



AN EMPIRICAL STUDY ON GREEN MARKETING AND ITS IMPACT ON GREEN CONSUMER BUYING BEHAVIOR

¹**DR.S.JAYALAKSHMI**

Assistant Professor (Guide), Chellammal Women's College

²**Mrs.C.MAHESWARI**

Assistant Professor (Research Scholar), Chellammal Women's College

ABSTRACT

Green marketing and its importance has been gained with the growing awareness among the people due to the environmental issues. The consumers and the manufacturers turned their attention towards the eco-friendly products “green” such as recyclable paper and organic foods, etc. The companies started to adopt the green marketing and also they are producing green products that have less harmful effects on the environment as compared to the conventional products. Nowadays the consumers are more aware about the environmental problems also they are actively trying to reduce the impact on the environment by purchasing the green products. The price of the green products are higher than the conventional products. However, the consumers are ready to pay a higher price for the ‘green’ products because these products provide an extra value to the customers. This research concentrate on green marketing and its impact on consumer buying behaviour.

Keywords: Green Marketing, Green Products, Consumer, Buying Behaviour

1. INTRODUCTION

The green marketing topic has been recently studied. But, the green marketing concept emerged in the years of 80’s decade. It represents the advertising products with the environmental characteristics. The new types of products were introduced in this markets, it is called by “green products”, and it has many features and less damage on the environment. Peattie, K. (1995), examined that there are three different phases of the new tendency of this green marketing. The “environmental” reflects the development of ways to solve the existing environmental problems. The “environmental” involves using “clean technology” in the process of creating the new products. Developing and green marketing the green products are eco- friendly and creates awareness among the customers about these types of issues.

According to Henion and Kinnear (1976), green marketing is not only about incorporating the environmental characteristics of products or services. These changes realized in products' green marketing and some of the other companies are using the other company's trademark which can occur with a logo change or the packaging material they used. Singh and Pandey (2012) stated that the companies engage with modifying the product, production process and other activities for green. The concept of green displays the increasing awareness of customers, businesses and economy elements to diminish their impact in the environment. This research focuses on the concept of green marketing and green consumer buying behavior in order to develop the green marketing and green product.

2. REVIEW OF LITERATURE

Kiran Wazir and Haider Khan (2021), ascertained that there are three specific green marketing tools such as green advertisements, green brands and green labels. These green marketing tools might enhance the consumer's knowledge about environment-friendly products and environment, also it may help the customers in distinguishing between the green and conventional products. These green marketing strategies have positive impact on the consumer behavior and beliefs. The consumers are more concerned with the environmental issues and they try to buy convenience goods. The companies try to target the consumers according to the environmental beliefs.

Peter Ansu-Mensah (2021), found that the policies might be formulated which could eventually aid in achieving the tremendous green consumer. The consumer's behaviour and standard of living can protect the disappearing resources of the earth. Enhance marketing and place emphasis on the exact factors can help to develop the more optimistic approach towards the green purchase intentions. The impact of green product awareness on the consumers' green purchase intention might offer the valuable evidence to the advertising agencies concerning the advertising materials along with channels to be used to propagate the information of green product consumption.

Sandeepani DMM and Samaraweera GC (2021), revealed that the consumers are more concerned about the concept of green hence it lead the companies to focus on the 'green marketing' with rapid increase in the environmental as well as health considerations. The green marketing has become the unique and emerging concept in the market. The company should know about the consumer attitude and awareness towards the green products while evaluating their perception towards the green marketing tools such as eco-branding, eco-labelling and eco-packaging.

Joana Cristina Gamboia Fonseca (2015), examined that the companies have been using the green marketing practices, as transforming the products into more friendly for the situation and incorporating the features which cause less impact. These green products are emerging as differentiating the products, in order to follow up with the valued customers, whose buying-decision and consumptions patterns have been evolving. The customers are more concerned with the environmental issues and they have an active role in order to reduce the impact of the environment. It requires the companies and customers contribution and interaction for protecting the environment also they need awareness about environmental issues like global warming.

YeowKar Yan & Rashad Yazdanifard (2014), concluded that the firms are taking action to develop the potential green approaches in the green market industry. The green marketing and green product development are more useful techniques that are used by companies to increase the competitive advantages and stand a chance for gaining the consumer satisfaction in order to achieve the organization's mission and vision. The green marketing and green product development have numerous benefits to the companies in order to increase the sustainable environmental benefits also increase the awareness of company's brand image.

