

Original Article

# The Impact of Ecolabels and Sustainability Marketing on Consumer Perceptions and Purchase Intentions in India

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Received: 18 June 2025

Revised: 30 July 2025

Accepted: 19 August 2025

Published: 31 August 2025

**Abstract** - Sustainable textile products have gained popularity in recent years. This research examines the impact of eco-labelling and sustainable-forward advertising on consumer purchasing intentions for textile goods in India. Out of a sample of 51 individuals, 2 randomized groups with at least 25 individuals each emerged. The experimental group was provided with the survey featuring a sustainability-forward advertisement of a carpet with an ecolabel, while the control group was given a survey with only product details. Product ratings were based on features like Durability, Quality, Design and Style, Ease of Cleaning, Stain Resistance, Color, and Sustainability. The collected data were analyzed using descriptive statistics, correlation analysis, and linear regression. Results stated that marketing products that are sustainable with ecolabels led to perceptions of lower durability, cleaning difficulties, and ease of staining. Moreover, it is associated with higher quality, better design and style, and sustainability. However, a weak positive correlation existed between the sustainability of the product and consumers' purchase intentions. Regression analysis concluded that product features significantly impacted willingness to buy and willingness to recommend. In contrast, ecolabels and advertisements significantly influence willingness to recommend, but do not directly affect buying decisions. This allows companies to prioritize balanced approaches towards advertising products using product features and ecolabels.

**Keywords** - Purchase Intentions, Eco-labels, Sustainability, Textiles, Product Features.

## 1. Introduction

### 1.1. General Background

Despite being a highly profitable industry, textile manufacturing is often associated with negatively impacting the environment and engaging in unethical activities [1]. The environmental impacts of the textiles industry, such as dumping chemicals due to dyeing textile goods, and emissions of greenhouse gases by these factories, have proven to be negative externalities from the textile industry for the environment [2]. Additionally, ethical issues such as low wages and child labor are not only unethical but also illegal practices in any area of work, which can prove to worsen the reputation of any company, apart from companies operating in the textiles industry [3]. In response to these wider issues, companies in the textile industry are now adopting environmentally safe and ethical practices to combat unethical and environmentally unsafe practices in the industry [1]. Many companies have started adopting environmentally safe practices such as eco-friendly production methods and the usage of sustainable materials, such as no synthetic fibers, only cotton farmed and produced without using artificial fertilizers and pesticides, which have significantly reduced harmful impacts on the external environment [4]. To resolve the unethical activities, companies have increasingly adopted

ethical practices such as fair trade, through which they offer farmers appropriate and equitable prices for sustainably produced materials, such as cotton. This approach ensures that producers receive fair compensation and can participate in mutually beneficial trade relationships [5].

Furthermore, in recent years, there has been a trend indicating an increase in demand for eco-friendly and sustainably produced goods. The contributing reasons for this upward trend include the rapid growth of environmental issues such as air and water pollution, which cause many harmful effects on external third parties, like local communities in the vicinity of factories that produce these goods [6]. As consumers become more environmentally aware of these issues, they begin to demand products that are not only effective but also environmentally safe and responsible [7]. Supportingly, the Global Sustainable Clothing Market size was valued at USD 3.3 billion in 2023 and is anticipated to reach a CAGR (compound annual growth rate) of 9.5% between 2024 and 2032. Consumer awareness of fast fashion's environmental and social impacts is growing, leading to the growing demand for sustainably and ethically produced clothing. Within the clothing industry, there are several factors that affect the ways in which consumers make



decisions for purchasing clothing goods [8]. Price is a factor that influences consumer demand for clothing goods. Changes in tastes indicate the changing trends in the economy, causing the demand for some goods to change. Marketing is also a crucial factor in the demand for goods since well-known brands' goods will be in demand more than those of lesser-known brands [9]. Product features such as quality, packaging, design, and texture also tend to influence consumer demand for textile goods [10].

