
A study of Consumer Attitude in Predicting the Purchase behavior towards green Products

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ABSTRACT:

One of the indicators which points toward the inclination of consumers for buying green products is the amount of literature which can be seen all around, it has increased manifold. Attitudes of consumers and their perception are closely related, attitudes get heavily influenced by the perceptions a buyer has towards anything. Major influencers of perceptions range from information in media, both electronic and print not excluding social media. Another influencer is peers and they play key role in it. This research intends to investigate as to how consumer attitudes can be utilized to predict consumer behavior towards buying green products. The available data and its consequent analysis points towards an heavy impact of awareness in the buyers towards buying green products. Its beyond reasonable doubt to conclude that the awareness amongst consumers has shaped their perception and thus has altered their buying behavior. The marketers will be largely benefited from further research in such field. The research intended to identify newer areas of influence will lead to major benefits to marketers.

Keywords: Green Marketing, Purchase Behavior, green marketing benefits, consumer awareness

1. INTRODUCTION

Environmental pollution is a major cause of concern. It is the culmination of several factors such as the damage we do to environment in name of economic development. Further the revolution in the information technology has played villain than a hero in sustaining environment. The results are Unpredictable weather conditions, toxic air, destruction of flora and fauna through deforestation are few outcomes of exploiting nature. We as human race today stand on the brink of impending disasters. There is a need to find the solution globally. Industries should come out with the resolution that they will not create pollution. The need of the hour is to use green strategies by the industrialist and use of green products by the consumer. Generally speaking the green products are ecofriendly carry bags, herbal products, energy saving bulbs such as LED bulbs, recycled

paper, energy efficient home appliances [1][2]. In 2010 Chan and Chai suggested that such products also adopt eco friendly production which generates minimal waste.

Due to increasing concern and global awareness about the damage which has been done to environment, a large number of studies have been conducted to explore the buying behaviour of consumers towards eco friendly products. Such researches provide vital information to businesses and help them understand how important green marketing and green products can be for them.

Sustained availability, recyclability and benefits to environment can define the green product. The consumer behaviour which intends to achieve one or more of these objectives can be termed as GREEN PURCHASE. Such consumer behaviour can be measured from the intent, willingness and actual purchase by the consumer.

Consumer behaviour is intention of consumer coupled with his attitudes and other subjective norms[3] Subsequent research by Fishbein and Ajzen in 1980 extended this model and added perceived behavioural control along with measure of attitudes and norms. Similar models have been developed and used by several researchers in India as well. Different models give inconsistent and ineffective results in different setups, the setups vary from countries to countries and within regions within the countries. Therefore modified behavioural measures are used by different researchers. It can be said that consumer behaviour is not only function of consumer attitudes but at the same time knowledge and perception towards the effectiveness of green product in sustaining the environment that plays a vital role in defining consumers intention to buy a green product.

The greatest barrier for promotion of green products is lack of understanding of intent of consumer to buy a green products. Though the consumers are more willing and capable of shelling out more money for green products yet there is a limit to extent one is willing to purchase a green product. This is evident from the miniscule share the green products have in modern markets. As a result there is a need for doing extensive research in this area. So the study is conducted that focuses on green marketing and more specifically on attitudes of consumers and their intention to purchase eco friendly products.

2. LITERATURE REVIEW

Green marketing essentially means selling of such products or services which have a palpable environmental benefit. In late 80's it started to pickup and by early 90's it was gathering steam. It is considered as a vital trend in saving environment and thus this planet (Rajesh Kumar 2012). How we stand on environmental friendliness scale was made vivid in 2011 when we ranked 7th most hazardous country in terms of environment? Developing countries face challenge of its natural resources depleting at a rapid rate. Awareness about climate change and the impact of global warming has significant social impact. Impact of green products and green marketing is holistic from economic point of view, it has lead to environmental friendly practices and also has generated ample new job opportunities.

The first ever workshop on marketing with ecological benefits was conducted in 1975. Five years later was the birth of green marketing. American Marketing associations view green marketing as marketing of environmentally friendly products and activities such as modifying products, altering the production, advertising and packaging . The changes in the attitudes of consumers are even more influenced by the policies and practices followed by the organizations impact the environment which is the reflection of organizations commitment towards well being of community. This is in turn leads to the production of products which

are safe and beneficial for the environment (kumar, 2011).

