

Exploring Factors Affecting Consumer's Behaviour towards Green Products and Green Marketing – A Study of Punjab

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Abstract—Purpose – This paper presents an empirical investigation based on the implementation of factor analysis to locate important factors affecting consumer buying behaviour towards green products and green marketing in the state of Punjab and to measure their awareness and knowledge regarding green products in Punjab.

Design/methodology/approach – As the demand for green products is increasing with the increase of ecological consciousness among the people and with the motive of protecting environment, the consumers now days are becoming more concerned with environment and seeking green products because the main cause of environment degradation is increasing population and our consumption pattern. For this reason, the study of consumer behaviour towards green products was conducted in urban Punjab. 126 respondents from three districts namely – Amritsar, Ludhiana and Gurdaspur were chosen on the basis of non probability convenience sampling method. Using a 11 statements questionnaire, the data were collected from 126 respondents in Punjab. The data was analysed using exploratory factor analyses. Data was analysed using SPSS.

Findings – Consumer's environmental concern, eco-friendly activities and perceived behaviour emerged as three major determinants of consumer green purchase behaviour. The paper reports about the main predictors of consumer's green buying behaviour. The findings of this study will help marketers, manufacturers, managers and policy makers in understanding the profile of green consumer in Punjab and further in formulating and implementing strategies to encourage green purchasing in Punjab.

Originality/value – The study described in the paper is the first analysis of the State of Punjab green consumers' characteristics through providing a comprehensive understanding and their effect on green buying. Furthermore, the study offers a profile of green consumers.

Keywords: Consumer buying behaviour, Green marketing, Environmental Awareness, Green Consumer, Eco-Friendly Products. Paper type Research paper

Introduction

Green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. (Guru.P& Vigesh.J.,2014). According to the American Marketing Association, green marketing is the marketing of

products that are presumed to be environmentally safe. Green marketing is a process of creating such type of products and services which provide quality, comfort, convenience at comfortable price to the consumers without affecting the piousness of nature.(J.Sathyapriya et.al.,2013). Human wants are infinite whereas resources to satisfy them are meagre and scarce. So it is important for companies to make optimum utilisation of their resources in order to achieve their pre-determined goals, to satisfy their consumers and to earn handsome amount of profits simultaneously. To achieve this, they have to resort towards green marketing in today's scenario because consumer of new era is also taking keen interest in protecting the environment by becoming choosy in selecting the products. This behaviour of consumers' call the companies to indulge into green marketing practices for the production of green and eco-friendly products. (Guru.P& Vigesh.J.2014, Smith & Perks,2010,). As green marketing activities are flourishing in many countries, these activities played a significant role in enlarging consumer knowledge and in switching consumers over green products purchasing. (Delafrooz N et al, 2014). Now, green consumers are adapted to environmental threats in several ways as they became more willing to pay more for eco-friendly products, reckoned environmental issues when shopping (e.g. checking if the product is made from recycled materials), and bought more ecologically compatible products (Laroche et al., 2001).- Tamar. A. Awad., 2011. The obvious assumption of Green Marketing is that potential consumers will view products' or services' "greenness" as a benefit and base their buying decisions accordingly" (Saini, 2013). Though green consumerism is intensifying, yet all the consumers are not uniformly green. (Chan, K., 1999; Diamantopoulos et al., 2003; Ottman, 1992;Peattie, 1992; Roper, 1990, 1992). Most consumers simply will not sacrifice their needs or desires just to be green. Few consumers may not be interested to buy green products because they feel that such products are performing less and claiming more. (Luchs et al., 2010). That being the case, target marketing rather than mass marketing

