International Journal of Research in Engineering, Science and Management
Volume-1, Issue-12, December-2018
www.ijresm.com | ISSN (Online): 2581-5792

Predicting Green Products and Services Adoption using the Technology Acceptance Model

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***Abstract*: Environmental concern and environmental friendly products are gaining importance in India due to growing awareness for sustainable development. The present study attempt to explore the factors leading to green consumption and their relationship for designing a conceptual framework based on Technology Acceptance Model (TAM) for green consumption behavior and its connection with purchase intention and buying behavior in emerging markets of India. Using survey data derived from 412 participants in Bengaluru, India the proposed covariance based on structural equation model consisting of Perceived Usefulness, Perceived ease of Use and Perceived Risks, Attitude, influencing the conversion behavioral intention to buy green products and that will lead to actual intention of buying green products. The findings of this Model indicate that perceived usefulness, perceived ease of use and perceived risks have significant positives influence on the purchase for green products .Furthermore results indicates that positive attitude has a significant influence on conservation behavioral intention buying of green products. We also tested proposed conceptual framework with demographics variable such as age, education and income on conservation behavioral intention to buy green products. The finding from this study contribute to improving the understanding of intention to purchase green products which could play a major role towards sustainable consumption.**

***Keywords*: Green products, perceived usefulness perceived ease of use, perceived risks, purchase intension, TAM sustainable consumption.**

1. Introduction

Over the last decade, consumption of goods and services has increased tremendously across the world, which leads to depletion of natural resources and severe damage to the environment. The rapid economic growth in the past year have witnessed increasing consumers' consumption worldwide causing environmental deterioration through over-consumption and utilization of natural recourses. [1]. It is anticipated that if the current trend of economic growth and an irresponsible consumption pattern continues, environmental degradation would worsen with the consequences of global warming, depletion of ozone layer, pollution of sea, noise ,air pollution ,acid rain and desertification.[2] . Various countries across the globe are beginning to realize this threat and have started working towards minimizing the harmful impact of their business activities on the environment. This realization and concern towards the environment and society has led to the emergence of 'sustainable development' which emphasizes the need to promote sustainability and advocates that form of development. It minimizes negative impact on the environment and society. Sustainable development encourages eco innovation and green consumption. Eco innovation focuses on incorporating environmental sustainability practices at all the stages of creation of goods and services. 'Green consumption' on the other hand, is related to environmentally responsible consumption where consumers consider the environmental impact of purchasing, using, and disposing of various products, or using various green services. Environmentally responsible purchasing is vital as unplanned purchasing of goods can severely damage the environment. 40% of the environmental damage were due to consumer household purchases. Consumers possess the ability to prevent or decrease environmental damage by purchasing green products [3]. In fact, consumers have in the past expressed their demand for green products to companies. 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 concern and positive attitude of customers towards sustainability and green products, market share of green products remains confined to just three percent of the entire market. This concludes that environmental considerations play a minor role in consumer purchasing decisions and people generally overlook environmental impacts of their purchases. While exploring green purchase behavior, many studies have reported a discrepancy or "gap" between consumers expressed favorable attitudes and actual purchasing practices. It is important to examine why environmental attitudes have a weaker influence on consumer green purchase behavior, 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 attitude and purchase behavior. [4] Once these factors are determined through proper research, steps can be taken to address these issues and encourage consumers to actually purchase green products. This study also concentrated on observing consumer's consumption patterns and non-consumption

behavior, yet the knowledge of factors affecting consumer green purchase behavior remains limited. Some studies have clearly shown that even though individuals understand the seriousness of environmental issues, their environmental attitudes do not necessarily lead to green purchasing. Even consumers with the highest level of environmental consciousness do not always purchase green products, their choice of products depends on both ecological perspectives as well as their evaluation of the various product attributes. Further, situational factors can also hamper environmentally responsible purchasing and lessen the influence of a positive environmental attitude.

