

# UNRAVELING THE THREADS OF SUSTAINABLE CONSUMPTION: EXPLORING THE NEXUS OF ENVIRONMENTAL CONCERN, CONSUMER ATTITUDE, AND INTERPERSONAL BEHAVIOR ON GREEN PURCHASE INTENTION AND BEHAVIOR

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## ABSTRACT

*This research aims to establish a theoretical basis for understanding how consumers behave in relation to environmentally friendly products. It explores the impact of interpersonal influence, attitudes towards green consumption, awareness of green practices, and various factors that may affect these behaviors. Additionally, the study investigates whether these influences vary significantly across different stages of consumer behavior: purchasing, usage, and recycling. Professionals and youth made up the primary sample of 512. This study relies on factors that scrutinize the hypothesis and provide support for the conceptual discrete model. The study was analyzed by IBM SPSS AMOS 23v (2019). The paper provides a comprehensive analysis of the factors that influence green consumer behavior. The results show that marketers should prioritize green household products (FMCG-day-to-day products) over other general green product categories, such as energy-saving bulbs, recycled papers and other materials, and eco-friendly carry bags. They should do so by promoting the benefits of recyclable or reusable material or packaging through media such as television, the internet, newspapers, and magazines, as well as by assisting in reducing pollution emissions through eco-quality environmental products. Three cognitive and altitudinal factors, namely environmental concern, perceived consumer effectiveness, and attitudes toward green products, significantly influenced consumers' green purchase intention, which in turn influenced their green purchasing behavior, as confirmed by this study. This study's findings are based on the consumer stimulus model of green purchasing behavior.*

**Keywords:** Green Consumer Behavior, Eco-Label, Environmental Concern, Interpersonal Influence, Eco-Literacy.

## INTRODUCTION

Consumers worldwide have taken a serious note of global warming and embraced green living. Consumer sentiment against irresponsible manufacturing and consumption is growing, and markets in the Western world are already seeing a significant shift towards green products. In the late 1980s, green marketing concepts emerged, building upon earlier ideas from the 1970s. Concerns over environmentally harmful products, which originated in Europe during the early 1980s, sparked the initial discussions. Since then, green marketing has evolved through three

distinct phases. The first phase, known as "ecological" green marketing, emerged in the late 1980s, focusing on addressing environmental issues through marketing activities. Marketers during this phase started adopting green marketing strategies to cater to consumer demands and environmental concerns. The belief was that consumers would purchase eco-friendly products, thereby enhancing the organization's credibility. These will help to capture a larger share of the market (Kerr, 2007). Still, nothing happened as expected. Green consumer behavior can motivate businesses and society to pursue "sustainable production and consumption" while balancing the demand and supply sides of the economic cycle and addressing ecological and social well-being (Aagerup & Nilsson, 2016). Various cultural contexts of industrialized countries have conducted several studies on green consumption and product purchase behavior (Roberts & Bacon, 1997; Straughan & Roberts, 1999; Peattie, 2010; Ottman, 2011). However, compared to Western and other emerging economies, such a phenomenon was somewhat understudied in India. Similar studies have been highlighted in Asian emerging economies such as India, China, and Malaysia, among others (Chan, 2001; Jain & Kaur, 2004; Mostafa, 2007; Chen & Chai, 2010).

Furthermore, most studies have concentrated on examining the correlation between socio-demographic and psychographic characteristics and green purchasing behavior, with the aim of defining the phenomenon of green consumer behavior in the Indian and Asian contexts. No such research appears to have examined the impact of green marketing tools on customers' green purchasing behavior, with the aim of promoting green lifestyles and green purchasing behavior in India's target market, in line with other growing economies (Rahbar & Wahid, 2011). The idea is that, in the current era of global sustainability and competition, green consumer behavior in India, industrialized economies, and other Asian countries is still in its infancy.

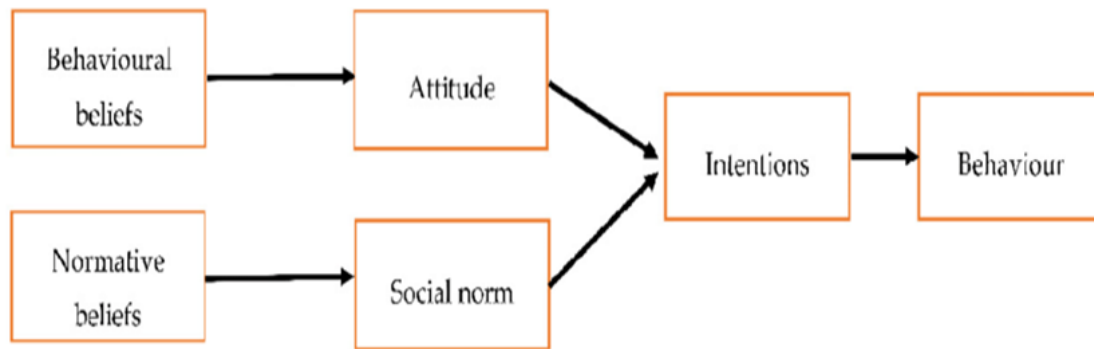
According to a global poll conducted by Greendex (2014), developing countries such as India, China, and others consistently outperform developed countries in terms of environmental stewardship and use of green products. Academic researchers, corporations, society, and policymakers have thus shifted their attention to understanding the phenomena of green consumer behavior to develop marketing policies and tactics in the Indian context of green consumption and green lifestyle.

## LITERATURE REVIEW

### Theoretical Background and Research Model

There are several competing IT adoption models including TAM, TPB and TRA. The following sections review these models based on two criteria: we included past studies that either compare the two models or focus solely on green consumer behavior.

