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**STUDY ON CONSUMER BEHAVIOUR TOWARDS PURCHASE OF ECOFRIENDLY PRODUCTS**

*Strategic conceptual study based on literature*

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**Abstract**

Over the past decade or so, terms such as eco-friendly, organic, sustainability, green and environment-friendly have become buzz-words in today's market scenario and are interchangeably used. Many organisations involved in various types of businesses have long back started to plan for environment-friendly strategies and launch eco-friendly products and services. A number of consumer research studies have been carried out, in diverse industries, focussing on these types of products. This paper is an outcome of the literature survey done by the authors in this area. 'Environment-friendly-products related' consumer behaviour variables that have been investigated in these studies (consumer perception, customer segmentation, consumer purchase behaviour) and major findings that have been brought out through these studies have been reviewed, consolidated and logically analysed in this paper. Based on the gaps identified, scope for further research has also been presented.

*Keywords: Environment-friendly products, eco-friendly product purchase behaviour, consumer segmentation*

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## 1.0 Introduction

Now-a-days it is quite common to see eco-friendly aspects in the product-offerings by many industries. A number of research studies, focusing on consumer behaviour towards these products, have been conducted in diverse industries in different countries. In today's buyers' markets, consumers demand environment-friendly products and demand that their suppliers or sellers guarantee their ethical claims related to their products (Strong, 2017). Environment-friendly ways for consumer living and consumerism are rapidly on the rise (Tse and Yim, 2002). This attitudinal change of consumers had propelled the marketers to launch green and environment-friendly products. Thanks to the awareness about concepts such as pollution control, sustainability, etc. today's consumers give increased importance to these types of products and indirectly almost force the companies to produce and supply such products. In fact, D'souza (2014) stated that consumer power would change the market, forcing manufacturer and retailer to respond to social and ethical concerns. Even local organisations including dealers and distributors started incorporating environmental aspects in advertisement themes for improving company's image in minds of the consumers (Davis, 2013) so that they would induce the consumers' positive attitude towards the company. In fact, using the term 'eco-friendly' as 'USP' would pay dividends to marketers of products and services.

In a research study done in India, Gowda, *et. al.*, (2008) found that impact of green areas in Bangalore will provide outdoor recreation area to the city people and it would abate stress of urban living due to various reasons. In the context of Indian hotel industry, Manaktola and Jauhari (2007) discovered that consumers are very conscious about their selection process with respect to environmental friendliness and expect a good service quality. At the same time it was found that consumers' attitude is very strong on not to pay extra for green practice in hotels. This shows that though consumers are aware of the green and environmental activities they are also concerned about other factors like price, quality, etc. The best way for companies to capture the market is to concentrate on socially conscious products and goods (Carrigan and Pelsmacker, 2009). In another Indian study, Singh (2009) stated that with growing consumerism, urban consumers' exhibit more socially responsible behaviour.

### 1.1 Consumer perception about eco-friendly products

Today, it is quite common to see the consumers anxiously looking for information given on the package and labels. Concern for health, eagerness to acquire health-related knowledge, etc. have compelled the consumers to seek for not only nutritional information but also green-related inputs through labels. D'Souza (2004) asserted that this growing public concern about the information on label has improved the perception of consumer purchases. Information such as impact of ingredients, green products and environmental information on the product labels will drastically improve the consumer perception about the product quality, value and future purchase intention (Borin, *et. al.*, 2011). Thus product labelling plays a very vital role and as stated by D'Souza (2004), accuracy of label information will additionally help the consumers to make good product choices, as it will be conspicuously perceived by consumers.

### 1.2 Consumer attitude towards environment-friendly products

Consumer attitude plays a crucial role in consumer purchase decision process. Positive attitude towards environment-friendly products and negative attitude towards polluting products have been found to have a bearing on positive or negative purchase preferences of

consumers respectively. But, a different sort of proposition was put forward by Yam-Tang and Chan (1998) who felt that positive attitude towards environment needs to be created among the consumers. They recommended that intervention, in the form of education and other similar initiatives, by governments and organizations, is needed to bring in attitudinal change among consumers for realizing the need to have environmental concern.