Labelling textile goods enables consumers to understand their credibility and special properties or features. Specifically, sustainable labeling, or eco-labelling, is a form of transparency used by businesses to inform their consumers about the sustainable production of the goods that they are buying. For example, a sustainably produced good will be labeled as "sustainably produced" (under certain conditions), which will inform the consumer about the material used for the good, adding to the transparency of the overall business that is producing the good itself [11]. There are many other types of eco-labels for goods in the textile industry. Some of these labels include animal welfare, sustainable cotton production, and even the prevention of carbon emissions. For instance, the BCI (Better Cotton Initiative) label includes the growing of cotton in a sustainable manner, socially, environmentally, and economically. The CarbonCare label encourages organizations to tackle the global issue of climate change in 3 steps, known as MRO: Measuring, Reducing, and Offsetting carbon footprints [12]. Eco-labels are used in sustainable marketing, a crucial concept emphasizing social, ecological, and economic aspects in developing marketing strategies [13]. Sustainable marketing has positive effects on branding by enhancing brand equity; furthermore, a good brand image and a higher level of brand awareness, which are included in brand equity, affect consumer behaviour to some extent [14]. Hence, it is explicitly seen that product features, eco-labelling, and sustainable-forward marketing all play a vital role in influencing consumers' purchase intentions within the textile industry.

## 1.2. Literature Review

Past research papers written by authors regarding the topic of labeling (i.e., eco-labeling) have elaborated on the significance of the same. A study in this context aimed to examine consumers' perception of green marketing and eco-labeling on their purchase intentions regarding eco-labeled products. The research paper used a quantitative method, which was a survey with a non-probability convenience sample of 172 consumers, all based in Belgrade, Serbia. The data was analyzed using methods such as ANOVA, Cronbach's Alpha, descriptive statistics, correlation analysis, and regression analysis. The findings of this research paper showed that a majority of the 172 consumers did not believe that purchasing green goods had an impact on the environment [15]. Results also showed that there was a strong relation between acceptance towards sustainable advertising and

intentions to purchase eco-labelled products. Furthermore, there existed a strong relationship between the behaviour of consumers that was in favour of the environment, and factors like current purchase intentions of consumers, along with their acceptance of green advertising [15].

Another research in the same realm found the change in consumer perception from the "Made in" label on textile goods, indicating the country of origin of the goods themselves. Using interviews, it was found that effective, sustainable decisions cannot be made by consumers purely based on "Made in" labels, and that these labels can be misinterpreted by consumers, causing them to mislead consumers, since they may not provide adequate information to consumers about the goods [16]. This primary finding showed that there is a need for more transparency when involving factors such as the "Made In" label in the supply chain. Hence, the study recommended additional information to be included with the "Made In" label, including a QR Code which showed details for the same, or even alternative labels that could be used instead of the "Made In" label [16].

A similar study examined the significance of sustainability labels in the consumer selection of products. An e-commerce online store was simulated as an online store, investigating its users' product selections; the products ranged from those including sustainability labels to those excluding sustainability labels. A sample size of 499 users was briefed before the investigation about a questionnaire that was to be answered [17]. Findings showed that eco-labels can positively influence consumers' choices, making environmentally-friendly products selected with more frequency. Conditionally, this finding was dependent on consumer awareness regarding these eco-labels, making the impact of the same differ across various consumers. However, regardless of the consumers' knowledge about the same, findings showed that they had trust in these eco-labels, making them play a crucial role in consumers' purchasing decisions regarding textile goods [17].

Other results were shown for a research that investigated consumers' understandings of ecolabels before purchasing textile goods, with the research being based in South Africa. The methodology used for this research included online questionnaires; responses showed environmental consciousness amongst those who responded, and the price and availability of eco-textile products are barriers to buying them [18]. Furthermore, to determine the perception of labelling about sustainable aspects, differing from product type, the methodology used to conduct this research paper included a sample size of 73 participants, who chose between different versions of a single product, each being eco-labelled differently. The impressions (emotions, implications, etc.) of the participants (generated by the eco-labelling) were examined in this study [19]. Findings showed that the consumers' preferences for specific environmental aspects,

like social aspects or health aspects, was dependent on the type of product that was being advertised; for example, health-related labels would heavily impact consumers' purchasing decisions if they would purchase food products, and environment-related labels would do the same for clothing goods (i.e., textile goods) [19]. Concisely, findings showed that consumers' preferences for sustainability aspects were entirely dependent on the contexts of the goods, which were influenced by the nature of the product [19].