### The Theory of Reasoned Action



**FIGURE 1**  
**SOCIAL PSYCHOLOGY PARADIGM**

TRA is a popularly researched social psychology paradigm Figure 1. The TRA identifies two distinct factors—attitude toward the activity (noted ATT) and subjective norm (noted SN)—that influence behavioral intention (noted BI). Ajzen & Fishbein (2004) contend that investigating people's ideas about themselves and their environments is necessary to develop a fuller knowledge of the elements driving behavior. Therefore, it is believed that a person's beliefs underlie their attitude and subjective norms, which in turn govern their intention and action. Subjective norms are defined as an individual's opinion that the majority of significant individuals believe they should or should not execute the activity, as well as their incentive to do so. Meta-analysis provides further information on the extensive use of TRA in the past (Sheppard et al.'s 1988). TRA has served as the foundation for testing various technologies in the field of information technology, such as MS Word processing (Davis, 1989), e-commerce (Grandon, 2005), management information systems, and e-banking (Shih and Fang, 2006). From an information system perspective, TRA benefits from the theory that attitudes and subjective norms mediate the effect of external variables on the intention to use new IT (Davis, 1989). However, three empirical studies reported in this study (Davis, 1989; Shih, Shih, and Fang, 2006) failed to find a significant relationship between SN and BI.

### **Studies Related to Consumer Attitudes towards Green Products**

D'Souza et al., (2006) explained that consumer preferences change with the changing requirements of the current environment. Researchers conducted a study in Victoria, Australia, to understand consumers' awareness and attitude toward green products. The findings revealed that while customers in Bhopal were aware of environmental problems, their green purchasing behavior had not improved.

### **Studies Related to Green Purchasing Behavior**

Using a planned behavior model, Hojjat Mobrezi & Khoshtinat (2016) have investigated the factors influencing female consumers' willingness to make green purchases in Iran. Hojjat Mobrezi & Khoshtinat (2016) applied a fundamental and developmental research method with a descriptive survey as its objective. We apply the research method with the intent of conducting a descriptive survey. Questionnaires were handed out. We tested the reliability of each questionnaire component using Cronbach's alpha, and found all to be satisfactory. For data analysis, SPSS and AMOS software were used.

## Studies Related to Interpersonal Influence

According to Khare, (2014), marketers influence consumer purchasing decisions toward eco-friendly products. The company has begun to target customers who exhibit a high level of environmental consciousness and responsibility. In this article, researchers divided green consumers into three groups based on subjective norms, purchase intention, and attitude toward consuming eco-friendly products. This segmentation aids in identifying the challenges and opportunities businesses have encountered while implementing green marketing. This paper also looked at India's current green marketing trend, the motivations behind companies adopting green marketing strategies, and the future of green marketing.

## Studies Related to Eco-Literacy

According to Kirmani & Khan, (2016), today's Indian consumers are concerned about the general and personal environment, and they have also stated that customers education and occupation influence their awareness, attitude, and behavior toward green products.

## Studies Related to Willingness to Pay

Perceived value and willingness to pay a premium directly influence purchase intention for green products, and purchase intention influences purchasing behavior (Berger, 2019). Subjective norms (SN) significantly positively influence attitude and perceived behavioral control, but they have a negative relationship with purchase intention. Perceived behavioral control significantly influenced both purchase intention and behavior. Purchase intention showed a positive relationship with behavior, and the additional variable of environmental concern, while influencing subjective norms, could not influence purchase intention.

## Studies Related to Environmental Concern

Cruz & Manata (2020) explained a conceptual link between green marketing, environmental justice, and industrial ecology in their paper. It argues for a greater awareness of environmental justice in green marketing practices. Finally, a research agenda is proposed to determine consumer awareness of environmental justice and their willingness to bear its associated costs.

## METHODOLOGY

### Objective of The Study

- To find out the factors influencing consumers purchase decision of eco-friendly products.
- To study the influence of Green Marketing on the buying decision process of consumers.

### Research Hypotheses

*H<sub>1</sub>: Consumers' attitude towards green products has a positive and significant effect on their green purchase intention.*

*H<sub>2</sub>: There is a positive and significant relationship between higher payment and green products.*

*H<sub>3</sub>: There is a positive and significant relationship between green products and*

*environmentally conscious.*

**H<sub>4</sub>:** *Recycling and reusable of products has positive and significant effect on the purchasing behavior of green products.*

**H<sub>5</sub>:** *Consumers' perception of eco-literacy has a positive and significant effect on their green purchasing behavior.*

**H<sub>6</sub>:** *Consumers' environmental concern has a positive and significant effect on their green purchase intention.*

**H<sub>7</sub>:** *Interpersonal behavior has a positive and significant effect on their green purchasing behavior.*

**H<sub>8</sub>:** *Age has a significant moderating impact on green consumer buying behavior.*

**H<sub>9</sub>:** *Gender has a significant moderating impact on green consumer buying behavior.*

**H<sub>10</sub>:** *Income has a significant moderating impact on green consumer buying behavior.*

**H<sub>11</sub>:** *Education has a significant moderating impact on green consumer buying behavior.*

## Sample Size and Profile

We distributed a total of 800 questionnaires in Delhi, NCR, using convenient sampling to collect responses from adults (age 18 or older) and educated groups of the target population to analyze this empirical study. However, 512 questionnaires were found to be filled out appropriately for the purpose of this study. The respondents who belong to an adult and educated population are able to understand much more adequately than the immature and low-educated groups of the population.