According to SyedaShaziaBukhari (2011), the green marketing incorporates the broad range of activities such as changes in the production process, product modification, packaging changes and modifying the advertisement. Green marketing is not a simple task and it has several meanings. This will be the existence of varying environmental, social and retail. Green marketing is the process of selling products or services based on the environmental benefits. These product or service might be environmentally friendly or produced or packaged in the environmentally friendly way.

Uma Durgude, SatyaSwarupRanjan, S. B. Sawant, Ashvini A. Chavan (2022), ascertained that the use of green marketing approaches is shaping the buying behaviour of consumer and the growing importance of environmental responsibility and sustainability. A combination of strategies of green marketing such as green advertising, eco-labelling, building trust, brand and loyalty. The green marketing can help to raise the consumer awareness about the impact of consumers purchasing decisions on the environment, encourage the adoption of sustainable consumption patterns and promote environmentally responsible products and services.

Rahbar & Wahid (2011) revealed that the green marketing approaches is potential to influence the consumer behaviour in significant ways. Through raising consumer awareness about the environmental impact of consumer's purchasing decisions, companies will motivate the consumers to make ecologically responsible choices. The green marketing strategies will increase the consumer trust and brand loyalty. The consumers are more likely to select the brands that align with the environmental values. The green marketing plays more important role in shaping the consumer buying behaviour and promoting the sustainable consumption patterns.

3. GREEN MARKETING

The green marketing is the marketing of green products that are supposed to be environmentally safe. It incorporates the broad range of activities, such as changes to the production process, product modification, sustainable packaging and modifying the advertising. The green marketing is not a simple task and it has several meanings, these meanings intersect and contradict with each other. It has other similar terms used such as ecological marketing and environmental marketing.

The environmental, green and eco-marketing are the part of new marketing approaches which do not adjust, change or enhance the existing marketing practices and thinking, but it seek challenge of those approaches and provide substantially in different perspective. The environmental, eco-marketing and green belong to the approaches to seek address the lack of fit between the marketing which is currently practiced, ecological and social realities of the broader marketing environment.

The term Green Marketing entered in the late 1980s and early 1990s. The American Marketing Association held the first workshop in the year 1975 on "Ecological Marketing". The records of this workshop resulted in the first books on green marketing which entitled "Ecological Marketing". Tiwari, Tripathi, Srivastava, & Yadav (2011), examined that the green marketing consists of wide range of business activities which intends to satisfy the customers' wants and needs, also diminish the negative impacts on the natural environment. The green marketing refers to the organization that sets its efforts in to pricing, promoting and distributing the products with eco-concerns.

The American Marketing Association indicated that the green marketing approach is marketing the products that are primarily focused on environmental safety. It incorporates the business activities which consist of production process, green marketing and packaging modification. The green marketing is also described as any marketing activity which highlights the ecological ethics as business fundamentals and it perceive an advantage of switching the consumer behaviour towards the brand. Generally, the key objectives of green marketing is minimize the ecological hazards which are caused by the industrial manufacturing and strengthen the corporate eco-centric image in the customer's perception.

4. GREEN PERCEIVED QUALITY

Green perceived quality is overall judgment of the customers' about the product's total ecological superiority or excellence and distinct characteristics affects the green consumers'. The green perceived quality focuses on the common goal of the use of complementary formulations, quality patented ingredients and the effective treatment systems, all in pursuit of optimal and affordable health care.

5. GREEN PERCEIVED AVAILABILITY

The promotion of the application of green technologies in production and the efforts to boost the consumption is gaining attention. An assessment of the influence of green marketing tools on consumer buying behaviour would be beneficial to the marketers within the industry also the environment as a whole. Therefore, consumer buying behaviour is shaped by the green marketing tools involving eco-branding, eco-labelling and eco-packaging. This focuses to fulfil the goals of identifying the consumer awareness and their attitude towards the green products and evaluating the consumer perception towards the green marketing. Witek and Kuzniar (2021) revealed that the female consumers are more enthusiastic about purchasing the green products and feel more responsible about the environment as compared with the male consumers. The Youngsters are more interested in purchasing the green products as compared to the old people.

Witek and Kuzniar (2021) stated that they have a positive link between individuals' economic condition and their intention to buy the green items. Pacoet al. (2009) found that the women show the positive attitude towards the environment and green products. This will be helpful to promote the green products while providing the consumers more awareness of the qualities and characteristics of green products. This study provides guideline for the companies to develop and initiate the green and ecological marketing strategies in a profitable, effective and accurate manner while considering the consumers' awareness of the green marketing.