Currently, because of the increased societal attention and consumer demand for environmentally friendly products, more and more companies were willing to accept the environmental responsibility Currently, environmental concerns were rapidly emerging as a mainstream issue for consumers, especially because of global warming, and many companies were seeking to profit from the opportunity. Environmental pollution could result from the inefficient use of resources, but businesses could increase their productivity with the use of green innovation. Green innovation relates to innovation in environmentally responsible products and services that were both sustainable and contributing to reducing the impact of greenhouse gases on the environment. If companies want to adopt green marketing successfully, their environmental concepts, and ideas should be in all aspects of marketing. When companies are able to provide products or services that satisfy their customers' environmental needs, the customers might be more favorably disposed toward their products or services. For the last few decades, concerns over the different environmental issues are gaining attention of various groups of the society. Consumers are becoming more aware about the environmental problems and have started realizing that majority of issues are because of increasing population, our consumption habits and are the consequences of technological advancements. These awakened consumers are now ready to change their preferences from mainstream products to greener products which have least impact on the environment. Changing consumption habits and rising preferences of consumers for green products are proving to have greater influence on the corporate world also. In response to this, big corporate houses have now started addressing environmental issues in various manners. Companies like Nike, Philips, Panasonic, UV&W, and Organic India have started manufacturing ranges of green products which appeal to green consumers and even mainstream consumers with price, design and quality parity. Not only corporate world, but every section of the society now understands the emerging needs of becoming green and adopting green behavior. Royal challengers Bangalore, a Bangalore based franchise of Indian premier league has adopted 'Go Green' initiative for addressing the issue of environmental degradation, and with the intent of reducing their carbon foot print they have adopted various initiatives like, dry waste and wet waste segregation in stadium during home matches and wearing green jerseys to acknowledge the issue of environment conservation. The recent years have witnessed the wave of environmentalism in India too. Facing the pressure exerted by environmental lobbies, the government has endorsed number of environment related legislations to battle the pollution nuisance and for the preservation of natural resources. The 'Environment Education, Awareness and Training' is a flagship scheme which has been initiated by the Ministry of Environment and Forests (MoEF), Government of India in order to enhance the understanding of public about relationships between human beings and environment and also to develop competencies to protect the environment. Under the umbrella of this initiative, MoEF formulated National Green Corps (NGC) in 2001-02 with a view to create environmental awareness among children. The program has been in operation since then and turned into the mass movement of children for preserving the environment. As many as 1, 30,931 eco clubs have been established in NGC schools nationwide under this movement. Consumers were influenced by advertisements on environmental issues and they were not only ready to buy, but were also ready to pay more for the certified eco products. Apart from this, the study highlighted in Indian context that non-availability of environmentally friendly products, lack of willingness to protect the environment, lack of enforcement of laws, indifference of people and government towards the environment, non-availability of ecofriendly alternatives and low level of education were the major hindrances in the way to solve environmental problems.

2. Literature review

Davis (1989) adapted the TRA and introduced the technology acceptance model (TAM), which was specifically developed to explain computer usage and adoption of new information technologies. Davis (1986) provided the theoretical link between two specific beliefs – perceived usefulness (PU) and perceived ease of use (PEOU) and potential adopter attitudes, intentions and computer usage behavior. Whereas the TAM has been utilized exclusively in understanding and predicting people's usage of information technologies .So Attitude-based models TAM was thus the most widely applied models to predict consumers 'adoption of green products and services as these products are innovative products compare to traditional products. The TAM posit that perceived usefulness is the strongest predictor of an individual's intention to use an information Technology. (Venktesh and Davis 2000). Lim (2003) when consumers cannot predict purchase results and feel uncertain, perceived risk exists in their decision-making process. Perceived risk can be defined as the characteristics and sum of the risk that consumers expect from particular purchase behavior and Risk Perception is the ability of an individual to feel a certain amount of loss. Risk factors always affect purchase behavior of consumers. Bjorner et al. (2004) any uncertainty or unfavorable result that consumers perceive is subjectively an expected loss also found that when consumers