|                | <b>Frequency</b> | <b>Percent</b> | <b>Cumulative Percent</b> |
|----------------|------------------|----------------|---------------------------|
| Male           | 337              | 65.8           | 65.8                      |
| Female         | 170              | 33.2           | 99                        |
| Others         | 5                | 1              | 100                       |
| Total          | 512              | 100            |                           |
|                | <b>Frequency</b> | <b>Percent</b> | <b>Cumulative Percent</b> |
| 15-20 Year     | 234              | 45.7           | 45.7                      |
| 20-25 Year     | 100              | 19.5           | 65.2                      |
| 25-30 Year     | 68               | 13.3           | 78.5                      |
| 30 and Above   | 110              | 21.5           | 100                       |
| Total          | 512              | 100            |                           |
|                | <b>Frequency</b> | <b>Percent</b> | <b>Cumulative Percent</b> |
| Under Graduate | 97               | 18.9           | 18.9                      |
| Graduate       | 139              | 27.1           | 46.1                      |
| Post Graduate  | 231              | 45.1           | 91.2                      |
| Doctorate      | 45               | 8.8            | 100                       |
| Total          | 512              | 100            |                           |
|                | <b>Frequency</b> | <b>Percent</b> | <b>Cumulative Percent</b> |
| Below 20000    | 89               | 17.4           | 17.4                      |

|             |                  |                |                           |
|-------------|------------------|----------------|---------------------------|
| 20000-40000 | 128              | 25             | 42.4                      |
| 40000-60000 | 128              | 25             | 67.4                      |
| Above 60000 | 167              | 32.6           | 100                       |
| Total       | 512              | 100            |                           |
|             | <b>Frequency</b> | <b>Percent</b> | <b>Cumulative Percent</b> |
| Service     | 232              | 45.3           | 45.3                      |
| Business    | 121              | 23.6           | 68.9                      |
| Student     | 88               | 17.2           | 86.1                      |
| Homemaker   | 71               | 13.9           | 100                       |
| Total       | 512              | 100            |                           |

As per the above Table 1, it can be concluded that the demographic characteristics of the respondents represent that gender-wise, 337 (65.8%) respondents were found to be male, 170 (33.2%) respondents were female in the sample of this study and 5 (1%) respondents were of other genders. We will talk about the age group-wise data, so 234 (45.7%), 100 (19.5%) respondents were of other genders. We will talk about the age group-wise data, so 234 (45.7%), 100 (19.5%) respondents were found to be a majority in the age group of 15-20 and 20-25 years on the to be a majority in the age group of 15-20 and 20-25 years on the other side, followed by 68 (13.3%) and 110 (21.5%) respondents in the age groups of 25--30 and 30 and above, respectively. As we know, education also plays a vital role in purchasing behavior, so educational qualification-wise data has also been collected, which shows that the majority (72.3%) of the respondents were found to be either graduates (45.1%) or postgraduates (27.1%), followed by 97 (18.9%) undergraduates and 45 (8.8%) doctorate respondents in the present sample of this study.

And we have also considered the occupation factor, so occupational status-wise data was also collected, and the data shows that 232 (45.3%), 121 (23.6%), and 88 (17.2%) respondents were found to be service, business, and students, respectively, in order, followed by 71 (13.9%) respondents, which fall into either housewives or retired respondents in this study sample, and lastly, income-related data has been collected, which represents 89 (17.4%), 128 (25%), 130 (25.4%), and 165 (32.2%) respondents were associated with the income group of below 20000, Rs. 20000-40000, Rs. 40000-60000, Rs. 60, 000, and above, respectively, in this study.

## Data Collection and Analysis

Using the data collected during the inquiry and a review of the available literature, we created hypotheses in the preceding part of the study. This part attempts to analyze the data collected. The present study aims to examine green marketing and its impact on consumer purchasing behavior in Delhi-NCR, India. The present study includes two dependent variables, namely purchase intention and purchase behavior, and seven independent variables, namely recycling, eco-literacy, interpersonal influence, environmental concern, consumer attitude toward green products, green purchase behavior, and willingness to pay.

And the use of factor analysis has been carried out, CFA and SEM are statistical techniques used to identify a relatively small number of underlying dimensions, or factors, that can be used to represent relationships among interrelated variables out of forty-eight items that have been taken for this research. Factor analysis is best described as a tool for finding the underlying factors that may explain the dimensions linked to large data variability. In this situation, we primarily use factor analysis to reduce the number of variables and uncover structure in the relationships between them. We employed principal component analysis (PCA),

which provides a singular solution, to reconstruct the original data. Because it considers the overall variance among the variables, the resulting solution will have as many factors as there are variables, although it is unlikely that all of them will satisfy the retention requirements. The current investigation was conducted using PCA and CFA using SPSS and AMOS software.

### Data Suitability for PCA

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |  |          |
|--|--|----------|
|  |  | .803     |
| Bartlett's Test of Sphericity                    |  |          |
| Approx. Chi-Square                               |  | 3089.408 |
| df   |  | 1035     |
| Sig.   |  | .000     |

*Source: Researcher Calculation based on primary data*

The Table 2 reveals excellent sampling adequacy with a KMO test value of 0.805. According to the Bartlett test results, the level of significance (0.000) is less than the selected significance level of 0.05. (Gonick, 1993, *The Cartoon Guide to Statistics*, Harper Perennial.). The present study rejects the null hypothesis, indicating that the observed correlation is not an identity matrix. Thus, data reduction through PCA is possible Table 3.

