

## Impact of Green Marketing strategies on Consumer behavior

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### ABSTRACT

The concept of sustainability is beginning to receive more attention in the fashion industry. Businesses that are operating sustainably want to be known, inform the public about their products and services, and increase demand from customers. Consumer awareness of sustainability is still a mystery, though. In this study, survey respondents were asked about their sociodemographic characteristics, level of awareness, the influence of green marketing on consumer behaviour, and the variables influencing green buying behaviour in relation to sustainable fashion. The survey was done in Delhi/NCR. The study used a sample of 304 people.

The survey's findings revealed that the respondents had a high level of awareness. The analysis' findings show that consumers are aware of how producing clothing has an impact on the environment. Customers, however, are not happy with their sustainable purchases. Customers' attitudes and lifestyles have a significant impact on knowledge. In consolidate, a high level of sustainable knowledge has been noted.

**Keywords:** sustainable fashion; sustainable business; consumer behavior; consumer information; corporate social responsibility

### 1. INTRODUCTION

Sustainable fashion, often known as eco-fashion, is a comprehensive term that refers to any initiatives taken by the government, businesses, and customers to establish a carbon-neutral fashion sector. It encompasses all facets of garment production, usage, and disposal, including who does what when, where, and for how long until it becomes garbage. In order to combat the large carbon footprint that quick fashion has left behind, the sustainable movement seeks to decrease the environmental repercussions of fashion, such as air pollution, water pollution, and general climate change. According to reports, today's fashion sector consumes main raw materials and water at a rate that ranks behind only food, housing, and transportation. (European Commission 2020, 13).<sup>1</sup> Therefore, 20 % of all textiles end as waste, with less than 1 % of all textiles in the world are recycled into new textiles. More than 80 million tones of garbage is generated by the fast fashion industry each year, with less than 1% being recycled and the rest ending up in landfills, incineration plants, or leaking into the environment<sup>2</sup>. Environmental dangers now play a role in more than 100 of the world's most hazardous diseases and injuries, killing 12.6 million people each year, accounting for roughly one-quarter of all deaths<sup>3</sup>. Businesses demand a large amount of water, which is a severe concern for ground or natural water sources, resulting in the loss of ground water levels by 2,700 litres of water to create one tshirt <sup>4</sup>

## 2. REVIEW OF LITERATURE:

C Saricam , N Erdumlu, A Silan, B L Dogan and G Sonmezcan(2017 ):" In this study, a survey that was conducted in Turkey and asked participants about their socio demographic traits and level of awareness of sustainable fashion was used to try to gauge consumer awareness of the topic. The survey's findings revealed that participants' levels of awareness are not particularly high, and their perceptions of sustainability are largely restricted to certain elements of sustainable fashion, such as "Use of organic materials" and "Recycling."

Dr. Vishal Thelkar , 2018 : The goal of this study was to comprehend consumer attitudes about environmentally friendly and sustainably produced clothes. With a focus on gender and age group, the aim of this article is also to investigate the relationship between green fashion and their willingness to spend more for eco-clothes. This study divides the sample of 119 consumers in the Pune region into seven categories based on their individual attitudes about eco-friendly and sustainable clothes. Retailers of fast fashion, marketers, advocates for the environment, ecologists, nonprofit organisations, and public policy makers will all benefit from the findings.

Anica Hunget & Goran Kozina, 2021 : 263 people completed a questionnaire about their perceptions, knowledge, and behaviour about sustainable fashion, and the results were then evaluated using descriptive statistics and the t-test. Consumer opinions towards fashion firms' sustainable business strategies were the main subject of this study. According to the research, there are disparities between the sexes in how conscious they feel they are of sustainability in the fashion industry, with women feeling more informed than men. Women under the age of 35 and those above the age of 36 were both surveyed regarding their perceptions of fashion sustainability awareness.

## 3. Objectives of the study:

- 1) To analyze the consumer behaviour in terms of awareness level.
- 2) To study the impact of Green Marketing on consumer behaviour.
- 3) To study the factors affecting consumer buying behaviour
- 4) To determine the customer satisfaction towards green products.

## 4. Hypothesis :

1. H<sub>1</sub>: Awareness positively related to the impact of green marketing on consumer behaviour.
2. H<sub>2</sub>: Awareness positively related to the factors of green marketing on consumer behaviour.
3. H<sub>3</sub>: Awareness positively related to the customer satisfaction of green products.
4. H<sub>4</sub>: Impact of green marketing on consumer behaviour positively related to the customer satisfaction of green products.
5. H<sub>5</sub>: Factors of green marketing on consumer behaviour positively related to the customer satisfaction of green products.