appears as a better strategy.(Sanjay. K. Jain & Gurmeet Kaur.,2006) in order to encourage individual consumers to incorporate environmental or green factors into their buying behaviour, be it by consuming less, consuming locally, buying eco-friendly products, recycling, and sharing, among many approaches to improve greener consumer behaviour.(Robert Mittleman.,2012). Understanding the impact of green consumption values on consumption behavior is critical as more and more companies focus on products and processes designed to minimize environmental harm.(Haws et al. 2014). Between the early 1970s and 1995, the reigning streamlet of green consumer research concerned attempts to portray green consumers and develop meaningful market segmentations using various criteria. (Ken Peattie.,2010). In attempts to explain green consumer behaviour, many factors have been proposed as antecedents such as changing consumer values (Peattie, 2001; Lien-Ti & Simpson, 1995), environmental attitudes (Schlegelmilch, Bohlen, & Diamantopoulos, 1996), demographic factors such as age, gender, education, and income (Roberts, 1996; Diamantopoulos et al. 2003), as well as psychographic factors including altruism (Stern et al., 1993), knowledge of environmental problems and alternative products (Chan, 1999), perceived personal relevance (Mainieri et al., 1997) and the ability of the individual to make an effective contribution (Dembkowski&Hanmer-Lloyd, 1994). This paper focuses on individual's environmental awareness and knowledge about green products and trying to excavate such factors that are affecting consumer buying behaviour towards green products and green marketing. Before exploring the aforesaid agenda, it is imperative to brush up the mind about what is a green product, who is a green consumer and what is green consumer behaviour.

Green/Eco Friendly Products:

Mohanasundaram (2012) explained that the products which are manufactured through green technology and that caused no environmental hazards are called green products. Promotion of green technology and green products is necessary for protection of natural resources and sustainable development. Green products can be defined by following measures:

- Products those are originally grown,
- Products those are recyclable, reusable and biodegradable,
- Products with natural ingredients,
- Products containing recycled contents, non-toxic chemical,
- Products with contents under approved chemical,
- Products that do not harm or pollute the environment,
- Products that will not be tested on animals,
- Products that have eco-friendly packaging i.e. reusable, refillable containers etc. (Kumar 2012, Vikas, 2015)

So, it can be said that a green product may be considered "green" if it :

1. Conserves water and energy
2. Prevents contributions to air, water and land pollution
3. Protects indoor air quality
4. Uses renewable, responsibly sourced materials
5. Produces little environmental impact
6. Is manufactured in an environmentally conscious way (Saini,2013)

Green Consumer and his behaviour:

Now a days, customers are aware about the environmental issues like; global warming – depletion of the ozone layer and the impact of environmental pollution. They are more and more concerned about the protection of the environment.(Anirban Sarkar.,2012). They are also realising that this adverse effect on environment is because of people's wrong criterion of manufacturing, purchasing, consuming and disposing activities.(Laroche, Bergeron &Barbaro-Forleo, 2001).Green consumer as one who avoids products that are likely to endanger the health of the consumer or others; cause significant damage to the environment during manufacture, use or disposal; consume a disproportionate amount of energy; cause unnecessary waste; use materials derived from threatened species or environments; involve unnecessary use of, or cruelty to animals; adversely affect other countries.(Elkington.,1994) – AnirbanSarkar. Therefore, green consumers can be defined as those who concentrate on the purchase and consumption process especially it relates to the production process and the disposal of products as well as their impact on the ecological environment. Consumers' behaviour is influenced by the activities of the marketers. They behave in a particular way which makes the marketers to create policies which affect them the most. "Consumer behaviour includes activities i.e. mental, emotional and physical that people take into consideration while selection, purchase, use and dispose of products and services that satisfy their needs and wants" (Kotler,1999). Consumer behaviour is influenced by so many factors such as socio-cultural, psychological-individual, marketing and mixed situations. According to theory of reasoned action, the power of performing a behaviour is exerted by consumer's intention which itself is an outcome of his attitude and subjective norms with the assumption of freedom of action but at the same time, theory of planned behaviour hold the belief that consumer behaviour is motivated or controlled positively or negatively by numerous psychographic, social and personal constraints that may be perception, learning, motivation, personality, time, resources, culture, society, family, location etc which is termed as perceived behavioural control. So there is a gap between how consumers behave and what they believe. Thus, green marketing is an attempt to fill this gap by reshaping and modifying all its tools such as environmental-advertising, eco-

branding, eco-labelling, environmental awareness, green products, green promotions, green price and demographics so that consumer get motivated to take decision to buy green product. There is a process and stages in consumers buying decision. These stages are-

- 1) Identification of problem or needs,
- 2) Searching the alternatives,
- 3) Evaluation of alternatives,
- 4) Making the purchase decision, and
- 5) Post purchase behaviour. (Sharma & Trivedi, 2016, Delafrooz N et al, 2014)

Review of Literature

In order to get an insight and to gain proper understanding of the topic, a thorough review of the work already done in the relevant field is a must. With this in mind, some of the available literature has been reviewed.