| Constructs                               | Items | Factor Loading | Composite Reliability | Squared Multiple correlation | Cronbach's Alpha | Average variance explained |
|--|-------|----------------|-----------------------|------------------------------|------------------|----------------------------|
| Eco-Literacy                             | ECL1  | .741           | 0.824                 | 0.593                        | 0.782            | 0.689                      |
|  | ECL2  | .713           |                       | 0.612                        |                  |                            |
|  | ECL3  | .723           |                       | 0.687                        |                  |                            |
|  | ECL4  | .702           |                       | 0.641                        |                  |                            |
|  | ECL5  | .520           |                       | 0.549                        |                  |                            |
|  | ECL6  | .671           |                       | 0.558                        |                  |                            |
| Recycling                                | RCY1  | .752           | 0.862                 | 0.610                        | 0.843            | 0.622                      |
|  | RCY2  | .506           |                       | 0.700                        |                  |                            |
|  | RCY3  | .601           |                       | 0.688                        |                  |                            |
|  | RCY4  | .546           |                       | 0.646                        |                  |                            |
|  | RCY5  | .696           |                       | 0.646                        |                  |                            |
|  | RCY6  | .715           |                       | 0.548                        |                  |                            |
|  | RCY7  | .520           |                       | 0.620                        |                  |                            |
|  | RCY8  | .520           |                       | 0.692                        |                  |                            |
| Green Purchase behavior                  | GPB1  | 0.835          | 0.785                 | 0.581                        | 0.689            | 0.784                      |
|  | GPB2  | 0.786          |                       | 0.582                        |                  |                            |
|  | GPB3  | 0.782          |                       | 0.612                        |                  |                            |
|  | GPB4  | 0.761          |                       | 0.646                        |                  |                            |
|  | GPB5  | 0.727          |                       | 0.599                        |                  |                            |
| Consumer Attitude towards Green products | CAGP1 | .707           | 0.689                 | 0.621                        |                  |                            |

|                         |       |       |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|-------|
|                         | CAGP2 | .506  |       | 0.612 |       |       |
|                         | CAGP3 | .601  |       | 0.693 | 0.812 | 0.612 |
|                         | CAGP4 | .546  |       | 0.612 |       |       |
|                         | CAGP5 | .696  |       | 0.597 |       |       |
|                         | CAGP6 | .715  |       | 0.641 |       |       |
|                         | CAGP7 | .618  |       | 0.549 |       |       |
| Willingness to Pay      | WTP1  | .674  | 0.897 | 0.758 |       |       |
|                         | WTP2  | .549  |       | 0.610 | 0.799 | 0.690 |
|                         | WTP3  | .618  |       | 0.712 |       |       |
| Interpersonal Influence | IPI1  | .537  | 0.894 | 0.599 |       |       |
|                         | IPI2  | 0.797 |       | 0.646 | 0.647 | 0.689 |
|                         | IPI3  | 0.699 |       | 0.646 |       |       |
|                         | IPI4  | 0.69  |       | 0.548 |       |       |
|                         | IPI5  | 0.643 |       | 0.620 |       |       |
|                         | IPI6  | 0.616 |       | 0.542 |       |       |
|                         | IPI7  | .696  |       | 0.613 |       |       |
|                         | IPI8  | .715  |       | 0.452 |       |       |
|                         | IPI9  | .606  |       | 0.612 |       |       |
|                         | IPI10 | .566  |       | 0.646 |       |       |
| Environmental Concern   | EC1   | .496  | 0.881 | 0.459 |       |       |
|                         | EC2   | .566  |       | 0.621 | 0.812 | 0.657 |
|                         | EC3   | 0.841 |       | 0.612 |       |       |
|                         | EC4   | 0.811 |       | 0.550 |       |       |
|                         | EC5   | 0.802 |       | 0.799 |       |       |
|                         | EC6   | 0.492 |       | 0.533 |       |       |
|                         | EC7   | .496  |       | 0.649 |       |       |

## CONFIRMATORY FACTOR ANALYSIS STAGES

### CFA and Construct Validity

- Construct validity is one of the numerous metrics that may be used to validate tests. How effectively a test assesses what it is intended to measure is determined by its construct validity.
- Construct validity is made up of four important components:
- Convergent validity – do the items load very well on their constructs. Three approaches to test are
- Factor loadings- Standardized loading estimates should be .5 or higher, and ideally .7 or higher.
- Variance extracted-AVE should be .5 or greater to suggest adequate convergent validity.
- Reliability- Construct reliability should be .7 or higher to indicate adequate convergence or internal consistency.
- Discriminant validity. Are the constructs measuring different things. AVE estimates for two factors also should be greater than the square of the correlation between the two factors to provide evidence of discriminant validity.
- Nomological validity.
- Face validity Table 4.