have high perceived risk, their purchase intention is reduced. And pointed out that the implementation of green marketing can help consumers identify environmentally friendly products and form a basis for buying green products, which can also reduce consumer uncertainty. Therefore, consumers will perceive that green products have more value and reduce their perceived risk. Lee (2009) combined the TAM Model with theory of planned behavior (TPB), to understand the adoption of internet banking (Green Banking).Their study shows that respondent adopt internet Banking due to convenience even not knowing technology. And convenience is the major factor that motivate the customers' in to green banking adoption. Marius Christopher (2011) Findings suggest that four key barriers, lack of awareness, lack of value as well as usage and image are responsible for consumer resistance to green products adoption. And higher the perceived barriers or trade-off, the higher consumers' level of resistance to green products. Perceived risk indicate consumers' uncertainty about the outcomes of individual purchase, use, or disposal behavior. Lack of awareness towards the green products is the significant cause for not purchasing green products. Hong, Youl, and Swinder (2012): - Examines behavioral intentions toward purchase of energy-efficient products result indicate Consumers' attitudes toward energy-efficient products have a stronger effect on intentions compared to the subjective norm component.

3. Methodology

All the required data for the study was collected from both primary and secondary sources. The residents of city of Bengaluru has been chosen as population of study. Convenience sampling method adopted because of its convenience, low costs, a high response and easy access approach. Sample size of 412 believed to be fair representative of the population for consumer study. Face to face interview method adopted to collect the data.

A. Primary data

The primary data was collected from the direct interview method and online survey conducted through structured questionnaire from 412 respondents.

B. Construction of questionnaire and scoring

Based on experts' suggestion, the final questionnaire was modified and the number of indicators was reduced 56 accordingly to be responded on a 5 point likert scale. The basic questions were formulated based on the earlier studies and review of literatures on the research subject. The questionnaire consisted of 14 indicators on each of the divisions measured on a likert scale. All the indicators were measured on a 5-point rating scale from strongly disagree to strongly agree with 1- Strongly Agree, 2- Agree, 3 – Neutral, 4 – Disagree and 5 – Strongly Disagree. A few statements were reverse coded. For the benefit of the readers, the indicators under each of the

Table 1
Demographic distribution

Features	Classification	Frequency(n)	Percentage
Gender	Male	235	57
	Female	177	43
	TOTAL	412	100
Age	Less than 30 years	218	53
	31 – 40 years	121	29
	41 – 50 years	54	13
	51 years and above	19	5
	TOTAL	412	100
Education	Higher primary	33	8
	Below Graduation	87	21
	Graduates	107	26
	PG	136	33
	Professionals	49	12
	TOTAL	412	100
Occupation	Students	136	33
	Home Makers	60	15
	Business	43	10
	Services	115	28
	Govt Employees	58	14
	TOTAL	412	100
Income	Under 15000	150	36
	15000 – 30000	107	26
	30000 – 50000	78	19
	50000 – 75000	41	10
	75000 +	36	96
	TOTAL	412	100
Family Size	0 – 2	23	6
	3 – 5	334	81
	6 – 8	47	11
	Above 8	8	2
	TOTAL	412	100

dimension are shown in Chart -I

C. Secondary data

Apart from primary data collected, the secondary data was also collected for present study. It is that data that was collected by other researchers.

D. Data analysis technique

As mentioned above, the independent variables used in this study, i.e. perceived usefulness, perceived ease of usefulness and perceived risk, are theoretical constructs that cannot be observed directly. It was therefore crucial to establish internal and external validity of these latent constructs via CFA before estimating their influence on the above mentioned dependent variables (e.g. Gerbing and Anderson 1988). Confirmatory factor analysis (CFA) is a type of structural equation modelling (SEM) that deals specifically with measurement models, that is, the relationships between observed measures or indicators (e.g. test items, test scores, behavioral observation ratings) and latent variables or factors. (Brown 2006, p. 1)

4. Analysis and discussion

A. Demographic profile

Our sample is composed of 412 respondents. We have more men than women but difference is not high. 43% of women (177) respondents and 57% of men (235) have participated in our survey. Half of the sample is composed of people who are less than 30 years old, 29% are between 31-40 years old. Overall it is found that majority of the consumers who participated in the survey are from the younger age group .With postgraduate qualification and working in a private company. The distribution of demographic profile of the respondents is presented in the Table 1.

