ECOLITERACY, ENVIRONMENTAL RESPONSIBILITY ATTRIBUTION AND SOCIAL INFLUENCE AS DETERMINANTS OF GREEN CONSUMER BEHAVIOUR OF UNDERGRADUATE STUDENTS

SAJILA K. M.

Thesis

Submitted for the Degree of

DOCTOR OF PHILOSOPHY IN EDUCATION

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DECLARATION

I, **SAJILA K. M.**, do hereby declare that this thesis entitled **ECOLITERACY, ENVIRONMENTAL RESPONSIBILITY ATTRIBUTION AND SOCIAL INFLUENCE AS DETERMINANTS OF GREEN CONSUMER BEHAVIOUR OF UNDERGRADUATE STUDENTS** has not been submitted by me for the award of any Degree, Diploma, Title or Recognition anywhere else earlier.

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This is to certify that the thesis entitled **ECOLITERACY, ENVIRONMENTAL RESPONSIBILITY ATTRIBUTION AND SOCIAL INFLUENCE AS DETERMINANTS OF GREEN CONSUMER BEHAVIOUR OF UNDERGRADUATE STUDENTS** is an authentic record of research work carried out by **SAJILA K. M.**, for the degree of **Doctor of Philosophy in Education** of **University of Calicut**, under my supervision and guidance and that no part thereof has been presented before for any other Degree, Diploma or Assoctiateship in any other University.

The thesis is revised as per modification and recommendation reported by the adjudicators and re-submitted.

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C. U. Campus
.10. 2017

Dr. M. N. MOHAMEDUNNI ALIAS MUSTHAFA
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Education is essential for every society and individual. It is the means through which the aims and habits are sustained, transformed and transmitted from one generation to the next. The main aim of education is the all-round development of an individual in to a complete integrated person. Education's key roles of acculturation coupled with catalysing individual and societal progress needs a meticulous planning followed by its execution with extreme sensitivity (NPE, 1992). A comprehensive education towards this helps in achieving and developing skills, abilities, values, insights and scientific temper. Besides the literary and aesthetic appeal of education, there are utilitarian aspects too which are of greater importance in modern life. One such universal embodiment of life oriented education is the Education for Sustainability (EfS) that beholds the key idea of creating a firm nexus between education, environment and society.

Education and Ecology has increasingly accepted that, the activities of human are fast overwhelming the self regulating capacity of the planet. Human activities are tremendously impacting the environment and degrading it beyond the limits. One such detrimental activity arises from the aftermath of the role of humans as consumers for survival and existence. However, the various environmental issues prevailing have prompted consumers to become more aware of their impact on the environment. In the contemporary world, *Green* has become a mainstream issue driving millions to find out how people can live a more ecofriendly existence. Accordingly several measures have been adopted in various sectors like business, marketing, education, science, technology and several others to re-evaluate human behaviour and consumption patterns.

Education is universally considered as the most crucial sectors that can invariably contribute towards moulding behaviours and in inducing social change to heed sustainability. Several educational efforts and reformations have been done by various governmental and non-governmental agencies for addressing the issues. Unsustainable ways of human consumption for survival is causing extensive damage to the environment. Hence, creating awareness on environment and raising consumer awareness on adopting environment friendly and sustainable lifestyles in tandem is equally important in education. This can be materialised through EfS with a consumer focused approach that invariably develops the right cognizance to reorient the consumer behaviour towards being more ecofriendly for sustainable living. This should rightly foster Green Consumer Behaviour among students that pave the way for manifesting environmentally responsible consumer behaviours for sustainability.

EfS is a step towards education that prepares for life that seeks to embed the knowledge, awareness and understanding about sustainability across the varied aspects of curriculum. The National Curriculum Framework of India has emphasised the paramount importance of imparting Environmental Education at various stages of school education (NCF, 2005). Another landmark that gave impetus to environment oriented education was the Supreme Court judgment enforcing compulsory environmental education by the state government and the education departments at all levels on a mandatory basis (Anand, 2016). The University Grants Commission (UGC), which is the apex body governing and maintaining the standards of Higher Education (HE) in India, emphasised value oriented education for sensitisation of individuals, transforming them by imbibing the right set of values that enable them to be humane while interacting with fellow beings and environment (UGC, 1996). This was materialised through the recommendations put forth by the committee headed by Justice J. S, Verma in

1999 to include in the HE curriculum, the Fundamental Duties enshrined in the Article 51(A) of the Indian Constitution specifically emphasising the clauses like (e), (g), (h) and (j) that rightly linked education with sustainable development.

Higher Education Institutions (HEIs) have immense power of autonomy to function in the broad relevance to attain the aims of education. HEIs can bring about drastic changes in the thoughts and actions of the citizens of the nation towards building global environmental citizenship. Such institutions are the training grounds for moulding the youth with potential for humanitarian approach to environment facilitating sustainability through fostering Green Consumer Behaviour. Indeed, it is this generation that has witnessed and lived through the worst ecological devastations caused by natural disasters. Since environmental issues are particularly relevant and known to today's young generation, the youth are likely to be more aware and capable of recognizing their position within the ecological setting. Given their exposure to these events, this generations' role will be pivotal in leading the society towards sustainable development for improving the environmental quality of life. Hence, there is a vital need to develop educational forms that are robustly congruent with the environmental issues addressed. This must induce in making greater efforts to reduce environmental damage by adopting green initiatives like green behaviours for sustainable living that generate a minimum detrimental impact on the environment.

A sustainable future depends on the quality of thoughts and actions of the upcoming generation. In pursuing Education for Sustainability, educational institutions at all levels need to calibrate their efforts to educate students for a sustainable future. The youthful energies of students at young age must be perfectly channelized to induce transformations in the society in sustainable ways. This can only be operationalised through a practice oriented

approach to learning wherein the educational experiences are directly related to life. Taking into account the potential of students at Higher Education (HE) as emerging decision makers of the society, greater focus should be given to this sector in nurturing the desired qualities for global citizenship. To materialise this, education for sustainability with a consumer focused approach is the need of the hour and therefore consumer education is vital for raising consumer awareness which may either be imparted through a particular subject or through several subjects adopting a multidisciplinary approach to teaching and learning (OECD, 2009). This could be a good starting point for educators to develop a curriculum dedicated to this cause.

Greening the multifaceted aspects of HE would indicate a positive inclination amongst its stakeholders to adopt more sustainable lifestyles. This adaptation must be essentially reflected among the students who are one among the stakeholders of education. Curriculum which is essentially considered as a tool for moulding students according to the ideals of society, nation and global citizenship, has a massive potential for transforming generations with revolutionary changes. Hence the curriculum must be enriched with elements related to the nexus between humans and nature that rightly provoke the thoughts and actions of young citizens to be ambassadors of the planet Earth.

Students at tertiary level of education, who are at their formative stage of life, is rightly adorned with the potential to think creatively and constructively for finding out practical solutions to the sustainability problems prevailing in the society (Sibbel, 2009). College students as current and potential consumers, who constitute a major part of consumer population, have a considerable power and responsibility to exercise their choices sensibly in the market. Education for sustainability with a consumer focused approach with an obvious orientation towards environment improves

consumer awareness of students. Such an education must enable the students in making sensible decisions thereby transforming them as environmentally responsible green prodigies.

Transformations demand gauging the present status of the determinants of student's behaviour so as to comprehend the mode of changes that are to be essentially considered for the attainment of the desired goals. For the manifestation of environmentally friendly consumer behaviour, the individual must develop awareness along with the right attitude which gives impetus for the manifestation of Green Consumer Behaviour. How far the present system of HE has been able to mould the behaviour of young citizens towards becoming green consumers? To what extent the system has succeeded in providing the right educational opportunities and experiences for developing the sense of environmental responsibility of students for environmental stewardship? To gain insight on such matters it is essential to conduct an indepth study to identify the influential factors that facilitate in modifying the behaviour of students in to responsible green consumers for environmental citizenship.

The factors that were most relevant to the academic and social milieu of students pursuing HE that has the immense potential for influencing the Green Consumer Behaviour such as Ecoliteracy, Environmental Responsibility Attribution and Social Influence were made the focal point of the study. Green Consumer Behaviour which is a sub set of human behaviour involves the study of decision process and physical activities in which the individual engage while evaluating, acquiring, using or disposing of goods and services that they expect will satisfy their needs and wants without any detrimental input on the environment. Consumer awareness of students about the rights and responsibilities as green consumers through formal and informal means is inevitable in this era of sustainable development. This is

expected to be a yardstick to measure their overt support for sustainable development. The present study sheds light on the importance of educating the youth to satisfy individual goals in such a way that the preservation, protection and conservation of the physical environment are upheld for sustainable living.

Need and Significance of the Study

Education, specifically, the Higher Education (HE) has a greater role to play in the wider context of the society in influencing the students and their fellow beings for maintaining the quality of life (IAU, 2006 and Sherren, 2006). It has a prominent role in shaping the lives of young citizens through imparting enriched teaching and learning experiences in the institutions. Such a life oriented education must be befitting sustainable living encompassing economic, socio-cultural, environmental aspects of life of individual. This would be fruitful only if the students are enriched with relevant knowledge, capacitated with adequate skills and adorned with right attitude that induces action oriented behaviours for environmental sustainability. Education for sustainability with a consumer focused approach is of paramount importance to produce citizens who can efficiently facilitate the utilisation of environmental resources on a long run for economic and social development of the nation and humanity at large.

Amidst the stakeholders of education, students are assumed to be the most beneficent of all. Hence a study that focuses on the ripe and enriched state accomplished by the students to take up the major responsibilities and to take vital decisions of life is essential for moulding environmentally responsible young citizens. Such qualities imbibed by the young citizens from the HEIs should not only be put in to practice in the context of their academic lives but also transfer this learning to their future professional pursuits as well as personal lives. Students of HE who constitute a major part of consumer

population as current and potential buyers of goods and services in the market, determining what they know about the environment, how they feel about it, what are their intentions and what actions they take that may help or harm the environment is critical to establish the sustainability of a community.