The term “green” has been profoundly expounding its wings throughout the world but Indian consumers are still in their blossoming phase of green movement. (Maheshwari, 2014, Nath et. al., 2012). “Green is the buzzword that is gaining popularity in the contemporary generation. Both the public sector and the private sector undertakings are embarking on the green bandwagon”. (Kumar, Pawan, 2015). While the shift to “green” may appear to be expensive in the short run, it will definitely prove to be beneficial and imperative in the long run. (Sharma, 2011). Though knowledge among Indian consumers regarding environment degradation and ozone layer depletion has been noted in the literature, their awareness and behaviour towards green products, green marketing and further buying behaviour towards eco-friendly products is still beyond the ambit of clear understanding. (Kumar & Ghodeswar, 2015). Consumer buying behaviour is a direct function of environmental awareness. As there is an increase in consumer environmental awareness, consumer purchasing behaviour towards eco-friendly products also increases. (Agyeman, 2014). So there is a positive significant relationship between the duo. Environmental awareness and knowledge are known to be chief predictors of environmental buying behaviours. Various studies excavated that consumers are now more aware of environment and are concerned about whether the products they use cause any environmental harm or not (Johri and Sahasakmontri, 1998; Straughan and Roberts, 1999). This awareness is high in the developed countries, but is also witnessing an uptrend even amongst the emerging economies like China, India, Brazil, etc. The fact that the consumers’ needs are changing towards more sustainable products and services adds on to the importance of green marketing and a response towards these needs leads to green product and process innovation (Ottman, 2006). But contrary perspective also prevails to this assertion in the literature. Although the number of individuals willing to

purchase green products has increased in the last few years, there is little evidence to suggest that purchase of green products has increased; despite environmental awareness, concern and positive attitude of customers towards sustainability and green products, market share of green products remains confined to just 1-3% of the market in totality. (Bray, Johns and Killburn, 2011). This proves that respondents have low knowledge and awareness about the green products and green issues, which does not affect their buying behaviour. One probable reason for this may be that only a basic understanding of ecological and social problems might not be enough to inspire consumers towards adopting sustainable consumption practices. Thorough understanding of the consequences of irresponsible consumption might prove to be more effective in making the consumer shift towards green consumption. (Joshi & Rahman, 2015). Ali et al. (2011) investigated that Pakistani consumers do not buy green products because of their sky touching prices and inferior qualities as compare to non-green products though numerous customers are aware of environmental degradation and have highly positive attitude and intention to buy the same. Hence, Rao et al. (2011) suggested in order to increase the buying of green products among those consumers who have positive intentions to purchase green products, marketers need to offer eco-friendly products of high quality as compared to traditional products and at reasonable and affordable prices at the same time. Moreover, Chase and Smith (1992) also excavated that 70% of the consumer purchase decisions were influenced by environmental protection message given in advertising and product labelling. India direly requires to enhance the awareness level of consumers. Manufacturers and marketers in India have to put in enormously efficacious efforts to increase their communication with their customers about green products and green marketing either through green advertising, eco-labelling etc. (Maheshwari, 2014, Bukhari, 2011, Saini, 2013). It has become very essential to know the factors that create the desire of consumers to purchase a product. (Agyeman, 2014). It is equally desirable to examine why environmental attitudes have a weaker influence on consumers’ green purchase behaviour; there might be possible factors such as price and availability of the product, and social influences among others that lead to the discrepancy between consumer intention and actual purchase behaviour. This discrepancy or gap between consumers’ favourable attitude towards, and actual purchase behaviour of green products is referred to as ‘green purchasing inconsistency’ or ‘green attitude-behaviour gap’. (Tanner and Kast, 2003; Vermeir and Verbeke, 2006; Vermeir and Verbeke, 2008). McEvoy (1972), Reizenstein et al. (1974), Kumar et al. (2012) found that males have more favourable attitude and were more inclined to pay for the control of air pollution. Contrary to this, Webster (1975), VanLiere and Dunlap (1981), Schahn and Holzer (1990), Roper Organization (1990 and 1992), Stern et al. (1993) and Scott and Willits (1994), Saxena & Khandelwal, (2010) highlighted that although both the sexes have positive attitude towards

green marketing and green products but comparatively females are little more concerned and have more favourable attitude towards environmental issues than their male counterparts. The Roper Organisation too in its opinion poll found "white-collar workers, women and educated" consumers as being more green-minded consumers (Shrum et al., 1995).