B. Structural equation model analysis

1) Conceptual frame work

The hypothesized model or frame work of the research study is depicted in Fig 1. The frame work is based on Technology Acceptance Model. Accordingly, three constructs or determinants namely Perceived Usefulness, Perceived ease of use and Perceived risks which are informative in nature influencing the convention behavioral intention to buy green products. Furthermore, it is believed that convention behavioral intention to buy green products will lead to actual intention of buying green products and services. Finally, the influence of external demographic variables such as Age, Education and Income on convention behavioral intention to buy green products is also looked into.

- H_1: Perceived usefulness has a positive and significant influence on attitude towards buying Green Products.
- H_2: Perceived ease of use has a positive and significant influence on attitude towards green Products.
- H_3: Perceived risk has a negative and significant influence on attitude towards buying green Products.
- H_4: Perceived usefulness has a positive and significant influence on Actual buying Green Products.
- H_5:PositiveAttitude has a significant influence/impact on conservation behavioral intention buying of Green Products
- H_6: Younger age group has a positive attitude towards conservation behavioral intention of buying green Products.
- H_7: Educational Status has a positive attitude towards conservation behavioral intention of buying green Products.
- H_8: Household Income has a positive attitude towards conservation behavioral intention of buying green Products.

Chart I – Dimension Labeling for green products

Variable (Indicator)	Dimension
Usage of more organic foods, vegetables & Herbal products really improves our health	**Perceived Usefulness**
Biodegradable packaging is a perfect replacement to plastic packaging	
Usage of more Bio fuel for automobiles would help in reduction of carbon	
Biodegradable packaging is easy to handle as compared to packaging material	**Perceived ease of Use**
Non availability of bio fuels sometimes result in dependency towards carbon fuel	
Very limited range of green products, so it is easy to select and buy green products	
Adverse effect on health is expected with more usage of herbal/organic farm products	**Perceived Risk**
Bio fuel production result in loss of wildlife habitat, huge carbon emission	
Plastic has become a lifestyle and it's difficult to shift to biodegradable packing	**Attitude towards buying Green Products**
Green products are very complex and require lot of knowledge	
As my knowledge w.r.t green product is very limited, I prefer non green products	**Conservation Behavioral Intention to buy**
I would check for Environmental aspects before buying green products	
Although, I am concerned about environment, I still prefer to buy non green products in future	**Actual buying of green products**
I would recommend to my friends and relatives to buy more green products	

Table 2
Reliability and Item Loadings Constructs of Measurement Model for Behavioural intention to buy green products

Latent Variable	Indicators	Standardized Loadings	Composite Reliability	Coronach Alpha	Average Variance Extracted (AVE)
Perceived Usefulness (PU)	PER_USFN_1	0.726	**0.671**	**0.674**	**0.408**
	PER_USFN_2	0.571			
	PER_USFN_3	0.608			
Perceived Ease of Use (PE)	PER_EAS_1	0.679	**0.677**	**0.681**	**0.416**
	PER_EAS_2	0.516			
	PER_EAS_3	0.721			
Perceived Risk (PR)	PER_RISK_1	0.746	**0.670**	**0.671**	**0.505**
	PER_RISK_2	0.487			
Attitude towards Green products (AGP)	Attitude_1	0.911	**0.690**	**0.706**	**0.546**
	Attitude_2	0.511			
Conservation Behavioral intention to Buy (CONBHIB)	CONBHIB_1	0.789	**0.607**	**0.617**	**0.446**
	CONBHIB_2	0.520			

- H_9: Conservation behavioral intention result in actual buying of green Products.