Even though there exists genuine concerns about the state of environment, there is a lack of awareness among individuals about going green. A society pursuing sustainability should reflect this principle centrally in its educational system. Educating young people to be 'environmentally responsible or green consumers' have never enjoyed a high priority in educational institutions. The National Policy on Education (NPE) have fuelled the vital need of environment oriented education for creating environmental consciousness permeating all sections of the society through integration in the entire process at all levels of education (NPE, 1986). The Organisation for Economic Co-operation and Development (OECD), an intergovernmental economic organisation has rightly recognised that, the significance and efficiency in raising consumer awareness rightly dwelt in clear cut definition of objectives and strategies which forms stronger foundation for formulating policies. It has also recommended the need for implementing consumer education at early age itself by incorporating it in to educational programmes on an independent subject basis or multidisciplinary basis appropriately that continues in all stages of life (OECD, 2009).

There is an essentiality of enhancing education to facilitate sustainable living through consumer focused education with an orientation towards environment and its implications in the light of sustainable development. Consumer awareness and Green Consumer Behaviour enhances the life and decision making skills pertaining to sustainable development among the youth. Education in this area is vital for empowering students to act as

discriminating consumers capable of making informed choices and to practice their rights and responsibilities of preserving and conserving the environment. Such an education should aim at transforming students into Green Consumers with higher knowledge, attitude, concern and more efficiency (in relation to sustainability, environment, green products and green services) in relation to the environment attributing greater responsibility to the self and community to protect and conserve the same for sustenance of life on Earth.

Over the past few decades, environmental problems and issues have been extensively recognized and discussed. A large number of respondents all over the world state that they are 'concerned' or 'very concerned' with environmental problems. Numerous studies supported the importance of young consumers' appeal towards ecofriendly products (Lee, 2011). Several researches have also focused on determining the various factors that influence the Green Consumer Behaviour of individuals, specifically that of undergraduates. Studies reveal that the intentions, behaviours and perceptions of green consumers are influenced by internal conditions, psychological factors, personal factors and external influences. Researches show that, despite the increased awareness, there is still wide variation between consumer intentions and their behaviours. In regards to how knowledge affects consumers' ecological behaviours, findings have been contradictory. In most cases, knowledge was found to be significantly related to how consumers gather, organize, and evaluate products, as well as being a significant predictor of ecofriendly behaviour (Vining, 1990). Cheah *et al*. (2011) identified the key antecedents and moderators that influence consumers' willingness to purchase ecofriendly products like ecoliteracy, interpersonal influence (social factors) and value orientation.

There are several studies that reveal positive correlations between environmental attitude and ecofriendly behaviours (Van Liere & Dunlap

1981; Roberts & Bacon 1997). Findings of these studies reveal that attitudes are the most consistent predictor of pro-environmental consumer behaviours. It was also found that the stronger the consumers believe that their Environmental Action are effective in enhancing the environmental conditions; the greater will be the effect of Environmental Attitude on Green Consumer Behaviour (Bruyere, 2008 and Keum, 2013). On the other hand, there are some researchers who have identified weak or insignificant relationships between attitude and behaviour (Wicker 1969). Ajzen & Fishbein (1980) demonstrated that there is a strong empirical relation between intention and behaviour. They purports that "a person's behaviour is determined by an individual's intention to perform the behaviour and that this intention is, in turn, a function of attitude toward the behaviour and his or her subjective norm". Hence it is a vital need to examine the factors that influence Green Consumer Behaviour with specific reference to Environmental Awareness, Environmental Attitude and Environmental Actions to gain clear insight of the determinants of Green Consumer Behaviour.

The awareness of consumers in Asian societies regarding global environmental problems is growing. Paradoxically, the growing concern of consumers about the environment appears to have little noticeable impact on consumers' pro-environmental behaviors. Therefore, it has become clear that the prediction of Green Consumer Behaviour which is a form of pro-environmental behaviour needs to be analyzed more comprehensively in the Indian context. Although there is increasing concerns of consumers towards environmental issues, it does not appear to have generated a significant impact on individual Green Consumer Behaviours. The practical relevance of the proposed research problem is increasing as education with an orientation towards environmental paradigm is emerging as a trend for heeding sustainability. Therefore, it is important to look into the potentiality of HEIs

as social institutions that could nurture young citizens capacitated to contribute exuberantly towards the socio-economic progress of the society and nation at large.

There have been only quite a few studies conducted on orienting education for promoting Green Consumer Behaviour among students of HE. Apart from this, the result varies either due to different countries were set as the origin or different samples were used for the study. Together, the green marketing studies in Asian countries are relatively less compare to Western countries (Lee, 2008). Moreover, there are only quite a few studies in the Indian context that throws light on the determinants of Green Consumer Behaviour of individuals, with only very few studies undertaken to shed light on the Green Consumer Behaviour of undergraduate students. Taking the Kerala context, which is rightly a consumeristic state, only a meagre number of studies can be seen to understand the Green Consumer Behaviour of individuals with almost a very few directed towards comprehending the Green Consumer Behaviour of undergraduate students. The aspect to be considered here is that most of such studies pertain to contributions to the field of business and marketing, with very few studies taken up in the academic context for reorienting the educational pursuits for attainment of the goal of sustainability. Thus, it is important to perform a study to understand the Green Consumer Behaviour in the Indian context with specific reference to the Green Consumer Behaviour of undergraduate students of Kerala.

It is invariably found that psycho-social variables influence greatly in exhibiting environment friendly consumer behaviour. Intentions, behaviours, knowledge, attitudes and environmental action can significantly be related to ecofriendly behaviour. Attributing greater responsibility for environmental protection and influence of others are also important determinants of an individual's behaviour. Hence the identification of these variables can

transform and transpire to evolve potential green consumers in the learning community thereby empowering them with environmental stewardship. Moreover, the psycho-social variable identification facilitates the educational administrators, policy makers, curriculum planners and educators in infusing the components of green education and green curriculum for different levels of education.

The present study attempted to find out personal and social variables as determinants of Green Consumer Behaviour of undergraduate students. The personal variables encompass Ecoliteracy and Environmental Responsibility Attribution, while the social variable constitutes Social Influence on students in manifesting Green Consumer Behaviour. The students pursuing bachelor degree of commerce were exclusively selected for the study owing to their persistence of knowledge about marketing and consumer behaviour, which is a part of the undergraduate curriculum. Due to the fact that the faculty for environmental education is prevailing from initialisation of schooling and is followed throughout the learning stages till the college level, there is a need to find out how far the education of these students have been fruitful in transforming them as green consumers.

The investigator made a rigorous attempt to deeply comprehend the nature and effects of variables. The effects and inter-relationships are tested among variables like Ecoliteracy (EL), Environmental Responsibility Attribution (ERA) and Social Influence (SI) for a better understanding of the personal and social factors that predict and influence the Green Consumer Behaviour (GCB) of undergraduate students. For gaining an indepth understanding of the predictor variables, dimension-wise analysis of each predictor variables was also attempted. Hence the dimensions of Ecoliteracy like Environmental Awareness (EAW), Environmental Attitude (EAT) and Environmental Action (EAC) are considered for the study. The dimensions of

Environmental Responsibility Attribution included Environmental Responsibility Attribution to Self (ERAS) and Environmental Responsibility Attribution to Others (ERAO). Dimension-wise analysis of Social Influence was also done by taking the dimensions like Parental Influence (PI), Teacher Influence (TI), Peer Group Influence (PGI) and Media Influence (MI). Apart from this, attempt is also made to find out the significant predictors and their relative efficiency in predicting the Green Consumer Behaviour of the students of higher education. The study provide insights in planning and developing strategies for transforming young consumers into environmentally responsible or green consumers who integrate green lifestyles contributing towards sustainability.

Statement of the Problem

An individual's behaviour is evolved as a result of the cognitive, social and cultural exposure; the way that individual is nurtured and educated. Conceiving this in mind, the study aims to find out the relative efficiency and intensity of prediction of a vital dependent variable which presumes to form the base for a responsible citizen who could regulate the thoughts and actions in an ecofriendly manner.

Here in the present study, an attempt is made to deeply analyse the efficiency of certain personal and psycho-social behaviours on determining the consumer behaviour of prospective citizens. The expectation of this research is such that this shall bring about wider perspectives on the undergraduate curriculum. Undergraduate students as participants will benefit the curriculum developers and educators to identify the thrust areas of psycho-social aspects to be focused while developing and imparting a curriculum dedicated to transforming students into environmentally responsible or green consumers. The present study is entitled as **ECOLITERACY, ENVIRONMENTAL RESPONSIBILITY ATTRIBUTION AND**

SOCIAL INFLUENCE AS DETERMINANTS OF GREEN CONSUMER BEHAVIOUR OF UNDERGRADUATE STUDENTS.

Definition of Key Terms

The following section gives definition of the key terms used in the study.

Ecoliteracy

Ecoliteracy is the capacity of an individual to act successfully in daily life on a broad understanding of how people and societies relate to each other and to natural systems, and how they might do so sustainably. This requires sufficient awareness, knowledge, skills and attitudes to incorporate appropriate environmental considerations into daily decisions about consumption, lifestyle, career, and civics, and to engage in individual and collective action (Elder, 2003).

Ecoliteracy is the state in which a man lives in harmony with ecosystem and possesses the skills, attitudes and knowledge necessary to identify and solve environmental problems. It can be taken as a composite of factoral familiarity and personal variables about environment. (National Association for Environmental Education as cited in Encyclopedia of Educational Research).