According to Teri Environmental Survey, 2013, residents of metropolitan cities in India stated that the government, businesses, academic and research organisations should take the lead, following which consumers/citizens should be aware and proactive. They feel that government policies relating to environment protection and consumer knowledge in different spheres of the country exists, but the common opinion suggests that these policies are either inadequate or not being implemented to meet their desired objectives.

Objectives of the study :

- 1) To measure consumers' awareness and knowledge about green products in Punjab.
- 2) To explore factors affecting consumers' behaviour towards green products and green marketing in Punjab.

Research Methodology:

The present study has used cross sectional research design whereby the data was collected using structured questionnaires which was developed from previous studies. Structured questionnaire contains 11 statements about awareness and various environmental aspects along with the demographic profile. Respondents were asked to rate their opinion on various environmental aspects on five point likert scale (1 – Strongly Disagree....). Primary data is collected from 150 consumers from Punjab using non probability convenience sampling. Out of which 126 responses are found valid for the study. Exploratory factor analysis was employed so as to extract the underlying dimensions. Factor analysis is interdependence technique and is used to fine the underlying structure among the variable under consideration. The interdependency technique is used to find the latent factors that account for the patterns of collinearity among multiple metric variables. The factors with factor loading =0.50 was considered as significant under each dimension. (Mahapatra,2013). Data was analysed using SPSS. The draft questionnaire underwent a pretest with selected consumers. Based on observations made by respondents in the pretest, modifications were made and the revised questionnaire was administered to the final set of respondents. (Mahapatra,2013).

Data Analysis -Descriptive analysis indicated the demographic profile of the respondents, awareness analysis and factors that influence their behaviour towards green products and green marketing.

Table 1: Demographic Profile of Respondents

Variable Name	Category	Frequency	% of total sample
Gender	Male	72	57
	Female	54	43
	Total	126	100
Age (in years)	21-29	54	42.9
	30-39	48	38.1
	40 or above	24	19.0
	Total	126	100
Highest Education Level	Post Graduate	92	73.0
	Graduate	18	14.3
	Any other qualification	16	12.7
	Total	126	100
	Occupation	Employed/Service	50
Professional		34	27.0
Student		32	25.4
Business/Self-employed		10	7.9
Total		126	100
Monthly Income		10,001-25,000	46
	25,001-50,000	32	25.4
	50,001-1,00,000	22	17.5
	More than 1,00,000	18	14.3
	Total	118	93.7

As shown above in Table 1: 57% the respondents were male, while 43% were female. 42.9% of the respondents interviewed were of the age group of 21-29 years, 38.1% in the age group of 30-39 and 19% are above 40 years. From the survey, 36.5% of the respondents had monthly income less than 10,000 rupees. 39.7% were in service sector, 27% were professionals, 25.4% were students and 7.9% were doing their own business.

Obj No-1: To measure consumers' awareness and knowledge about green products in Punjab.

Awareness Analysis :

Table 2: Consumers Awareness for Green Products

		Freque ncy	Perce nt	Valid Percent	Cumulative Percent
Valid	Yes	97	77.0	77.0	77.0
	Little	29	23.0	23.0	100.0
	No	0	0	0	
	Total	126	100.0	100.0	

The frequency analysis of consumers' awareness for green products is shown above in

Table 2. The results revealed that majority of the respondents (77%) in the sample were found aware about the green products. Only few respondents (23%) were found little aware about green products whereas no respondents were found who are totally unaware about green products. Therefore the findings of the awareness analysis show that the respondents are well aware about green products and green initiatives.

Source_Nature

Table 3: Consumers' Source of Information About Green Products

Source	Frequency	Percent	Valid Percent	Cumulative Percent
Neutral Article/Programme	42	33.3	33.3	33.3
Company Advertisement	36	28.6	28.6	61.9
Both	48	38.1	38.1	100.0
Total	126	100.0	100.0	

Table 3 shows that out of the sample of 126 respondents, only 28.6% respondents got information about green products from company advertisement whereas 33.3% were found to receive the information about green products and environmental issues from neutral articles and programmes. The source of awareness about green products for 38% of the respondents were both – company advertisement and neutral articles and programmes.

Obj 2: To explore factors affecting consumers' behaviour towards green products in Punjab.