However, notwithstanding this type of outcome, several studies have been done in diverse industries and the outcome supported the effect of attitude on consumer purchases in the context of environment-friendly products. For example, Vlosky, *et. al.*, (1999) asserted that consumers are willing to pay premium price for environmentally certified goods. Going a step beyond, Gupta and Ogden (2009) classified consumer attitudinal characteristics of trust, in-group identity, expectation of others, cooperation and perceived efficacy for discriminating green and non-green buyers. Consumer attitude is revealed through many environmental product purchases and allied activities. In fact, organic products play a more significant role in determining the consumer attitude. Mondelaers, *et. al.*, (2009) conducted a research with 527 participants and found that consumers now-a-days classify organic products among other quality niche products due to their goodness characteristic.

Research done by Chen (2009) in Taiwan found that health and environment are the two important motives and attitudes for consumers purchasing organic foods. According to the author, consumers purchase organic foods for maintaining a healthy lifestyle. Another study by Hustvedt and Dickson (2009) in United States brought out a fact that consumers are willing to purchase organic cotton apparel for their self-identity (as environmentally organic and socially responsible consumers). This shows that a number of consumers in United States are interested to buy organic cotton apparels. In another research that was also done in the same country, Kim and Chung (2011) examined 207 respondents and concluded that consumers who are conscious in appearance and environment will have positive attitude towards purchasing organic personal care products.

### **1.3 Eco-friendly product purchase behaviour by consumers**

To a large extent, consumers have started buying eco-friendly products. Many consumers take pride and feel satisfied when they make such purchases and from companies manufacturing and marketing such products. Davis (1994) stated that consumers' purchase decision is influenced, atleast to some extent, by the supplier's environmental concern and their image as an environmentally good citizen. Schlegelmilch, *et. al.*, (1996) stated that consumers who are environmentally conscious will be environmentally responsible during their purchase behaviour too. There are also studies that have brought out different sort of outcomes. For example, Yam-Tang and Chan (1998) stated that industrialized countries lag behind the western countries and it is quite difficult to find the consumer purchase behaviour for environmentally sensitive products. The authors did a study with 552 Hong Kong citizens and found that consumers' environmental concern is not reflected in their purchase behaviour.

However, consumers do make purchase decisions based on many factors such as price, location, income, quality, advertisements, and label information. For example, through an extensive research study in Newzland, Eves and Kippes (2010) found that residential property buyers make purchase decisions according to the location and price of the property, irrespective of income levels. This indicates that pollution-free atmosphere, among others, is a major concern in consumer purchases.

Another trend that one can observe now-a-days is the increased degree of significance attached to labels by a large number of consumers. Information regarding the products, either through advertisements or through labels, is increasingly sought by consumers. As cautioned by Biel and Grankvist (2010), negative information about environment will effect stronger than positive information. Therefore, providing complete and detailed information to communications about environmental aspects is essential for any marketer to attract prospects.

Several researchers have brought out interesting information-related outcomes through their research exercises. Chan (2004) studied 914 Chinese consumers and found that they seek continuous product information flow on print environment advertisements rather than broadcasting ones for shopping of goods for consumer purchase. Beyond getting acquainted through advertisements, consumers wish get more exact information about the products through packages and labels.

In a more related research study carried out with the objective of finding the usefulness of ecological product labels and related consumer behaviour, D'Souza, *et. al.*, (2006) found how labels influence consumers and how do consumers differ in responding to those labels. Although some consumers were found to have difficulty in understanding product labels, the authors discovered, through their study with 155 consumers in Australia, that there are many consumers who even tend to buy inferior quality goods, when the product label provides enough environmental information. The authors also concluded that there is strong relationship between price sensitivity and reading which influence purchase decisions on a whole.

Organic products such as organic vegetables, fruits and other such goods that are the output of pollution-free agricultural efforts, natural horticultural methods, etc. have gained popularity in many countries. In this context, a related finding was reflected in the research outcome of study done by Mondelaers, *et. al.*, (2009) whose research took cognizance of increased buying intensity of this sort of organic vegetables. Their study also revealed that consumers perceive price as less important when compared to organic products labeling.

Past experience, significantly influences purchase intention (Kwon and Noh, 2010; Tan 2002). For example, in another organic product consumer study in United States, Kim and Chung (2011) investigated the effect of past experience on purchase intention of organic personal care products. In addition to the factors so far explained, Chan (2004), in his research concerning environmental advertising, identified some other factors as influencing consumer purchases. They are: perceived credibility of the claim, relevance of the advertised product to daily lives, education level and media type.