For the present study Ecoliteracy is the knowledge that combines environmental awareness, environmental attitude and environmental action / skills resulting in knowing the impact of human behaviour on the environment and a kind of sensitivity to what happen in the environment and living in harmony with ecosystem. An ecoliterate understands the principles of organisation of the ecosystem and applies it for improving the quality of life and environment.

Environmental Responsibility Attribution

Attribution

Attribution is the process by which individuals explain the causes of behaviour and events.

Responsibility Attribution

Responsibility Attribution relates to beliefs about the cause of an event, or outcome, or state which may be positive or negative that may apply to the self or to others.

Environmental Responsibility

Environmental Responsibility refers to individual's intention to take action directed toward pro-environmental behaviours (Stone *et al*., 1995).

For the present study Environmental Responsibility Attribution is a process whereby an individual attributes the responsibility or obligation of conservation, preservation, and protection of the environment either to oneself or to others.

Social Influence

Social Influence is defined as change in an individual's thoughts, feelings, attitudes, or behaviours that results from interaction with another individual or a group (Rashotte, 2007).

Social Influence is defined as a change in an individual provoked by an actual or imagined presence of others (Hogg & Vaughan, 2008).

For the present study Social Influence is the change in an individual's thoughts, feelings, attitudes or behaviours as a result of interaction with

parents, teachers, peer group and media while making decisions as a green consumer.

Determinants

Determinants are the influencing factors that contribute to producing a result.

For the present study determinants include influencing factors like Ecoliteracy, Environmental Responsibility Attribution and Social Influence of Green Consumer Behaviour of undergraduate students.

Green Consumer

Green consumers are those whose behaviour exhibits and reflects a relatively consistent and conscious concern for the environmental consequences related to the purchase, ownership, use or disposal of particular products or services (Hennion & Kinnear, 1976a).

For the present study, green consumer is one who prefers to buy ecofriendly products and services which generate a minimum detrimental impact on the environment during production, use or disposal; and do not cause unnecessary waste; or use materials derived from endangered species or environment.

Green Consumer Behaviour

Green Consumer Behaviour is the behaviour of an individual who considers environmental or social issues while making purchasing or non-purchasing decisions (Peattie, 1992).

For the present study Green Consumer Behaviour is defined as all the psychological, social and physical behaviours that the consumer displays in searching, evaluating, purchasing, using and disposing of products and/or

services that they expect will satisfy their needs and wants without any detrimental input on the environment.

Undergraduate Students

Undergraduate is a student in a college or university who has not received a Bachelor's or a similar Degree (Good, 1945).

For the present study undergraduate students include students attending the final year of B. Com Degree courses in Aided and Government colleges of University of Calicut in the State of Kerala.

Variables of the Study

The variables of the study are listed below.

Predictor Variables

1. Ecoliteracy
2. Environmental Responsibility Attribution
3. Social Influence

Criterion Variable

1. Green Consumer Behaviour

Objectives of the Study

1. To assess the existing level of Ecoliteracy, Environmental Responsibility Attribution, Social Influence and Green Consumer Behaviour for the total sample and the sub samples based on gender, locale and type of institution.
2. To find out whether there exist any significant differences in the mean scores of Ecoliteracy for the sub samples based on gender, locale and type of institution.

3. To find out whether there exist any significant differences in the mean scores of Environmental Responsibility Attribution for the sub samples based on gender, locale and type of institution.
4. To find out whether there exist any significant differences in the mean scores of Social Influence for the sub samples based on gender, locale and type of institution.
5. To find out whether there exist any significant differences in the dimensions of Ecoliteracy (Environmental Awareness, Environmental Attitude and Environmental Action) for the sub samples based on gender, locale and type of institution.
6. To find out whether there exist any significant differences in the dimensions of Environmental Responsibility Attribution (Environmental Responsibility Attribution to Self and Environmental Responsibility Attribution to Others) for the sub samples based on gender, locale and type of institution.
7. To find out whether there exist any significant differences in the dimensions of Social Influence (Parental Influence, Teacher Influence, Peer Group Influence and Media Influence) for the sub samples based on gender, locale and type of institution.
8. To find out whether there exist any significant differences in the mean scores of Green Consumer Behaviour for the sub samples based on gender, locale and type of institution.
9. To find out whether there exist any significant relationship between the predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) for the total sample and the sub samples based on gender, locale and type of institution.
10. To find out whether there exist any significant relationship between the dimensions of predictor variables (Environmental Awareness,

Environmental Attitude, Environmental Action, Environmental Responsibility Attribution to Self, Environmental Responsibility Attribution to Others, Parental Influence, Teacher Influence, Peer Group Influence and Media Influence) and the criterion variable (Green Consumer Behaviour) for the total sample and the sub samples based on gender, locale and type of institution.

11. To identify the significant predictors and to estimate the relative efficiency of predictor variables' individual and collective contribution in predicting the criterion variable for the total sample and the sub samples based on gender, locale and type of institution.
12. To identify the significant dimensions of predictors and to estimate the relative efficiency of the dimensions of predictor variables' individual and collective contribution in predicting the criterion variable for the total sample and sub samples based on gender, locale and type of institution.

Hypotheses of the Study

1. There is no significant difference in the mean scores of Ecoliteracy for the sub samples based on
    a. gender
    b. locale
    c. type of institution
2. There is no significant difference in the mean scores of dimensions of Ecoliteracy for the sub samples based on gender, locale and type of institution.

2.1 There is no significant difference in the mean scores of Environmental Awareness for the sub samples based on

a. gender
b. locale
c. type of institution

2.2 There is no significant difference in the mean scores of Environmental Attitude for the sub samples based on

a. gender
b. locale
c. type of institution

2.3 There is no significant difference in the mean scores of Environmental Action for the sub samples based on

a. gender
b. locale
c. type of institution

3. There is no significant difference in the mean scores of Environmental Responsibility Attribution for the sub samples based on

a. gender
b. locale
c. type of institution

4. There is no significant difference in the mean scores of the dimensions of Environmental Responsibility Attribution for the sub samples based on gender, locale and type of institution.

4.1 There is no significant difference in the mean scores of Environmental Responsibility Attribution to Self for the sub samples based on

a. gender
b. locale

c. type of institution

4.2 There is no significant difference in the mean scores of Environmental Responsibility Attribution to Others for the sub samples based on

a. gender
b. locale
c. type of institution

5. There is no significant difference in the mean scores of Social Influence for the sub samples based on

a. gender
b. locale
c. type of institution

6. There is no significant difference in the mean scores of the dimensions of Social Influence for the sub samples based on gender, locale and type of institution.

6.1 There is no significant difference in the mean scores of Parental Influence for the sub samples based on

a. gender
b. locale
c. type of institution

6.2 There is no significant difference in the mean scores of Teacher Influence for the sub samples based on

a. gender
b. locale
c. type of institution

6.3 There is no significant difference in the mean scores of Peer Group Influence for the sub samples based on

a. gender
b. locale
c. type of institution.

6.4 There is no significant difference in the mean scores of Media Influence for the sub samples based on

a. gender
b. locale
c. type of institution.

7. There is no significant difference in the mean scores of Green Consumer Behaviour for the sub samples based on

a. gender
b. locale
c. type of institution.

8. The relative efficiency of predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) is not significant in predicting the criterion variable (Green Consumer Behaviour) for the total sample.

8.1 There is no significant multiple correlations between the predictor variables and the criterion variable for the total sample.

8.2 The criterion variable is not significantly predicted by one or more of the predictor variables for the total sample.

8.3 The relative efficiency of predictor variables' individual and collective contributions is not significant in predicting the criterion variable for the total sample.

8.4 The relative efficiency of significant predictor variables is not different in predicting the criterion variable for the total sample.

9. The relative efficiency of predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) is not significant in predicting the criterion variable (Green Consumer Behaviour) for the sub samples based on gender, locale and type of institution.

9.1 There is no significant multiple correlations between the predictor variables and the criterion variable for the sub samples based on

a. gender
b. locale
c. type of institution.

9.2 The criterion variable is not significantly predicted by one or more of the predictor variables for the sub samples based on

a. gender
b. locale
c. type of institution.

9.3 The relative efficiency of predictor variables' individual and collective contributions is not significant in predicting the criterion variable for the sub samples based on

a. gender
b. locale
c. type of institution

9.4 The relative efficiency of significant predictor variables is not different in predicting the criterion variable for the sub sample based on

a. gender
b. locale
c. type of institution

10. The relative efficiency of dimensions of predictor variables (EAW, EAT, EAC, ERAS, ERAO, PI, TI, PGI, MI) is not significant in predicting the criterion variable (Green Consumer Behaviour) for the total sample.

10.1 There is no significant multiple correlations between the dimensions of predictor variables and the criterion variable for the total sample.

10.2 The criterion variable is not significantly predicted by one or more of the dimensions of predictor variables for the total sample.

10.3 The relative efficiency of dimensions of predictor variables' individual and collective contributions is not significant in predicting the criterion variable for the total sample.

10.4 The relative efficiency of significant dimensions of predictor variables is not different in predicting the criterion variable for the total sample.

11. The relative efficiency of dimensions of predictor variables (EAW, EAT, EAC, ERAS, ERAO, PI, TI, PGI, MI) is not significant in predicting the criterion variable (Green Consumer Behaviour) for the sub samples based on gender, locale and type of institution.

11.1 There is no significant multiple correlations between the dimensions of predictor variables and the criterion variable for the sub samples based on

a. gender

b. locale
c. type of institution.

11.2 The criterion variable is not significantly predicted by one or more of the dimensions of predictor variables for the sub samples based on

a. gender
b. locale
c. type of institution.