**Table 4**  
**CONSTRUCT VALIDITY**



|       | ECL         | RCY         | GPB         | CAGP         | WTP        | IPI  | EC | SFL         | DELTA<br>ERROR<br>VARIANCE | SUM OF<br>LOADING<br>SQUARED | CR           | AVE         |
|-------|-------------|-------------|-------------|--------------|------------|------|----|-------------|----------------------------|------------------------------|--------------|-------------|
| ECL1  | 0.61        |             |             |              |            |      |    | 0.62        | 0.6124                     |                              |              |             |
| ECL2  | 0.53        |             |             |              |            |      |    | 0.87        | 0.7125                     |                              |              |             |
| ECL3  | 0.71        |             |             |              |            |      |    | 0.75        | 0.4214                     |                              |              |             |
| ECL4  | 0.63        |             |             |              |            |      |    | 0.66        | 0.3487                     |                              |              |             |
| ECL5  | 0.62        |             |             |              |            |      |    | 0.62        | 0.6348                     |                              |              |             |
| ECL6  | 0.52        |             |             |              |            |      |    | 0.36        | 0.5974                     |                              |              |             |
| ECL   | <b>3.61</b> |             |             |              |            |      |    | <b>3.87</b> | <b>3.3272</b>              | <b>9.015</b>                 | <b>0.777</b> | <b>0.56</b> |
| RCY1  |             | 0.62        |             |              |            |      |    | 0.61        | 0.3932                     |                              |              |             |
| RCY2  |             | 0.65        |             |              |            |      |    | 0.85        | 0.6124                     |                              |              |             |
| RCY3  |             | 0.67        |             |              |            |      |    | 0.74        | 0.4874                     |                              |              |             |
| RCY4  |             | 0.64        |             |              |            |      |    | 0.72        | 0.6412                     |                              |              |             |
| RCY5  |             | 0.85        |             |              |            |      |    | 0.46        | 0.5487                     |                              |              |             |
| RCY6  |             | 0.71        |             |              |            |      |    | 0.55        | 0.4578                     |                              |              |             |
| RCY7  |             | 0.39        |             |              |            |      |    | 0.52        | 0.6102                     |                              |              |             |
| RCY8  |             | 0.62        |             |              |            |      |    | 0.65        | 0.5004                     |                              |              |             |
| RCY   |             | <b>4.33</b> |             |              |            |      |    | <b>5.09</b> | <b>4.2513</b>              | <b>12.124</b>                | <b>0.869</b> | <b>0.53</b> |
| GPB1  |             |             | 0.78        |              |            |      |    | 0.71        | 0.3458                     |                              |              |             |
| GPB2  |             |             | 0.51        |              |            |      |    | 0.7         | 0.6458                     |                              |              |             |
| GPB3  |             |             | 0.68        |              |            |      |    | 0.77        | 0.5478                     |                              |              |             |
| GPB4  |             |             | 0.72        |              |            |      |    | 0.49        | 0.6201                     |                              |              |             |
| GPB5  |             |             | 0.74        |              |            |      |    | 0.6         | 0.5417                     |                              |              |             |
| GPB   |             |             | <b>5.54</b> |              |            |      |    | <b>3.27</b> | <b>2.7012</b>              | <b>19.484</b>                | <b>0.917</b> | <b>0.54</b> |
| GAGP1 |             |             |             | 0.612        |            |      |    | 0.61        | 0.4518                     |                              |              |             |
| GAGP2 |             |             |             | 0.538        |            |      |    | 0.49        | 0.6124                     |                              |              |             |
| GAGP3 |             |             |             | 0.624        |            |      |    | 0.42        | 0.6457                     |                              |              |             |
| GAGP4 |             |             |             | 0.618        |            |      |    | 0.56        | 0.4589                     |                              |              |             |
| GAGP5 |             |             |             | 0.487        |            |      |    | 0.49        | 0.6214                     |                              |              |             |
| GAGP6 |             |             |             | 0.541        |            |      |    | 0.61        | 0.6119                     |                              |              |             |
| GAGP7 |             |             |             | 0.654        |            |      |    | 0.49        | 0.4589                     |                              |              |             |
| GAGP  |             |             |             | <b>4.074</b> |            |      |    | <b>3.67</b> | <b>3.861</b>               | <b>28.648</b>                | <b>0.917</b> | <b>0.55</b> |
| WTP1  |             |             |             |              | 0.58       |      |    | 0.58        | 0.3548                     |                              |              |             |
| WTP2  |             |             |             |              | 0.49       |      |    | 0.41        | 0.5489                     |                              |              |             |
| WTP3  |             |             |             |              | 0.62       |      |    | 0.62        | 0.6158                     |                              |              |             |
| WTP   |             |             |             |              | <b>1.7</b> |      |    | <b>1.61</b> | <b>1.5195</b>              | <b>31.018</b>                | <b>0.936</b> | <b>0.51</b> |
| IPI1  |             |             |             |              |            | 0.79 |    | 0.65        | 0.4587                     |                              |              |             |
| IPI2  |             |             |             |              |            | 0.67 |    | 0.51        | 0.5114                     |                              |              |             |
| IPI3  |             |             |             |              |            | 0.63 |    | 0.56        | 0.4587                     |                              |              |             |
| IPI4  |             |             |             |              |            | 0.59 |    | 0.55        | 0.4358                     |                              |              |             |
| IPI5  |             |             |             |              |            | 0.57 |    | 0.56        | 0.6132                     |                              |              |             |
| IPI6  |             |             |             |              |            | 0.51 |    | 0.51        | 0.5478                     |                              |              |             |

|       |  |  |  |  |  |             |             |             |               |               |              |             |
|-------|--|--|--|--|--|-------------|-------------|-------------|---------------|---------------|--------------|-------------|
| IPI7  |  |  |  |  |  | 0.48        |             | 0.5         | 0.4118        |               |              |             |
| IPI8  |  |  |  |  |  | 0.57        |             | 0.39        | 0.6124        |               |              |             |
| IPI9  |  |  |  |  |  | 0.49        |             | 0.61        | 0.6008        |               |              |             |
| IPI10 |  |  |  |  |  | 0.5         |             | 0.7         | 0.5481        |               |              |             |
| ITI   |  |  |  |  |  | <b>5.81</b> |             | <b>5.55</b> | <b>5.1987</b> | <b>44.587</b> | <b>0.911</b> | <b>0.52</b> |
| EC1   |  |  |  |  |  |             | 0.56        | 0.71        | 0.5842        |               |              |             |
| EC2   |  |  |  |  |  |             | 0.52        | 0.69        | 0.6212        |               |              |             |
| EC3   |  |  |  |  |  |             | 0.51        | 0.38        | 0.4854        |               |              |             |
| EC4   |  |  |  |  |  |             | 0.47        | 0.71        | 0.4501        |               |              |             |
| EC5   |  |  |  |  |  |             | 0.37        | 0.71        | 0.6214        |               |              |             |
| EC6   |  |  |  |  |  |             | 0.35        | 0.66        | 0.4584        |               |              |             |
| EC7   |  |  |  |  |  |             | 0.71        | 0.62        | 0.6114        |               |              |             |
| EC    |  |  |  |  |  |             | <b>3.49</b> | <b>4.49</b> | <b>3.8321</b> | <b>52.488</b> | <b>0.945</b> | <b>0.55</b> |

