economical for the attributes they offer

1 2 3 4 5 6 7
Totally disagree ☐ ☐ ☐ ☐ ☐ ☐ ○ Totally agree

15. To me, it deserves to consume environment friendly products despite their premium pricing

Like for example, you prefer to invest little more on buying power saving Air conditioners which complies with the environment standards / invest in high quality products which are less harmful to your health

1 2 3 4 5 6 7
Totally disagree ☐ ☐ ☐ ☐ ☐ ☐ ○ Totally agree

16. I am willing to buy environment friendly products at a higher price for their environmental benefits

Not interested at all ☐ ☐ ☐ ☐ ☐ ☐ ○ Totally interested

17. Given a choice between two substitute products, I intend to choose the one having less environmentally hazardous substances in future

1 2 3 4 5 6 7
Strongly disagree ☐ ☐ ☐ ☐ ☐ ☐ ○ Strongly agree
A Framework For Studying Consumer Intention Towards Green Consumerism In India

Doctoral Thesis

Published by: Tomas Bata University in Zlín,

nám. T. G. Masaryka 5555, 760 01 Zlín.

Number of copies:

Typesetting by: Ing. Anusua Saha

This publication underwent no proof reading or editorial review.

Publication year: 2017

ISBN 978-80-…………..