In the context of India, another study explores the impact of the fundamental marketing mix, including the 4 P's of marketing (Price, Product, Place, Promotion), along with other factors like customer satisfaction and word of mouth, on consumers' purchase intentions regarding green fashion goods [20]. This research used a methodology that involved 279 participants, all from India. It collected qualitative data through structured interviews, which concentrated on consumers' perceptions and intentions related to sustainable fashion goods. The collected data were then analyzed using both correlation and regression analysis, examining the relationship between the sustainable marketing mix elements and consumers' purchase intentions. Findings in this research showed that factors such as word of mouth and premium pricing were effective in influencing other factors, like consumers' purchase intentions and increasing consumers' willingness to buy. It also showed how factors such as product quality and place (channels of distribution) were ineffective in affecting consumers' purchase intentions [20].

### **1.3. Literature Gap and Rationale of the Study**

However, limitations have arisen across these analyzed papers. One main limitation is that the characteristics of the participants being surveyed have not been taken into consideration with respect to the studies as a whole. The sample size of participants, if small, leads to an increased margin of error, becoming another limitation. Furthermore, the geographic locations of participants have been varied, causing qualitative factors such as differing perceptions not to have been taken into account; this also accounts for overall demographic factors, aside from geographic factors. The idea of this research paper is not directly seen in other papers, where there is an explicit comparison between non-sustainable and sustainable advertisements, making this study less accurate.

In a world today, where sustainability is talked about at almost every instance, its real-world applications are not adequately explored in the field of business, specifically marketing. This study was conducted to figure out the impacts of eco-labels, which are present in advertisements, on the purchase intentions of consumers with respect to sustainable textile goods. Since consumers' demand is trending towards sustainably produced goods, this research is crucial to identify critical variables and/or scenarios that can affect this demand. This study is required by businesses that produce sustainable

goods or textile goods since it helps them understand consumers' perceptions of certain advertising techniques and how they impact their overall perception of the goods that are advertised. The overarching aim of this study is to analyze the effects that eco-labels, advertisement types, and product features have on consumer perceptions and intentions related to purchasing sustainable textile products.

## **2. Methodology**

### **2.1. Research Aim and Objectives**

The aim of this study was to analyze the impact of eco-labeling on consumer perceptions and their purchasing intentions. To assess this broader aim, the following objectives were noted to be resolved:

- Analyze the differences between Sustainable and Non-sustainable advertisements with respect to product features
- Find the correlation between product features and consumer intentions
- Measure the impact of the type of advertisement and product features on consumers' intentions

### **2.2. Research Hypotheses**

- Null Hypothesis 1: There exists no correlation between product features and willingness to buy
- Null Hypothesis 2: There exists no correlation between product features and willingness to recommend
- Null Hypothesis 3: There is no impact of the type of advertisement (eco-label) on willingness to buy
- Null Hypothesis 4: There is no impact of the type of advertisement (eco-label) on willingness to recommend
- Null Hypothesis 5: There is no significant impact of product features on willingness to buy
- Null Hypothesis 6: There is no significant impact of product features on willingness to recommend

### **2.3. Scales and Tools used**

As the data collection methodology, two quantitative surveys were created. Both surveys were based on the same product, which was a carpet produced from recycled yarn, and similar questions were used to collect data. There were two sections in both surveys; one section was demographics-related, including age, gender, education level, income, and occupation, and the other section involved research-specific questions. The study used two different campaigns that were differentiated on the basis of marketing and advertising. On one hand, there was a campaign with ecolabelling and sustainable marketing. For that, a random picture of the carpet has been eco-labelled. The brand name chosen for this product is "EcoThreads," which emphasizes the sustainability factor of the product. The description of the brand focused on environmental consciousness and sustainability. On the other hand, there was a campaign without ecolabelling and sustainable-forward marketing. For that, the same picture and features of the product were placed in the survey. The brand name chosen for the product is "Sara Home". Herein, the advertisement only displays the product details in the

description instead of focusing on sustainability. The research-specific questions included scales that rated certain features of the product from 1 to 5, with 1 being the lowest rating and 5 being the highest rating. Factors included durability, ease of cleaning, color, design and style, stain resistance, quality, and sustainability. The purchasing intentions of the participants regarding the product were also inquired about, including the price the participants would be willing to pay for the product and the likelihood of consumers recommending the product to their friends and family. The scale for purchase intentions is sourced from a paper that evaluates the impacts of price, brand, and store information on the perceptions that buyers have of products [21].

