



## Impact Analysis of Environmental Knowledge and Environmental Attitude on Purchase Intention among Young Consumers

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### Abstract

Eco friendly consumption has emerged as a trend in the present scenario, where majority of customers are willing to purchase eco friendly products. The purchase intention towards the green products has increased drastically, most of the consumers are well aware of green consumption patterns. Recent research shows that today's consumer is well knowledgeable related to green purchases, which in turn has drastically affected his attitude in a positive direction towards eco- friendly purchases. The study tries to study the effect of Environmental Knowledge and Environmental Attitude and its impact on purchase intention of young consumers towards eco friendly products. The findings suggest that the customer is well aware about green products and also possess a positive attitude towards eco- friendly products. Therefore the research comes out with the suggestion that consumer is well aware about environmental concern and is willing to buy green products, so it is essential for organisations to market the environmental friendly features of the product.

**Keywords:** Environmental Knowledge, Green products, Environmental Attitude, Purchase Intention

**JEL Classification:** Q59, Q50, M39

**Paper Classification:** Research Paper

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### Introduction

Environmental sustainability has become a new growing phenomenon in the recent past. In present context, more and more organisations are going for environmentally sustainable products. Ecological consciousness has been described as a vital force for achieving sustainable development. According to Drumwright (1994), the environmental social concern has grown at a rapid pace to an extent that the last decade was named as a "Decade of the Environment". In today's scenario, environmental concern has grown at a very rapid pace as far as citizens attitudinal and behavioural phenomena are concerned. There has been found a great upsurge among consumers to go for green purchasing decisions (Aspinall, 1993). The current need for sustainable lifestyle and growing concern towards environmental issues has led to development of term green products, in which consumer shows behaviour having liking towards buying eco friendly products. The main purpose behind selling green products is to make environmentally safe products available to customers. Research on purchase intention regarding green purchase

has increased in the recent past due to rapid degradation of the environment disturbing balance of existence. Customers concern towards environment has been on a rise in recent years, which has been the main force behind organisations manufacturing products according to environmental norms. The consumption patterns also included pre and post behavioural intention regarding purchasing a green product. Researchers have also focussed on usage of natural resources by individuals acting towards environmental degradation (Kim, 2011). The organisations practicing sustainable consumption and producing eco friendly products is mainly due to the consumers increased awareness regarding environmental issues for which industries are found to be one of the root cause. The consumers are taking environmental concern very seriously and are of the view to establish ecological balance by practicing green behaviour. Researchers have pointed out that the increased environmental concern in recent decade is mainly due to the instances like depletion of ozone layer, acid rain, degradation of land, global warming, depletion in natural resources, extinction of many species and so on which has made the consumer to think about his/her own existence which seems to be in danger if proper care of environment is not taken (Mintel, 1991). Studies also show that concern towards environment has started way back and developed countries are rigorously working on it and trying their every bit to make environment sustainable for living, but in developing and under developed countries, the concept is still at a very initial phase and in these countries still consumers give importance to value driven by product over its environmental characteristics. In these countries, consumer is still willing to purchase general product over green product if available at lower cost (Prakash, 2002). Consumer today is well aware of environmental characteristics and also tends to shop for products with eco label or green certification. The organisations today are not only producing green products but also packaging and disposing products with environment friendly ways and all this is due to pressure from customers, government, media and some volunteer environmental groups committed towards saving nature (Polonsky, 2011). The main purpose of organisations manufacturing green products is to satisfy consumers needs and wants in such a way that by doing so they cause least damage to the environment. Studies have shown that environment protection was earlier considered as a part of ethical practices in marketing but now environment has been considered a broader concept and it is in the ethical guideline of the organisation to protect environment. Going green is considered as the need of the hour, not only by organisations but governments are also making rules and regulations towards protecting the environment. Due to concern from all the sectors, there is a rapid shift in purchases and more consumers are now going for eco friendly products even if the products are available at higher prices (Chen et al, 2012). Large number of organisations are completely changing their way of doing business in order to show their commitment of protecting environment. The organisations manufacturing eco-friendly products, green products may seem non profitable in short term but in long-term, it always proves advantageous for the organisation. Consumers show a lot of concern towards the impact of environment on the lifestyle of human being; this is the main reason behind consumers green purchasing decision. Every time a customer is choosing eco friendly products, he/she is contributing in making environment more sustainable for living. Consumer behaviour is very dynamic in nature and not too consumers possess the same behaviour, similarly the consumers while purchasing eco friendly products have different intentions. The main motive behind consumers showing sustainable consumption pattern is found to be the environmental concern and its societal impact. The increase in customer awareness regarding environment has turned the customer to behave in a more responsible manner towards environment while purchasing products. Consumers showing green purchase behaviour are different from consumers showing general purchase behaviour, consumers with general purchase behaviour purchase the product on the merit and applicability of the product on contrary consumers with green purchase behaviour purchase a product with environmental benefits as the main component of the product. Consumers showing green purchase intention are also willing to