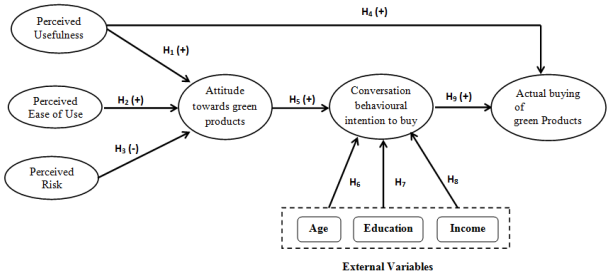

Fig. 1. Conceptual frame work – Intention to buy green products

C. Data analysis tools

Research carried out by using Structural Equation Modelling (SEM) which was run by AMOS Program to achieve first objective of the research study.

Confirmatory Factor Analysis (CFA) is used when the researcher postulates relations between the observed measures and the underlying factors 'a priori', based on knowledge of the theory, empirical research, or both, and then tests this hypothesized structure statistically. Because the CFA model focuses solely on the link between factors and their measured variables, within the framework of SEM, it represents what is called as a measurement model. In this study, the model was developed 'a priori', hence only the CFA was used. The objective of confirmatory factor analysis is to test whether the data fit into a hypothesized measurement model. In confirmatory analysis factor loadings are interpreted as regression coefficients maybe in standardized or un standardized form. The confirmatory factor analysis model focuses mainly on the link between factors and measured variables within the framework of SEM. It is called as the measurement model. Confirmatory factor analysis (CFA) is a statistical technique used to verify the factor structure of a set of observed variables.

D. Measurement model

In this context, firstly the measurement model or also sometimes referred as confirmatory factor analysis of convention behavioral intention to buy agricultural green products is shown in Fig. 2 comprises of four factors or dimensions namely Perceived Usefulness, Perceived Ease of Use Perceived Risks and Attitude towards buying agricultural green products Each factor is measured by a minimum of two to a maximum of three observed variables, the reliability of which is influenced by random measurement error, as indicated by the associated error term. Each of these observed variables is regressed into its respective factor or dimension.

E. Composite reliability

The composite reliability (see Table 2) shows the internal consistency of the constructs used which is similar to the cronbach alpha. In this regard the composite reliability a construct or a dimension has to be greater than 0.60 (Chin, 1998).

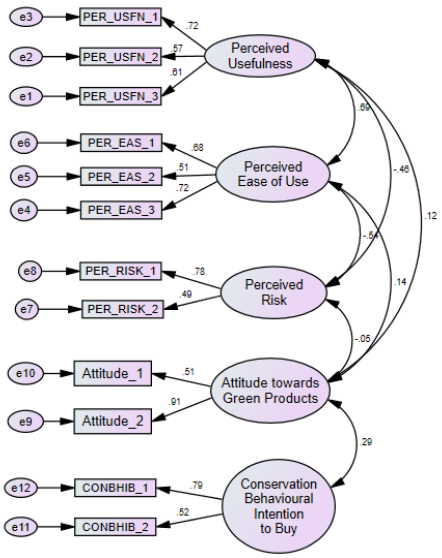

Fig. 2. CFA of Measurement Model - Behavioral Intention of buying green products

F. Convergent validity:

Convergent validity is shown when each measurement item correlates strongly with its assumed theoretical construct. In other words the indicators that are the indicators of a construct should converge or share a high proportion of variance in

Table 3
Discriminant validity result

	Square root of AVE	PU	PE	PR	ATT	BIB
PU	0.639	1				
PE	0.645	0.591	1			
PR	0.711	-0.478	-0.565	1		
ATT	0.739	0.118	0.139	-0.076	1	
BIB	0.668	-	-	-	0.291	1

common. The value ranges between zero and one (0 – 1) .The ideal level of standardized loadings for reflective indicators is 0.70 but 0.60 is considered to be an acceptable level (Barclay et al., 1995).Accordingly, it is observed from Table 1 that most of the indicators under each construct have loadings greater than 0.60. Hence, it could be concluded that there is an occurrence of convergent validity is not a complete convergence.