### DISCRIMINANT VALIDITY

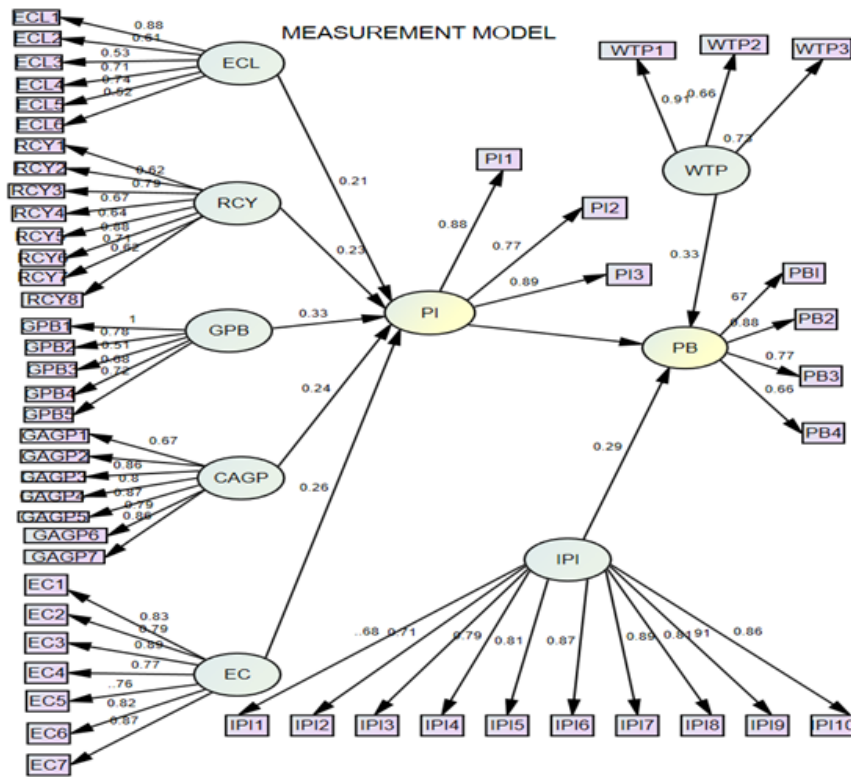
Tests designed to measure a specific construct do not correlate with tests designed to measure different constructs, according to discriminant validity. The idea that we wouldn't anticipate the same outcomes from two tests created to examine various concepts (such as a math test versus a spelling test) supports this. We can assess discriminant validity by comparing the outcomes of a test that measures one thing with those of an evaluation that evaluates something entirely different. If the scores have no correlation, the test has high discriminant validity; a strong correlation indicates low discriminant validity Table 5.

|      | EF           | RCY          | GPB          | CAGP         | WTP          | IPI          | EC           |
|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| ECL  | <b>0.801</b> |              |              |              |              |              |              |
| RCY  | 0.618        | <b>0.778</b> |              |              |              |              |              |
| GPB  | 0.747        | 0.614        | <b>0.812</b> |              |              |              |              |
| CAGP | 0.847        | 0.664        | 0.647        | <b>0.883</b> |              |              |              |
| WTP  | 0.648        | 0.719        | 0.669        | 0.617        | <b>0.798</b> |              |              |
| IPI  | 0.687        | 0.589        | 0.771        | 0.617        | 0.687        | <b>0.809</b> |              |
| EC   | 0.812        | 0.557        | 0.558        | 0.668        | 0.589        | 0.609        | <b>0.868</b> |

Table 5 shows the results of discriminant validity. The discriminant validity values clearly exceed 0.5 and surpass the correlation coefficients for all variables.

### Model Fit for Measurement Model

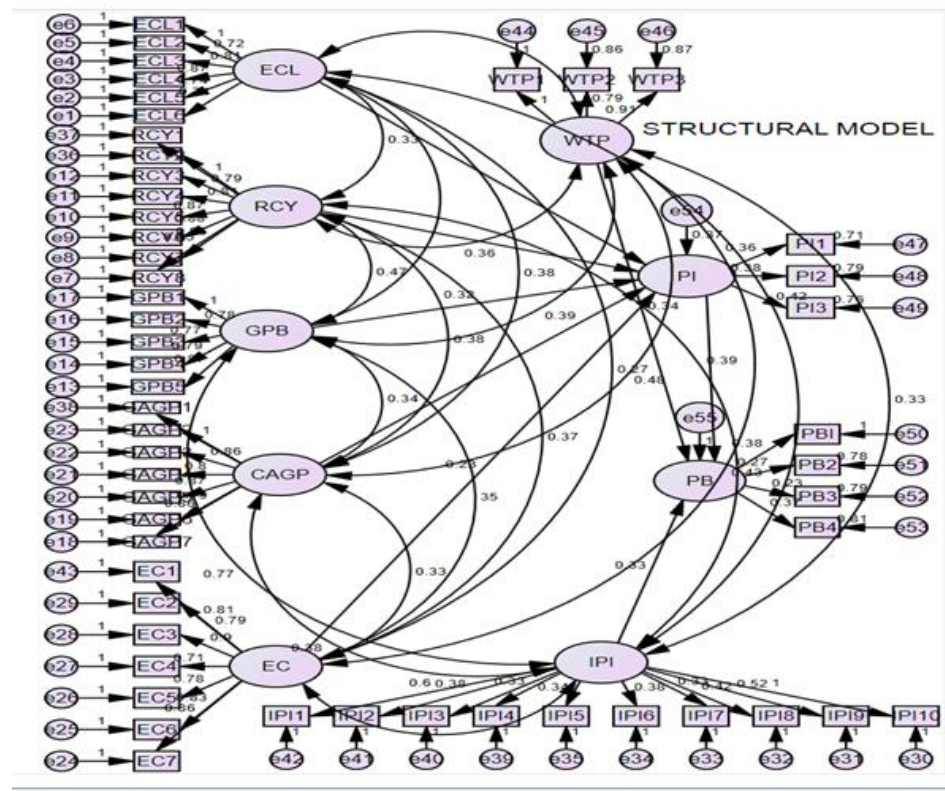
CMIN is an abbreviation for the Chi-square value, which is used to determine whether the observed variables and expected results are statistically significant. In other words, CMIN indicates whether the sample data and hypothetical model fit the analysis.