pay extra money for the benefit of the future generation. The main idea behind sustainable consumption is to form a society which is supporting a healthy lifestyle. The organisations have taken concern of consumer towards environment very seriously, due to which the organisations are coming forward and accepting their responsibility to contribute in saving the nature (Chen, 2008). Organisations are using green marketing strategies to promote their products. Green marketing involves all the activities starting from procurement of raw material till end usage of product by customer for his/her personal or family use, to follow norms and regulations which help in conserving the environment. Studies show that with green marketing, the consumers are choosing the product on basis of which product harms the environment and which is safe towards environment. The government is also taking environmental concern very seriously and coming forward to educate consumers regarding the causes of environmental degradation. The government organisations are making customer contribute towards saving environment by voluntarily participating in events stated by the organisations for preserving nature earth. The organisations by educating consumers about environment are moulding their purchasing behaviour towards environmental purchases (Ali et al, 2011). Green conscious consumers possess strong belief in purchasing green products. Consumers with green characteristics believe that their ability to use green products positively helps in preserving environment. Consumers with green consciousness believe that it is not only the responsibility of government and organisations manufacturing goods to protect environment, but it's the duty of every individual to protect environment (Peattie, 2011). Studies also predict that consumers with eco friendly behaviour voluntarily get involved in activities which help in preserving earth. These act of individuals act as a motivating factor for other consumers to follow them and start purchasing eco friendly products (Patton, 2005). Studies also predict that still green products are considered as products with high prices and only for a specific segment of people, but consumers with green purchasing intention are trying to reduce their this misconception and are making them aware of positive effects of environmental protection which convert them from purchasing general products towards eco friendly products. Consumers showing green purchase intention have many factors in mind before choosing the product which include price of the product, quality of the product, organisation manufacturing the product, competitors available in the market and so on, but along with it, the most important factor is the product should be environmentally sustainable. Researchers have found that consumers with green purchase intention are willing to pay higher prices for green products but the prices should not be too high that the product gets out of the reach of consumers (Lisa, 2004). Some studies have also shown that too higher prices of green products discourages customers and consumers end up buying general products with much lower prices. Studies show that there is also one more factor which is very important regarding green consumption, this factor is time. Consumers tend to prefer products which are easily available and which saves time while purchasing, so consumer will only go for purchasing green products if they are easily available and less time is spent on search and purchase (Blackwell, 1995). Consumers also relate non availability of green products in the market to its less focus on spreading awareness regarding green products. Studies also predict that consumers are also not just satisfied with marketers saying product as green, consumer only gets satisfied if the product has certain eco label or is certified green by some recognised agency which deals with green products certification (Rashid, 2009). Consumer also consider eco label as a useful form of information when it comes to developing a purchasing intention regarding green products. Green consumption pattern are practices undertaken by consumers to live a healthy life without harming the nature. Consumers showing green consumption pattern not only protect the environment for their healthy life but also contribute in preserving the earth and natural resources for the future generations. Consumer's knowledge regarding environment awareness takes cognitive behaviour of the consumer into consideration while making a green purchasing decision. Consumer's

