

# Sustainable Fashion in India: An Exploratory Study

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## Abstract

*Fashion industry has been confronted with several sustainability challenges such as usage of raw materials, natural and synthetic fibres, excess consumption of water and energy, products of chemicals, harmful by-products, and employment of child labour and so on. Today's consumers are more aware of such sustainability challenges, which are faces by the fashion industry, resulting into an increasingly changing habits and lifestyle, in terms of consuming fashion by them. The present paper makes an attempt to investigate the opinion of Indian consumers from four cities in India regarding some issues of sustainable fashion. A questionnaire that captured the opinion of the residents of four different cities in India with respect to sustainable fashion was constructed. Convenient sampling technique was used to collect data which was statistically analysed. The questionnaire was sent to total 575 people as an online Google Form. Total 314 responses were received, which were analysed by using techniques such as KMO test and Kruskal–Wallis test. Respondents agreed the most that ethical and fair-trade practices and minimised logistics/good supply chain practice are key features of sustainable fashion. However, their agreement level differed significantly on issues related to sustainable fashion in general and on issues related to pricing and key features of sustainable fashion in particular. Respondents from different age group differed significantly in the agreement level for extending individual support to sustainable fashion. Also, there is a significant difference in the average agreement level of the respondents having different levels of education for choosing sustainable fashion products over the normal fashion if the prices of both types of products are close. Finally, the four cities, from where the data was collected, seemed to have no significant difference in accessing sustainable fashion. Overall, the findings of the present study are useful for companies from the fashion industry in analysing the significance of sustainability of their product. Also, the present study may encourage researchers to further investigate relevant issues in the Indian context.*

**Keywords:** Sustainability, fashion, stakeholder, sustainable fashion

## Introduction

The word 'fashion' conveys the expression of a prevalent preference of consumers in apparel, shoes, embellishments, makeovers, hairdo and body proportion at a given time (Kaiser, 2019). Fashion industry may be divided into segments such as production of raw materials (e.g., fibres, textiles, leather and fur), production of fashion items, retail

sales and advertising and promotion. The above segments consist of various sectors such as textile designing, fashion designing, fashion retailing, marketing and merchandizing, fashion shows, media and advertising, and so on (Major & Steele, 2021). Fashion industry has been confronted with several sustainability challenges which include usage of raw materials such as natural and synthetic fibres, excess consumption of water and energy, products of chemicals, harmful by-products, leading to land filling and environment pollution, ill-treatment of the employees by employing child labours and human trafficking and so on (Badani et al., 2005).

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Today's consumers, however, are more aware of sustainability challenges, glaring at the fashion industry and the concept of fashion, thus, resulting into an increasingly changing habits and lifestyle, in terms of consuming fashion (Olsson et al.,2017). A KPMG survey, conducted in 2019 with 5,269 people worldwide found that 90% participants supported the concept of sustainable fashion in Shanghai, while 49% in Tokyo, 55% in New York, 54% in London, 71% in Hong Kong have supported the same concept (KPMG, 2019). Higher income groups, more frequent shoppers, and younger shoppers tended to be more supportive of sustainable fashion across all cities. It has been reported by several surveys that sustainability is a high priority for consumers in several countries (e.g., 81% in India, 62% in Italy, 60% in China). Worldwide, a number of fashion brands have been working towards production and marketing of ethical, transparent and sustainable fashion: Everlane, in California, USA, ABLE, in Tennessee, USA, Thought clothing in London, UK, Kotn in Toronto, Canada, Sézane in Paris France, Encircled, in Toronto, Canada, and Matter in Singapore promote ethical and transparent production in a safe environment with fair economic opportunities for people, use organic cotton and natural materials and emphasize zero-waste production. Indian fashion brands such as Ka-Sha in Pune, Maga in Noida, and Upasana in Auroville, Pondicherry, and No Nasties in Goa also promote sustainable fashion in a similar manner.

Not many researchers have been conducted to investigate the opinion of Indian consumers about sustainable fashion. Keeping this in mind, the present paper makes an attempt to investigate the opinion of Indian consumers from four cities in India about certain issues of sustainable fashion such as supporting sustainable fashion at the individual level, supporting sustainable fashion at the societal

level, accessibility of sustainable fashion products, key features of sustainable fashion and pricing of sustainable fashion products.