#### 2.4. Data Collection Process

The surveys were translated into Google Forms to collect the data. Then, using social media, two randomized broadcast groups were created. The experimental group was provided with the survey featuring a sustainability-forward advertisement of a carpet with an ecolabel (EcoThreads), while the control group was given a survey with only product details (Saral Homes). In the groups, forms were circulated individually. Regular reminders were given in both groups in order to fill out the responses for the forms. Alongside this method, some participants were approached individually in a physical environment.

#### 2.5. Sampling and Sample Characteristics

Convenience sampling was done for this research, where people were directly approached to fill out product surveys at random for non-sustainable and sustainable products, respectively. A total of 51 participants filled out the product review surveys, out of which 25 filled out the non-sustainable survey and 26 filled out the sustainable survey. Out of the 51 participants, 31 were males, 19 were females, and only 1 participant preferred not to say their gender. The majority of the participants were 18 to 30 years old, with 33 participants in the same age range. 17 participants were within the age range of 31 to 60 years old, and only 1 participant was above the age of 60 years old. 12 participants have completed or are currently in high school, 6 have completed their diploma course, 20 have completed their bachelor's degree, and the remaining 13 have a qualification of a master's degree or higher. It has been noticed that 18 participants are students, 16 are employees working on a salary basis, 7 are business owners, 5 are specialized professionals, and 5 are unemployed, of which 1 is retired. In terms of income, 20 participants are not earning, and the remaining 31 participants are earning, out of which 10 are earning less than 10 lakh rupees per annum, 11 are earning within the range of 10 lakh and 20 lakh rupees per annum, and the remaining 10 are earning above 20 lakh rupees per annum.

#### 2.6. Ethical Considerations

The ethics of this study were sustained very well. The anonymity of all the participants was maintained, as the

participants' identities and contact details were not collected during the response process. Additionally, there was strict confidentiality within the study, where the data of the participants would not be used anywhere else. The data was only used for research purposes. Lastly, informed consent was obtained from each participant, who voluntarily gave their consent to fill out the forms. Participants were free to withdraw from the study at any time and were given the option to opt out at any stage.