positive attitude towards eco friendly purchases has led the organisations to develop strategies which are in accordance with environmental norms and support eco friendly purchases. Studies found various factors which affect consumers purchasing decisions regarding green products, but the knowledge of the environment and attitude towards green products have been found to be the major two variables which contribute greatly while making eco friendly purchases. The widespread influence of the phenomenon can be seen in almost all human activities including business activities wherein one of the biggest challenges is to protect and preserve the earth's resources and the environment for the future generations, which not only means to meet their own demands but also to meet the demand of future generations. Studies show that there has been a lot of concern growing globally towards environmental issues which has led consumers to think about his/her purchasing decisions. The consumer of today is well aware about his/her impact on environment degradation due to which he/she has started purchasing green products. The consumer has realized that his/her purchase of eco-friendly products has huge impact on saving environment (Peattie, 2011). The environmental issues are not only a concern for the consumers but also pose serious threat to organisations selling general products. Many policies and rules have been made globally to protect environment but it has been found that the organisations are not complying totally with these norms and also are not making any serious effort to manufacture green products which can sustain in the market and compete with the general products available in the market. As the consumers needs and wants are increasing with time, it has led to depletion in natural resources. So, it becomes the duty of organisations to find ways in which they utilize least amount of natural resources and conserve the earth for future generation. Consumer's knowledge related to depleting natural resources has led organisations to consider green products as a part of their social responsibility and find innovative ways to manufacture products with green attributes. Organisations are considering it as their corporate responsibility and are manufacturing eco friendly products. Studies predict that consumers tend to show that they are environmentally responsible and often purchase eco-friendly products but in reality will only purchase green products when the products possess some tangible benefits like good quality, a well established brand, monetary benefits and so on. As consumer is well aware about environmental issues and shows a deep sense of concern towards environment, so the organisations are now focussing on spending more on advertisement showing environmental benefits, so that customer can easily recognise the product in the market and purchase the product. Organisation promoting green attributes of their product becomes an important factor for consumers while making an eco friendly purchase. The green attributes not only makes the consumer curious regarding purchase but also acts as a basic factor of differentiation when it comes while choosing product from different products available in the market. Studies have shown that consumer knowledge regarding environmental issues and positive attitude in conserving environment have been found to be the major drivers behind consumer willingness to purchase eco friendly products (Chan and Lam, 2002). Studies have also revealed that consumers growing commitment towards purchasing eco friendly products have forced the organisation to manufacture products with green attributes. Studies have also shown that having knowledge about environment and possessing positive attitude towards green purchases are not only the factors which completely motivate consumers to purchase green products, there are also some other factors like family influence, peer influence, societal influence and purchasing power capacity which together help in developing consumer intention towards buying green products, but awareness and attitude are found to be the major contributors when it comes to analyse purchasing behaviour of consumer regarding eco-friendly products (Thogerson, 2000). Factors determining consumers' positive attitude towards green purchases include environmental knowledge, product quality, perceived price of the product, and credibility of the product and companies brand value (Mostafa, 2006). Evidences reveal that increasing environmental concern

has positively influenced the consumption pattern of products. This has led to the concept of ecological consciousness in the behaviour which in turn has led to a greater faith in energy efficient products, appliances for environmentally sustainable consumers. Studies show that there is a huge increase in the consumer's environmental concern towards green products which has led to an increase in the consumer's perception for eco-friendly products. Researchers agree regarding environmental concern being the major reason behind increase in purchase of green products. Studies also prove that knowledge and awareness regarding causes of environment degradation is the major factor behind eco friendly purchases. Consumer's ecological consciousness generally means having environmental concern towards products and being sensitive towards the environment. Organisations are taking green consumption patterns very seriously and manufacturing products which are environmentally sustainable. The organisations are not only manufacturing products with green characteristics but also making sure that the process from procurement of raw material till end usage of the products follows environmental norms and regulations which help in preserving environment. Studies predict that attitude towards environment is very important while predicting the purchasing behavioural intention of consumer regarding green purchases. Studies show that environmental attitude and behaviour towards green products possess a direct relationship (Lehman, 1993).