## **Sustainability in fashion**

'Sustainability' is a concept that meets the needs of the present without compromising those of the future (Borowy, 2014). The definition thus encompasses the environmental, social and employment issues in the process of production and marketing and selling of the products. Research reveals that due to change in consumers' preference for and awareness towards sustainability, the fashion industry has started paying more attention to sustainability measures (Henninger et al.,2016). This has created the concept of 'sustainable fashion', which is used synonymously with terms such as 'eco-fashion' or 'green fashion' or 'ethical fashion' or 'slow fashion' (Khandual & Pradhan, 2019). Sustainable fashion is generally discussed in the context of design, production, distribution, consumption and disposal of products, keeping in mind the need for safeguarding the welfare of environment, the animals and humans involved in the business (Petrow & Leemann, 2018). Essentially, this needs to promote sustainability in the context of environment, society, and employment. Significant sustainability challenges faced by the fashion industry are discussed below.

### ***Environmental Issues***

Fashion industry is the second most polluting industry causing harm to the environment. Some of the issues which demand urgent attention in this regard are discussed below (Charpail, 2017).

**Water pollution:** Substances such as lead, mercury and arsenic are dumped into rivers by textile companies, which cause water pollution. It also contaminates seas and oceans across the globe. Fertilizers also act as water pollutant, which are used in cotton production.

**Effect on ocean ecosystems:** Post-consumer wastes such as plastic microfibers from polyester fabrics and artificial suede act as major pollutants of ocean ecosystems. These wastes enter the food chain of aquatic life, and affect the humans who consume seafood. Cotton, which is heavily used by this sector, also leads to groundwater depletion.

**Water consumption:** Massive consumption of water by fashion industry, especially for dyeing and finishing process, growing cotton (a water-intensive crop requiring 20,000 litres of water for 1 kg of cotton), etc. lead to ecological imbalance.

**Waste accumulation:** Disposable cloths are responsible for a huge pile of waste on earth. Also, 72% of synthetic fibre which forms part of our clothing today is non-biodegradable.

**Usage of chemicals:** In the fashion industry, 8000 different types of chemicals are used along with a heavy use of fertilizers in the production of cotton (a raw material for the industry), leading not only to death among cotton growers, but also to pollution of ground water and ocean water, resulting in soil degradation.

**Greenhouse gas emissions:** Due to consumption of more fossil fuels by synthetic fibres in contrast to natural fibres, more energy is consumed that produce gases, which have greenhouse effects. China and Bangladesh are the worst polluters with their coal-powered fashion mills and stand out as the worst contributors of carbon emissions.

**Soil degradation:** Excessive usage of grasslands for cashmere goats and sheep used for wool by fashion industry degrades soil. Also, excessive usage of chemicals to grow cotton and deforestation caused by wood-based fibres like rayon lead to soil degradation.

**Rainforest deforestation:** Unsystematic cutting of forests and re-plantation of trees for producing

wood-based fabrics like rayon endangers ecosystems and local communities.

### *Employment issues*

Certain employment-related issues have been a matter of concern for the fashion industry, some of which are discussed below.

**Living wage:** Due to heavy demand for goods, a large number of workers are appointed at very low wages, for long hours, with very little flexibility of taking a leave or time-off, leading to health hazards among the workers. .

**Long working hours:** Most people in this sector work for more than the recommended 48 hours per week (e.g., in Bangladesh, it is up to 60 hours per week). The Fair Wear Foundation points out that between 2012 and 2015, there were excessive overtime requirements in this sector.

**Irregular employment:** Casual labour and sub-contracting are the ways of exploitation of labour force. Labourers are left in real poor financial situations leading them into practices such as borrowing money from exploitative money lenders.

**Accidents and health issues:** 27 million workers in the fashion industry suffer from work-related ailments, at the injury rate of 5.6 per 100 workers, and it is a major concern.

### *Social issues*

Significant social issues in the context of fashion industry are as follows:

**Slavery in modern era:** The 2018 Apparel and Footwear Benchmark survey demonstrated that very few global-level companies could score more than 50 out of 100 points on employment indicators such as recruitment policies, grievance policies and so on, which indicates the unpleasant state of situation in this sector (Gillett, 2018).

**Forced and bonded labour:** The Global Slavery Index shows that 45.8 million people are victims of modern slavery and bonded/forced labour in cotton-producing countries like China, India, Thailand, Indonesia, Vietnam, Bangladesh, and Pakistan. Hard labour is extracted from them with no regular pay as a part of modern slavery or forced and bonded labour.