American Marketing association has bifurcated definition of green products into three impact areas. First of them being, How environment friendly the marketed product is, second, efforts on development and marketing such products which reduce the negative environmental impact and last being the amount of efforts deployed by firms to produce, pack, encourage people to use such products and at the same time reclaiming products in environmentally responsive ways. The businesses just like the end consumers have started to accept products which are environmentally friendly as they care about the health of environment and natural resources. Awareness about the social responsibility of the businesses also motivated them to adopt green marketing (nagraju and Tejeswini, 2014). Research has further demonstrated that the people tend to reject the products when they become aware that such products are damaging the environment even if the products are technically evolved [4]

Green products substantially reduce the harmful impact on environment due to their consumption when compared to their more traditional counterparts. This is due to the process involved in making these products and recycles them. A 2009 Gallup survey suggests that nearly 20% of Europeans believe that their contribution can be substantial if they shift to such products which are produced by eco friendly process. In the year 2009 in FMCG sector 458 green products were introduced in US market when compared to 2008.

Increasing global population , economic development, technology advancements also left a negative impact on the environment. The major challenges faced by the mankind today range from ozone layer depletion to the pollution of the resources like Water and air. Threat of acid rain is further aggravated by human acts like deforestation. With unrelenting increase in pollution over a decade or so has further brought research on Green products to the forefront. [4]; [5]; [6];[7]; [8];[9].

In last two decades a huge amount of research has been done to identify influencers which prompt the buyer to switch over to green products[10];[11]. Absence of logical, in-depth and factual understanding of intentions of buyers towards green products will be greatest barriers in making green products popular[12]. This will also hamper our ability to carve out effective marketing strategies which promote green products. This is evident from the fact that we have not been breach the glass ceiling and the market share of such products is negligible (Godelnik 2012).

An intention to buy any such product which is environmentally friendly, can be recycled, is sustainable and is beneficial to environment is called green purchase. (Chan 2001 Mustafa 2007). When this intention to buy green products, translates into action of actually buying green products, consciously, and, over a sustained period it can be evaluated as green purchase[2][3], suggested that the consumer behaviour is defined by intentions in sync with attitudes and prevailing norms. In India also, the models like TRA and TPB have been used widely, though with certain modifications to customized it to Indian beliefs and culture. The applicability of such models is yet not effective and is ambiguous[13][2], [14]–[16]

Indian markets as well as Asian markets adopted modified behavioural measures in products like Organic vegetables [17];[16];[18], Skin care products [15], [16], [19], The products that are energy efficient[19]etc. Products like energy efficient appliances and vehicles, herbal products, recyclable and recycled carry bags and packaging fall in category of green products or as they are termed as sustainable products(Lee, 2008; Joshi and Rahman, 2015). Such products are produced by adopting greener technologies and thus they produce less waste. From above, it can be deduced that the consumer behaviour is not only defined by attitudes of consumers but also is impacted by consumer awareness and concern towards environment [20]–[22]

This research is focused on green marketing more specifically on consumers' attitudes and

purchase intention towards the eco-friendly products. It has been the global concern to save world from the pollution and degradation of environment. A large number studies have focused on the green marketing exploring the importance of the topic and relationship to the attitude and purchasing behaviour of the consumers of eco-friendly products[23]. From the key information provided by the expert, competent and experience researchers, companies have now come in terms with importance of green marketing so as they start producing eco-friendly products. This has given information for the literature studies of the thesis

Increasing impact of use of green process on market success can be illustrated by the fact that the production houses are using recyclable as well as reusable packaging (Gupta and Aggarwal, 2019). With business gaining experience with customers who prefer green products one of the focus of businesses has become green marketing. This in turn encouraged consumers to adopt environment friendly purchases and thus leading customers to buy more environment friendly services as well as goods. Even at higher price, the customers are happily buying green products. The customers have deep-rooted belief that their choice of green products will lead to a positive impact on environment. Thus the consumers have actively encouraged

3. OBJECTIVES

- To study the awareness concerning different green products.
- To study the preferable green products amongst the different age group people.
- To study the factors responsible for purchase of green and non-green products.

4. RESEARCH METHODOLOGY

Primary as well as secondary data was utilized in this study. Source of secondary data is websites, journals and other relevant sources of information.