## Literature Review

The factor behind increase in the frequency of consumption of green products is the concern towards environment among consumers, consumer are more willing to purchase products with green characteristics. Ecological concern has been described as a vital force for creating a sustainable environment for living by use of the green products. Recent researches suggest that ecological consciousness is an important guiding force for attitudinal development among the consumers. The recent trend shows an impressive increase in ecological consciousness in which an increase in the level of environmental concern has had a greater impact on consumer attitude towards green products (Schlegelmich, 1996). Consumers responsible towards environment always value society and are committed to show societal conscious behaviour. Societal conscious behaviour is the behaviour displayed by individual living in the society which is related to environmental concern in consumption of products (Thogerson, 1996). Consumers more concerned about the environment possess a positive attitude towards green products and end up purchasing eco friendly products as compared to consumers who are least bothered about environmental issues. Demographic factors are also considered as an important factor of green purchasing behaviour, consumers who are well educated, young and belong to high income category are believed to possess higher tendency to purchase eco-friendly products. Studies also show that almost every consumer claims to be environmental friendly but when it comes to purchasing decision they tend to purchase green products only if it has some benefits attached with it other than environmental benefits (Mintell, 2008). Consumers are willing to purchase eco friendly products as long as the product does not harms his/her lifestyle and the product is of good quality with a reasonable price. Reports also suggest that customer will not purchase the product because of its green attributes, he/she will purchase the green product if it possesses some more benefits like good quality, safety features and affordable price. Studies have also shown that many consumers attitude towards green products is influenced by the belief that product will generally cost high (Ottman, 2002). Mostly consumers are willing to purchase eco-friendly products but high price of the products brings about a shift in his/her purchasing decision. The indifference in attitude of consumers regarding green purchases is mainly due to the awareness an individual has related to the environment (Anderson, 1972). Studies also predict that there will a be a lot of difference when it comes to motivation of the consumer regarding

environment and its cause, consumer well aware of environmental causes and having self belief that his/her actions can bring a change in saving environment is motivated enough in buying green products. Studies have given lot of emphasis on individual value when it comes to understanding purchase behaviour, individual with strong values towards protecting environment often takes part voluntarily in environment protecting activities and always purchase eco friendly products. Consumer's value is considered to be very crucial when it comes to understanding consumer purchase intention towards green products (Schwartz, 1996). Many studies have been done to analyse the values which favour eco friendly purchases and it has been found individuals concerned about their lifestyle and future generation wellbeing are more likely to exhibit values favouring eco friendly purchases. Some studies also suggest that individualistic behaviour and collectivism behaviour are basic fundamental beliefs when it comes to studying relationship among themselves and others which acts as base for analysing behaviour related to green purchases (Kim, 2005). Consumers with characteristics of collectivism are found more often showing green purchasing behaviour. This is due to the fact that consumers with groups behave more responsibly towards environment and are more concerned about their actions affecting the environment. Studies also show that mostly environmentally considered behaviours are recommended or controlled by people who show more tendencies to obey social norms and are more likely to participate in green purchasing behaviour. Studies suggest that ecological conscious consumer behaviour is a behaviour displayed by the consumer in obtaining, consuming and disposing off the green products in which obtaining or the buying decision is the most important input that leads to the consumption and dispose off function. Literature also suggests buying decision is an output of the favourable intend to purchase or purchase intention which one tends to incorporate into actions. Hartwick & Warshaw (1988) have predicted positive relationship among purchase intention and behavioural decision. Kumar B. (2012) has also predicted intention as a major force while predicting behaviour. This relationship has also been studied by Harsini & Firmanzah (2009) who have highlighted that the intention to buy green products considerably relates with ecological consciousness. In another study, Ellen (1994) found that knowledge towards environment is an important ingredient in predicting the performance of ecologically conscious consumer behaviour. He also suggested that organisations should focus on educating customers regarding environmental benefits of their product in order to increase green purchasing decision. Meffert and Krichgeorge (1993) suggested that environmental concern might occur in a number of ways mainly due to knowledge and awareness regarding environment in general and eco-friendly products in particular. Environmental conscious attitude is generally backed by environmental concern or environmental knowledge which includes having facts and figures related to the ecological environment (Fryxall and Lo, 2003). Another study conducted by Kaiser and Shimoda(1999) found that the concern towards environment is directly related towards consumer attitude to green products. Individual willingness to purchase a green product is the function of concern which an individual possess towards environment. Studies reveal that individuals strong attitude towards green purchase intention is due to both individualistic as well as collectivism factors. As studies have predicted, attitude of consumer acts as a major player while calculating purchase intention. Studies also predict that concern towards the environment acts as a major driving force while studying green purchase intention. Individuals more concerned about the environment come to know and get involved in the environmental issues, due to which individuals try to find ways to protect environment. Studies have also found strong relationship among environmental attitude and behaviour governing purchase of green products. Individuals with favourable attitude towards environment tend to behave in a positive manner towards green products. Individuals belief in self in acting as a strong force in contributing towards saving environment acts as a strong force in developing positive attitude among individuals towards purchasing eco friendly products (Taylor, 1986). Ecological consciousness focuses on a specific