**Discrimination:** Women, who form 80% of the workforce in the industry, face strong discrimination by way of low wages, workplace harassment and lack of measures for pregnant women, improper facilities and under-representation in management/senior positions in the factories and similar establishments.

**Child labour:** A large number of children are employed in this industry, who works for long hours, and, under dangerous conditions, for very low wages. Reputed brands such as Adidas, H&M and Nike are found to be engaged in these practices.

## Role of stakeholders

To bring effective sustainability practices in the fashion industry, various stakeholders to this industry need to play their respective and complimentary roles. Considering this, the United Nations (UN) has established several organisations under its control to work independently or in association with other organisations to achieve sustainability targets.

**Role of International Standards Organisation:** International Standards Organisation (ISO) plays a pivotal role in providing guidelines supporting sustainability in business operations. For example, the ISO: 14000 standard provides organizations useful guidelines to manage their environmental responsibilities. ISO: 26000 standards provide guidance to do business with social responsibilities by following an ethical and transparent way and

contributing towards welfare of the society.

**Role of Manufacturers:** Fashion brand manufacturers need to promote sustainability. For example, Nike and Adidas support eco-friendly dyeing technology to reduce wastewater, chemicals, energy use and toxic effluents (Yaman et al., 2009). They have introduced waterless dyeing technologies such as Dye Coo, Colour Zen and Air Dye in their production processes.

**Role of Consumers:** Consumers are the end-users and as such they are in a position to refuse to buy a fashion product if it is not manufactured with the right use of energy, resources or even the labour (Zadek et al., 2013). However, while some consumers may be willing to spend more amounts for sustainable fashion items, others may not be willing to do so due to financial limitations, choice and mind set (Burke et al., 1978).

Studies conducted worldwide have identified the crucial role of consumers in promoting and accepting the sustainable fashion products. Recent studies such as (Granskoget al., 2020) and (KPMG, 2019) have indicated that the fashion industry needs to pay attention to sustainability issues related to their products.

## Objectives of the study

This is an exploratory study, conducted among respondents from four different cities in India. Consumers, being the significant stakeholders, influence companies' strategies for sustainable products, keeping in mind the production system, material cost and the cost of finished product as noted earlier. And, moreover, issues, such as, acceptability of the sustainable fashion products among consumers, consumers' affordability to purchase sustainable fashion products, and consumers' awareness towards sustainability in fashion industry, finally decide the fate of the

companies.. Therefore, the present study aimed to investigate the opinion of Indian consumers about sustainable fashion products. One may note here that sustainability issues in the fashion industry are a comparatively recent phenomenon and not much research has been done to investigate consumers' opinion about the same.

The present study was planned to investigate respondents' opinion on certain issues related to sustainability issues in fashion from four cities in India. The issues considered included:

- Supporting sustainable fashion at the individual level
- Supporting sustainable fashion at the societal level
- Accessibility of sustainable fashion products
- Key features of sustainable fashion, and
- Price of sustainable fashion products

The objectives of the study were as follows:

- To investigate whether the respondents' agreement level varies, for the issues related to sustainable fashion.
- To investigate whether the respondents' average agreement levels vary regarding the price and key features of sustainable fashion.
- To investigate whether respondents from different cities differ in their agreement levels regarding the accessibility of sustainable fashion.
- To investigate whether respondents of different age and gender have different agreement levels on whether they support sustainable fashion as individual and whether they think our society supports sustainable fashion.
- To investigate whether respondents with

different educational levels and with different income levels have different agreement levels on whether they support sustainable fashion as individuals.

- To investigate whether respondents with different income levels have different willingness levels to pay a higher price for sustainable fashion products.
- To investigate whether respondents with different levels of education differ in the willingness levels to choose sustainable fashion products over the normal ones if the prices of both types of products are close.

## Methodology and Data Analysis

A questionnaire was constructed by including relevant questions that captured the opinion of the residents of four cities in India with respect to sustainable fashion (Table 1). In order to do so, several surveys conducted worldwide were referred to (e.g., Granskoget al., 2020; KPMG, 2019). The items in those surveys were studied carefully, based on which the questionnaire for the present study was finalized.