To achieve this objective, exploratory factor analysis was run on 11 statements in order to extract underlying dimensions (factors). Before employing factor analysis on the given data set, it is imperative to check whether the sample size is sufficient to run factor analysis or not. KMO test is used to check the sampling adequacy and the value of KMO should be greater than 0.6. **Table 4** shows that KMO value for the present study is 0.731 which is more than threshold value 0.6 (**Kaiser and Rice, 1974**), therefore, the sample size of the given data set is sufficient to apply factor analysis. Further, the Bartlett's test of sphericity is a test for the presence of correlation among the variables. This test provides the statistical significance that the correlation matrix has significant correlation among at least some of the variables (**Hair et al., 2006**). Test statistic for Bartlett test sphericity (Table 4) in this case is significant ".000" ($p < 0.05$) which reflects that the null hypotheses (the correlation matrix is an identity matrix) is rejected, therefore all the 11 statements are

sufficiently correlated with each other which is desirable by factor analysis.

Table 4 - KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.731
Bartlett's Test of Sphericity	Approx. Chi-Square
	Df
	Sig.
	395.430
	55
	.000

In order to extract the underlying dimensions of the given data set, principal component analysis with varimax rotation was employed which results in three factors. Only factors having eigen value more than one and statements having factor loadings more than 0.6 in their corresponding factors were retained. All the statements explain 57 % of the total variance in the given data set.

Table 5 - Communalities

	Initial	Extraction
Environmental Aspects	1.000	.601
Energy Ratings	1.000	.531
Ecologically Irresponsible	1.000	.491
Low Watt Lightbulbs Tubes	1.000	.778
Less Harmful	1.000	.677
Excessive Packaging	1.000	.355
Recycled	1.000	.659
Lowest Priced Product	1.000	.592
Environmentally Certified Products	1.000	.535
Paper Plastic Products	1.000	.565
Green Logo	1.000	.513
Extraction Method: Principal Component Analysis.		

Communalities and Total Variance Explained

Communality is the sum total variance of a variable explained by the extracted factors. Ideally its value is 1 because all the factors together explains 100% of the variable but as we retain only few factor based on certain criteria like Eigen value, total variance explained etc. the value of communality decreases as the no of factors extracted decreases. The factors which have been extracted through factor analysis should explain at least 50% of a single variable therefore the acceptable value for communality is 0.5. Table 5 shows that communality value for all the variables is more than 0.5 except Unique-ability (0.498) but it is very close to 0.5 hence this variable is retained for further factor analysis.

Table 6: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.768	34.259	34.259	3.768	34.259	34.259	2.248	20.434	20.434
2	1.361	12.372	46.631	1.361	12.372	46.631	2.068	18.798	39.232
3	1.168	10.620	57.251	1.168	10.620	57.251	1.982	18.019	57.251

4	1.093	9.938	67.189						
5	.843	7.666	74.855						
6	.748	6.801	81.656						
7	.569	5.168	86.824						
8	.446	4.050	90.874						
9	.407	3.696	94.570						
10	.328	2.984	97.554						
11	.269	2.446	100.000						
Extraction Method: Principal Component Analysis.									

Table 6 shows that the total variance explained by Varimax rotation and with Kaiser Normalization the 3 factors is 57% which is nearer to the desirable. The rotated solution gives 3 factors out of the value (57%).

Table 7

Rotated Component Matrix ^a			
	Component		
	1	2	3
Paper Plastic Products	.707		
Lowest Priced Product	.694		
Environmental Aspects	.674		
Environmentally Certified Products	.631		
Less Harmful		.747	
Energy Ratings		.690	
Recycled		.635	
Excessive Packaging		.597	
Low Watt Lightbulbs Tubes			.863
Ecologically Irresponsible			.683
Green Logo			.622
Extraction Method: Principal Component Analysis.			
Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 5 iterations.			
Table 7 gives the rotated solution with 11 items/statements.			

Table 8
Naming of the factors

Factor	Variables/Statements	Factor Loading	Variance Explained
Factor 1 (Environmental Concern)	Lowest Priced Products	.694	20.434
	Paper Plastic Products	.707	
	Environmental Aspects	.674	
Factor 2 (Eco-friendly activities)	Environmentally Certified Products		18.798
	Less Harmful	.747	
	Energy Ratings	.690	
	Recycled	.635	
Factor 3 (Perceived Behaviour)	Excessive Packaging	.597	18.019
	Low Watt Light Bulbs Tubes	.863	
	Ecologically Irresponsible	.683	
	Green Logo	.622	

Table 9: Reliability

Factor	No of Items	Chronbach's Alpha (a)
Environmental Concern	3	0.570
Eco-Friendly Activities	3	0.701
Perceived Behaviour	3	0.673

According to **Hair et al. (2010)** "Reliability is the extent to which a variable is consistent in what it is intended to measure". Alphas above 0.6 are generally considered as being satisfactory while values below 0.6 are considered less than satisfactory, (**Malhotra 2010 & Nunnally, 1970**). Table 9 shows alpha value of all the four factors which is more than accepted value 0.6 except for usage.