G. Discriminant validity

Discriminant validity refers to testing statistically whether two constructs differ. Yet, the rule of thumb is that the average variance extracted (AVE) values should be greater than corresponding Inter-construct correlation estimates (IC) in the model [Fornell and Larcker, 1981]. Ideally, the square root of AVE value for each construct should be greater than 0.50 (Hair et al., 2011).

Accordingly, from the Table 3, the findings show that the square root of AVE's of all the constructs are greater than the square of the correlations between any two latent variables together considered, which shows that all the constructs are having discriminant validity (Fornell-Larcker, 1981). For example, the square root of value of Average Variance Extracted (AVE) estimate for BIB is 0.664 and corresponding inter-construct correlation estimates (IC) value between Perceived Usefulness [PU] and Attitude towards buying green products is 0.739 and also IC between Perceived Ease of Use [PE] and ATT is 0.118. Thus square root of AVE is greater than IC and these values establish the discriminant validity among the latent variables in that they do not statistically overlap each other and are free from the problem of multico-linearity.

H. Model evaluation criteria

Goodness of Fit Index (GFI) is a measure of the relative amount of variance and covariance matrix. Goodness of Fit measure is unique. This index was first proposed by Joreskog and Sorbom in the year 1981. Goodness of fit =1.0 indicates a perfect model fit and values close to zero indicate a poor fit. These measures are classified into three groups' viz., absolute measures, incremental measures, and parsimony fit measures. The values of any goodness of fit measure result from a mathematical comparison of the hypothesized model and the saturated model. Another model originally associated with the same index is the Adjusted Goodness-of-Fit Index (AGFI). AGFI differs from the goodness of fit index only with the fact that it adjusts for the number of degrees of freedom in the model. The goodness of fit index and adjusted goodness of fit index can be classified as absolute indices of fit because they compare the hypothesized model with no model at all.

Some of the goodness fit indicators used to evaluate model fitness in SEM model are as follows:

Table 4
Goodness-of-fit & Incremental Indices of Measurement model for Behavioral Intention of buying green products

Fit Indices	Accepted Value	Model Value
Absolute Fit Measures		
$\chi 2$ (Chi-square)		125.894
df (Degrees of Freedom)		47
Chi-square/df ($\chi 2$/df)	< 3	2.679
GFI (Goodness of Fit Index)	> 0.9	0.918
RMSEA (Root Mean Square Error of Approximation)	< 0.10	0.089
Incremental Fit Measures		
AGFI (Adjusted Goodness of Fit Index)	> 0.80	0.864
NFI (Normed Fit Index)	> 0.90	0.885
CFI (Comparative Fit Index)	> 0.90	0.848
IFI (Incremental Fit Index)	> 0.90	0.853
RFI (Relative Fit Index)	> 0.90	0.789
Parsimony Fit Measures		
PCFI (Parsimony Comparative of Fit Index)	> 0.50	0.604
PNFI (Parsimony Normed Fit Index)	> 0.50	0.559

Table 4 depicts the Goodness-of-fit & Incremental Indices of Measurement model for behavioral Intention of buying green products. From the result, it is clearly observed that majority of the indices are above the acceptance value and hence we proceed for SEM model structure. Finally, Table 5 depicts the Goodness-of-fit & Incremental Indices of SEM model for behavioral Intention to buy green products. Firstly, Goodness

Table 5
Goodness-of-fit & Incremental Indices of SEM model for Actual Buying of Green Products

Fit Indices	Accepted Value	Model Value
Absolute Fit Measures		
$\chi 2$ (Chi-square)		222.446
df (Degrees of Freedom)		110
Chi-square/df ($\chi 2$/df)	< 3	2.022
GFI (Goodness of Fit Index)	> 0.9	0.890
RMSEA (Root Mean Square Error of Approximation)	< 0.10	0.070
Incremental Fit Measures		
AGFI (Adjusted Goodness of Fit Index)	> 0.80	0.847
NFI (Normed Fit Index)	> 0.90	0.826
CFI (Comparative Fit Index)	> 0.90	0.881
IFI (Incremental Fit Index)	> 0.90	0.889
RFI (Relative Fit Index)	> 0.90	0.864
Parsimony Fit Measures		
PCFI (Parsimony Comparative of Fit Index)	> 0.50	0.656
PNFI (Parsimony Normed Fit Index)	> 0.50	0.563