The questionnaire contained 12 items (variables) related to certain key issues in the context of sustainable fashion (Table 2). Respondents were requested to assign the level of their agreement on each of the items using the Likert 5-point rating system (1 = fully disagree, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = somewhat agree, 5 = fully agree). The questionnaire was administered to people from Mumbai, Kolkata, Chandigarh and Bangalore. Convenient sampling technique was used to collect the data. The questionnaire was sent to total 575 people as an online Google Form and 314 responses were received.

**Table 1: Details of the respondents**

Details		No. of respondent
Age group	18-25 yrs	58
	26-33 yrs	75
	34-41 yrs	112
	42-49 yrs	65
	50 yrs and above	4
City	Bangalore	106
	Chandigarh	44
	Kolkata	100
	Mumbai	64
Education level	Graduate	101
	Postgraduate	213
Gender	Male	135
	Female	179

Annual income	Less than 6 lakhs	8
	6 to 11.99 lakhs	74
	12 to 17.99 lakhs	119
	18 to 23.99 lakhs	91
	24 lakhs and above	22

The overall reliability of the questionnaire met the required standard (Cronbach's alpha = 0.797). The sample adequacy was tested for each item. According to (Hair et al., 2006), a KMO value > 0.5 proves sample adequacy for each item (i.e., the variable). For the items in the questionnaire, there was sample adequacy (as shown in Table 2).

Communality value shows that all issues can be included as a variable for sustainable fashion. Cronbach's alpha also shows that the internal consistency or average correlation of items in the questionnaire is adequate (Table 2).

**Table 2: Items in the questionnaire**

Issues	Items in the questionnaire	KMO	Communalities	Reliability-Cronbach alpha
Supporting sustainable fashion at the individual level	1. I support the notion of sustainable fashion as an individual	0.834331	0.602642	0.77333
Supporting sustainable fashion at the societal level	2. I think our society supports sustainable fashion	0.83715	0.691057	0.781713
Production process	3. Sustainable production process is important consideration for me while purchasing fashion items	0.79442	0.768602	0.765725
Accessibility of sustainable fashion products	4. I think sustainable fashion is easily accessible.	0.794659	0.753059	0.773277
Key features of sustainable fashion	5. Ethical and fair-trade practices is a key feature sustainable fashion	0.859943	0.65273	0.778613
	6. Ethical and fair labour practices is a key feature sustainable fashion	0.842836	0.432908	0.781376

	7. Use of recycled/organic/eco-friendly materials is a key feature sustainable fashion	0.602263	0.881439	0.780441
	8. Biodegradable/Sustainable packaging is a key feature sustainable fashion	0.581956	0.912366	0.784626
	9. Minimised logistics/Good supply chain practice is a key feature sustainable fashion	0.744757	0.586701	0.791923
Price of sustainable fashion products	10. I am willing to pay a higher price for sustainable fashion products compared with normal fashion	0.69912	0.782948	0.788925
	11. I am willing to buy sustainable fashion only if it is cheaper than normal fashion	0.683521	0.776082	0.788897
	12. I am willing to choose sustainable fashion products over the normal ones, if the prices of both types of products are close	0.733855	0.630909	0.804519

To understand the level of agreement of respondents for each of the items, respective averages for each item were computed. Taking into consideration the average score in the descriptive statistics (Table 3), It was found that, overall, respondents' average level of agreement was highest for the statement that ethical and fair trade practices were defining features of sustainable fashion (mean = 3.5573), followed by the statement that minimised logistics/good supply chain practice was a defining feature of sustainable fashion (mean = 3.5). Respondents' average level of agreement was least for the statement that our society supported sustainable fashion (mean = 2.949).

**Table 3: Descriptive statistics**

	Mean	Standard Deviation	Kurtosis	Skewness
1. I support the notion of sustainable fashion as an individual	3.2038	1.0528	-0.964	-0.25
2. I think our society supports sustainable fashion	2.949	0.9579	-0.94	0.0803
3. Sustainable production process is important consideration for me while purchasing fashion items	3.3121	0.8998	-0.06	-0.71
4. I think sustainable fashion is easily accessible.	3.3662	0.954	0.4865	-1.057
5. Ethical and fair trade practices are a key feature sustainable fashion	3.5573	0.7739	1.5013	-1.213