The primary data has been collected from the sample of 150 respondents from Chandigarh region having different age group. The data has been collected using non probability convenience sampling technique. The primary data were composed by individual interviews held with respondents and through questionnaire. The data collected with the help of questionnaire were separately compiled for every information required on a variety of characteristics.

A. Statistical Techniques

The demographic individuality of the data has been obtained through frequency and percentages. The paper uses the chi square statistics, ANOVA, tables, graphs to analyze the results. SPSS, Excel software has been used to get the results.

The use of Cronbach's alpha scale was made to ensure consistency and reliability within the research on social sciences (Schmitt, 1996). Apart from this various statistical techniques like standard deviation, variance, etc were used in analysis.

5. DATA ANALYSIS AND INTERPRETATION

The sample showed most of respondents (Table 1) were in younger age group of 18 to 25 years (61.3%). This indicates that these perceptions and conclusions were based on the responses of younger people. It is also clear that most of respondents were men (50.7%).

Respondents were dominated by unmarried people and fairly educated population and their responses which can be considered quite valid for forming conclusions from this sample of responses. One of the foremost and relevant demographic classifications is family income levels of respondents. Total 150 respondents were selected for the study.

Table-I
Demographic Factors

		Frequency	Percent
Sex	M	76	50.7
	F	74	49.3
Age range	18 to 25	92	61.3
	26 to 35	12	8
	36 to 45	40	26.7
	45 and above	6	4
Education	Undergraduate	26	17.3
	Graduate	20	13.3
	PG	96	64
	Doctorate	8	5.3
Employment	Employed	52	34.7
	Unemployed	12	8
	Student	86	57.3
Marital status	Married	50	33.3
	Unmarried	100	66.7
Family Income	Less than 5,00,000	64	42.7
	5,00,000-10,00,000	42	28
	10,00,000 and Above	44	29.3

H₁: Demographic factors do not have significant impact on awareness towards green marketing.

Table-II
Chi square test

	Sex	Age range	Education	Employment Status	Marital Status	Income
Chi Square	0.411	0.411	0.199	0.444	.303	0.431

Interpretation: As the significance value is greater than 0.05, it shows that Gender does not have a significant impact on green marketing. Significance value is greater than 0.05 thus age has no effect on green marketing. Significant value is greater than 0.05 thus education has not any significance on green marketing. Significant value is greater than 0.05 thus

employment status has not any significance on green marketing. Significant value is greater than 0.05 thus marital status has not any significance with green marketing. Significance value is greater than 0.05 thus income has not any significance with green marketing.

$H_{2(1-5)}$: There is no significance difference between ages of the respondents and various variables regarding awareness of the green products.

Table-III
Age and its Impact

		F	Sig.
Q8_1. Awareness about benefits of Green Products for health	Between Groups	.923	.431
Q8_2. Awareness about benefits of green products for environment	Between Groups	4.405	.005
Q8_3. Awareness about various brands offering Green Products	Between Groups	.548	.650
Q8_4. Awareness about various symbols of Green Products	Between Groups	1.205	.310
Q8_5. Awareness about various certificates and identifiers of Green Products	Between Groups	.367	.777

Interpretation:

From table III, it is clear that there is significance difference between the ages of the respondents on “Awareness about benefits of green products for environment” as the sig value is less than .05 and is .005. So the null hypothesis will be rejected and the alternative will be accepted.

Age don't have any significant impact on H1,H3,H4,H5.

Whereas age has significant impact on H2

$H_{3(1-5)}$: There is no significance difference between demographic factors of the respondents and various variables regarding awareness of the green products.

$H_{4(1-5)}$: There is no significance difference between demographic factors of respondents and reasons behind purchase of green products.

$H_{5(1-5)}$: There is no significance difference between demographic factors of the respondents and usage of green products.

$H_{6(1-5)}$: There is no significance difference between demographic factors of the respondents and frequent purchase of green products.

$H_{7(1-5)}$: There is no significant difference between demographic factors of respondents and their inclination to suggest green products to others.

$H_{8(1-5)}$: There is no significant difference between demographic factors of the respondents and level of satisfaction after using green products.

$H_{9(1-5)}$: There is no significant difference between demographic factors of the respondents and reason behind non purchase of green Products.

