
Consumer's Attitude towards Environmental Sustainability while Purchasing Covid 19 Products

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Abstract— *Environmental sustainability is a term that is of huge relevance to the current as well as the forthcoming generation. It primarily attempts to avoid actions that deplete natural resources in order to maintain ecological equilibrium. Sustainable practices enable a person to consider the future needs of the resources being consumed today. It influences the consumption patterns exhibited by a person. Covid 19 pandemic triggered the demand for a wide range of Covid 19 essential products like N95 masks, sanitizers, etc. As these products are in a huge surge, it is also important to understand the effects they have on environmental sustainability and the attitude of consumers towards the idea of green Covid 19 goods.*

The goal of this study is to determine the attitude of consumers towards environmental sustainability when purchasing Covid 19 products. A quantitative method is adopted for the study with a sample size of 200, collected using a convenient sampling method. After a detailed analysis of the data collected, we concluded that Environmental Protection, Perceived Availability Barrier, Perceived Quality/Performance Barrier, Perceived time barrier & Personal Norms have a significant influence in consumer's attitude towards environmental sustainability. We believe that our research findings will build on the existing body of knowledge by addressing the way consumers prioritize their eco-friendly purchases.

Keywords— *Covid 19 Products, Eco-friendly, Ecological Balance, Environmental Sustainability, Pandemic.*

I. INTRODUCTION

The world had one of its worst experiences recently due to the outbreak of coronavirus (Covid 19). The global pandemic affected various sectors harshly, while other sectors like online application firms had the time of its life. Another bright side is that the lockdown due to the pandemic led to detoxifying the environment and aided environmental conservation to an extent. Being said that, it also had adverse effects on the environment as people required extensive use of some products, commonly known as covid 19 products, like hand gloves, hand sanitizers, face masks, etc.

The prevention of natural resource depletion in order to maintain an ecological equilibrium is known as environmental sustainability. Sustainable practices enable a person to consider the future needs of the resources being consumed today. This also plays a major role in the consumption patterns exhibited by a person. This research intends to study the consumer's attitude or approach

towards environmental sustainability while they purchase Covid 19 essential products.

II. LITERATURE REVIEW

Covid 19 is a major health concern for the entire world. It has affected all the activities which people do in their daily lives. It also has its effect on the way people think and behaves, irrespective of where they lived. The impact of Covid 19 had a stronger influence on sustainable consumption among the Baby Boomers, X and Y generations, inhabitants of Brazil and Portugal, followed by environmental consciousness. It has also led to the practice of conscious consumption among the common public in these countries (Severo et al., 2021). The COVID-19 pandemic has also had an enormous impact on the economic, social and environmental underpinnings of human sustainability. (Ranjbari et al., 2021).

Due to the pandemic, we can also see a large number of wastes piling up. Any response to a health crisis should

strike a balance between public health and environmental protection, as the two are inextricably linked. Despite the fact that the use and consumption of plastics improved our quality of life, it is critical to change to more eco-friendly alternatives, such as bio-based plastics. (Patrício Silva et al., 2021). Age influences how people react to the COVID-19 outbreak, and these impacts may have resulted in a greater willingness to spend on environment friendly materials. Consumers' age appears to be inversely associated to their negative affective response to the spread of disease, which, in turn, appears to be inversely connected to their level of optimism when the spread of contagion was halted by public health measures. Furthermore, consumer optimism is linked to a pro-environmental attitude and, as a result, to a predisposition to increase sustainable purchasing (Peluso et al., 2021).

Plastic has become an evil polluter of the environment due to consumers' reckless behavior, mindset, lack of comprehension, and the pressure on waste management infrastructure in terms of gathering, maintenance, and financial restrictions as main factors, leading to mismanagement. Guiding principles supporting the use of safer techniques and long-term technical solutions, as well as consumer education to raise awareness, are critical in avoiding plastic from transforming from a protector with high usefulness to a polluter (Parashar & Hait, 2021). Despite what appears to be a major public health crisis, governments should seek to ensure that the coronavirus outbreak aids in a long-term consumption change. This would be one approach to compensate for some of the unlucky hardship and inconvenience caused by the tragedy (Cohen, 2020). During the pandemic, the ethical dimension of consumer decision has grown increasingly prominent, which is expected to lead to a shift in consumer behavior toward more responsible and prosocial consumption. Firms and organizations are likely to reflect such developments (He & Harris, 2020). Global Climate Change and COVID-19 are connected. First, COVID-19 has an impact on the Global Climatic Change; in other words, the drastic measures made to combat COVID-19 have improved Climatic Change indices such as emissions and air/water quality. Second, COVID-19's impacts are strengthened by Global Climate Change, indicating that public and environmental health are inextricably linked (Mende & Misra, 2021). The COVID-19 issue raised customers green food purchasing intentions, yet the Intention Behavior Gap continues to widen due to concerns such as scarcity, cost, and concern (Qi et al., 2020).