6. GREEN PERCEIVED PRICE

The perceived pricing is a value which the customers are willing to pay for the particular product or service based on their perception about the product. The perceived value is not based on the price of the product, but it is the value of the customers thinking that they are deriving from consuming the product or service. Perceived pricing is the most important marketing strategy which helps the companies to price a particular product in the markets. Normally, the marketers position in the product in such a way that will make the product distinctive.

The customers are usually compare the value that they derive after using the product or services and end up paying more. The marketers need to show their true value to the customers and they will get back after using the product.

7. GREEN PRODUCT AWARENESS

The green products are merchandises which normally bear the characteristics such as recyclable, energy efficient, low emitting and healthy products. The green products awareness are normally produced through the natural friendly processes in more durable way. The green products awareness are the ecologically friendly products which production processes does not utilise much influence on the environment. The green product is a term that used to define the product which does not trouble the resources or damages the environment and it has ability to ensure safeguarding the environment. The consumers will be conscious about the existence of green product before they make the purchases. Therefore, the green products has influence on the purchasing decisions of the consumers. The awareness of green products will be created through advertisement, labelling and packaging. The people who are aware and used the green products agree to the fact that will help the improvement of environment.

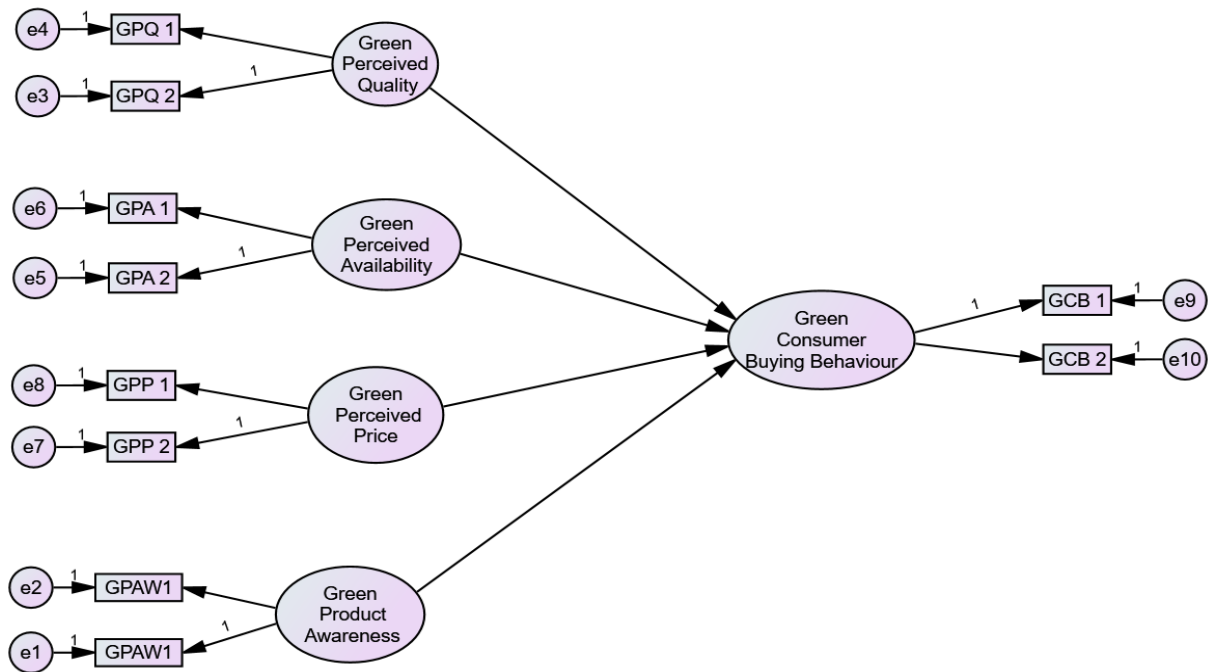
8. GREEN CONSUMER BUYING BEHAVIOUR

The price is one of the critical and key factor of green marketing mix. Some of the consumers are only ready to pay the additional value if there is a perception of additional product value. This value might improve the performance, design, function, visual appeal, or the taste. The green marketing will take all these facts into consideration while they charge a premium price. The consumer behavior has been demonstrated as the action of consumers who identify the need, buying, searching for information about the product, giving feedback on the products and services to fulfill their desires.