Naming the factors

Factor 1 – Environmental Concern. - The first factor explains 20.434% of the total variance and is named as "Environmental Concern" because all the items in this factor – paper plastic products, lowest price products, environmental aspects, environmentally certified products etc are related with attributes of environmental concern. Environmental concern has been traditionally viewed as a unidimensional construct ranging from unconcerned about the environment at the low end to concern at the high end, as measured by the new environmental paradigm (Milfont&Duckitt, 2004). Hines, Hungerford & Tomera (1987) evaluated that environmental concern has a direct relationship with green purchase behavior. Forseeably, people's extent of mind towards environmental concern is linked to their interest in and willingness to purchasing green products (Biswas, Liecata, Mckee, Pullig and Daughtridge, 2000; Mainieri, Barnett, Unipan and Oskamp, 1997; and Schwepker and Cornwell, 1991). Mainieri et al. (1997) argued that consumers with a greater concern for the environment are much likely to buy green products as a result of their environmental claims than those who are less concerned about the environmental issues. Kim and Choi (2005) found that environmental concern directly influences green buying behaviour. Conscious consumers with environmental concern can check out the availability of environmental resources, their cost of usage along with the percussions of this use to the environment and to themselves (Babaoğul and Ozgun, 2008). Hence, it has been observed from the literature that environmental concern has a positive significant influence on person's intention to buy green products.

Factor 2 – Eco-friendly activities - The second factor includes items like less harmful, energy ratings, recycling activities. All these reflects that consumers use or wish to use green products because he/she considers using green products as a matter of their prestige and status symbol also in the society, therefore this factor is named as "Eco-Friendly

activities". This factor explains 18.798% of the total variance. This factor predicts that behaviors on the side of environment are influenced by moral responsibility and ethics that affects individual's eco-friendly activities. Environment-friendly nature should be portrayed as a complex form of consumer behaviour, and the ethical perception is a significant part of it. (Basgoze&Tektas, 2012)

Factor 3 – Perceived Behaviour - Third factor which explains 18.02% of the total variance, the two variables basically explains the reasons why consumers buy green products i.e. to avoid products with excessive packaging or to use low watt light bulbs & tubes and not to buy products from such companies which are ecologically irresponsible. This factor shows the behaviour of the consumer towards usage of the product after reiterating their willingness to buy and outer world because perceived behaviour can be understood from two aspects: the inner self-efficacy of an individual and the perceived (extrinsic) barriers. (Sparks et al., 1997).

Results and Discussions

The purpose of the study was to measure consumer's awareness about green products and factors affecting consumer behaviour towards green products and green marketing. The results revealed that majority of the respondents were aware about green products. Further consumers were found to have concern about the environmental aspects of the products they purchase. They took into account whether the product they are purchasing is environment friendly or not. They use to check energy ratings before buying electronic products, they avoid using products of the company which are ecologically irresponsible, prefer using recycled products which shows that consumers in Punjab are conscious about environmental aspects of the products before they buy it.

Suggestions and Implications for marketers for profiling green consumer

- It is really essential for the marketers and policy-makers to attain comprehensive knowledge about green issues and how various consumer segments predict such green issues. (Zimmer et al., 1994). In short, an environmentally conscious consumer segment procurable for marketers to promote their wares only according to their requirements is not digestible enough in today's scenario, rather marketers need to frame policies and strategies related to

segmentation and positioning. Marketers have to made attempts to identify demographic variables that shape the green consumer profile. Such variables, when significant will help the marketers to segment the consumer market and capitalize on green attitude and green behaviour in an enormously efficacious manner.(Awad,2011).