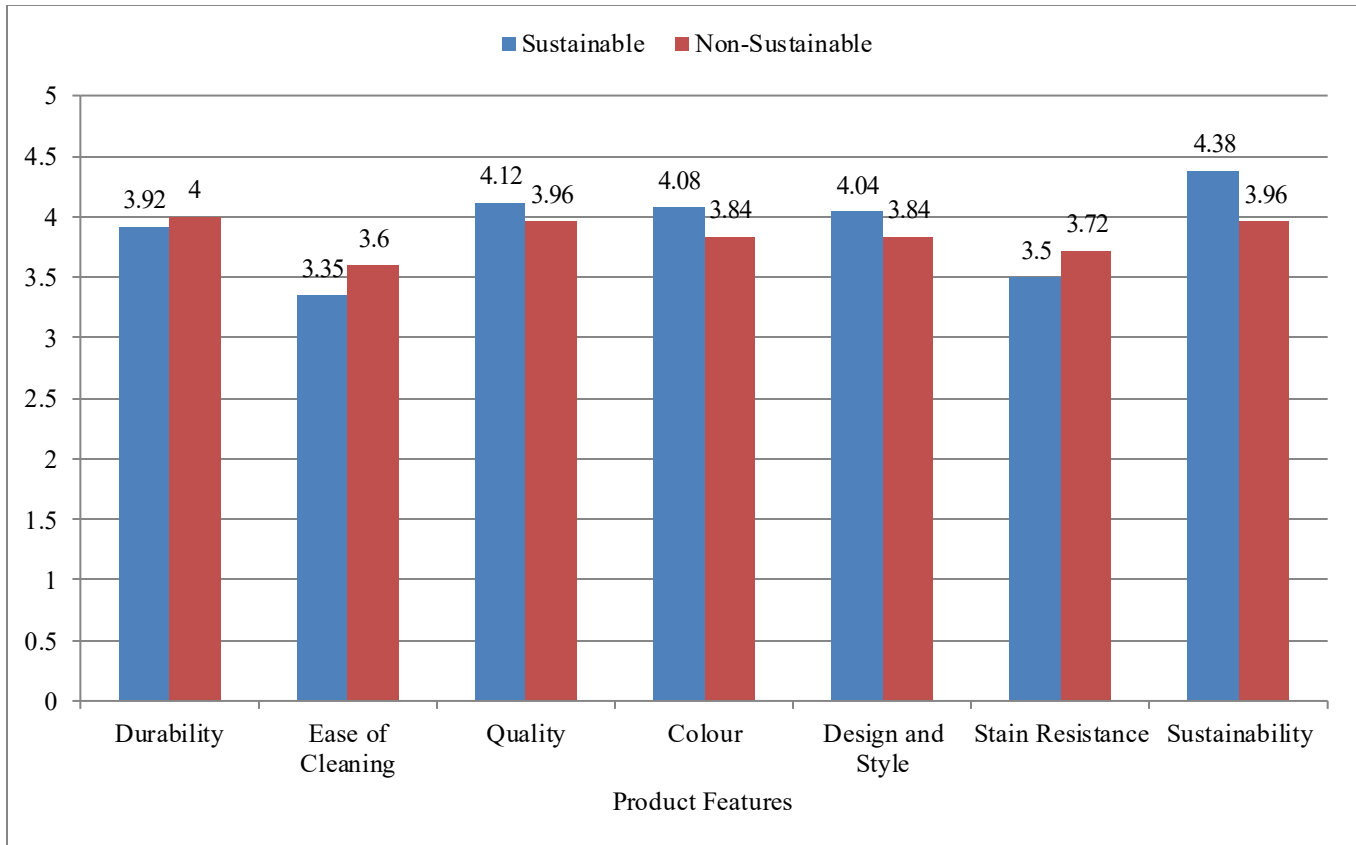
#### 2.7. Data Analysis Method

The collected data has been analyzed using visualizations and statistical tests. Firstly, the data for the ratings of product features was represented through a grouped column chart to compare the ratings of product features given by the respondents to the eco-labelled product and the one that is not labelled. Subsequently, correlational values and regression equations were used. Correlation analysis is a mathematical operation used to figure out the numerical relationship between 2 variables. This value is numerically shown by a coefficient of correlation, more commonly Pearson's coefficient, where it is expressed in the form of a p-value [22]. Hence, this study utilized Pearson's coefficient of correlation to assess the general relation between product features and purchase intentions. Lastly, regression analysis, another tool used in this study, is a statistical method used to form a model from a set of data that includes 2 or more variables. Dependent variables included willingness to buy and recommend, and a dummy variable for the advertisement type (non-sustainable = 1, sustainable = 0), and product features were considered independent variables [23].

### 3. Results and Discussion

The graph above shows the average individual ratings for each feature based on sustainable and non-sustainable advertisements, which have been color-coded respectively. There were only 3 features that had a higher average rating for the non-sustainable advertisement as compared to the sustainability-focused advertisement, being: durability, with an average rating of 4.00 (ARS = 3.92, ARNS = 4); ease of cleaning, with an average rating of 3.60 (ARS = 3.35, ARNS = 3.60); and stain resistance, with an average rating of 3.72 (ARS = 3.50, ARNS = 3.72). Herein, ARS is the average rating of the feature in regard to sustainability-forward advertisement, and ARNS refers to the average rating of the feature in regard to non-sustainability advertisement.

Textile goods are assumed to have lower durability if they are sustainably produced because durability is not synonymous with sustainability [24]; another point is that many studies reveal that recycled polyester fibers used in textile goods do not have the durability and strength of virgin polyester fibers used in the same goods [25]. Although recycled polyester fibers could increase fabric stiffness and reduce flexibility, repeated washing of the same fabric leads to the breakdown of these properties [26].



**Fig. 1 Average Ratings of Product Features**

The recycling processes used in sustainable textile goods can affect the quality of the fibers in the goods, making the maintenance of the goods tougher, hence leading to negative perceptions about ease of cleaning and quality of the same [27]. Furthermore, the recycling process involves the combination of many types of both natural and synthetic fibers, in order to increase the strength of the product; however, this combined material tends to react differently to cleaning agents, leading to damage in the products as a whole, hence requiring specialized detergents for the same [28]. Due to the recycling process, stain-resistant agents are removed [29] from the finish of the recycled goods, hence making the goods more susceptible to stains; furthermore, there are challenges such as unsuitable reactions to artificial stain-resistant chemicals [30], which can prevent them from being added into the goods again, after they have been recycled.