#### **1.4 Consumer Segmentation for eco-friendly products**

Marketers need to segment the market in order to differentiate their products, position their offerings and design marketing mix strategies. They study the consumers' behaviour to design segmentation strategies. Segmentation based on demographics is a widely followed marketing strategy. But, in the view point of Straughan and Roberts (1999), consumer segmentation as per psychographic criteria is more useful compared to demographic phenomenon.

However, a number of researchers (Kim and Park, 2005; Choy and Prizzia, 2010; Eves and Kippes, 2010; Carrigan and Pelsmacker 2009; Lee, 2009; Singh, 2009; Fraj and Mrtinez, 2006; Laroche *et. al.*, 2001) have studied the influence of demographic variables on consumers in the context of eco-friendly products. Also, other bases have been considered in the studies of certain

other authors. Based on a significant research work, Laroche *et. al.*, (2001) reported that married females with at least one child at home are more conscious about environment-friendly products.

In another gender study on environmental issues that was conducted in Hong Kong with 48 high schools, Lee (2009) found that self identity of male adolescent consumers in environment protection is more when compared to that of female adolescent consumers. Female adolescent consumers have been found to have high environment attitude, concern, perceived, seriousness of environment problems, responsibility, peer influence and green purchasing behaviour than male adolescent consumers. This outcome provides strong inputs to marketers for gender based segmentation.

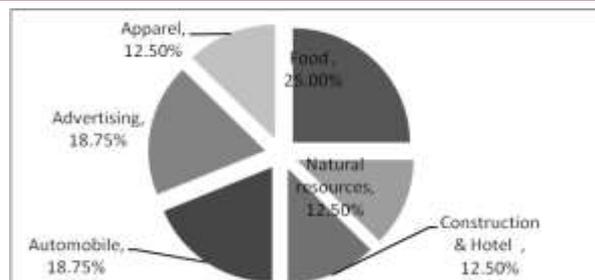
The study of Eves and Kippes (2010) led to a different outcome by showing that consumers purchase irrespective of their income. Earlier, Carrigan and Pelsmacker (2009) found that consumers across the international market are still socially conscious and they show the ethical consumption behaviour in recession period too. It reflects that, despite low income levels which are a common repercussion during recession periods, the consumers are socially conscious in their purchase behaviour. These results perhaps may guide marketers about the need to understand that income level need not necessarily be a base for segmentation.

Some other segmentation bases have also been focussed or identified in the environment related studies of other researchers. Paco and Raposo (2009) identified some environmental dimensions such as: concern, affect, knowledge, environment-friendly behaviour, and information search (activism, sensitivity to price, waste separation/recycling, perceived efficiency, etc). Market segmenting characteristics such as environmental patterns and self fulfillment values were examined by Fraj and Mrtinez (2006) in a study conducted with 573 individuals in Spain.

In another research done by Choy and Prizzia (2010) in Hawaii, a different sort of result came out in terms of price as an influencing factor. The outcome indicated that regardless of age and gender, the consumers purchase hybrid cars, if the price is as same as the traditional gas fueled cars. However, consumers expressed that they expect some tax credits for purchasing hybrid cars. This substantiates the consumers' price sensitivity as well.

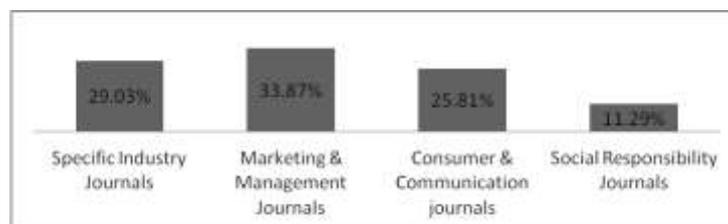
### **1.5 Reflection from the analysis of consumer behaviour literature on eco-friendly products**

A large number of research studies on green and environmental related aspects have been conducted across the world and the results have been published in journals. Analysis of the limited literature review carried out in this paper indicates that the journal papers that have been referred can be classified into six types of industries as depicted in Fig. 1. It clearly depicts that food industry related journal papers have been published more than those related to other industries. Advertising and automobile industries have taken the next positions in that order. The analysis reveals that there is a wide scope to conduct green consumer behaviour researches in other industries as well.