Table IV

Demographic factors and its impact on various factors related to awareness of Green Products

		Education	Employment	Income	Gender	Marital Status
		Sig.	Sig.	Sig.	Sig.	Sig.
Q8_1. Conscious awareness regarding the benefits of Green Products on health	Between Groups	0.047	.625	.010	.055	.419
Q8_2. Conscious awareness regarding the benefits of Green Products on environment	Between Groups	0.074	.923	.005	.006	.143
Q8_3. Awareness about various brands offering Green Products	Between Groups	0.271	.286	.189	.977	.529
Q8_4. Awareness about various symbols of Green Products	Between Groups	0.078	.283	.230	.664	.279
Q8_5. Awareness about various certificates and identifiers of Green Products	Between Groups	0.418	.467	.425	.344	.581
Q9_1. From where did you get the awareness about green products?: T.V	Between Groups	0.565	.760	.388	.011	.631
Q9_2. From where did you get the awareness about green products?: Newspaper	Between Groups	0.416	.177	.004	.482	1.000
Q9_3. From where did you get the awareness about green products?: Magazines	Between Groups	0.144	.877	.974	.000	.037
Q9_4. From where did you get the awareness about green products?: Friends/relatives	Between Groups	0.014	.057	.253	.298	.136

Q9_5. From where did you get the awareness about green products?: internet ads	Between Groups	0.833	.328	.397	.002	.021
Q9_6. From where did you get the awareness about green products?: super market staff	Between Groups	0.058	.272	.118	.073	.496
Q10_1. I draw satisfaction by using green products.	Between Groups	0.646	.162	.213	.999	.994
Q10_2. Green products contribute in saving the deteriorating environment	Between Groups	0.531	.515	.605	.999	.311
Q10_3. Claims made by green products are true, that they are environmental friendly.	Between Groups	0.026	.790	.002	.111	.081
Q10_4. Bu using green products, would you like to contribute to green movement.	Between Groups	0.012	.407	.115	.416	.792
Q10_5. I am not sure about performance and claims of green products.	Between Groups	0.582	.060	.037	.799	.574
Q10_6 will you be ready to shell out extra to buy green products and save environment	Between Groups	0.018	.029	.799	.986	.024
Q10_7. Is the price of green products justified by their performance	Between Groups	0.026	.432	.411	.623	.219
Q11_1. At the time of purchasing a green product, do you go through the label to ensure the contents are environmentally friendly.	Between Groups	0.002	.579	.298	.848	.696
Q11_2. Is it a preference with you	Between Groups	0.153	.247	.847	.285	.980

to buy products that are packed in recycled material						
Q11_3. At the point of purchase do you compare the price of green product with that of traditional products.	Between Groups	0.218	.810	.054	.492	.321
Q11_4. Do your peers influence you to buy green products	Between Groups	0.741	.061	.517	.590	.166
Q11_5. Does the trust in retail store make you buy green products.	Between Groups	0	.020	.262	.349	.325
Q11_6 Is it that you agree to pay extra for green products that they are good for your health	Between Groups	0.028	.025	.751	.058	.598
Q11_7. Using green products is a status symbol	Between Groups	0.65	.043	.271	.771	.422
Q11_8. Are you influenced by family pressure to buy green products.	Between Groups	0.203	.709	.385	.299	.000
Q11_9. Do you depend upon information that you have about green claims of products while buying them	Between Groups	0.097	.465	.857	.040	.135
Q11_10. Do you actively evaluate and believe on the experience of people who have used the green product earlier.	Between Groups	0.179	.879	.456	.230	.020
Q11_11. Do you think there has to be a certification which tells the product is green	Between Groups	0.311	.916	.707	.490	.022
Q12_1. From amongst the given statements, chose the	Between Groups	0.004	.173	.716	.008	.000

most appropriate one that describes your usage of green products [organic food]						
Q12_2. From amongst the given statements, chose the most appropriate one that describes your usage of green products [Organic clothes]	Between Groups	0.001	.275	.558	.111	.001
Q12_3. From amongst the given statements, chose the most appropriate one that describes your usage of green products [Cosmetics and personal care products]	Between Groups	0.067	.479	.001	.000	.626
Q12_4. From amongst the given statements, chose the most appropriate one that describes your usage of green products [Electrical appliances]	Between Groups	0.045	.102	.331	.023	.000
Q13. In last 3 months, how often was it that you bought green products?	Between Groups	0.575	.155	.009	.008	.003
Q14. How willingly would you recommend green product to your family and friends?	Between Groups	0.064	.722	.428	.000	.307
Q15. Describe the level of satisfaction with eco-friendly products you bought?	Between Groups	0.012	.463	.820	.685	.003
Q16_1. Lack of awareness of green products	Between Groups	0.03	.726	.237	.372	.142
Q16_2. Green products are costly	Between Groups	0.1	.554	.597	.097	.401