9. CONCEPTUAL FRAME WORK

Figure: 1

Research Model



10. STATEMENT OF THE PROBLEM

The companies adopt green marketing strategies to achieve their mission and vision, but there is a number of companies who fail to implement the green marketing effectively, whereby the marketers did not structure the green marketing policies appropriately that caused potential problems. Therefore, the consumers perceived that the green products were manufactured with the recycled materials so that it has poor performance than the conventional products. Michaud & Llerena, (2011) stated some of the consumers are not willing to pay higher price to buy the green product. Due to the lack of knowledge of consumers, they will not trust these eco-labels, the results is the consumers are ignoring the eco labeling.

11. SCOPE OF THE STUDY

This research was undertaken by the researcher to assess the green marketing and its impact on green consumer buying behaviour. This study will be useful to the consumers to analyze the green marketing.

12. OBJECTIVES OF THE STUDY

1. To analyze the factors determine the consumer's buying behaviour.
2. To develop the consumer buying behavior

13. HYPOTHESIS

H1: There is a significant relationship between age and green marketing

H2: There is an association between green products having higher quality and green marketing induce the customers to take buying decision

H3: Green marketing has a positive impact on the attitude of customers towards the buying behaviour of green products.

14. LIMITATIONS OF THE STUDY

- ❖ Particularly this study was done on green social media marketing.
- ❖ This study was undertaken on green consumer buying behaviour
- ❖ The period of study is very short.

15. METHODOLOGY

Primary as well as secondary data has been used for this research. The sample size of this study is 135. Cronbach's Alpha test is used to measure the internal consistency for validating the questionnaires. KMO and Bartlett's test, one-way ANOVA, post Hoc- Tukey HSD test and multiple linear regression analysis were adopted to analyze the factors of green marketing and green consumer buying behaviour.

16. ANALYSIS AND RESULTS

a. Reliability statistics

Table: 1

Reliability Statistics	
Cronbach's Alpha	N of Items
.903	8

Source: Primary Data

The researcher used Cronbach's Alpha test to measure the internal consistency to validate the questionnaire. The Cronbach's Alpha Value is 0.903.

b. KMO and Bartlett's Test

Table: 2

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.761
Bartlett's Test of Sphericity	Approx. Chi-Square	440.198
	df	10
	Sig.	.000

Source: Primary Data

KMO is an index which defines the sampling adequacy. The KMO value of this study is 0.761 which is more than 0.5. Therefore, it can be considered as good.

Bartlett's Test of Sphericity helps the researcher to decide whether the factor analysis results are worth considering for analyzing this study. Bartlett's Test of Sphericity significant at the level of 0.000 significance. Thus, there is a high level of correlation between the green marketing variables, so it is adequate for factor analysis.

c. COMMUNALITY TABLE

The communality table shows how much of variance in the variables are accounted for by the extracted factors. The variable are taken for further analysis.

Table: 3

Communality table

Communalities		
	Initial	Extraction
I am opting the green products at all times	1.000	.803
The companies are adopting green approaches to fix the price	1.000	.614
I prefer green products because it causes less pollution	1.000	.614
the green products has minimum impact to the people and environment	1.000	.852
Extraction Method: Principal Component Analysis.		

Source: Primary Data

Initially all variable in the communality table is expected to share 100% variance. Thus, initial value of each items is 1.00 which means 100% variance share by each item. The extraction value is ranging from 0.614 to 0.852 which shows that minimum variance share of item after extraction is 61.4% and maximum variance share of item is 85.2%.

d. TOTAL VARIANCE EXPLAINED

Table: 4

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.222	64.448	64.448	3.222	64.448	64.448
2	.746	14.922	79.369			
3	.534	10.686	90.055			
4	.436	8.721	98.776			
5	.061	1.224	100.000			
Extraction Method: Principal Component Analysis.						

Source: Primary Data

Total variance contributed by first component is 64.448. The Eigen value for a given factor measures the variance in all the variables which is accounted by that factor. It is also clear that there is one distinct components having the Eigen values greater than 1 from the given set of variables. Eigen value for factor 1 is 3.222.