- Some of the respondents feel that green marketing is a mere statement used by the marketers to capture the heart share of the market and hence is nothing but an emotional overdose for the customers. They feel it as a mere exaggeration of the fact. Hence it leaves a word of caution for the marketers to pursue the green marketing strategies carefully so that they can convince and not confuse.(Arora,2014). As consumers in Punjab are now much aware of the terms like green marketing, green strategies, green initiatives, green products, green business, green values etc and they feel that companies are claiming more and performing less, the study suggested marketers not to use the term “green” as a buzzword for promoting sales. Infact, they should truly indulge into green practices and become loyal towards what they claim.

Limitations

The present study suffers from some limitations such as sample size, limited time and budget. The sample size of the study is only 126, therefore the findings of the study would not be appropriate to generalize for whole Punjab region. The present study has been conducted by considering mainly those constructs which were the part of the theory of planned behaviour in addition to constructs environmental concern and environmental knowledge. Futuristic studies require to cater the role of various other variables like trust, values, indulgence which might act as moderator or mediator to the basic constructs of the model. There may be an issue with the self reported behavioural measures which are expected to be guided by the belief and intention of the respondents. However, the translation of the expressed behaviour into actual behaviour is a matter of further investigation. This has been the concern of many researchers such as Grunert and Juhl (1995) who in a study on sustainable food products found inconsistency between the attitude initially shown by the consumers and translation of the same into purchase decision. This inconsistency may depend on many factors such as price, availability, level of involvement etc.(Vermeir&Verbeke, 2004) Since environmental concern is a significant issue in today's scenario at worldwide level, it is prudent to study the contribution of environmental laws or governmental role as a mediator to the purchase behaviour in the model. (Bipul Kumar, working paper Dec,2012).

Punjab needs to raise the awareness level of consumers. Manufacturers in India have to put in extra efforts to raise the current low levels of awareness among consumers about green products (Maheshwari, 2014). Majority of respondents said that it is difficult for them to recognize the green products on

the shelves and this shows the gap between efforts put to increase environmental awareness. (Sharma &Trivedi ,2016). There is not much research work done in this field or similar field in India. Hence, it was not possible to find literature in Indian context.(Saxena&Khandelwal, 2008)

Future Scope of Research

The study has implications for marketers as well as consumers and makes a good case for start of an era of green marketing in Punjab. The study since focused on a limited geographical area has limited generalizability but provides good insights regarding behaviour of consumers towards green products. Future research could focus on psychographic segmentation of consumers in terms of assessing their green values and preferences. The study can be replicated at a larger scale to get more insights into the behaviour of consumers and understand more about green phenomenon. Furthermore, there is dire requirement for conducting studies specializing in consumer behaviour to identify the most efficacious promotional methods to encourage and motivate them to adopt the values and culture of eco-friendly consumption.(Hello & Momani,2014). Much research needs to be done to bridge the gap between the green initiatives taken by the firms and consumers' perceptions regarding green products. Studies related to green consumer behaviour, no doubt, are many in context of developed countries but these studies are generic. Specific research in case of industry and product requires to get conducted with which industries will get more insight in understanding consumer behaviour minutely (particularly in case of Punjab which is slowly progressing in this regard) and to make products accordingly and at the same time, product specific research helps consumers in shedding their confusions as to what exactly makes a green product and regarding the green features of that particular product which will make consumer ready to take decision to buy. How much consumer is willing to pay for a green product or a service is also a burning area to be reckoned with for research especially in case of developing countries like India where pro-environmental evolution is registering its space despite imbalance between demand for green products and awareness of Indians towards the same. Researchers should try to find the answers of what inspires a firm to go green, whereas more enquiries are needed to find out why consumers buy green products? What motivates them to prefer green products over traditional products? Do they understand what is a green product ? What are the factors responsible for purchase of green products ? What are the various barriers to purchase? (Narula& Desore,2016)

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Appendix

11 Statements:

- a) I consider the environmental aspects of the products before buying.
- b) I check energy ratings before buying electronic products, e.g., AC's, Refrigerators etc.
- c) I do not buy products of ecologically irresponsible companies.
- d) I use expensive low wattage light bulbs/tubes in house/office to save energy.
- e) When I have a choice between two equal products, I purchase the one, which is less harmful to other people & environment.
- f) I do not buy products which have excessive packaging.
- g) I try only to buy products that can be recycled.
- h) I buy lowest priced product, regardless its impact on society.
- i) I look for environmentally certified products.
- j) I buy paper and plastic products that are made from recycled material.
- k) Green logo on the product helps me in ensuring that the product is environment friendly.