11.3 The relative efficiency of dimensions of predictor variables' individual and collective contributions is not significant in predicting the criterion variable for the sub samples based on

a. gender
b. locale
c. type of institution

11.4 The relative efficiency of significant dimensions of predictor variables is not different in predicting the criterion variable for the sub sample based on

a. gender
b. locale
c. type of institution

Methodology

Sample

The population for the present study consists of all students attending the final semester of the Commerce Bachelor Degree Course of University of Calicut in Kerala. A representative sample of 1000 undergraduate students attending B. Com Degree Course of University of Calicut in Aided and

Government colleges situated in five districts of Kerala (viz., Malappuram, Kozhikode, Thrissur, Palakkad, and Wayanad) are selected.

The research design is quantitative in nature. The present study is conducted by field survey method with stratified random sampling technique by giving due representation to factors like gender, locale, and type of institution.

Tools for Data Collection

The following are the tools used for data collection:

1. Ecoliteracy Inventory (Musthafa & Sajila, 2015)
2. Environmental Responsibility Attribution Scale (Musthafa & Sajila, 2015)
3. Scale of Social Influence on Green Consumer Behaviour (Musthafa & Sajila, 2015)
4. Green Consumer Behaviour Scale (Musthafa & Sajila, 2015)

The following section gives a brief description of the tools used for data collection.

Ecoliteracy Inventory (Musthafa & Sajila, 2015)

The Ecoliteracy Inventory is a three point scale for assessing the Ecoliteracy of students that was constructed and standardised by the investigator with the help of supervising teacher. The inventory constituted 60 items from three components of Ecoliteracy namely, Environmental Awareness, Environmental Attitude and Environmental Action. Initially, the tool consisted of 82 items pertaining to three components that were prepared in the form of draft tool. This tool was then administered to a representative sample of 400 undergraduate students which was later subject to standardisation process using the procedure proposed by Likert (1932). Each

inventory statement has three choices of response viz., ‘Agree’, ‘Uncertain’ and ‘Disagree’ which were rated as 3, 2 and 1 respectively. The tool consisted of positive and negative statements. The negative statements were scored reversely, ie., 1, 2 and 3. The validity and reliability of the tool was established.

Environmental Responsibility Attribution Scale (Musthafa & Sajila, 2015)

The Environmental Responsibility Attribution Scale is a rating scale for assessing the responsibility attributions relating to environment. The tool was developed and standardised by the investigator with the help of supervising teacher. The scale constituted 25 items from two components Environmental Responsibility Attribution to Self and Environmental Responsibility Attribution to Others of Environmental Responsibility. The draft tool consisted of 30 items pertaining to the two components. The tool was then administered to a representative sample of 400 undergraduate students which was standardized using the procedure proposed by Likert (1932). Each statement carries five choices of response ranging from ‘Strongly Agree’, ‘Agree’, 'Undecided', ‘Disagree’ and ‘Strongly Disagree’ which were rated as 5, 4, 3, 2 and 1respectively for positive items and reverse scoring of 1, 2, 3, 4 and 5 for negative items. The validity and reliability of the tool was established.

Scale of Social Influence on Green Consumer Behaviour (Musthafa & Sajila, 2015)

The Scale of Social Influence on Green Consumer Behaviour is a rating scale for assessing the influence of social factors on Green Consumer Behaviour of undergraduate students. The scale was developed and standardised by the investigator with the help of supervising teacher. It

consisted of 60 items from four components ‘Parental Influence’, ‘Teacher Influence’, ‘Peer Group Influence’ and ‘Media Influence’ in nurturing Green Consumer Behaviour. The draft tool consisted of 61 items pertaining to the four components. The tool was then administered to a representative sample of 400 undergraduate students which was standardised using the procedure proposed by Likert (1932). Each statement carries five choices of response ranging from ‘Strongly Agree’, ‘Agree’, 'Undecided’ and ‘Strongly Disagree’ which were then rated as 5, 4, 3, 2 and 1respectively. The validity and reliability of the tool was also established.

Green Consumer Behaviour Scale (Musthafa & Sajila, 2015)

The Green Consumer Behaviour Scale is a rating scale for assessing the Green Consumer Behaviour of students that was developed and standardised by the investigator with the help of supervising teacher. The scale constituted 45 items from five components ‘Searching’, ‘Evaluating’, ‘Purchasing’, ‘Using’ and ‘Discarding’ of products and services. The draft tool consisted of 65 items pertaining to the five components. The tool was then administered to a representative sample of 400 undergraduate students which was standardised using the procedure proposed by Likert (1932). Each statement carries five choices of response ranging from ‘Always’, ‘Frequently’, ‘Sometimes’, ‘Rarely’ and ‘Never’ which were then rated as 5, 4, 3, 2 and 1 respectively. The tool consisted of positive and negative statements. The negative statements were scored reversely, ie., 1, 2, 3, 4 and 5 respectively. The validity and reliability of the tool was established.

Statistical Techniques Used for the Study

The present study being quantitative in nature, both descriptive and inferential statistics were used for analysing the data inorder to reach valid

generalisable conclusions. The statistical techniques used in the present study are described below.

Descriptive Statistics

Basic descriptive statistics like mean, median, mode, standard deviation, skewness and kurtosis were computed for each independent variable and dependent variable for the total sample and sub samples based on gender, locale and type of institution. The computation of descriptive statistics revealed the nature of distribution of the predictor variables and the criterion variable.

Percentage Analysis

Percentage analysis was done to assess the existing levels of Ecoliteracy, Responsibility Attribution, Social Influence and Green Consumer Behaviour of students for the total sample and sub samples based on gender, locale and type of institution.

Mean Difference Analysis

Test of significance of difference between means of large independent sample was used to find the difference in the mean scores of predictor variables, Ecoliteracy, Environmental Responsibility Attribution and Social Influence and the criterion variable Green Consumer Behaviour of students based on gender, locale and type of institution.

Stepwise Multiple Regression Analysis

Stepwise Multiple Regression Analysis was conducted to predict the individual and joint contributions of predictor variables in predicting the criterio variable. Regression equation was also developed to predict the criterion variable from the selected predictor variables.

Scope and Limitation of the Study

The present study examines the Green Consumer Behaviour of undergraduate students in Kerala. The factors considered for the study include Ecoliteracy, Environmental Responsibility Attribution and Social Influence for understanding the relative efficiency of these factors in determining Green Consumer Behaviour of college students. On considering the feasibility of the study the investigator delimited the study on students attending Degree course in aided and government colleges of University of Calicut. Data were collected and analysed using appropriate standardised tools and techniques to arrive at fairly objective and representative conclusions. The result of the study would be generalisable to young consumer groups in India subject to variations depending upon the conditions prevailing.

There are numerous psycho-social variables that have significant impact on Green Consumer Behaviour. The present study delimited to only major variables like personal and social variables that can be related to education of consumers such as Ecoliteracy, Environmental Responsibility Attribution and Social Influence as determinants of Green Consumer Behaviour of undergraduate students.

The study is expected to help the curriculum developers and educators to develop and impart a curriculum dedicated to transforming students into environmentally responsible or green consumers with higher knowledge, efficacy and concern in relation to the environment. The study would also help to plan Consumer Education in the Indian context for empowering students to act as rational and prudent consumers capable of making informed choices and to practice their rights and responsibilities of preserving and conserving the environment. The proposed study will also help higher educational endeavours to plan and include varied opportunities for students for inculcating pro-environmental behaviours through consumer education

and awareness programmes dedicated to this cause. Apart from this the proposed study is also expected to help policy makers to formulate strategies (economic, regulatory or social policy instruments) to promote more sustainable consumption. It is also expected to help both marketing and public relation practitioners in educating consumers about the environment in order for consumer's to have a more favourable mindset towards the firm's products. This research effort by determining the relative efficiency of some of the psychological, personal and social factors responsible for Green Consumer Behaviour is a real eye opener to all the stake holders of education to focus on nurturing the youth for eco-friendly accountable citizens.

In spite of the meticulous effort to evolve an accurate and precise study was made by the investigator, the following limitations were recognized.

1. The sample for the study did not include students pursuing degree courses in unaided colleges under the University of Calicut. Only government and aided college students were included in the sample selected. Though the investigator initially thought of including the unaided sector also, due to the unorganised and scattered nature of this group, the investigator could not include this group.

2. While considering the Green Consumer Behaviour, the investigator planned to select product and brand specific nature initially but thinking on the voluminous of the report and also due to other practical difficulties the investigation of Green Consumer Behaviour the present study was centered on the general green behaviours of the students for the present study.

3. A dimension-wise analysis of the criterion variable was not attempted. Since the predictor variables were subjected to dimension-wise analysis, attempting to comprehend the criterion dimensions would end

up in a too lengthy study. Hence the investigator opted not to do the dimension-wise analysis of the criterion variable.

4. The data analysis was done using software package like Statistical Package for Social Sciences (SPSS). The shortcomings of doing analysis using readymade software packages would have limitations to carry out and consider the unique requirements of the study. The investigator had to confine to the facilities and utilities available in the software package.

5. Data analyses using statistical techniques are not free of errors. Since the data analysis for the present study was carried out using statistical techniques, there are chances of sampling errors in the results of the study.

Even though these limitations were identified, the researcher hopes that the study is valid leading to objective and generalisable findings.

Organisation of the Report

Chapter I: This chapter gives a synoptic view of introduction, need and significance of the study, statement of the problem, definition of key terms, variables used in the study, objectives, hypotheses, methodology, scope and limitations of the study.

Chapter II: This chapter elaborates on the overview of theoretical orientations of predictor and criterion variables of the study and also presents the review of related literature of the variables.

Chapter III: This chapter substantiates on the description of the methodology of the study. An overview of the of predictor and criterion variables are also presented along with objectives, tools, sample, data collection procedure and statistical analysis employed in the study.