On the other hand, the other 4 features that had a higher average rating for the sustainable advertisement in comparison to the non-sustainable advertisement, included: quality, with an average rating of 4.12 ( $AR_S = 4.12$ ,  $AR_{NS} = 3.96$ ); color, with an average rating of 4.08 ( $AR_S = 4.08$ ,  $AR_{NS} = 3.84$ ); design and style, with an average rating of 4.04 ( $AR_S = 4.04$ ,  $AR_{NS} = 3.84$ ); and sustainability, with an average rating of 4.38 ( $AR_S = 4.38$ ,  $AR_{NS} = 3.96$ ). The average rating of sustainability in the sustainable advertisement was the highest

amongst all features for both 2 advertisements, sustainable or non-sustainable.

Design and style are crucial in sustainable textile goods [31]. The sustainability factor incorporates aesthetic and technical features that appeal to audiences better, marketing themselves as socially and environmentally responsible. Moreover, consumers highly value eco-labels and product certifications, since they heavily influence purchasing intentions for consumers, ranking them higher in rating compared to non-sustainable textile goods [32]. Coloring in sustainable textile goods is done using natural dyeing, using processes such as UV protection and antimicrobial activity [33]. The appeal of sustainable production is directly provided to consumers, causing the color rating of sustainable textile goods to be significantly higher than that of non-sustainable textile goods. In addition, the quality [34] of sustainable textile goods is significantly higher than that of non-sustainable textile goods since the sustainability factor of textile goods heavily influences the design focus on environmental concerns and improved characteristics, causing the ratings of the quality of sustainable textile goods to significantly rise. Lastly, sustainability has a higher rating in the sustainable advertisement due to the use of eco-labels and the brand name, “Eco Threads”, complementing the overall theme of the product.

**Table 1. Correlation of Product Features with Consumer Purchase Intentions**

Features	Statistic	Willingness to Buy	Willingness to Recommend
<b>Durability</b>	Correlation	0.62	0.71
	p	<.001	<.001
<b>Quality</b>	Correlation	0.55	0.66
	p	<0.004	<.001
<b>Color</b>	Correlation	0.13	0.16
	p	0.525	0.436
<b>Ease of Cleaning</b>	Correlation	0.47	0.6
	p	<0.016	<.001
<b>Design and Style</b>	Correlation	0.62	0.62
	p	<0.001	<0.001
<b>Stain Resistance</b>	Correlation	0.47	0.44
	p	<0.016	<0.025
<b>Sustainability</b>	Correlation	0.29	0.47
	p	0.146	<0.015

Table 1 illustrates the correlation between all product features (respectively) and both willingness to buy and willingness to recommend, while also using the p-value. There is a positive and high correlation of durability with willingness to buy ( $r=0.62$ ,  $p < .001$ ) and willingness to recommend ( $r=0.71$ ,  $p < .001$ ). This implies that if a product is rated higher in durability, it is likely to be purchased and recommended to others. Moreover, the p-value indicates that the positive correlation between these variables is highly significant. Quality and willingness to buy correlate positively ( $r=0.55$ ,  $p < .004$ ), indicating that if the quality of a good is higher, it is more likely to be bought. The p-value for the same indicates that the correlation is highly significant. The same can be said for quality and willingness to recommend ( $r=0.66$ ,  $p < .001$ ), implying that a higher quality good is more likely to get recommended to others. Color, although having a positive relationship with willingness to buy ( $r=0.13$ ,  $p=0.525$ ) and willingness to recommend ( $r=0.16$ ,  $p=0.436$ ), its correlation isn't high ( $0.13 < 0.50$  &  $0.16 < 0.50$ ), showing the insignificant impact of color on the thought perception of a consumer. Ease of cleaning has a positive, relatively weak correlation with willingness to buy (0.47), showing that consumers may be willing to buy a good if it is easier to clean, but not be too conscious about the same; the p-value (0.016) shows that ease of cleaning is still a highly significant factor for the product. However, ease of cleaning and willingness to recommend have a relatively stronger and higher correlation (0.66), implying that if the good is easier to clean, it is likely to be recommended to others; and again, the p value directly supports this implication ( $<0.001$ ). Stain resistance is also relatively close to the statistics of ease of cleaning, but the correlations are not as strong and high for stain resistance as they are for ease of cleaning (0.47 and 0.44). Design and style have quite a strong and high correlation with willingness to buy and recommend (0.62), showing that the product style is

likely to attract more consumers through purchasing and word of mouth; again, the p-value supports this assumption (0.001). The most important factor in this study, Sustainability, is surprisingly not strongly correlated to willingness to buy, but is positively correlated; the p-value shows the insignificance of the same (0.146). However, sustainability has a relatively stronger correlation with willingness to recommend, showing that sustainability included in a product is likely to be recommended to others, being significant in correlation as well.