of Fit index (GFI) obtained is 0.918 as against the recommended value of above 0.90; The Adjusted Goodness of Fit Index (AGFI) is 0.864 as against the recommended value of above 0.80 as well. The Normed fit Index (NFI), Relative Fit index (RFI), Comparative Fit index (CFI), Incremental Fit Index (IFI) are 0.885, 0.789, 0.853 respectively as against the recommended level of above 0.90.

RMSEA is 0.089 and is well below the recommended limit of 0.10, and Root Mean Square Residual (RMR) is also well below the recommended limit of 0.08 at 0.013. This can be interpreted as meaning that the model explains the correlation to within an average error of 0.013 (Hu and Bentler, 1999). Hence the model shows an overall acceptable fit. The model is an over identified model. Now, we proceed to SEM model fit as shown in Fig. 3.

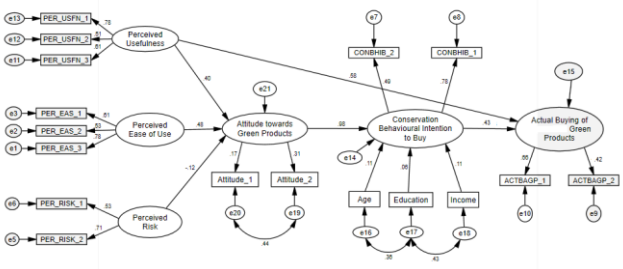

Fig. 3. Full SEM Model for Actual buying of green products

The regression results are provided in Table 6. Accordingly, it is observed that the p-value of the relationship between Perceived usefulness and Attitude towards buying (ß=0.02, C.R = 2.229, p<0.05) is less than the significance alpha level of 0.05, we accept H1 and conclude that Perceived usefulness is positively related to Attitude towards buying green products. The interpretation is that, for one unit increase in the rating scale of agreement on Perceived usefulness construct, one could expect about 0.402 times (approximately one third times) increase in the attitude towards buying green products by the consumers. Likewise, it is observed that it is observed that Perceived ease of use has a significant positive relationship with Attitude towards buying (ß =0.482; CR= 2.317, p<0.05), thus, H2 could be asserted. Similarly, it is observed that Perceived risk has a negative relationship (influence) on Attitude towards buying (ß = - 0.125; CR= - 2.136, p<0.05), thus, H3 could be asserted. Furthermore, it is observed that a direct and positive and significant relationship between Perceived usefulness on Actual buying of green products (ß = 0.577; CR=2.274, p<0.05). Hence H4 is asserted. Similarly, Attitude towards buying green products has an influence on behavioral intention to buy green products (ß = 0.981; CR=2.298, p<0.05). Thus, H5 is asserted however, with regard to the influence of demographic variables (Age, Educational Status and Income) on behavioral intention to buy green products, it is observed the

Table 6
Direct Effect of Research Model: Standardized Regression Weights for Green Products

Relationships between Exogenous and Endogenous			Standard Estimate	S.E.	C.R.	P-value
Attitude towards buying GP	<---	Perceived usefulness	0.402	0.096	2.229	0.026
Attitude towards buying GP	<---	Perceived ease of use	0.482	0.066	2.317	0.021
Attitude towards buying GP	<---	Perceived risk	- 0.125	0.055	-2.136	0.036*
Actual buying of GP	<---	Perceived usefulness	0.577	0.127	2.274	0.018*
Behavioral intention to buy		Attitude towards Green Products	0.981	0.662	2.298	0.022
Behavioral intention to buy	<---	AGE	0.109	0.041	1.295	0.195
Behavioral intention to buy	<---	Educational Status	0.062	0.029	0.682	0.495
Behavioral intention to buy	<---	Household Income	0.111	0.032	1.290	0.197
Actual Buying of GP	<---	Behavioral intention to buy	0.427	0.044	2.271	0.023*