Chapter IV: This chapter presents the detailed results of preliminary analysis, percentage analysis mean difference analysis, and results of stepwise multiple regression analysis.

Chapter V: This chapter provides summary of the study, study in retrospect in terms of objectives and hypotheses, methodology, major findings, suggestions for improving practices and suggestions for further research.

CHAPTER 2

REVIEW OF RELATED LITERATURE

- Theoretical Overview of Variables
- Review of Related Studies

REVIEW OF RELATED LITERATURE

The present study explores the dynamics of Green Consumer Behaviour of undergraduate students with respect to Ecoliteracy, Environmental Responsibility Attribution and Social Influence. Inorder to do an indepth study, the investigator explored the theoretical and conceptual frameworks to undermine the various aspects for getting a clear insight of the selected predictor variables and criterion variable. A thorough review of literature was also done to find out studies conducted with regard to the variables in the educational scenario. This chapter presents the details of theoretical frameworks and the relevant researches related to the variables under. This would essentially give direction to the research by comprehending the trends followed by these variables.

Theoretical Overview of Variables

This section presents the theoretical background of variables Ecoliteracy, Environmental Responsibility Attribution, Social Influence and Green Consumer Behaviour.

Theoretical Framework of Ecoliteracy

Environmental issues are at its paramount having catastrophic effect not only on the nature but has alarmingly begun to impact human life as well. Almost all the ecological problems that are experienced today are the aftermath of ignorance of realising the cardinal position of humans in the web of life (Capra, 1997). Essentially Ecoliteracy had been considered as the key to rediscover, maintain and sustain the nexus between humans and nature. Education for Ecoliteracy must enable the materialisation of ‘connected wisdom’ (Booth Sweeney & Meadows, 1995). The Higher Education (HE) experiences must enable the students to discover and unleash the vast

reservoir of wisdom embedded in nature for transcendence of knowledge from nature so as to value natures' vitality in human existence. The learning experiences gained by students at HE level from educational institutions and otherwise facilitated in deeply comprehending the guiding principles on which nature functions capacitating them to relate each and every element of their life with nature and build a future in tune with the natural provenance.

Education must rightly be aimed at developing and nurturing young generations enriched with eternal values and beliefs about the supreme existence of nature. Ecoliteracy had developed an understanding in learners about the ecological paradigm that emphasises humans as embedded in nature rather than being perceived as separate entity. Hence, any attempt made for the development of communities must be done attuned with nature. This highlighted the need for building communities sustainably with the guiding principles of nature as its foundations. The goals of Ecoliteracy must be far reaching not only encompassing building of awareness about natural systems, but also relate this knowledge to real life situations as in the case of developing Green Consumer Behaviour and other sustainable lifestyles. This application of knowledge must be to envision and redesign the societal entities, structures and organisations with the guiding principles of nature. HE plays a vital role in orienting this crucial change by nurturing nature citizens and extending this knowledge to the broader society.

Educational efforts should rightly nurture the ecological intelligence among students. According to Goleman, (2009) the term ecological intelligence denotes the capacity of an individual to understand the complexities of ecological systems as well as the interplay between the natural and human made systems. Goleman opined that ecological intelligence must be used in a collaborative manner for deeply understanding and communicating the environmental problems with specific reference to the

cause and effect of it so as to find solutions for addressing such issues. The ecological intelligence must perpetuate the lives of individuals capacitating them to draw feedback about their impact on the environment. Goleman also pointed out the need to utilise ecological intelligence and social intelligence in tandem in order to attain a harmonious coexistence of humans with nature (Goleman, 2009).

Environmental Significance in Human Life

Humans and environment coexist from time immemorial. There is a vital need to understand the inter relationship that exists between the environment and community for sustainable development and survival of humanity. There were several catastrophes that persist in the contemporary world that harms the biosphere and the life on earth in alarming ways. The most prominent challenge that humanity faces today is the creation of sustainable communities powered with the abilities to satisfy the needs and wants without any detrimental impact on the environment. As a part of this, several attempts were being made at all facets of life for building and nurturing sustainable communities. More intricate and subtle ways of organising such communities had been deliberated inorder to maximise sustainability.

Environment comprises of the complex web of scientific, ethical, political, economic, and social relationship and institutions that surround, affect and influence the growth, development, and survival of humanity. In an era where humans virtually affect all of the Earth's processes, questions arise about whether individuals have sufficient knowledge of human–environment interactions. Population growth, economic activities and consumption patterns, have placed increasing pressure on the environment (UNEP, 2007). This has led to the degradation of the environment resulting in irrevocable loss of natural resources leading to local, regional, and global environmental

catastrophes including climate change, decline in biodiversity and ecosystem imbalance affecting the existence of living systems on earth.

Significance of Environmental Education in Fostering Ecoliteracy

Ecoliteracy is essentially a component of environmental education. The concept emerged during the early 90's and ever since recognised as an integral part of environmental education (Roth, 1992). Morrone, Mancl & Carr (2001) highlighted the need for developing a firm foundation of knowledge about the principles and concepts of environment and their interconnectedness with each other forming the web of life. It was on this firm foundation of knowledge that an individual's attitudes and values were to be developed towards nurturing of environmentally responsible citizens. In the next level, students develop the power of inquiry through which rational ideas are sought out for finding practical solutions to the problems. And finally, students should be well quipped and capacitated with skills required for performing action oriented activities. Many a times attempts of environmental education ended up in the emphasis of developing attitudes and values before building the adequate foundational knowledge of the environment which was highly essential for developing the right attitudes and values for action oriented environmentally responsible behaviours. For fruitful educational efforts the development of attitude and skills along with adequate factual knowledge were crucial. This indeed nurtured ecoliterates who endured in building communities by actively involving and applying the ecological knowledge and skills with a right sense of attitude that are pertinent to sustainable development.

The emphasis on environmental education in India with its clear presence in the education system and curriculum can be noted back from the late 20^{th} century. The surge for the need to protect and conserve the environment through educational efforts got salience since early 21^{st} century.

The educational programmes towards this evolved as a result and imperative through several revisions and reorientations envisioning the best possible educational opportunities that is viable for a better socio-political and environmental milieu. Over the years, in India, environmental education had become an integral part of both schooling and higher education (HE) through integrating its importance in the National Curriculum Framework. Environmental studies have been made mandatory right from the early stages of schooling itself. Later on its purview broadened by perpetuating all the levels of schooling right from primary stage of education up to higher education. However the main challenge of environmental education is the discrepancies and gaps in implementing the same. The mode of infusing environmental education in disciplines varied with a wide range in the sense that either it was fully infused in the discipline or infused with very little relevance to it. This variegated mode of infusion of environmental studies in the school and HE curriculum had either produced citizens with indepth knowledge and capacities towards environmental affairs or nurtured citizens with only a meagre knowledge that is insufficient to act in an environmentally responsible manner (Roth, 1992).

The gap pertinent in environmental education was evident with a vast disconnect between the scientific understanding and the low level of action taken by all sectors of society for addressing environmental issues. One possible means to decrease this gap is to increase individual's ecological literacy by nurturing individuals through incorporating all the domains of learning like cognitive, affective and psychomotor. The cognitive domain is nurtured by enriching the individual with sufficient knowledge and awareness about the environment, the nurturing of affective domain encompasses developing the right attitudes, values and dispositions towards the environment and the psychomotor domain is nurtured by developing the skills and competencies required to manifest action oriented behaviours.

Additionally, it was also found to be important to focus on the ecological literacy of policy makers, administrators, educators and educational decision makers to keep themselves informed as well as to keep others informed in terms of ecological literacy providing them with the wisdom to think about the environmental consequences of their decisions in addition to the economic and social consequences.

UNESCO (1978) had rightly pointed out the essentiality of developing environmentally literate citizens through environmental education enriching and capacitating them with adequate knowledge and skills pertinent to solving environmental problems and to address environmental challenges with high degree of attitude, motivation and commitment towards the environment. The goal of Ecoliteracy must be accomplished by fostering awareness, awakening curiosity and by developing sensitivity towards nature. For sustaining this, lifelong learning experiences in nature must be made available to students providing ample opportunities to develop social understanding, sense of belonging, sense of respect and cooperation amongst the fellow beings. This must result in the modelling of values and behaviours for adopting sustainable lifestyles and ultimately, environmental citizenship.

Frameworks of Environmental Literacy

The term environmental literacy was firstly used by Roth during 1968 which gradually evolved its meaning extending and expanding its frontiers. One among the most widely accepted meaning of environmental literacy is the awareness and concern about the environment and the associated problems along with adequate knowledge, skills and motivation to work towards finding solutions to prevailing problems and curtailing new problems (NAAEE, 2004a). Another concept that emerged overtime and is often used similar to environmental literacy is the ecological literacy, it was first used by Risser (1986) while addressing the Ecological Society of America. Since then

the term has been popularly used and widely portrayed its relevance in the field of ecology connoting the knowledge and skills acquired through scientific enquiry and systems thinking (Powers, 2010). The distinctive aspect regarding Ecoliteracy was that it emphasised on building of the sustainable human communities (Capra, 2002). The meaning of ecological literacy gained new dimensions within the humanities realms with Orr's distinctive emphasis on the creation of sustainable human communities (Orr, 1992).

The conceptual ideology of ecological literacy got momentum with the addressing of the growing concern centred on the state of environment that was invariably impacting human life and socio-economic development. The major break through to the advancements of environmental literacy was the charter by UNESCO-UNEP (1976) at Belgrade which was commonly known as the Belgrade Charter. It emphasised the goal of environmental education for creating awareness and concern about the vital environmental issues and capacity building of individuals with the adequate knowledge, skills, attitudes and values that gives motivation and develops commitment to work towards finding solutions to environmental problems.