## 5. Need of the study :

The future will be determined by the sustainable work we do today. Businesses had to reevaluate their priorities as a result of the epidemic and the unsettling impacts of climate change, making more place for sustainability. Applying the concept of environmentally friendly clothing and equipment to its fullest extent is essential given the world's fast decline. If we want to live and if we want the next generation to survive, sustainable clothing is crucial. If rigorous action is not taken now, when the earth is in a state of emergency, our existence is in danger.

## 6. Method :

The survey of 304 residents of Delhi/NCR provided the information for this study. Five components made up the questionnaire. The first section asked questions about sociodemographic characteristics, the second focused on awareness, the third asked questions about the influence of green marketing strategies on consumer behaviour, the third asked questions about factors influencing consumer behaviour, and the final section asked questions about satisfaction. The research is descriptive in nature. EFA (Exploratory factor analysis) and CFA (Confirmatory factor analysis) were done to check the reliability and validity of questionnaire. SEM (Structural equation modeling) was done to do hypothesis testing. EFA was done in SPSS 20 and SEM was done in AMOS 20.

## 7. Demographic profile

Demographic Profile	Frequency	Percentage
<b>Gender</b>		
Male	91	29.93
Female	213	70.07
<b>Age</b>		
Between 21-30 years	196	64.47
Between 31-40 years	62	20.39
Between 41-50 years	39	12.83
Between 51-60 years	7	2.30
<b>Education</b>		
Higher Secondary	6	1.97
Graduate	200	65.79
Post-Graduate	98	32.24
<b>Marital Status</b>		
Married	110	36.18
Unmarried	194	63.82

**Profession**

Student	175	57.57
Salaried	91	29.93
Professional	25	8.22
Other	13	4.28

**Annual Income**

Below 3 lakhs	165	54.28
Between 3-6 lakhs	95	31.25
Between 6-9 lakhs	19	6.25
Between 9-12 lakhs	8	2.63
Above 15 lakhs	17	5.59

**8. Exploratory Factor Analysis (EFA)**

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</b>		0.907
<b>Bartlett's Test of Sphericity</b>	Approx. Chi-Square	2298.526
	df	120
	Sig.	<0.001

Total variance explained by all the factors was 67 % which was greater than 50 %. Therefore the data has good sampling adequacy

**Table 1 EFA AND RELIABILITY**

Items	Factors				Cronbach's Alpha
	AWR	IMP	FAC	SAT	
AWR_4	0.682				0.861
AWR_5	0.817				
AWR_6	0.819				
AWR_7	0.808				
AWR_8	0.840				
IMP_1		0.801			0.870
IMP_2		0.796			
IMP_3		0.670			
IMP_4		0.831			
IMP_5		0.764			
FAC_5			0.631		0.771
FAC_6			0.729		
FAC_8			0.831		
FAC_9			0.738		
SAT_1				0.801	0.752
SAT_2				0.892	

Total four factors were extracted i.e AWR, IMP, FAC & SAT. The values of Cronbach Alpha were 0.861, 0.870, 0.771 & 0.752. AWR factor includes five items with labels as AWR\_4, AWR\_5, AWR\_6, AWR\_7 & AWR\_8. **AWR\_8** has highest value of 0.840 which indicates that consumers were aware of the trademarks and certifications. Similarly in factors of **IMP**, highest value is 0.831 which is possessed by **IMP\_4** i.e Eco friendly purchases will help in leading healthy life. In **FAC**, highest value is **FAC\_8** of 0.831 i.e Ease in product availability motivates you to purchase and in **SAT**, highest value is **SAT\_2** which is 0.892 i. e I will purchase a green apparel in near future.