**Fig: 1. Industry-wise journals containing consumer research papers pertaining to eco-friendly products**

Many journals have published the outcome of eco-friendliness oriented consumer studies done in various industries. The literature survey indicates that journals that have published such papers can be classified into four groups viz., specific industry related journals, marketing & management related journals, consumer & communication related journals and social responsibility related journals. Fig. 2 shows the classification and the percentage of articles published in each group. The figure clearly depicts that green / environment related consumer articles have been published more in marketing & management related journals. Specific industry related journals rank next. About one-fourth of the studies have been published in the journals that are exclusively on consumer and communication. Only less numbers consumer papers related to eco-friendly products have been published in social responsibility related journals.



**Fig: 2. Categories of journals that have published 'environment-friendly-product related' consumer studies**

In Table 1, the dependent and independent variables that have been considered in the research studies referred in this paper are consolidated and presented along with the details of author/s and year of publication.

**Table:1 Major components of framework considered in various consumer-research studies on eco-friendly products**

Sl. no.	Major Dependent variables	Major Independent variables	Author & year of publication
1.	Customer attitude	Lifestyle	Chen (2009)
		Conscious about environmental friendliness	Manaktola and Jauhari (2007)
		Environmental & appearance consciousness, past experience, purchase intention perceived behavioral control	Kim and Chung (2011)
		Marketing strategies	Johri and Sahasakmontri (1998)
2.	Purchase behaviour	Gender	Lee (2017)
		Attitude on environmental concern	Yam-Tang and Chan (1998)
		Values, attitudes, purchase intention	Follows and Jobber (2010)
		Location	Eves and Kippes (2010)
		Environmentally consciousness	Schlegelmilch, <i>et. al.</i> , (1996)
		Image	Davis (1994)
		Conscious about environmental friendliness	Manaktola and Jauhari (2007)
		Price	Choy and Prizzia (2010)
		Attitude and self-identity	Hustvedt and Dickson (2009)
Green consumer profile	Akehurst, <i>et. al.</i> , (2012)		
3.	Consumer perception	Socio-demographic & situational factors	Bohlen, <i>et. al.</i> , (1993)
		Environmental initiatives	Kirchoff, <i>et. al.</i> , (2011)
4.	Consumer purchase intention	Perceived credibility of claim, relevance of advertised product, educational level, media type	Chan (2004)
		Price and brand loyalty	Louchran and Kangis (1994)
		Perceived value & risk	Chen and Chang (2012)
		Green consumer profile	Akehurst, <i>et. al.</i> , (2012)
5.	Consumer preference	Product information	Biel and Grankvis (2010)
		Price, label and quality	Mondelaers, <i>et. al.</i> , (2009)

## 1.6 Conclusion and scope for further research

An attempt has been made in this paper to delve into the existing literature pertaining to the consumer studies dealing with eco-friendly products. A number of journals belonging to various industry sectors, marketing & management disciplines, consumer & communication fields and social responsibility area have been surveyed and varieties of papers dealing with a wide range of products / services such as food, automobiles, apparels, construction, hotel, etc. have been analysed. Consumer behaviour aspects and issues such as consumer perception, purchase decision, consumer attitude and customer segmentation have been investigated in these journals. The consolidated findings that were brought to light through these studies and the understanding, logic & directions that emanate from them have been presented in the present paper.

In the context of consumer behaviour towards eco-friendly products, numerous studies have been conducted on consumer purchase behaviour, consumer attitude, consumer perception and purchase intention. But, consumer studies investigating other variables such as consumer learning, personality, etc. are rare. Future researchers could test these variables in terms of green consumer behaviour. A number of researchers have used demographic and environmental variables to test their effect on consumer behaviour. There is a wide hope for future researchers to study the ecological issues in relation to various other consumer psychology related aspects as independent variables.

Consumer researchers have conducted their environment-friendly product oriented studies predominantly in the industry sectors cited above. Other sectors such as agriculture, transport, tourism, health, logistics, etc. can also be brought into research studies in future, for the purpose of analysing consumer behaviour towards eco-friendly products and services.

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