6. Ethical and fair labour practices is a key feature sustainable fashion	3.4745	0.9762	-0.217	-0.82
7. Use of recycled/organic/eco-friendly materials is a key feature sustainable fashion	3.3885	0.884	-0.092	-0.705
8. Biodegradable/Sustainable packaging is a key feature sustainable fashion	3.3885	0.884	-0.092	-0.705
9. Minimised logistics/Good supply chain practice is a key feature sustainable fashion	3.5	0.8431	0.5004	-0.869
10. I am willing to pay a higher price for sustainable fashion products compared with normal fashion	3.1592	1.2071	-1.12	-0.408
11. I am willing to buy sustainable fashion only if it is cheaper than normal fashion	3.2484	1.1509	-0.995	-0.434
12. I am willing to choose sustainable fashion products over the normal ones, if the prices of both types of products are close	3.0102	1.0285	-1.016	0.1618

Descriptive analysis also revealed that, on average, respondents' agreement level on the accessibility of sustainable fashion products was more or less similar (Bangalore = 3.44, Chandigarh = 3.31, Kolkata = 3.34, Mumbai = 3.31). The average agreement level of the respondents from different age groups for extending individual support to sustainable fashion was somehow different though (18-25 yrs = 3.18, 26-33 yrs = 2.93, 34-41 yrs = 3.09, 42- 49 yrs = 3.6, 50 yrs and above = 5). Respondents from different age groups were somehow similar in their average agreement level on whether our society supports sustainable fashion (18-25 yrs = 2.89, 26-33 yrs = 2.92, 34-41 yrs = 2.83, 42- 49 yrs = 3.2, 50 yrs and above = 3.5). Average agreement level of male and female respondents for extending individual support (male = 3.19, female = 3.21) and their belief whether the society supports sustainable fashion (male = 2.94, female = 2.95) is almost similar. Respondents with graduation and post-graduation were somewhat similar in their average agreement level for extending individual support to sustainable fashion (graduates = 3.04, postgraduates = 3.27). Average agreement level of the respondents from

different income groups for paying higher price for sustainable fashion products was also similar (less than 6 lakhs = 3.37, 6-11.99 lakhs = 3.22, 12 to 17.99 lakhs = 3.17, 18 to 23.99 lakhs = 3.13, 24 lakhs and above = 2.86). Finally, average agreement level of the respondents with different level of education for choosing sustainable fashion products over normal ones, if the prices of both types of products were close, seemed to be similar (graduates = 3.29, postgraduates = 3.22).

Considering the above, following hypothesis was framed for further investigation:

Hypothesis 1:

- Hypothesis  $1_0$ : There is no significant difference in the average agreement level of the respondents on the issues related to sustainable fashion.
- Hypothesis  $1_a$ : There is a significant difference in the average agreement level of the respondents on the issues related to sustainable fashion.

Hypothesis 2:



- Hypothesis 2<sub>0</sub>: There is no significant difference in the average agreement level of the respondents on the issues related to price to be paid for sustainable fashion products.
- Hypothesis 2<sub>a</sub>: There is a significant difference in the average agreement level of the respondents on the issues related to price to be paid for sustainable fashion products.

#### Hypothesis 3:

- Hypothesis 3<sub>0</sub>: There is no significant difference in the average agreement level of the respondents on the issues related to key features of sustainable fashion products.
- Hypothesis 3<sub>a</sub>: There is a significant difference in the average opinion level of the respondents on the issues related to key features of sustainable fashion products.

#### Hypothesis 4:

- Hypothesis 4<sub>0</sub>: There is no significant difference in the average agreement level of the respondents from different cities on the issues related to accessibility of sustainable fashion products.
- Hypothesis 4<sub>a</sub>: There is a significant difference in the average agreement level of the respondents from different cities on the issues related to accessibility of sustainable fashion products.

#### Hypothesis 5:

- Hypothesis 5<sub>0</sub>: There is no significant difference in the average agreement level of the respondents from different age groups for extending individual support to sustainable fashion.
- Hypothesis 5<sub>a</sub>: There is a significant difference in the average agreement level of the respondents from different age groups for extending

individual support to sustainable fashion.

#### Hypothesis 6:

- Hypothesis 6<sub>0</sub>: Respondents from different age group do not significantly differ in their average agreement level on whether our society supports sustainable fashion.
- Hypothesis 6<sub>a</sub>: Respondents from different age group significantly differ in their average agreement level on whether our society supports sustainable fashion.