III. RESEARCH QUESTION

Due to the Covid 19 surge, people are getting more cautious about their way of living and are purchasing many Covid 19 products such as Face Masks, Hand Gloves, etc. to make themselves safe from the virus. These products can have their effects on environmental sustainability. So, the goal of this study is to answer the following question.:

Which are the factors that influence consumer's attitudes towards environmental sustainability while purchasing Covid 19 products?

IV. THEORETICAL FRAMEWORK

To support the research question, we came up with a theoretical model based on the insights we got from analyzing the research papers (Tanner & Kast, 2003) and our own practical analysis. There are 9 independent variables including perceived availability barrier, perceived monetary barrier, perceived time barrier, perceived quality barrier, use & disposal, product knowledge, brand knowledge and personal norms which contributes to the output variable, "Pro environmental attitude of consumers".

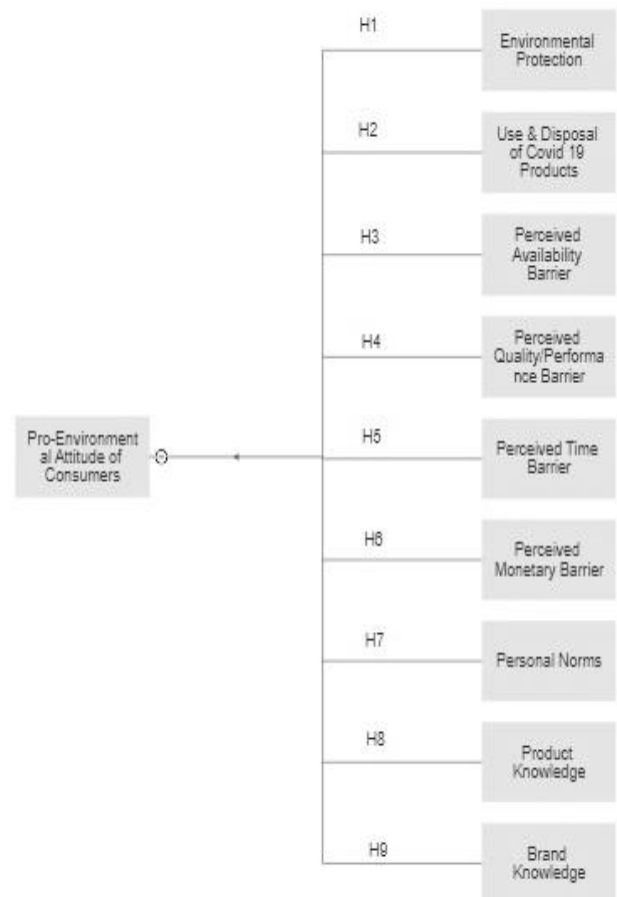


Fig. 1: Theoretical Framework

V. HYPOTHESIS

We consider the following hypothesis for this research:

- H1: Environmental protection has a significant impact on the attitude of consumers towards environmental sustainability while consuming Covid 19 products
- H2: The way people use & dispose Covid 19 products, has a significant impact on the attitude of consumers towards environmental sustainability while consuming Covid 19 products
- H3: Perceived availability barrier has a significant impact on the attitude of consumers towards environmental sustainability while consuming Covid 19 products
- H4: Perceived Quality/Performance Barrier has a significant impact on the attitude of consumers towards environmental sustainability while consuming Covid 19 products
- H5: Perceived Time Barrier has a significant impact on the attitude of consumers towards environmental sustainability while consuming Covid 19 products
- H6: Perceived Monetary Barrier has a significant impact on the attitude of consumers towards environmental sustainability while consuming Covid 19 products
- H7: Personal Norms has a significant impact on the attitude of consumers towards environmental sustainability while consuming Covid 19 products
- H8: Product Knowledge has a significant impact on the attitude of consumers towards environmental sustainability while consuming Covid 19 products
- H9: Brand Knowledge has a significant impact on the attitude of consumers towards environmental sustainability while consuming Covid 19 products

VI. METHODOLOGY

This research intends to find out the factors affecting consumer attitudes towards environmental sustainability while purchasing Covid 19 products. As mentioned above in the theoretical framework, 9 factors including environmental protection, Use & Disposal of Covid 19 products, perceived availability barrier, perceived quality/performance barrier, perceived time barrier, perceived monetary barrier, personal norms, product knowledge, and brand knowledge are considered which in turn can directly affect the pro-environmental attitude of consumers while purchasing Covid 19 products. Quantitative research is carried out to measure the effects of these factors on the attitude of the consumers.

VII. RESEARCH DESIGN

The research is designed as quantitative. A questionnaire is used as the tool for data collection. The sample size is 200. The questionnaire survey was conducted across people of the age group of 18 years and above who live in different parts of India, to analyze the factors that enable or inhibit them from having a pro-environmental attitude while purchasing Covid 19 products. The data is collected using convenience sampling technique.