Q16_3. Green products are not promoted properly	Between Groups	0.053	.455	.481	.666	.191
Q16_4. Green products are not easily available	Between Groups	0.35	0.348	.730	.002	.002
Q16_5. Lack of information on labels of green products	Between Groups	0.242	0.455	.031	.363	.191

Interpretation

Variables with values less than 0.05 thus making significant impact with education are: H1,I4, J3, J4, J6, J7, K1, K5, K6, L1, L2, L4, O, P1

Variables with values greater than 0.05 thus don't have any significant impact with education are :

H2, H3, H4,H5, I1, K10, K11, L3, M,N, P2, P3, P4, P5.

Status of employment has significant impact with J6,K5,K6,K7

Status of employment has not any significant impact with H1,H2, H3, H4, H5, I1, I2, I3, I4, I5, I6, J1, J2, J3, J4, J5, J7, K1, K2, K3, K4, K8, K9, K10, K11, L1, L2, L3, L4, M, N, O, P1, P2, P3, P4, P5

Income has significant impact with H1,H2,I2,J3, M, P5

Income has not significant impact with H3, H4, H5, I1, I3, I4,I5, I6, J1, J2,J4, J5, J6, J7, K1,K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, L1, L2, L3, L4, N, O, P1, P2, P3, P4

Gender having significant impact with H2,I1,I3,I5,K9,L1,L3,M,N,P4

Gender don't have any significant impact with

H1,H3,H4,H5,I2, I4, I6,J1, J2, J3, J4, J5, J6, J7, K1, K2, K3, K4, K5, K6, K7, K8, K10, K11, L2, L4,0,P1,P2,P3,P5

Marital status has significant impact with I3,I5,J6,L1,L2,L4,L8,L10,M,O,P4

Marital status don't have significant impact with H1, H2, H3, H4, H5, I1, I2,I4, I6, J1,J2,J3,J4,J5,J7,K1,K2,K3,K4,K5,K6,K7,K9,K11,L3,N,P1,P2,P3,P5

6. CONCLUSION

When the research topic concerns certain personality traits or attitudes towards complex topics such as the degree of interest in health or factor influencing the acceptance of certain products, using a single simple scale does not usually provide enough information. In this situation proposed multiple scales

known as Likert scales are preferred, because interviewer uses them to indicate a degree of agreement or disagreement with several statements related to the topic under study. Each sub scale measures an aspect of common factor, which constitutes the basis for the construction of multiple scales. It enables a single score to be obtained for each individual by adding the values procured with each sub-scale.

Following conclusions can be drawn from the analysis of questionnaire which was circulated with objective of understanding customers attitude toward green marketing. This was aided with the awareness level of the consumers. The consumers appreciate products and packaging which is eco friendly; They very well decipher

the objective of advertising in promoting eco friendly products. One of major influencer towards buying eco friendly or green product was attitudes of peers and friends. Education, friends and peers are three major influencers and determinants of attitudes towards green products. The attitudes of consumers nudge them to recommend products to co workers, friends and others in their area of influence. It is this attitude which also has a profound impact on buying behaviour. Perceptions towards the green products are also shaped by the underlying attitudes. The principle reasons given by consumers that shape perception and define attitudes are health as well as environmental constructive impact of green products and also the level of satisfaction which they get by using the products. Education has contributed majorly in making consumer realize their social responsibility towards environment and has prompted them to take such steps which make environment more sustainable, eco friendly/ green

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7. RECOMMENDATIONS

- a .Demographic factors such as age, region, sex , income etc should be taken into account by corporate while starting various campaigns.
- b. The products not merely be green but they should also take into account needs and underlying expectations into account.
- c .To encourage innovation in filed of green marketing and green product development more finances should be diverted into this field.
- d. Efforts by government should be aimed at promoting green products and thus shifting to green economy.
- e. To make green products more affordable grants be provided to businesses and producers of green products.
- f. Our government and industries both have to work together to make green marketing successful.