Amongst all of the factors, durability, design, and style have the highest correlation with willingness to buy and recommend, followed by quality. On the contrary, color has the lowest correlation with willingness to buy and recommend. Sustainability has a low correlation with willingness to buy, whereas it has a relatively higher correlation with willingness to recommend. It was stated in a study [35] that products that are of better quality have a longer life cycle, allowing consumers to use them for a longer period of time; this explains the high correlation between durability and willingness to buy and/or recommend. The higher a product's useful life is, the more likely a consumer will buy the product. Another study [36] stated that highly designed products attract consumers' attention and emotions; this was concluded when the behaviour of consumers towards aesthetic products was observed and noted, purely based on the design aesthetics of the product. This evidence convincingly explains the reasons for the high correlation between willingness to buy and recommend and design and style. The literature justifies the strong, positive correlation between durability and purchase intentions. A study [37] showed similar results, where ease of cleaning was strongly correlated with willingness to buy (and/or recommend), since frequently used goods that still look good after constant use will more likely

be purchased by a consumer. Consumers prefer to buy carpets that are stain-resistant and easy to clean because they tend to prioritize flooring that is resistant to physical damage while being easy to maintain; the demand for such a carpet reflects consumers' desire for durable [38], low-maintenance flooring that can withstand daily wear and tear, all while maintaining their appearance and functionality. When recommending goods that have a large sustainability factor rooted in them, it is generally noticed that such goods are more likely to be

recommended to other consumers by those whose professions are embedded in environmental sustainability and concern, representing their knowledge on sustainability as a factor [39]. However, consumers are not as compelled to buy textile goods with significant sustainable attributes because economic barriers, such as pricing, play a vital role in the purchase of such goods; this causes consumers to miss the opportunity of buying these goods [40].

**Table 2. Regression Analysis Results considering willingness to buy as the dependent variable**

Model	Coefficient	Standard error	t	p
Constant	-0.52	0.68	-0.76	0.452
Type Non-Sustainable	-0.29	0.23	-1.29	0.204
Product features	0.16	0.02	6.58	<.001

**Table 3. Regression Analysis Results considering willingness to recommend as the dependent variable**

Model	Coefficients	Standard error	t	p
Constant	-0.65	0.69	-0.95	0.347
Type Non-Sustainable	-0.53	0.23	-2.32	0.025
Product features	0.16	0.02	6.73	<.001

Linear regression was used in this study in order to figure out the impact of the product's features and the advertisement type on the purchase intentions of consumers, which include both willingness to purchase and recommend; one boundary set was that in order for there to be a level of significance or impact, the p-value was to be below or equal to 0.05. It was found from the results in Tables 2 and 3 that the advertisement type (non-sustainable or sustainable) did not have a significant impact on the consumer's willingness to buy, with a p-value of 0.204. However, it was found that the advertisement type did impact the consumer's willingness to recommend the product to others, with a p-value of 0.025. The coefficient implies that if the advertisement or the marketing is sustainable forward, then the product is more likely to be recommended to others than a simple advertisement. Moreover, all of the product features (durability, sustainability, ease of cleaning, stain resistance, quality, design and style, and color) significantly and positively impacted the consumer purchase intentions (willingness to purchase and recommend), with p-values in both categories being <0.001.

It is evident in the literature that although consumers purchase goods [41] that have been advertised using eco-labels, there persists a significant gap between awareness and actual purchasing behaviour. Consumers are not aware of the impact of eco-labels. In actuality, consumers look for personal benefits in goods, rather than societal benefits. Consumers also find it time-consuming to research eco-labels and their environmental impacts, significantly reducing [42] the role of eco-labels when influencing their purchasing intentions. Along with this, the use of specific eco-labels perplexes consumers and prevents them from taking appropriate

decisions regarding purchase intentions [43]; hence, this impacts their purchasing intentions on a very insignificant level. Furthermore, some consumers tend to be sceptical about eco-labels, claiming that they greenwash the good, making their sustainable appeal [44] look bigger than it is. Therefore, willingness to purchase the textile product is not influenced significantly by the type of investment but only by product features.