e. ONE- WAY ANOVA

Table: 5

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
green products provide higher quality than the regular ones	Between Groups	39.485	3	13.162	7.796	.000
	Within Groups	219.470	130	1.688		
	Total	258.955	133			
I consider green products having higher quality	Between Groups	20.087	3	6.696	5.642	.001
	Within Groups	154.271	130	1.187		
	Total	174.358	133			
Companies are adopting green approaches to maintain the availability	Between Groups	27.411	3	9.137	6.593	.000
	Within Groups	180.171	130	1.386		
	Total	207.582	133			
I am opting the green products at all times	Between Groups	2.343	3	.781	.747	.526
	Within Groups	135.963	130	1.046		
	Total	138.306	133			
Green market charges premium price to positioning their product	Between Groups	11.255	3	3.752	2.565	.057
	Within Groups	190.178	130	1.463		
	Total	201.433	133			
the companies are adopting green approaches to fix the price	Between Groups	16.367	3	5.456	4.673	.004
	Within Groups	151.782	130	1.168		
	Total	168.149	133			
I prefer green products because it causes less pollution	Between Groups	22.855	3	7.618	5.574	.001
	Within Groups	177.682	130	1.367		
	Total	200.537	133			
the green products has minimum impact to the people and environment	Between Groups	2.176	3	.725	.717	.544
	Within Groups	131.563	130	1.012		
	Total	133.739	133			

Source: Primary Data

The P value of the green marketing variables such as green products provide higher quality than the regular ones, I consider green products having higher quality, Companies are adopting green approaches to maintain the availability, the companies are adopting green approaches to fix the price and I prefer green products because which cause less pollution are less than 0.05 at 5% level of significance. Hence, null hypothesis is rejected at 5% level of significance. It is ascertained that there is a significant relationship between the above green marketing variables and age of the respondents.

H1: There is a significant relationship between age and green marketing

MULTIPLE LINEAR REGRESSION ANALYSIS

The factors of green marketing is taken as independent variable and green marketing induce the customers to take buying decision is considered as dependent variable.

Table: 6

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.993 ^a	.987	.986	.119	.954
a. Predictors: (Constant), I prefer green products because which cause less pollution, Green market charges premium price to positioning their product, I consider green products having higher quality, green products provide higher quality than the regular ones, I am opting the green products at all times, the companies are adopting green approaches to fix the price					
b. Dependent Variable: Green marketing induce the customers to take buying decision					

Source: Primary Data

It was analyzed from the above table $R^2 = .987$ which implies that the factors create 98.7% variance on the dependent factor green marketing induce the customers to take buying decision. The Durbin-Watson statistics shows 0.954 it indicates that there is an auto correction. The regression fit is verified with the following ANOVA table.

Table: 7

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	131.955	6	21.992	1565.374	.000 ^b
	Residual	1.784	127	.014		
	Total	133.739	133			
a. Dependent Variable: Green marketing induce the customers to take buying decision						
b. Predictors: (Constant), I prefer green products because it causes less pollution, Green market charges premium price to positioning their product , I consider green products having higher quality, green products provide higher quality than the regular ones, I am opting the green products at all times, the companies are adopting green approaches to fix the price						

Source: Primary Data

From the above table, it is found that $F = 1565.374$, $P = .000$ are statistically significant @5% level of significance. It is concluded that there is a significant relationship between the independent factors and dependent variable. The individual influence of all the factors estimated in the following coefficient table.

Table: 8

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.028	.028		-.976	.331
	green products provide higher quality than the regular ones	-.011	.010	-.015	-1.077	.284
	I consider green products having higher quality	-.987	.035	-1.127	-28.437	.000
	I am opting the green products at all times	1.003	.015	1.020	67.039	.000
	Green market charges premium price to positioning their product	.005	.010	.006	.456	.649
	The companies are adopting green approaches to fix the price	1.022	.034	1.146	30.469	.000
	I prefer green products because it causes less pollution	-.029	.012	-.036	-2.484	.014

a. Dependent Variable: Green marketing induce the customers to take buying decision

Source: Primary Data

It was found from the above table, I consider green products having higher quality ($\beta = -1.127$, $t = -28.437$, $P = .000$), I am opting the green products at all times ($\beta = 1.020$, $t = 67.039$, $P = .000$), the companies are adopting green approaches to fix the price ($\beta = 1.146$, $t = 30.469$, $P = .000$) and I prefer green products because it causes less pollution ($\beta = -.036$, $t = -2.484$, $P = .014$) are statistically significant @5% level of significance. Hence, it was found from this study there is an association between the independent factors such as I consider green products having higher quality, I am opting the green products at all times, the companies are adopting green approaches to fix the price and I prefer green products because which cause less pollution and green marketing induce the customers to take buying decision.

H2: There is an association between green products having higher quality and green marketing induce the customers to take buying decision

H3: Green marketing has a positive impact on the attitude of customers towards the buying behaviour of green products.