dimension of behaviour related to consumers (Laroche et al., 2001). The dimension refers to consumers' intention of purchasing decision and their willingness to pay higher price for ecological products. Consumer purchase intention of environmental friendly products is a function of consumers' attitude has been pointed out by a number of studies (Cheng, Lam & Hsu, 2006; Ajzen, 1991; Fraz and Martinez, 2007; Lehman, 1993; and Wang and Ying, 2010). In a study by Chan (2001) it was found that consumer is willing to pay higher prices of the product provided the product is not too highly priced and also the product along with environmental benefits satisfies the needs of the customers more efficiently than its competitors. Whereas, Azen (1991) has emphasised that positive attitude strengthens the intention regarding purchasing eco friendly products. In another reference, Fraz and Martinez (2007), concluded positive relationship between environment attitude and buying behaviour. According to Wang Ying (2010), consumer's attitude towards environmental innovation by the businesses help the consumer in making favourable purchase decisions. Relationship is also examined between environmental attitude and eco friendly purchases (Lehman, 1993) wherein it is also found that there exists a significant relationship between environmental attitude and eco friendly purchases while considering the recyclable value of the products.

Atkinson's (1964) has stated in the study that the perceived probability of success of green products has an impact where consumer actually goes for purchasing the green product. Consumer attitude has been found to possess a deep concern regarding environment due to which the consumer more often tends to display green purchasing behaviour. Studies have shown that consumer with ecological consciousness tends to possess strong personal character and have self-belief that their actions can help in conserving the nature, due to which they generally prefer green products (Taylor, 1981). Studies also predict that consumer with attitude which is emotionally linked and are confident in taking their decisions themselves, are the ones who have strong feeling towards environmental degradation and are more committed towards purchasing green products (Anderson, 1972). It has been found by researchers that attitude towards environment turns out to be an important factor while studying green purchasing behaviour. Consumer with positive attitude generally ends up purchasing green products. Organisations selling products are also taking positive attitude of consumer towards environment very seriously and using technology to produce green products. This may at initial phase require some start up cost to install the technology but in the long run the organisation is going to benefit from it. Studies have also shown that consumer's knowledge also affects attitude of consumer towards green purchases, products having green certification and promoted by organisations having green claims tend to mould attitude of consumer in a positive manner regarding purchasing green products (Renner, 2002). Studies also show that consumers are influenced by the information available in the product regarding environment which influences his/her purchasing behaviour. Studies also predict that environmental concern is an important factor while analysing consumer's conscious behaviour. Consumer is highly concerned about the environment due to the fact that environment has a direct effect on his/her lifestyle, which affects the consumer attitude and consumer becomes willing to purchase green products in future (Yeung, 2004). Baker et al. (2006) found that the ability of an individual to control his/ her behaviour has a positive relationship while intending to make a green purchasing decision. Taylor and Todd (1995) said that the availability of green products have a greater role in converting the purchase.