## 4. Conclusion

This research aimed to measure the effectiveness of ecolabels and sustainable marketing on the perceptions and buying intentions among Indian consumers towards textile goods, such as carpets. A quantitative survey approach was adopted, where randomized control and experimental groups of at least 25 people each were given two types of advertisements, with and without eco-labels. The data was evaluated using graphs and statistical evaluations, such as correlation and regression models. The outcomes found that sustainability marketing improved perceptions of design, color, and quality, but decreased durability, ease of cleaning, and stain resistance. Advertisements and ecolabels increased willingness to recommend, while on the contrary, they had relatively small impacts on purchase intentions. There was a high positive, significant correlation of factors such as design and style, stain resistance, durability, ease of cleaning, and quality with both willingness to buy and recommend. However, there was a positive, insignificant correlation between color and willingness to buy and recommend; although sustainability followed the same pattern for willingness to buy, it showed significance in willingness to recommend. Regression results supported that product features significantly impact consumers' willingness to

recommend and buy. Durability allows goods to be long-lasting, making consumers more compelled to invest in them for the long run; furthermore, higher-quality products tend to be more durable. Products that have been designed up to the mark appeal more to the emotions and thoughts of consumers, making them all the more interesting and wanted by consumers. Moreover, products that are easy to clean and less likely to get stained work efficiently for consumers, making them more desirable for long-term usage. However, statistics indicated that the eco-labelled advertisement and product had a lower average rating in durability, ease of cleaning, and stain resistance, due to recycled materials used in the production of sustainable goods; the strength of the fibers directly impacts these factors and their roles in the usage of the goods, reducing their ratings for sustainable contexts. In addition, using cleaning agents with sustainable goods creates a dent in their quality, making them less desirable for purchase and usage. Using regression analysis, it was noted that the advertisement type and eco labels did not impact the consumers' willingness to buy, but they did impact the consumers' willingness to recommend. Consumers did not tend to want to buy goods that were advertised either way because they wished to look into the personal benefits they would receive when purchasing and consuming the goods; furthermore, there is less awareness about eco-labels and sustainability amongst consumers, leading to fewer consumers buying sustainable goods. Also, consumers tend not to want to research sustainability-related topics and eco-labels because it is time-consuming for them.

### Limitations and Scope of the Study

This study employed a small (total) sample size of 51 people, which increased the margin of error due to the relatively smaller sample sizes. Limitations to this study, other than the one already forementioned, included the smaller spread of demographic and geographic statistics related to the

participants in the study, leading to the conclusion of an inability to generalize this study to the entirety of India; furthermore, a few participants had filled the survey outside of the city where many of the surveys were filled, which was Gurgaon. Few participants filled out surveys from cities including Panipat, Mumbai, and even Dehradun, leading to the inability to generalize this study to any part of India, or even to the entirety of India.

Despite these limitations, this study can be used by policymakers and governments to phase out plans that can create a awareness about sustainability amongst consumers, and eco-labels in advertisements, allowing the production of merit goods to be impactful and helpful on a larger scale in India. Awareness about the same can be spread through campaigns, non-profit organizations, infographics, and advertisements on a larger scale through mostly used social media platforms. Moreover, businesses can use this study to analyze and assess the lifespan of specific goods in a market, with respect to sustainability and eco-labelling, enhancing marketing techniques, and the 4 Ps of marketing: price, product, promotion, and place. 3 of the 4 Ps can be used individually: product will be the initial design of the good and how it will be produced, price to determine how much consumers are willing to pay for the product, and promotion to figure out the advertising of the product to appeal to the customer. Place, which involves distribution channels and making the product reach different marketplaces, will be dependent on promotion and product. Lastly, researchers can use and extend this study by including a wider spread of demographic and geographic factors, along with larger sample sizes during the study, in order to find more accurate and generalized results. Some comparative studies can also be done on the same, comparing specific demographic factors of different participants (consumers).

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