The upgrading of the Belgrade Charter was done at an intergovernmental conference on environmental education popularly known as the Tbilisi Conference held at Georgia in 1977. The outcome of this was the setting of goals which formed the basis of environmental education. The three goals includes fostering awareness and concern about the socio-economic, political and ecological interdependence in urban and rural areas; providing ample opportunities to individuals to acquire knowledge, skills attitudes and values pertinent to environmental protection; and to develop new models of action oriented behaviours at individual and societal level. This was followed by the UNESCO-UNEP (1989) putting forth the Environmental Literacy for all campaign which set milestones in the enhancement of

educational opportunities by making environmental literacy as the fundamental goals of environmental education.

The upsurge of environmental problems and deteriorations brought in a feeling of inconsistency in the awareness and capacity building at par with the deteriorating status of the environment. This matter was addressed in a meeting convened as a part of World Commission on Environment and Development in 1983. The Commission later came to be known as the Bruntland Commission in its report called Our Common Future comprehensively studied and identified the deteriorating state of planet Earth encompassing myriad environmental problems and human related problems like poverty. It was based on this report that chapter 36 of Agenda 21 recommended the reorientation of education towards sustainable development (UNESCO, 1992). This in turn gave impetus to UNESCO to make a change in its International Education Programme (1975-1995) to Education for Sustainable Development (UNESCO, 1997). This replacement was reflected in the form of revolutionary changes in the educational realms characterised by a mass movement perpetuating all levels of education and across discipline. This transcended in a new form towards a quest for reviving the planet Earth and the life on it. This educational revolutionary movement acclaimed as Education for Sustainable development (ESD).

Ecoliteracy and the Path to the Sustainable Community

The term sustainable development was the outcome of the Bruntland Commission which in its report characterised sustainable development as meeting the present needs without compromising the ability of future generations to meet their own needs. The UN general assembly of 1987 has rightly proclaimed that the goal of environmental education must be to develop ecoliterates capacitated with environmental decision making skills and action oriented behaviours for fostering sustainable development. The

initiatives and programmes for popularising and spreading the light of sustainable development, must essentially look in to the salience and appropriateness by giving due consideration to the environmental, social and political aspects of the development (UNESCO, 2005).

Ecoliteracy as a logical component of Education for Sustainable Development (ESD) captured the essence of the interconnectedness of the elements in nature including human interactions that do not hamper the sublime existence of nature. Therefore, such an education provided and instilled in students the broader outlook of human's developmental activities by giving due weightage to the pillars of sustainable development. The environmental sustainability ensured the rational use of natural resources without causing any depletion or degradation of the nature. The social aspect of sustainable development ensured a developmental milieu in the society with individuals and groups working together towards the attainment of common goals. In doing so, the individual interests and well being were ensured with opportunities to uphold cultural aspirations too. The economic aspect of sustainable development was attained with financial feasibility while pursuing environmental and socio-cultural sustainability. Education focused on all these aspects for addressing the issues of sustainable development through environmental education.

Hence, Education for Sustainable Development with Ecoliteracy as its logical component has a wide potential to address the issues of sustainability by raising the level of awareness, knowledge, skills, attitudes and values about the environment that awakens the senses of students to be more humane towards nature. However there was a common consensus that in the pursuit of sustainable development, the environmental aspect often lacked the required consideration which hampered the true meaning of sustainable development (EU CSD, 2007). Hence it was imperative for more concerted efforts in

educating the vitality of the environmental element of sustainability. It was here that the paramount importance of fostering Ecoliteracy emerged. Education must begin right from the grass root level traversing all stages of life of an individual encompassing all levels of education from primary to higher education extending further through lifelong learning. Such fruitful education must transform the individuals to environmental citizens who can contribute exuberantly for safeguarding and sustaining the planet Earth and the life on it.

Developing Ecoliteracy

McBride (2011) conducted a study on essential elements of ecological literacy and the pathways to achieve it: perspectives of ecologists. McBride examined the elements of Ecoliteracy and also discussed the different ways of achieving Ecoliteracy by surveying ecologists. As an outcome, five means of achieving ecological literacy identified by McBride are discussed in this section. The first means was related to education by mass media. Under this, education must utilise the endless potential of mass media, especially, television and internet. These media as powerful tools for retrieving and disseminating information in communication must be effectively utilised for spreading awareness about environmental issues or environmental concepts. Thus mass media must effectively utilised in environmental education for fostering awareness about environmental concepts and issues.

Formal education was another mode of producing ecoliterates through infusing environmental education in school and higher education curriculum. This implied that mere infusing of the element of environmental education in to the curriculum did not enable in the attainment of the goals. This demanded the chalking out of programmes and activities specifically meant for the fostering of skills, knowledge and awareness along with inculcation of

attitudes and values for capacitating the individuals for action oriented behaviours with environmental commitment (McBride, 2011).

Financial incentive was the third factor that induds ecological literacy by providing financial incentives. The idea behind this was rewarding ecofriendly actions incentivises the good behaviours of individuals. This maybe in the form of governmental or institutional incentives provided for adopting ecofriendly behaviours or penalties imposed as a result of adhering to non ecofriendly actions impacting the environment in a detrimental way. The basic idea underlying this was the aspect related to the cognitive dissonance which proposed that incentives induced behaviour which in turn induced development of positive attitudes that was reinforced in individuals. Similarly, imposing of penalties for environmental detrimental behaviours tends to reduce such behaviours to overcome the burden of penalty (McBride, 2011).

Participatory or interactive education is another pathway to ecological literacy suggested by Coyle (2005) and Louv (2005) that involved engaging students actively in the lap of nature; ie., setting the learning outside the classrooms. This could be facilitated through residential environmental education programmes in which inquiry and experience based learning were embedded and the learners explored the nature by themselves to unveil the realities with firsthand experience of nature explorations. This would pave the way for developing an indepth understanding about the ecological system. Such an exposure of students to the abundance of nature would enable to formulate different connections with nature developing variegated capacities for addressing the environmental issues (McBride, 2011).

Communication and outreach by scientists is yet another means identified to develop Ecoliteracy wherein the students were given opportunities to interact with experts who had firsthand experience in

studying and experimenting with concepts and issues related to the environment. The sharing and communication of the experiences with emphasis on the strategies for solving and addressing issues of environment awakened the curiosity and inspiration to learn and go into further details for broadening the horizons of knowledge pertaining to sustainability (McBride, 2011).

Essential Competencies of Ecoliteracy

Competencies are the abilities of an individual to perform a task with a specific level of proficiency. Competency encompasses the entire domains of the learner like cognitive, affective and psychomotor domains. At the cognitive level, competency constitutes knowledge of relevant facts, concepts and skills required for doing a particular task. Competency also requires the possession of specific skills that relates to the ability of an individual to perform a particular task with some level of efficiency. Competency also demands the possession of specific attributes or traits that makes an individual competent enough to do the task. Finally, the level of efficiency also counts to be specifically called as being competent.

Nichols (2010), through a content and construct analysis, propounded with the idea of essential Ecoliteracy (EEL) that constitutes four major domains like concepts, sense of place, respect for other (diversity), and competencies. The components identified in the domain of competencies of EEL included competencies of self regulation/adaptability, competencies relating to scientific reasoning that encompasses competencies in understanding the nature of science, critical thinking and argumentation. The third category included competencies of practical ethics that involves moral development and competency of systematic moral analysis. The last classification of competency included competencies in socio-political skills encompassing social and political skills coupled with media literacy.

According to Nichols (2010), the cognitive skills included multifaceted skills characterised by pragmatic abilities that can be developed through practice. Further, nurturing of these abilities would develop capacities in individuals to come up with efficient decision and practical solutions to address environmental problems. The EEL competency framework also included self regulated learning that facilitated motivation, meta cognition and adopting strategic actions enabling the learner to be cognitively adaptable to environmental situations. This would rightly transform the learners to be proficient in lifelong learning. Moreover, imbibing these competencies would help individuals to easily adapt to the situations and to creatively develop practical solutions to environmental problems for improving the quality of life.

The Centre for Ecoliteracy (www.ecoliteracy.org/discover/ competencies) proposed a set of competencies that enable individuals to build sustainable communities. The core competencies of Ecoliteracy were based on UNESCO's recommendations on the four pillars of learning which forms the fundamental principles for reorienting education. These competencies of Ecoliteracy associated with 'head' that focused on the first pillar of learning (learning to know). These competencies pertained to the cognitive domain encompassing abilities to have a holistic view of environmental aspects from a system's perspectives. Core competencies also pertained to understanding the fundamental principles of ecology, critical thinking ability to evolve creative solutions to solve environmental issues and to apply knowledge in new situations. The Ecoliteracy competencies also covered the ability to gauge the impact of technology and human actions, and finally the ability to envision the far reaching impact of environmental decisions.

The next set of competencies of Centre for Ecoliteracy pertained to the emotional dimension comprising the 'heart'. These encompassed a sense of

feeling of concern, respect and empathy towards the living entities of the planet. It also included having a multi perspective sense of appreciation and competency of conducting collaborative works and valuing the diversity of people. Yet another competency in the emotional domain was the ability of an individual to practise equity, justice, develop respect for all and adorning inclusivity. The action oriented domain of competency is associated with 'hands'. It included competencies for creating and using objects and procedures needed for building sustainable communities. It also included abilities to perform action oriented behaviours through applying knowledge towards sustainability, and finally the ability to gauge the availability of resources and use it in a sustainable manner. The final domain of competency proposed by the centre was the one associated with spiritual dimension encompassing the 'connectednesses. The abilities under this included appreciating the aesthetic values of nature, have a revered feeling towards the planet earth and living elements. It also included having a feeling of connectedness and to feel kinship with nature as well as to motivate others in developing the same feelings among fellow beings towards nature.