17. FINDINGS

- ❖ The findings of the study shows that the customers are giving more importance to the green marketing and green product because of environment.
- ❖ The customers have awareness about the green products that it provides higher quality than the regular ones.
- ❖ The green perceived quality, green perceived availability, green perceived price, and green product awareness motivated the customers to buy the green product based on the green advertisement.
- ❖ Below 30 age group respondents are giving much more importance to the green marketing as compared to the other age group respondents. It was ascertained that the younger age customers are eager to buy the green products.
- ❖ There is a positive relationship between green marketing and consumer buying behaviour.
- ❖ The green marketing will be helpful to the companies to increase their sales.
- ❖ The green marketing improve the consumers' knowledge and understanding on green products also it encourage them to take buying decision.

18. CONCLUSION

The green marketing approaches are shaping the consumer buying behaviour to take the buying decision. It gives the importance of environmental responsibility and sustainability in this today's world. The combination of green marketing strategies such as green perceived quality, green perceived availability, green perceived price and green product awareness will build trust among the consumers and it also helps to increase the consumer awareness about the impact of their buying decisions. Adopting green approaches to maintain the availability promote products and encourage the adoption of sustainable consumption patterns.

The effectiveness of green marketing approaches will vary depending on the specific approach and target audience. The green marketing play a crucial role in shaping the consumer behaviour and promoting the sustainability. The companies need to develop more effective strategies to encourage the consumers and promote sustainable consumption patterns. The green marketing is one of the strategy that address the concern of promoting and preserving the environment also it is benefit for the consumers, companies and the environment while the green product is developed.

The green marketing will help the companies to achieve their mission and vision in a short period. The companies need to identify the customers' eco-friendly needs and develop green products which go beyond the quality expectations of customers. Most of the companies used green marketing as a promotional strategy which can educate the consumers about the way of protecting the environment.

REFERENCES

1. KiranWazir, Haider Khan (2021),The Impact of Green Marketing Strategies on Consumer Purchasing Patterns, *International Journal of Business and Management Sciences*, Vol. No:02 (01), Page No: 44-67.
2. Peter Ansu-Mensah (2021) Green product awareness effect on green purchase intentions of university students': an emerging market's perspective, *Future Business Journal*, Vol: 7(1), Page No: 1-13.
3. Sandeepani DMM and Samaraweera GC (2021) How green marketing tools shape consumer purchase behaviour, *Tropical Agricultural Research and Extension*, Vol: 24 (3), Page No:206- 219.
4. Joana Cristina Gamboia Fonseca (2015), The impact of green marketing practices on consumer buying decision, *Joana Cristina Gamboia Fonseca*, Page No.1- 129.
5. YeowKar Yan & Rashad Yazdanifard (2014), The concept of green marketing and green product development on consumer buying approach, *G.J.C.M.P*, Vol.3(2), Page No:33-38.
6. SyedaShaziaBukhari (2011), Green Marketing and its impact on consumer behaviour, *European Journal of Business and Management*, Vol 3, No.4, Page No: 375 – 384.
7. Dr. Uma Durgude, Prof.SatyaSwarupRanjan ,Prof.Dr. S. B. Sawant , Prof.Ashvini A. Chavan (2022) Role Of Green Marketing Approaches In ConsumerBuying Behaviour: An Empirical Study, *Journal of Pharmaceutical Negative Results*, Volume 13, Special Issue 10, Page No: 1851 – 1857.
8. Ogiemwonyi O, Harun AB (2020) Consumption of green product as a means of expressing green behaviour in an emerging economy: with the case study of Malaysia. *Environ Urban ASIA*, Vol.No: 11(2), Page No:297–312.
9. Suki NM (2016) Green product purchase intention: impact of green brands, attitude, and knowledge. *Br Food J*, Vol.No:118(12), Page No:2893–2910.
10. Rahbar, E., & Wahid, N. A. (2011). Investigation of green marketing tools' effect on consumers' purchase behavior. *Business strategyseries*, 12(2),Page No: 73-83.
11. Tiwari, S., Tripathi, D. M., Srivastava, U., &Yadav, P. K. (2011). Green marketing - emerging dimensions. *Journal of Business Excellence*, Vol.No:2(1), Page No: 18-23.
12. Witek L and Kuzniar W (2021) Green Marketing: The Effectiveness of Socio-Demographic Variables for Explaining Green Purchases Behavior in Emerging Markets, *European Research Studies Journal*, Vol. No: 24 (2), Page No:1070-1080.