Convergent and discriminant validity was established through the EFA. In table 1, after removing the low loaded and cross loaded items, the remaining items were loaded onto the same factors and all the item loadings were greater than 0.50, therefore, there was evidence of convergent validity. Also Cronbach's alpha values were greater than 0.70 hence showing good reliability of the data

**Table 2** **FACTOR CORRELATION MATRIX**

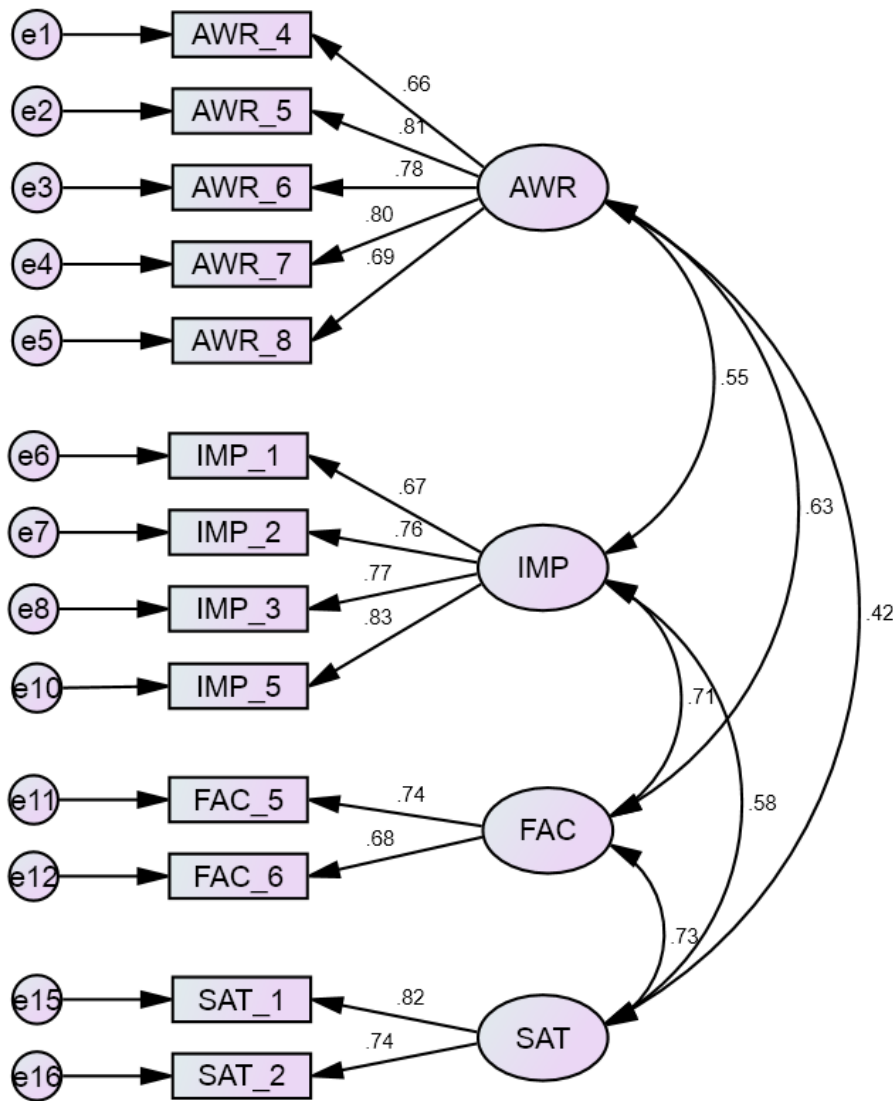
<b>Factors</b>	<b>AWR</b>	<b>IMP</b>	<b>FAC</b>	<b>SAR</b>
<b>AWR</b>	1.000	0.423	0.468	0.322
<b>IMP</b>	0.423	1.000	0.536	0.435
<b>FAC</b>	0.468	0.536	1.000	0.465
<b>SAT</b>	0.322	0.435	0.465	1.000

The correlation matrix table 2 describes the discriminant validity, which means the degree to which factors were distinct and not related to each other. For discriminant validity to occur, the value of correlations in the table 2 should not exceed 0.7.

### **Confirmatory Factor Analysis (CFA)**

In this section, overall fit of the model, validity, and reliability of the model was examined with the help of confirmatory factor analysis (CFA). Dependent/Endogenous/Observed variables were shown in the box and Independent/Unobserved/Exogenous variables shown in oval shapes. Each Dependent variable has an error term. Two sided arrows were indicating covariance between constructs, whereas single headed arrows indicate the causal path between the construct and the measured variable.

Four factors confirmatory factor model (i.e. "AWR, IMP, FAC, SAT ") was run using AMOS 20 software.