Ecoliteracy Teaching Strategies

In the light of a shared concern for the environment and recognition of the central role of education must be in enhancing human-environment relationships. Ecoliteracy can be promoted by a variety of teaching strategies, based on practices matched to students' levels of development and on brain-based research, to foster the knowledge, skills, and values essential to sustainable living. It was widely recognized that students learned the best when teaching strategies were varied to include hands-on activities, time for reflection and thoughtful discussion, a mix of indoor and outdoor environments, and opportunities to participate in interdisciplinary projects.

Goleman, Bennet, & Barlow (2013) popularised Ecoliteracy by integrating emotional, social and ecological intelligence. The emotional and social dimensions of ecological intelligence encompassed the ability of an individual to develop an understanding about the interconnectedness of nature and its entities. Cognitive skills were used with empathy for all living elements of nature. Hence educators play a pivotal role in fostering social and emotional learning inculcating empathy and knowledge for inducing environmentally responsible actions among students for valuing and practising sustainable living. Towards this, Goleman and others had proposed five ways of developing emotional and social oriented Ecoliteracy development practices that could be adopted by educators in the academic milieu. The proposed practices may be used for nurturing students according to their age appropriate manner from pre primary stage to adulthood. These practices essentially foster Ecoliteracy traversing cognitive and affective abilities that are cardinal to the integration of the social-emotional and ecological intelligence. The five practices that were developed by the Center for Ecoliteracy, Berkley are enumerated below.

Developing Empathy towards all Living Things

This began with a sense of feeling that all living creatures of the planet had common needs like food, water, space and conditions for survival and existence. Practising this feeling rightly inculcated the value that human beings too form a part of web of life rather than perceived as superior separate entity. This circle of empathy needed to be nurtured through variegated experiences inside the classrooms and within the natural settings that paved way for direct interactions with nature for exploring things. Teachers materialised this through field trips to places where the students got full opportunity to explore the nature getting first hand experiences of learning.

Embrace Sustainability as a Community Practice

This can be done through developing an understanding of the web of life in which the elements are interconnected and interdependent for survival and existence. From this, the value of living together as a community would be highlighted and nurtured among the students. Students needed to realise that progress of any community was based on the cohesiveness with which the community functioned for the attainment of common goals.

Make the Invisible Visible

The reality about the distance between human interactions with nature and its consequences are made aware to the students. The unprecedented exploitation of natural resources resulted in its scarcity and depletion. This was to be affirmed in students by technology based learning wherein web based tools such as Google Earth used by teachers to virtually take students to such places for gauging the intensity of depletion and destructions actually taking place. Teachers also must familiarise students with the websites, blogs, other social networking sites and similar such platforms where they can gather as well as exchange information and issues relevant to environment and sustainable living.

Anticipate unintended Consequences

Most of the environment related issues and problems were the aftermath of human activities that were actually not intended to ruin the environment. Teachers can teach strategies to overcome such consequences like taking precautionary measures to curtail the happening of such events. Another strategy that could be adopted by teachers include familiarising students about the systems thinking where in complex matters were broken down in to simple components for getting a better understanding about the phenomenon for efficient management and decision making. It is also

considered that nurturing this practice would develop the capacity of predicting the possible consequences. Above all building resilience is yet another important strategy that the teachers need to inculcate in children for survival and sustenance.

Understanding the Self Regulating Capacity of Nature

It is very vital to understand the self regulating capacity of nature characterised by its continual revival for maintaining the equilibrium of the state of planet. Ecoliterates perceived nature as an abundant reservoir of resources. Ecoliterates imbibed the wisdom of nature by learning the valuable sets of principles wired in it. The three main principles that students and individuals needed to learn from nature was the interdependence, systems thinking and self regulating capacity of nature.

Apart from the aforesaid strategies, there were other popular strategies also that facilitated the fostering of Ecoliteracy. Some of such commonly used popular strategies are discussed below.

Interdisciplinary and Transdiscilinary Learning

Interdisciplinary learning involves learning centered around themes and issues wherein students found answers to questions from a variety of disciplines for getting a holistic approach to learning and problem solving. Interdisciplinary learning provided ample opportunities for students to select a topic of study and traverse across disciplines to find answers to it at any point of the learning process, as the situation demands for developing wider perspectives utilising a wide range of information from multidiscipline. Interdisciplinary teaching and learning kept the learner actively engaged at all the stages of learning keeping the student motivated to learn throughout the learning sessions. Transdisciplinary learning involves learning across and through different disciplines that essentially catered to the vital needs of

learners to address questions and issues related to varied fields of discipline. The area of sustainable development was essentially multidisciplinary as it involved the themes drawn from environment, sociology, economics, cultural studies, etc. There can be no better method than interdisciplinary learning to foster Ecoliteracy that involves drawing themes from variegated disciplinary dimensions.

Experiential Learning

Experiential learning is mainly based on the works of Dewey (1916) and Piaget (1964) that considers learning as an active process involving the students learning in the real world situation where teacher facilitated learning. Experiential learning considered learning as a continuous process with experience as its vital element. In this type of learning the students followed the learning cycle which commenced with exploration followed by the formation of concepts and application of the same. This sequence of learning is reflected in the constructivist theory. Experiential learning is considered as an important strategy to be used in education for sustainability. This importance has been characterised in the essentiality of the student to have direct experience with nature and its elements for gaining an indepth understanding of ecological facts, concepts and principles. It was only through direct contact with the natural world students developed an in-depth understanding of fundamental ecological principles.

Project-based Learning

Project based learning involves planning and undertaking projects that addressed vital issues related to the topic selected. The duration of projects ranged from short term involving a few days or weeks or long term projects that may extended to months or even years. Projects are undertaken by students by the guidance of teachers. The students worked on it by utilising

various resources like technological, community based, material or expert resources for the successful execution of the project. Under this method students get actively engaged in learning by getting opportunities of learning in real societal settings.

Place-based Learning

Place based learning is another strategy that gained popularity in environmental education. It is unique in the sense that it captures students' imagination in the process of learning for environmental stewardship and active participation of students in the community and natural environmental settings. The output of the learning has practical implications towards improving the quality of life of community. Student learning are more life oriented and situational as it tried to solve real life problems in the learning process. In place based learning, students get opportunities for collaborations with communities and organisations with efforts directed towards physical and socio-economic development of their community. Through direct contact with community they learn how the system functions in its totality. Place based learning activities include mapping the local environment and understanding the interconnectedness and interplays between the local society and the environment for maintaining a quality of living.

Socratic Inquiry

Socratic enquiry gained its name from the name of the great Greek philosopher Socrates, who had a strong belief that questions awakens the learning impetus when compared to answers. Through this students uncovered their beliefs, misconceptions, and values, and eventually clarified their thoughts related to the topic under discussion. Experiential learning in turn fostered critical thinking, forming their own ideas and become more tolerant to diverse ideas and opinions. The role of teacher is that of a facilitator of

discussion. Through the skilled questioning sessions, teacher clarified statements, found out weak arguments and provided evidences of reasoning require students to clarify their stances and finally provided evidence for their reasoning.

Role of Educators in Fostering Ecoliteracy

Over the past few decades concerted efforts had been made in the field of education as to how education can guide students to lead meaningful, sustainable and healthy lives. Wendell Berry's expanded definition of health was a notable one which encompassed not only one's own health, but that of one's place, community and the wholeness of life. Emphasis was to be given on the need for education to impart an understanding the interdependences between natural processes and human ways of living. A new value entered education called the "well-being of the earth". The teaching endeavours must aim to replace fragmentary thinking with new cognitive and social capacities necessary for the design of sustainable ways of living.

Teachers must be dedicated educators who shared a commitment to smart, vital and hopeful ecological education. It is important for teachers to collaborate in environmental projects establishing a link between theory and practice thereby inspiring students and the community at large, and also becomes essential to keep the society informed about the findings and suggestions. The inspiration should develop wonder and love for nature among the students which in turn leads them towards gaining understanding and skills for creating a resilient community. Such transformational endeavours from the part of teachers leveraged the advancement of education responsive to the challenges of the hour. In this context, it was found important that firstly, teachers were to be aware of what students needed to know inorder to be good citizens of planet Earth.

Ecoliteracy as a Determinant of Green Consumer Behaviour

Environmentally responsible behaviour refers to human behaviour attained with maintaining the quality of environment for the well being of society and humanity at large. The upsurges of the burgeoning environmental problems created concern among individuals regarding the state of environment. The situation had been deteriorating at large pace that it started impacting human and other forms of life in a direct manner. in the case of consumers Polonsky *et al.*, (1995) indicated that this concern about the diminishing state of quality of environment has started reflecting in consumer behaviour with a propensity towards going green or ecofriendly manner. The concept of environmentalism is now being very much popular and is evident in consumers in the form of green consumerism. This is a mass movement endorsing the readiness of consumers to contribute their bit towards the protection of environment for ensuring sustainable living.

This surge of green consumerism witnessed revolutionary changes especially in the production and distribution of goods and services with green dimensions. It also was a concept that related to socio economic perspective with peoples' readiness and willingness to use the limited resources available in the most environmental friendly manner for satisfying the needs and wants forging sustainable living. This revolutionary change in the mind set of consumers gave impetus to green marketing initiatives which specifically focuses on marketing initiatives with ecofriendly motives. The green marketing is defined by Polonsky (1994) as all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants such that the satisfaction of these needs and wants occurs with minimal detrimental impact on the natural environment. Towards this, it becomes very important to note that behaviour is determined by intension of the individual to perform the behaviour which in turn is a function of attitude towards the particular

behaviour and the subjective norms associated with the person (Ajzen & Fishbein, 1980).