**FIGURE 2**  
**MEASUREMENT MODEL**

**Structural Equation Modeling**

SEM is a statistical method for assessing the many dependencies between independent and dependent variables that are used to create a research model (Malhotra & Dash, 2010). The SEM model was effectively used Figure 2. With regard to the suggested values, the structural model that was generated is desirable Figure 3.



**FIGURE 3**  
**STRUCTURAL MODEL**

| Model         | CMIN    | DF | P | CMIN/DF |
|---------------|---------|----|---|---------|
| Default model | 167.399 | 87 | 0 | 1.924   |

The value of interest here is the CMIN/DF for the default model and is interpreted as follows:

- If the CMIN/DF value is  $\leq 3$  it indicates an acceptable fit (Kline, 1998).
- If the value is  $\leq 5$  it indicates a reasonable fit (Marsh & However, 1985)

So, per above Table 6, CMIN/DF value is 1.924 so it can be said that model is an acceptable and fit Table 7.

| Model         | RMR   | GFI   | AGFI  | PGFI  |
|---------------|-------|-------|-------|-------|
| Default model | 0.057 | 0.912 | 0.879 | 0.661 |

The Goodness of Fit Index (GFI) is an abbreviation for the smallest discrepancy function required to achieve a perfect fit under maximum likelihood conditions (Jöreskog & Sörbom, 1984; Tanaka & Huba, 1985).

Where:

RMR = Root Mean Square Residual. The smaller the RMR value the better. An RMR of 0 represents a perfect fit.

GFI = Goodness of Fit Index and takes values of  $\leq 1$  where 1 represents a perfect fit.

From the above Table 7 it can be concluded that GFI value is .912 which is very close to 1 so we can say it represent a perfect fit. And RMR value is also very small 0.057 so we can also say root mean square residual is also perfectly fit.

**Initial and Final Model Fit For Measurement Model**

Baseline Comparisons refers to the models automatically fitted by Amos for every analysis, respectively the default, saturated, and independence model.

| Model         | NFI    | RFI   | IFI    | TLI   | CFI   |
|---------------|--------|-------|--------|-------|-------|
|               | Delta1 | rho1  | Delta2 | rho2  |       |
| Default model | 0.948  | 0.937 | 0.974  | 0.969 | 0.974 |

From the above Table 8 Baseline Comparisons it can be concluded that Normed Fit Index value is .948 which is very close to 1 which shows models a perfectly fit (Bentler & Bonett (1980), Relative Fit Index value is .937 which is also close to 1 which indicates a model very good fit, Incremental Fit Index placed in third column value (0.974) which is again very close to 1 so it is indicate very good model fit ( Hu & Bentler, 1999), and if we will be talking about Tucker-Lewis coefficient that values (0.969) are also very closed to 1 which represent a very good model fit (Cai, Chung & Lee, 2023), and lastly Comparative Fit Index value is 0.974 which is considered an excellent fit for the model (West et al., 2012).

| Model         | RMSEA | LO 90 | HI 90 | PCLOSE |
|---------------|-------|-------|-------|--------|
| Default model | 0.064 | 0.049 | 0.079 | 0.056  |

From the above Table 9 root mean square error of approximation value is 0.064 which is considerable acceptable (Chen, 2007), lower boundary value is 0.049 (MacCallum et. Al., 1996), HI90 0.079 and P value is 0.056 which indicate a better model fit (Miles & Shevlin, 2007).

This model fit cheat sheet summarizes some of the most important parameters and them accepted values accordingly to the literature Table 10.

| Fit Indices    | Recommended Value |          | Achieved Fit indices |
|----------------|-------------------|----------|----------------------|
|                | Acceptable        | Good Fit |                      |
| <b>CMIN/DF</b> | <5                | <3       | 1.924                |
| <b>P</b>       | <.05              | <.05     | 0                    |
| <b>RMR</b>     | <.08              | <.05     | 0.057                |
| <b>GFI</b>     | >.85              | >.9      | 0.912                |
| <b>IFI</b>     | >.9               | >.9      | 0.974                |
| <b>TLI</b>     | >.9               | >.9      | 0.969                |
| <b>CFI</b>     | >.9               | >.9      | 0.974                |
| <b>RMSEA</b>   | <.08              | <.05     | 0.064                |
| <b>NFI</b>     | >.9               | >.9      | 0.948                |

From the above Table 10 it can be concluded that all the fit indications are completely fit as per the literature given.

## Path Analysis

### Supported/Not Supported of Hypothesis According to SEM Results

| Hypothesis | Structural Path |      | Standardized Estimates | P Value | Decision |           |
|------------|-----------------|------|------------------------|---------|----------|-----------|
| $H_1$      | CAGP            | <--- | PI                     | 0.319   | 0.01     | SUPPORTED |
| $H_2$      | WTP             | <--- | GPB                    | 0.275   | 0.01     | SUPPORTED |
| $H_3$      | GPB             | <--- | GPI                    | 0.457   | 0.01     | SUPPORTED |
| $H_4$      | RCY             | <--- | GPI                    | 0.109   | 0.01     | SUPPORTED |
| $H_5$      | EL              | <--- | GPI                    | 0.408   | 0.01     | SUPPORTED |
| $H_6$      | EC              | <--- | GPI                    | 0.098   | 0.01     | SUPPORTED |
| $H_7$      | IPI             | <--- | GPB                    | 0.527   | 0.01     | SUPPORTED |

From the above Table 11 it can be concluded that all the seven hypotheses have been supported as per path analysis and the path analysis results revealed that there is direct impact of independent variables on dependent variable.