*Significance at 5 % level

Table 7
Regression Results: Summary of test results on study Hypotheses relating to Green products

Hypotheses	Study Hypotheses	Result
H_1	Perceived usefulness has a positive and significant influence on attitude towards buying ***Green Products***.	Supported
H_2	Perceived ease of use has a positive and significant influence on attitude towards buying ***Green Products***.	Supported
H_3	Perceived risk has a negative and significant influence on attitude towards buying ***Green Products***.	Supported
H_4	Perceived usefulness has a positive and significant influence on Actual buying ***Green Products***.	Supported
H_5	Positive Attitude has a significant influence/impact on conservation Behavioral intention buying of ***Green Products***	Supported
H_6	Younger age group has a positive attitude towards conservation behavioral intention of buying ***Green Products.***	Not Supported
H_7	Educational Status has a positive attitude towards conservation behavioral intention of buying ***Green Products.***	Not Supported
H_8	Household Income has a positive attitude towards conservation behavioral intention of buying ***Green Products.***	Not Supported
H_9	Conservation Behavioral intention results in actual buying of ***Green Products.***	Supported

p-values of these three variables are greater than the significance level alpha of 0.05. Hence, H_6, H_7 and H_8 are not asserted. Finally, Conservation behavioral intention has a significant influence on actual buying of green products (ß = 0.427; CR=2.271, $p<0.05$). Thus, H_9 is asserted.

5. Conclusion

The research contributes to a growing body of work in the green consumer behavior domain that investigates consumer response to sustainable new products. This thesis examined consumer perceptions and attitudes towards green products and how they influence green consumption. This study contributes to theory and practice in green marketing and green consumption, and argues that challenges are posed by issues of green consumption behavioral influences.

- To analyze the Consumer perception towards Environment Friendly product the present study has taken some factors some of them are, preference, awareness, initiative, this study provides with the conclusion that there is a lack of standardization to certify the product as organic unless some regulatory bodies get involved in providing the certification. A standard quality control board has to be in place for such labelling and licensing.
- As it's a new concept, there is lack of general awareness. People need to be educated and made aware of the environmental threats related to it. The new green movement needs to reach the masses and that will take a lot of time and efforts.
- The investors and corporate world need to view the environment as major long-term investment opportunities, the marketers need to look at the long term benefits from this new green movement.
- As it is a new concept, it will have its own acceptance period. The first rule of green marketing is to focus on customer benefits, the main reason why customers would prefer to buy specific products at first place. Therefore companies should motivate consumers to switch brands or even pay premium for the greener alternatives.
- It is not going to help if a product is developed which is absolutely green in various aspects but it does not fulfil the customer satisfaction criteria. It will also lead to green myopia concept where other companies get benefit by selling low products compare to environmental safe products which are expensive. Also if the green products have high cost then again it will lose its market acceptability. Therefore companies should make long term policies for Environment sustainability.

A. Limitations of the study

Concerning our data collection and analysis, we faced to some difficulties because we realized that our sample was likely too small (412) to obtain more relevant data that generated a lack of reliability. This study is undertaken only within geographical limits of Bangalore City so study cannot generalized for all the areas.

B. Areas for future research

Further Research might focus on the awareness knowledge and adoption of youths on green products with reference to age group, level of education and living standards, the correlation between youth's environmental attitudes, their interaction to use the green products and their actual behavior should be explored quantitatively with a large sample by expanding the survey to youth in entire India. Secondly, as this study utilized quantitative data, it aimed to provide a detailed description analysis of consumer's perception and attitudes. Impact on buying behavior Therefore, its findings provide an informative frame work for further qualitative research, which is recommended in order to validate and extend its findings. Finally, group conformance reduces the risks associated with purchasing green products. The influence of social identity, group membership, normative and informative value as per influence on green purchase behavior presents an interesting research area in India.

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