## Methodology

The study was done by circulating a detailed questionnaire among 600 respondents out of which only 490 were found valid making the successful response rate to 82%. A structured

questionnaire constructed using scales given by Fishbein & Ajzen (1975) and Ajzen 1991) was administered to the respondents. The questionnaire comprised both closed and open ended questionnaire. All the closed ended questions were studied by using five- point likert scale as the measurement tool. The samples comprised young consumers from region of Delhi, Jammu, Chandigarh and Shimla. The technique administered for collecting samples was a combination of convenience as well as simple random sampling.

## Data Analysis and Results

On basis of data collected and inferences drawn from the above literature, following two hypotheses were formulated.

H1: Environmental Knowledge has a positive relationship with Purchase Intention among young consumers.

H2: Environmental Attitude has a positive relationship with Purchase by young consumers.

After formulating the hypotheses, Cronbach Alpha Test was done to check the reliability and validity of scales used in measurement. The reliability used for the scales came out to be 0.725 for attitude, 0.726 for environmental knowledge and 0.746 for purchase intention which shows all the scales used in the research are reliable. The factors were further administered to find correlation among themselves in which it was found that the independent variables: Environmental attitude and Environmental knowledge are positively correlated to dependent variable, Purchase intention.

### Correlation Matrix

Variable	Purchase Intention(PI)
Environmental Attitude (EA)	0.875 (**)
Environmental Knowledge(EK)	0.881 (**)

(\*\* - Significance at 0.01 level (2 – tailed); N=490)

The factors were further studied through regression analysis to see the effect of independent variables on dependent variable. After analysing the factors, it was found out that environmental knowledge and environmental attitude have positive influence on purchase intention of young consumers. The R2 value comes out to be 0.413 which shows that 41.3% of intention to pay is explained by environmental attitude and environmental knowledge.

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.643a	.413	.411	1.505

a. Predictors: (Constant), EK, ATT

### Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.776	.623		4.455	.000
ATT	.391	.046	.368	8.520	.000
EK	.505	.062	.351	8.135	.000

Based on the analysis, following regression equation has been formulated to see the effect environmental knowledge and environmental attitude has on purchase intention.

$$PI = 2.776 + .505 (EK) + .391 (EA)$$

Where: PI = Purchase Intention  
 EK = Environmental Knowledge  
 EA = Environmental Attitude

## Implications and Conclusions

The findings of the research depict that environmental awareness has a greater effect on purchases related to green products. Environmental knowledge plays a vital role while going for purchase decision. The findings also reveal that environmental knowledge and environmental attitude plays a positive role while purchasing. The research also shows that both environmental knowledge and attitude have positive correlation regarding the purchasing decision of green products. Environmental knowledge always plays a positive role on attitude building which influences the consumption pattern of consumers. The above study formulates that environment related knowledge guides in building up a positive environmental attitude. Although environmental knowledge helps in developing environmental attitude but one cannot ignore attitude because environmental attitude is an important determinant of green purchase related decisions. Consumer's ecological consumption is widely understood by their attitude towards environmental issues. This signifies that consumer having positive environmental attitude are more willing to buy environment friendly products. These findings suggest that the marketer must keep in mind the green values considered as essential by consumers and then only go for segmenting and targeting of customers. The marketer must make serious efforts to make all the information available to the customer and try to persuade the customer to buy green products. The marketer must target the customer in such a way that usage of products makes the consumer feel that they are not harming the environment. The marketer must try to make such messages which connect green purchase to better and a healthy lifestyle which in turn helps in sustainable development of the society.

## Limitations and Future Scope

The study possesses few limitations which are, firstly the study only considers young consumers, so the study does not represent whole set of target customers. This limitation can also be considered as a future area for research in which whole set of population is considered. The second limitation is that it considers only a small set of consumers and in future research can be carried on at a very broader level to make the suggestions more appropriate and applicable to larger set of population. The last and final limitation is that the study has been done keeping in mind eco friendly products. So scope for future research is also there where along with green, there can be some more parameters which can be considered while seeing the consumers purchase intention.

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