### Moderating Effect of Demographic Character On Green Consumer Buying Behavior

| Hypothesis | Relationship | P-Value | Decision      |
|------------|--------------|---------|---------------|
| $H_8$      | Age          | 0.01    | Supported     |
| $H_9$      | Gender       | 0.594   | Not supported |
| $H_{10}$   | Income       | 0.01    | Supported     |
| $H_{11}$   | Education    | 0.483   | Not supported |

*Source: Researcher Calculation based on primary data*

From the above Table 12 it can be concluded that there is impact of age and income on green consumer behavior thus hypothesis has been supported and the same time there is no impact of gender and education on green consumer behaviour thus hypothesis has not been supported.

## IMPLICATIONS

According to the findings of this study, consumers are willing to pay a percentage more for green products that have attributes such as recyclable or reusable material or packaging and contribute less to pollutant emissions. This is based on findings regarding overall awareness, perception, and willingness to pay more for environmentally friendly products.

As a result, marketers should prioritize green household products (FMCG-day-to-day products) over other general green product categories, such as energy-saving bulbs, recycled papers and other materials, and eco-friendly carry bags. They should do so by promoting the benefits of recyclable or reusable material or packaging through media such as television, the internet, newspapers, and magazines, as well as by assisting in the reduction of pollution emissions through eco-quality environmental products.

This study established a significant relationship between three cognitive and altitudinal

factors—environmental concern, perceived consumer effectiveness, and attitudes toward green products—and consumers' green purchase intention, which in turn influenced their green purchasing behavior. This study's findings were based on the consumer stimulus model of green purchasing behavior.

According to the findings, environmental concern, perceived consumer effectiveness, and attitudes toward green products in the Indian context significantly influence green purchase intention, which is the primary determinant of green purchase behavior (Mostafa, 2007).

However, in this study's research model, there was no significant correlation between perceived environmental knowledge and green purchase intention. Unlike major Indian metropolitan cities in other developing countries, green consumerism and green lifestyles are still in their infancy in India, particularly in the metropolitan regions of Uttar Pradesh. Therefore, from a strategic green marketing perspective for major policymakers and managers, an integrated marketing communication strategy can play a significant role in promoting green lifestyles among the target Indian youth and educated people. Furthermore, in today's digital India, web-based advertisements can be one of the primary information sources in the promotion of green products and their associated emblems, logos, and promises (Sarkar et. al., 2007).

## CONCLUSION

Despite the fact that consumers have a sufficient level of awareness about green products, it has not had the greatest influence on their attitudes. The researcher did, however, test other influencing factors such as subjective norms and perceived behavioral control based on availability, as well as consumer effectiveness, which resulted in a significant influence among consumers towards green products. Consumers are eager to be more environmentally conscious, and the fact that consumer market conditions are not conducive to this goal is a significant setback. As a result, the government and eco-friendly promotional organizations must take more initiatives to assist consumers in making environmentally friendly purchases and to make the ecological system more environmentally friendly.

The first step in determining green consumerism is to assess customers' knowledge of and attitudes toward environmentally friendly products. Marketers must consider their pro-environmental behavior when developing marketing policies and strategies to effectively reach the target market. As a result, the phenomenon of green consumer behavior has emerged as an important topic for academic scholars, policymakers, and managers in the field of contemporary consumer behavior research.

The primary goal of this empirical study is to comprehend and evaluate green customer behavior in order to develop green marketing policies and strategies for indigenous Indians. The initial goal of the study was to investigate customer awareness, perception, and willingness to pay a premium for green products. Following that, it evaluated study hypotheses to determine how consumers' perceptions of green marketing tools relate to their green purchasing behavior. Finally, it investigated the relationship between cognitive and attitudinal factors and green purchasing behavior among customers.

Finally, we profiled green consumers based on demographics, attitudes, and behavioral traits using the segmentation method. Academic researchers, decision-makers, and managers developing green marketing policies and strategies can put critical insights from the study's summary of findings into practice in the Indian context of green consumption. Furthermore, this study's findings help us better understand how Indian consumers behave in terms of going green, particularly in the Delhi NCR metropolitan areas. To sum up, consumer purchasing behavior for green durable products is based on recognizing problems with non-green durable products. The

public's concern about the environment is growing, which has a significant impact on green purchasing behavior. This has led to an increase in the number of people seeking information about the attributes of durable green products from various sources, ultimately resulting in a purchase. This, in turn, leads to positive post-purchase behavior, which is achieved through satisfaction with green durable products, allowing for green durable product sustainability.

This study concluded that customer demands compelled marketers to develop green products and green processes as part of a green consumption-production paradigm (Akenji, 2014). The corporation can pursue its economic goal of profitability by managing demand for environmentally safe products and addressing consumer and societal needs while emphasizing the other objective of sustainability for people and planet well-beings. As a result, in today's era of environmental sustainability and a competitive economic landscape, the balance between the business cycles of "green consumption and green production" may be handled.

### Disclosure Statement

No potential conflict of interest was reported by the author.

### Summary Statement of Contribution

This study confirmed that three cognitive and altitudinal factors, namely environmental concern, perceived consumer effectiveness, and attitudes toward green products, were significantly related to consumers' green purchase intention, which in turn was significantly related to their green purchasing behavior. The findings of this study are based on the consumer stimuli model of green purchasing behavior.

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