**Table 3** CFA Model Fit Values

CMIN/DF	1.381	<3
SRMR	0.037	<0.08
GFI	0.958	>0.90
AGFI	0.935	>0.90
CFI	0.987	>0.90
RMSEA	0.035	<0.08
PCLOSE	0.908	>0.05

Once the model fitness with the data is established, convergent validity was checked. To assess the convergent validity following measures for evaluating the measurement model are:

1. Factor loadings of the items must be greater than 0.5 for them to be statistically significant.
2. Values of the Construct Reliability (CR) must be greater than 0.7.
3. Values of Average Variance Extracted (AVE) must be greater than 0.5.

**Table 4**

Factors	Items	Standardized Loading	AVE	CR
<b>AWR</b>	AWR_4	0.657	0.563	0.865
	AWR_5	0.815		
	AWR_6	0.776		
	AWR_7	0.799		
	AWR_8	0.693		
<b>IMP</b>	IMP_1	0.673	0.577	0.845
	IMP_2	0.763		
	IMP_3	0.766		
	IMP_5	0.829		
<b>FAC</b>	FAC_5	0.743	0.508	0.673
	FAC_6	0.681		
<b>SAT</b>	SAT_1	0.819	0.613	0.760
	SAT_2	0.745		

**Note.**AVE=Average Variance Extracted. CR=Composite Reliability.

**Table 5 Discriminant Validity Test Outcome**

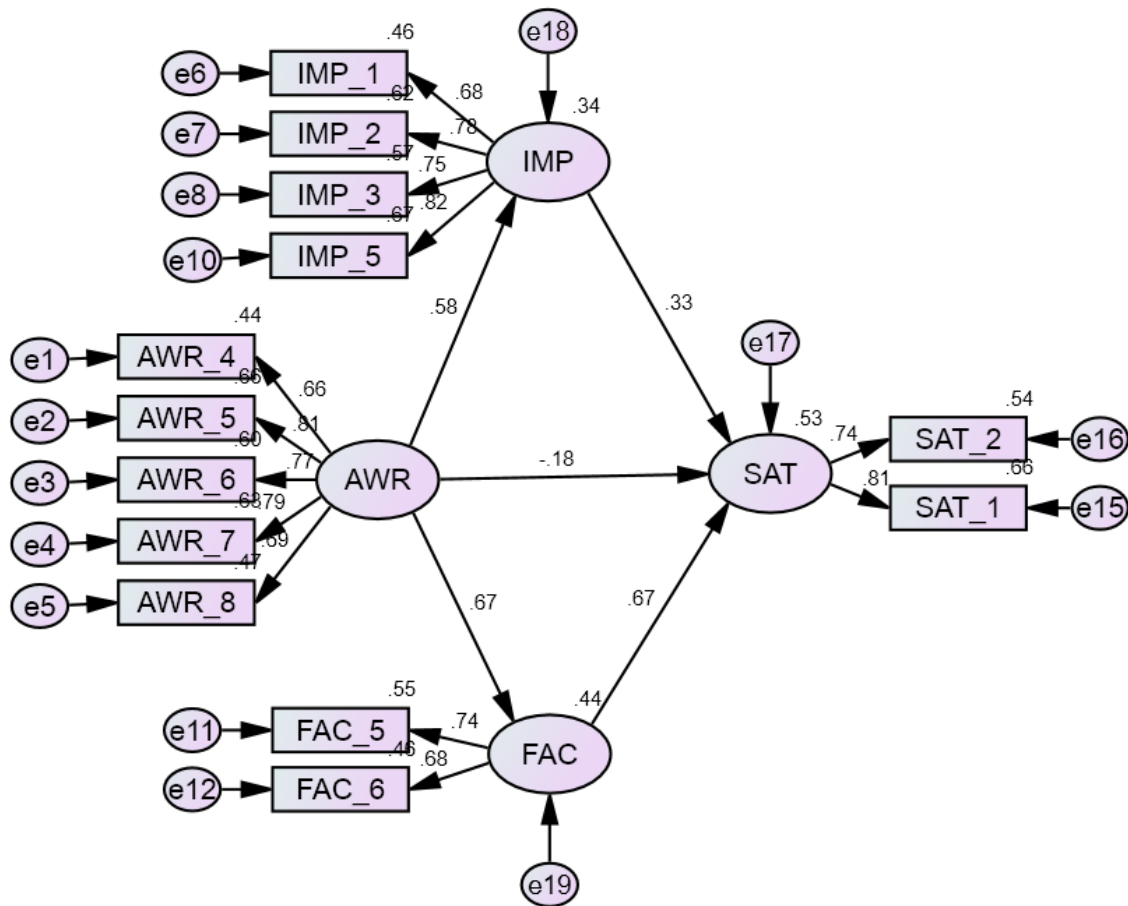
Factors	FAC	AWR	IMP	SAT
<b>FAC</b>	<b>0.713</b>			
<b>AWR</b>	0.630	<b>0.751</b>		
<b>IMP</b>	0.706	0.547	<b>0.760</b>	
<b>SAT</b>	0.734	0.419	0.578	<b>0.783</b>