VIII. MEASUREMENT

A google form was employed to collect the responses from the consumers. Scaling is done on a 5-point Likert scale. The questionnaire had 2 sections. The first section had 8 questions and was focused on collecting the demographic data like their age group, gender, income, education, the region of residence etc. (urban/rural/metro). The first part of the questionnaire also asks the consumer about their preferences, that is, whether they prefer natural products over artificial ones. The second part had 26 questions to find out their approach while purchasing the Covid 19 products and the effects of their pro-environmental attitude on their purchases. Responses were collected from 200 consumers across India within the age group 18-65.

IX. ANALYSIS & INTERPRETATION

SPSS is used for the purpose of data analysis. After data cleaning, only 166 out of 200 values were found to be valid for the analysis. So, the rest were eliminated. The fitness and reliability of the data set were calculated by the standard reliability test. The value of Cronbach’s Alpha is 0.853 (Table 1). As it is greater than the pre-set level (Ursachi et al., 2015), the data is reliable and fit for further analysis.

Table 1: Reliability

RELIABILITY STATISTICS		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.853	0.776	10

Table 2: Regression Analysis

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
		1	(Constant)	3.898		
	Epavg	-0.258	0.270	-0.156	-1.985	0.032
	Udavg	0.189	0.148	0.202	1.283	0.207
	Pmavg	0.016	0.151	0.023	0.106	0.916
	Paavg	-0.013	0.115	-0.021	-2.111	0.032
	PQavg	0.029	0.095	0.057	3.302	0.007
	PT1	-0.249	0.112	-0.427	-2.231	0.032
	Pnavg	0.230	0.165	0.249	1.996	0.001
	PK1	0.060	0.141	0.080	0.428	0.671
	Bkavg	-0.135	0.136	-0.172	-0.995	0.326

a. Dependent Variable: DV Avg

Perceived Monetary Barrier	0.023	0.106	0.916	Accept
Personal Norms	0.249	1.996	0.001	Reject
Product Knowledge	0.080	0.428	0.671	Accept
Brand Knowledge	-0.172	-0.995	0.326	Accept

Second, regression analysis is conducted to identify how each input variable affects the outcome. Regression analysis is used to check all 9 input variables, and the t values, significance (p-value), and beta were discovered (Table 2).

A 5% significant level (.05) is used to compare the p values. When the level of significance is set low, it suggests we'll need more evidence to reject the study's null hypothesis. The null hypothesis is rejected when the p-value of the variable under investigation is less than 0.05, indicating that the variable has a substantial impact on the output.

The p-value of the variable Personal Norm is 0.001 which is <0.05. This means that the null hypothesis H7 should be rejected. This variable has a considerable effect on the pro-environmental attitude of the consumers. As the beta value (0.249) and the t statistic (1.996) are both positive for H7, it means that for every 1 unit increase in the H7 variable, the output will increase by 0.249. Likewise, other input variables Environmental Protection (H1), Perceived Availability Barrier (H3), Perceived Quality/Performance Barrier (H4), Perceived Time Barrier (H5), have a significant influence on consumer's attitude as their p values are less than 0.05 and the null hypothesis is found to be false. But when we consider other factors including Use & Disposal of Covid 19 products (H2), Perceived Monetary Barrier (H6), Product Knowledge (H8), Brand Knowledge (H9), the p-value is >0.05 and the null hypothesis is accepted. These variables don't have a significant effect on the attitude of consumers (Table 3).

Table 3: Interpretation of results

Variable	Beta	t value	p Value	Result
Environmental Protection	-0.156	-1.985	0.032	Reject
Use & Disposal of Covid 19 Products	0.202	1.283	0.207	Accept
Perceived Availability Barrier	-0.021	-2.111	0.032	Reject
Perceived Quality or Performance Barrier	0.057	3.302	0.007	Reject
Perceived Time Barrier	-0.427	-2.231	0.032	Reject

X. DISCUSSION

This research was conducted to study the attitude of consumers towards environmental sustainability while purchasing Covid 19 products. From the 9 factors considered for the study (Environmental Protection (H1), Use & Disposal of Covid 19 products (H2) Perceived Availability Barrier (H3), Perceived Quality/Performance Barrier (H4), Perceived Time Barrier (H5), Perceived

Monetary Barrier (H6), Personal Norms (H7), Product Knowledge (H8), Brand Knowledge (H9)), 5 factors, namely Environmental Protection, Perceived Availability Barrier, Perceived Quality/Performance Barrier, Perceived time barrier & Personal Norms have a significant influence in consumer's attitude towards environmental sustainability. This is clear from the data analysis. When the values of these factors change, it will have a considerable impact (either positive or negative) on the pro-environmental attitude of consumers while buying Covid 19 products. Use & Disposal of Covid 19 products, Perceived Monetary Barrier, Product Knowledge, and Brand Knowledge, don't have any effect on their attitude.

XI. LIMITATIONS OF THE STUDY

The study was intended for an audience all across India. But the responses came mostly from those who live in the southern parts of the country. This can be a limitation as the preferences and choices of those living in other areas will be different. Also, among the responders, most of them reside in the urban areas/metro cities of the country. The responses of those living in rural areas should be different as their standard of living is dissimilar from the rest. The preferences of people can change with time. Their attitude at the time of the survey can be different from that they have now. This is also a limitation of the study.

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