#### Hypothesis 7:

- Hypothesis 7<sub>0</sub>: There is no significant difference between the average agreement level of male and female respondents for extending individual support to sustainable fashion.
- Hypothesis 7<sub>a</sub>: There is a significant difference between the average agreement level of male and female respondents for extending individual support to sustainable fashion.

#### Hypothesis 8:

- Hypothesis 8<sub>0</sub>: Male and female respondents do not significantly differ in their average agreement level on whether our society supports sustainable fashion.
- Hypothesis 8<sub>a</sub>: Male and female respondents significantly differ in their average agreement level on whether our society supports sustainable fashion.

#### Hypothesis 9:

- Hypothesis 9<sub>0</sub>: There is no significant difference in the average agreement level of the respondents having different level of education for extending individual support to sustainable fashion.
- Hypothesis 9<sub>a</sub>: There is a significant difference

in the average agreement level of the respondents having different level of education for extending individual support to sustainable fashion.

Hypothesis 10:

- Hypothesis 10<sub>0</sub>: There is no significant difference in the average agreement level of the respondents from different income groups, for paying higher price for sustainable fashion products.
- Hypothesis 10<sub>a</sub>: There is a significant difference in the average agreement level of the respondents from different income groups, for paying higher price for sustainable fashion products.

Hypothesis 11:

- Hypothesis 11<sub>0</sub>: There is no significant difference in the average agreement level of the respondents having different level of education for choosing sustainable fashion products over the normal ones, if the prices of both types of products are close.
- Hypothesis 11<sub>a</sub>: There is a significant difference in the average agreement level of the respondents having different level of education for choosing sustainable fashion products over the normal ones, if the prices of both types of products are close.

These hypotheses could be tested using either ANOVA or Kruskal-Wallis Test, based on whether the assumption of normality for the sample was satisfied. In order to test the assumption of normality, Shapiro-Wilk Test was used. It is established that if the significance value of the Shapiro-Wilk Test is greater than 0.05, the data is normal. From the test, it was found that normality assumption was not satisfied by the present sample (i.e., the significance

value for the test was less than .05). Hence, Kruskal-Wallis Test was used to investigate the proposed hypotheses for the present study.

To investigate whether the distribution of the average agreement level of the respondents differ significantly for sustainable fashion (across all the items), Kruskal-Wallis Test was conducted. It was found that the p value was significantly less than the level of significance ( $p = .0000$ ,  $\alpha = 0.05$ ), hence, it was concluded that there were significant differences between average agreement levels assigned by the respondents for all items. Therefore, hypothesis 10 is rejected (Table 4). Kruskal-Wallis Test was conducted to investigate whether the distribution of average agreement level of the respondents differed significantly for the pricing and key features of sustainable fashion. It was found that in both cases, the p value was less than .05, which means that there is a significant difference in the average agreement level of the respondents. Therefore, hypotheses 20, and 30 are rejected (Table 4).

**Table 4: Kruskal-Wallis Test result**

Items	p value	Significance
Overall sustainable fashion (all 12 items)	2.0714E-22	Yes
Price of sustainable fashion products (item 10, 11, 12)	.008	Yes
Key features of sustainable fashion (item 5,6,7,8,9)	.037	yes

In order to identify, in which of the items related to price of sustainable fashion, respondents differed significantly in their average agreement level, non-parametric post-hoc comparison test (Tukey's HSD/Kramer Test) was used. It was

found that respondents' agreement level differed significantly ( $p$ value = .023,  $\alpha$  = 0.05) for their willingness to buy sustainable fashion only if it was cheaper than normal fashion (item 11) vis-a-vis their willingness to choose sustainable fashion products over the normal ones if the prices of both types of products were close (item 12). Although a significant difference among the average agreement level of the respondents across all five key features of sustainable fashion was found (Table 4), no significant difference was seen in the agreement level of respondents on any one feature vis-a-vis other features, during post-hoc analysis.

For testing null hypotheses 40 to 110, Kruskal-Wallis Test was conducted. The result indicated that there was a significant difference in the average opinion level for extending individual support to sustainable fashion among the respondents from different age groups. Significant difference was also found in the average willingness level of respondents with different level of education for choosing sustainable fashion products over normal one if the price of both types of products were close. In both cases, the  $p$  value was less than .05 (Table 5). Therefore, hypotheses 50 and 110 are rejected. In all other cases, the  $p$  value was more than .05 and thus there was no significant difference. Therefore, hypotheses 40, 60, 70, 80, 90, and 100 are retained (Table 5).