From the above mentioned sections and the discussion given thereof, it is evident that the result of the fit index suggest model fitness with the data. The model was also found to have convergent and discriminant validity.

### **SEM (STRUCTURAL EQUATION MODELLING)**

Structural Equation modeling (SEM) is a set of statistical techniques used to measure and analyze the relationships of measured and latent variables. Latent variables are those variables which cannot be measured directly. It is the most advanced form of hypothesis testing as it not only do hypothesis testing but also tell fit indices.





Structural equation model for the four factors extracted in previous section is shown. Measured variables were shown in the box with latent variables shown in oval shapes. Each measured variable has an error term. Single headed arrows indicate the causal path between the construct and the measured (indicator) variable.

**Table 6 SEM Model Fit Values**

Model Fit Indices	Model Fit Values	Recommended Threshold
CMIN/DF	2.039	<3
SRMR	0.065	<0.08
GFI	0.938	>0.90
AGFI	0.907	>0.90
CFI	0.964	>0.90
RMSEA	0.059	<0.08
PCLOSE	0.164	>0.05

From the above mentioned sections and the discussion given thereof, it is evident that the result of the fit index suggest model fitness with the data



**SEM Path Models**

Hypothesis	Path Models			Unstandardized Estimate	Standardized Estimate	Standard Error	t value	P value	Results
H1	AWR	→	IMP	0.487	0.584	0.066	7.409	<0.001	Sig.
H2	AWR	→	FAC	0.589	0.666	0.074	7.938	<0.001	Sig.
H3	AWR	→	SAT	-0.162	-0.184	0.107	-1.510	0.131	NS
H4	IMP	→	SAT	0.347	0.330	0.087	3.975	<0.001	Sig.
H5	FAC	→	SAT	0.662	0.668	0.133	4.971	<0.001	Sig.

Note. Sig. = Significant. NS = Not Significant.

From the above shown table, it can be concluded that:

1. “Awareness is positively related to the impact of Green Marketing on consumer Behaviour” (t=7.409, p<0.01). Therefore, **Hypothesis 1 i.e AWR → IMP** is significant.
2. “Awareness is positively related to the factors of Green Marketing on Consumer behaviour” (t= 7.938, p<0.01). Therefore, **Hypothesis 2 i.e AWR → FAC** is significant.
3. “Awareness is not positively related to the customer satisfaction”(t= - 1.510) Therefore, **Hypothesis 3 i.e AWR → SAT** is insignificant.
4. “Impact of Green Marketing on consumer behaviour is positively related to the customer satisfaction” (t=3.975, p<0.01). Therefore, **Hypothesis 4 i.e IMP → SAT** is significant.
5. Factors of Green Marketing on consumer behaviour is positively related to the customer satisfaction (t = 4.971, p < 0.01). Therefore, **Hypothesis 5 i.e FAC → SAT** is also significant.

**9. Results:**

It is crucial to research "Empirical Study of Impact of Green Marketing Strategies on Consumer Behavior." The survey's findings revealed that the respondents had a high level of awareness. The analysis' findings also revealed that shoppers were aware of how producing clothing has an impact on the environment. Customers' attitudes, lifestyle choices, family health concerns, and celebrity ads all have a significant impact on consumer behaviour. Customers, though, weren't happy with their sustainable purchases. In consolidate, a high level of sustainable knowledge has been noted.

**10. Suggestions:**

1. It has been noted that women made up the bulk of the consumer base. There is a need to concentrate more on raising awareness among male consumers as a result.
2. Another aspect that affects how Green Marketing Strategies affect consumer behaviour is age. Since the majority of respondents were between the ages of 21 and 30, other age groups must also be taken into consideration.
3. There was a low degree of consumer satisfaction. Therefore, a sound approach should be developed to raise the satisfaction level.

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