8. REFERENCES

- [1] L. Kaman, "Opportunities for green marketing: young consumers," *Mark. Intell. Plan.*,

- vol. 26, no. 6, pp. 573–586, Jan. 2008, doi: 10.1108/02634500810902839.
- [2] Y. Joshi and Z. Rahman, *Factors Affecting Green Purchase Behaviour and Future Research Directions*, vol. 3, no. 1–2. Holy Spirit University of Kaslik, 2015.
- [3] R. B. Douglass, “No Title,” *Philos. Rhetor.*, vol. 10, no. 2, pp. 130–132, [Online]. Available: <http://www.jstor.org/stable/40237022>.
- [4] K. Peattie, *Environmental marketing management: meeting the green challenge*. London: Pitman, 1995.
- [5] M. J. Polonsky and A. T. Mintu-Wimsatt, *Environmental marketing: strategies, practice, theory, and research*. New York : Haworth Press, 1995.
- [6] B. B. Schlegelmilch, G. M. Bohlen, and A. Diamantopoulos, “The link between green purchasing decisions and measures of environmental consciousness,” *Eur. J. Mark.*, vol. 30, no. 5, pp. 35–55, 1996, doi: 10.1108/03090569610118740.
- [7] D. Fuller, “Sustainable Marketing: Managerial-Ecological Issues.” Thousand Oaks, California, 1999, doi: 10.4135/9781452220611.
- [8] S. P. Kalafatis, M. Pollard, R. East, and M. H. Tsogas, “Green marketing and Ajzen’s theory of planned behaviour: A cross-market examination,” *J. Consum. Mark.*, vol. 16, no. 5, pp. 441–460, 1999, doi: 10.1108/07363769910289550.
- [9] P. Hartmann, V. Apaolaza Ibáñez, and F. J. Forcada Sainz, “Green branding effects on attitude: functional versus emotional positioning strategies,” *Mark. Intell. Plan.*, vol. 23, no. 1, pp. 9–29, 2005, doi: 10.1108/02634500510577447.
- [10] L. Bertrandias and L. Elgaied-Gambier, “Others’ environmental concern as a social determinant of green buying,” *J. Consum. Mark.*, vol. 31, no. 6–7, pp. 417–429, 2014, doi: 10.1108/JCM-05-2014-0966.
- [11] M. E. Cholette, M. Celen, D. Djurdjanovic, and J. D. Rasberry, “Condition monitoring and operational decision making in semiconductor manufacturing,” *IEEE Trans. Semicond. Manuf.*, vol. 26, no. 4, pp. 454–464, 2013, doi: 10.1109/TSM.2013.2268861.
- [12] S.-C. Tseng and S.-W. Hung, “A framework identifying the gaps between customers’ expectations and their perceptions in green products,” *J. Clean. Prod.*, vol. 59, pp. 174–184, 2013.
- [13] H. A.-Z. Zhao Hui-hui A4 - Gao, Qian A4 - Wu, Yao-ping A4 - Wang, Yuan A4 - Zhu, Xiao-dong, “What affects green consumer behavior in China? A case study from Qingdao,” *J. Clean. Prod.*, vol. v. 63, pp. 143-151–2014 v.63, 2014, doi: 10.1016/j.jclepro.2013.05.021.
- [14] J. Paul, A. Modi, and J. Patel, “Predicting green product consumption using theory of planned behavior and reasoned action,” *J. Retail. Consum. Serv.*, vol. 29, pp. 123–134, 2015, doi: 10.1016/j.jretconser.2015.11.006.
- [15] G. Prakash and P. Pathak, “Intention to buy eco-friendly packaged products among young consumers of India: A study on developing nation,” *J. Clean. Prod.*, vol. 141, pp. 385–393, 2017, doi: 10.1016/j.jclepro.2016.09.116.
- [16] C. L. Hsu, C. Y. Chang, and C. Yansritakul, “Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity,” *J. Retail. Consum. Serv.*, vol. 34, no. August 2016, pp. 145–152, 2017, doi: 10.1016/j.jretconser.2016.10.006.
- [17] Y. Kim, “Understanding Green Purchase : The Influence of Collectivism , Personal Values and Environmental Attitudes , and the Moderating Effect of Perceived Consumer Effectiveness,” *Seoul J. Bus.*, vol. 17, no. 1, pp. 65–92, 2011.
- [18] L. Zagata, “Consumers’ beliefs and behavioural intentions towards organic food. Evidence from the Czech Republic,” *Appetite*, vol. 59, no. 1, pp. 81–89, 2012, doi:

- 10.1016/j.appet.2012.03.023.
- [19] H.-Y. Ha and S. Janda, "Predicting consumer intentions to purchase energy_efficient products," *J. Consum. Mark.*, vol. 29, pp. 461–469, 2012.
- [20] R. Y. K. Chan and L. B. Y. Lau, "Antecedents of green purchases: A survey in China," *J. Consum. Mark.*, vol. 17, no. 4, pp. 338–357, 2000, doi: 10.1108/07363760010335358.
- [21] T. Chen and L. Chai, "Attitude towards the environment and green products: Consumers' perspective," *Manag. Sci. Eng.*, vol. 4, no. 2, pp. 27–39, 2010, [Online]. Available: <http://50.22.92.12/index.php/mse/article/view/1324>.
- [22] C. K. M. Lai and E. W. L. Cheng, "Green purchase behavior of undergraduate students in Hong Kong," *Soc. Sci. J.*, vol. 53, no. 1, pp. 67–76, 2016, doi: 10.1016/j.soscij.2015.11.003.
- [23] R. Gupta and S. Aggarwal, "A Study on Women Empowerment through Self-Help Groups with special Reference to Ghaziabad in Uttar Pradesh District," pp. 32–38, 2017.

APPENDIX

New Variable Names	Old Variable Names	New Variable Names	Old Variable Names
H1-	Q8_1. Conscious awareness regarding the benefits of Green Products on health	K4-	Q11_4. Do your peers influence you to buy green products
H2-	Q8_2. Conscious awareness regarding the benefits of Green Products on environment	K5-	Q11_5. Does the trust in retail store make you buy green products.
H3-	Q8_3. Awareness about various brands offering Green Products	K6-	Q11_6 Is it that you agree to pay extra for green products that they are good for your health
H4-	Q8_4. Awareness about various symbols of Green Products	K7-	Q11_7. Using green products is a status symbol
I1-	Q8_5. Awareness about various certificates and identifiers of Green Products	K8-	Q11_8. Are you influenced by family pressure to buy green products.
I2-	Q9_1. From where did you get the awareness about green products?: T.V	K9-	Q11_9. Do you depend upon information that you have about green claims of products while buying them
I3-	Q9_2. From where did you get the awareness about green products?: Newspaper	K10-	Q11_10. Do you actively evaluate and believe on the experience of people who have used the green product earlier.

I4-	Q9_3. From where did you get the awareness about green products?: Magazines	K11-	Q11_11. Do you think there has to be a certification which tells the product is green
I5-	Q9_4. From where did you get the awareness about green products?: Friends/relatives	L1-	Q12_1. From amongst the given statements, chose the most appropriate one that describes your usage of green products [organic food]
I6-	Q9_6. From where did you get the awareness about green products?: super market staff	L2-	Q12_2. From amongst the given statements, chose the most appropriate one that describes your usage of green products [Organic clothes]
J1-	Q10_1. I draw satisfaction by using green products.	L3-	Q12_3. From amongst the given statements, chose the most appropriate one that describes your usage of green products [Cosmetics and personal care products]
J2-	Q10_2. Green products contribute in saving the deteriorating environment	L4-	Q12_4. From amongst the given statements, chose the most appropriate one that describes your usage of green products [Electrical appliances]
J3-	Q10_3. Claims made by green products are true, that they are environmental friendly	M-	Q13. In last 3 months, how often was it that you bought green products?
J4-	Q10_4. By using green products, would you like to contribute to green movement.	N-	Q14. How willingly would you recommend green product to your family and friends?
J6-	Q10_5. I am not sure about performance and claims of green products.	O-	Q15. Describe the level of satisfaction with eco-friendly products you bought?
J7-	Q10_6 will you be ready to shell out extra to buy green products and save environment	P1-	Q16_1. Lack of awareness of green products
J8-	Q10_7. Is the price of green products justified by their performance	P2-	Q16_2. Green products are costly
K1-	Q11_1. At the time of purchasing a green product, do you go through the label to ensure the contents are environmentally friendly.	P3-	Q16_3. Green products are not promoted properly
K2-	Q11_2. Is it a preference with you to buy products that are packed in recycled material	P4-	Q16_4. Green products are not easily available

K3-	Q11_3. At the point of purchase do you compare the price of green product with that of traditional products.	P5-	Q16_5. Lack of information on labels of green products
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