**Table 5: Kruskal-Wallis Test result**

Investigation on	p value	Significance
Difference in average opinion level of the respondents from different cities on the issues related to accessibility of sustainable fashion products.	.618	None

Difference in average opinion level of the respondents from different age groups for extending individual support to sustainable fashion.	1.39939 E-05	Yes
Respondents from different age group differ in their average opinion level on whether our society supports sustainable fashion.	.107	None
Difference in average opinion level of male and female respondents for extending individual support to sustainable fashion.	.877	None
Male and female respondents differ in their average opinion level on whether our society supports sustainable fashion.	.958	None
Difference in average opinion level of the respondents having different level of education for extending individual support to sustainable fashion.	.087	None

Difference in average willingness level of the respondents from different income groups, to pay higher price for sustainable fashion products.	.74	None
Difference in average willingness level of the respondents having different level of education for choosing sustainable fashion products over the normal ones, if the prices of both types of products are same.	.012	Yes

## Discussion

The present study was planned to investigate respondents' agreement levels on certain issues related to sustainable fashion. Based on the analysis of the collected data, it was found that respondents agreed the most that ethical and fair-trade practices and minimised logistics/good supply chain practice are key features of sustainable fashion. Clearly, the respondents were aware about sustainability in fashion. On the other hand, they agreed the least that our society supported sustainable fashion. This probably indicates that sustainability issues in fashion need to be promoted and encouraged by various stakeholders. This finding is supported by findings of previous studies such as KPMG (2019) and Granskog et al. (2020).

Even if respondents agreed on the substantiality issues in fashion as mentioned above, their agreement levels differed significantly on issues related to sustainable fashion in general and on issues related to pricing and key features in particular. This, still, needs further investigation,

especially with the product type, usage and utility in mind.

Further analysis of the data showed that respondents from different age groups differed significantly in the agreement levels for extending individual support to sustainable fashion. Also, there was a significant difference in the average agreement levels of the respondents with different level of education for choosing sustainable fashion products over normal ones if the prices of both types of products were same. This is an interesting finding. It may be assumed that with increasing age and education, respondents perhaps value the notion of sustainability more. Interestingly, income did not seem to be a significantly differentiating factor for the respondents in agreeing to pay higher price for sustainable fashion products. This too needs further investigation.

The four cities, from where the data was collected, seemed to have no significant difference in the accessibility of sustainable fashion. Both male and female respondents also did not differ in their agreement for extending individual support to sustainable fashion and in their belief whether the society supports sustainable fashion.

Overall, the findings of the present study may be useful for companies from fashion industry in analysing the significance of sustainability of their product. Also, the present study may encourage researchers to further research to investigate related issues in the Indian context.

## Conclusion

The present study is topical as well as contemporary. In a country like India, which is extremely diverse in terms of social, economic and cultural factors, an enquiry into the issue of sustainability in fashion seems to be an interesting proposition to investigate. Majority of respondents in this study showed

awareness about issues related to ethical and fair trade practices and minimised logistics/good supply chain practice as key features in sustainable fashion. It is assign that consumers are increasingly concerned about what they buy and whether or not they should. Therefore, fashion companies need to think about going green in sourcing the materials and other business practices.

A result of this study shows that with increasing age and education levels, respondents perhaps become more concerned about issues related to sustainability in fashion industry. This serves as a wakeup call for the industry. The fact that across all income groups, respondents seemed to be in support of buying sustainability sourced products indicates the acceptance of sustainable fashion products.

## Implications

There are several academic and managerial implications which could arise from this kind of viewpoint which will have far reaching effects in the way production houses are going to source materials, organize their production processes (including taking care of human rights issues) and address their environmental concerns, which would show the degree of their ethical response to protecting environments and communities that may be impacted by their business activities. Going green will not be a fashion statement for this industry any more but a serious concern, since this would determine their long-term survival in a business environment which is fast becoming increasingly populated with informed consumers who can make or mar their fate. Before crossing the hump, the fashion industry definitely needs to look at the many concerns that are the topic of debate among various sections of society in general and consumers of this industry in particulars well as among other stakeholders who may impact or be impacted by it.

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