Self efficacy of an individual is yet another important factor that induced particular action oriented behaviours. Self efficacy essentially invoked the individuals' choice of decision to pursue a particular mode of action oriented behaviour. in relation to this, individuals with high self efficacy tend to do things uprightly without any stressful feelings; while people with low self efficacy approached matters related to performance of behaviour with stress and anxiety (Bandura, 1971). Consumers' environmentally responsible behaviours are essentially determined by the knowledge and self efficacy pertaining to decision making which further leads to action oriented consumer behaviours. In this context, Ecoliteracy embraces a major role to play by keeping the consumers informed about the basic principles of ecology and the interconnectedness and interplay of the variegated elements in it. This should rightly awaken the thoughts and actions towards undertaking a more environment friendly approach to consumer decision making and behaviours popularly acclaimed as green consumer behaviour.

Review of Related Studies on Ecoliteracy

Following the popularisation of the concept of Ecoliteracy in the 1990s, an interest in testing ecoliteracy emerged in academia. These research studies aimed to identify and assess the strengths, weaknesses and opportunities with respect to ecoliteracy education in contemporary society. After David Orr popularised the term ecological literacy in the early 1990s, understanding and measuring ecological literacy saw increased scholarly interest. There were two main routes of study in this research area, theoretical work and survey work. The theoretical area looked at teaching pedagogies and ecological literacy. Orr's work represented this field of study and was

based on examining the intersection of societal structure and ecological literacy.

Lee *et al.*, (2017) examined the views about green consumption and green consumption practices of college students in China. The green consumption behaviour of the students was deeply comprehended by using the frameworks of Theory of Planned behaviour (TPB) by analysing the four aspects of green consumption – attitudes, subjective norms, perceptions and behaviours of college students. 1439 students were surveyed and data collected was analysed using multiple regression analysis. The findings of the study showed that green consumption intentions of college students were significantly predicted by green attitude, green subjective norms and green perceived behaviour.

El Sakka (2016) studied the impact of University students Green Awareness Purchasing and Green Marketing in Egypt. The study aimed at investigating the university students' level of awareness about Green Marketing and the factors influencing the students to buy green product and services. The study also gave insights on whether the environmental responsibility had any influence on the consumer behaviour of students. For this, a survey was conducted using a self administered questionnaire. The result revealed that students were not aware about the benefits of green products and services. It was also found that there exists a positive correlation between awareness and consumer behaviour. The study concluded by stating that proper awareness about green purchasing would raise the responsibility of students towards environment and this in turn could impact their consumer behaviour.

Cortes *et al.,* (2016) investigated how the university students' Environmental Behaviours were structured by conducting a survey on 1035 student sample from Brazil and Portugal. Data analysed using Multivariate

Statistical Techniques revealed that the two groups were similar in terms of Environmental Behaviours. It was also found that Environmental Beliefs were formed conflicting to anthropocentric views. The study also revealed that Environmental Attitudes were developed as a result of Environmental Concern. The ecocentric orientations of students were evident through students' perspectives to decrease production and consumption. It was found that although students had ecocentric beliefs, Green Consumption patterns are yet not evident among the students.

Sethi and Tandon (2016) studied the awareness, perception and purchase intentions of 75 university students through survey. The results of percentage analysis revealed that the university students had high level of environmental concern. The study also found that the students have positive attitudes towards buying green products. It was also reported in the study that students expresses high level of intention to buy green products in future. The statistical tests to determine the correlations revealed that no significant correlation existed between gender, income and green purchase intention to buy ecofriendly products among university students.

Nabila and Nazdrol (2015) conducted a study to identify the factors influencing green product purchase behaviour of university students in Malaysia. The study followed a quantitative approach. The sample of the study consisted of 346 respondents from whom data was collected and was subjected to analysis using mean difference analysis and regression analysis. From the results of the study the investigators concluded that the factors influencing green product purchase behaviour of university students included environment concern, green product awareness and benefits the consumers have by using green products. However, price of green products was not a significant factor influencing the green purchase of university students.

Joshi and Rahman (2015) in their review based study explored the factors affecting green purchase behaviour and future research designs. The main focus was to examine existing empirical research and identify the diverse factors affecting green purchase intentions and behaviours. It also aims to find out the reasons behind the observed attitude behaviour inconsistency regarding green product purchase on the basis of the factors identified. Research articles on green purchase behaviour from Scopus database was used for the review analysis involving within study and between study literature analysis. Findings manifested that the consumers' environmental concern and products functional attributes emerged as the foremost determinants of the consumers green purchase behaviour.

Dagher, Itani, and Kassar (2015) investigated the influence of environmental concern and attitude on green purchasing behaviour, studying the moderating effect of gender. The framework used for the study was based on the theory of socialisation which proposes that individual behaviour is determined by the gender expectation at par with the cultural context. The study was conducted on a sample of 326 Lebanese consumers who were surveyed through online questionnaires. The responses were rated using five point Likert Scale and the data was analysed by the statistical techniques of independent sample t test and regression analysis. The results indicated that gender had a moderating effect on both environmental attitude and environmental concern of the sample towards green purchasing behaviour. It was also evident that there exists significant gender difference in the mean scores of green purchasing behaviour, with the females having a high mean score indicating that females possess high level of green purchasing behaviour when compared to their male counterparts. A significant model was yielded with environmental attitude, concern and gender as significant predictors of green purchase behaviour.

Anvar and Venter (2014) comprehensively examined the variant factors influencing attitudes and purchase behaviour of green products among Generation Y consumers in South Africa. The research incorporated factors such as social influence, environmental awareness and price. It also attempted to expose the role of consumer attitudes in determining the consumers' purchase behaviour of green products. The research used quantitative approach and used a sample of 200 students between the age group of 18 to23. The results of simple and multiple linear regression analysis reflected that factors like social influence, environmental awareness and price, positively influenced individuals' attitudes towards green products. The investigation showed that there was a positive effect of attitude on buying behaviour and as a result, consumers with positive attitudes towards green products are more likely to purchase green products. Findings also indicated that there was a significant difference between males and females with regard to green buying behaviour.

Jeger, Ham, and Leko (2014) examined the relationship existing between environmental attitudes and intentions to purchase green food products among 181 undergraduate students in Croatia. The study was conducted through a survey by utilising questionnaire. Significant positive relationship was evident between attitudes (in relation with health consciousness, environmental protection and green food origin) and intention to buy green food products. The study reaffirmed the potential of personal attitudes in influencing green consumer intentions among students as potential consumers.

McGinn (2014) identified Ecoliteracy of first year Liberal Arts students at eight colleges in Pennsylvania. The data was processed to quantify the number of students who were considered ecologically literate in the areas

of Caring, Practical Competency and Knowledge. The study proved that there is a definite gap in the college educational system with respect to Ecoliteracy.

Stevenson *et al.* (2013) observed that gender was related to environmental literacy in complex ways and that females tend to have lower knowledge pretest scores than males. However, females outperform males in affect and cognitive skills and improved faster in knowledge over the course of the semester they studied. They also noted that females had more positive environmental attitudes and greater levels of concern for the environment. According to the results obtained, males had higher pretest and posttest scores than females. However, due to the small sample of male subjects that participated in this study though, concrete conclusions could not be made.

Hai and Mai (2013) analysed the environmental awareness and attitudes of 900 consumers through conducting a survey. Data was collected using questionnaire and analysed by using percentage analysis. The findings indicated that consumers with high level of education were more knowledgeable about green products and green purchasing behaviour. It was also found that consumers with high level of education had more concerns about environmental issues prevailing. The study also reported the positive attitude of highly educated consumers towards green purchasing along with willingness to continue this in future. The study reiterated the fact that educating consumers is vital for developing positive attitudes and green consumer behaviour.

Yadav and Pathak (2013) studied the levels of environmental awareness and environmental concern of female students in relation to how to find solutions to the prevailing environmental problems. The study was qualitative in nature that sought a dual moderator focus group interview of 12 female students, selected through convenient sampling, pursuing professional courses in institutions of national importance in India. The findings revealed

that the female students possessed high level of awareness and showed high level of concern towards the existing environmental issues.

Marques and Almeida (2013) proposed and tested a model using structural equation modelling. The model was tested with the effects of constructs like consumers' confidence, competence and effectiveness on green purchase behaviour of undergraduate students. The method adopted for the study was survey and data was collected from 419 undergraduate students. Findings of the study showed that the frequency of green purchase behaviour was directly related to the knowledge of environmental issues which was a direct result of consumers' belief in the effectiveness of green behaviour of students and the indirect result of the consumers' trust on green claims.

Logeswari (2013) surveyed to determine the green buying behaviour of undergraduate students of Malaysia. The independent variables of the study included environmental awareness and marketing effectiveness with the mediating effect of intention. A sample consisting of 375 undergraduate students were surveyed using a questionnaire. Data analysis carried out using multiple regression analysis showed that the students possessed environmental awareness or concern which mediated the buying behaviour of students. The study revealed that environmental awareness or concern, marketing effectiveness and intentions contributed significantly in predicting the green buying behaviour of undergraduate students.

Keum (2013) in a comparative study identified causal relationship among green consumer behavior, environmental knowledge and environmental attitudes of students. Survey study using structural analysis undertaken via AMOS 7.0 in bootstrapping method reflected that initially the causal model among green consumer behavior, environmental knowledge and environmental attitudes of students in the University of Education was suitable to the empirical analysis on research variables. Secondly, the

environmental attitude of students in the University has a direct and positive effect on green consumer behaviour. Finally, the environmental knowledge of the students had an indirect, positive effect on green consumer behaviour.

Szerenyi, Agnes, and Anna (2011) conducted a survey to analyse the consumer behaviour and everyday lifestyle patterns of university students and college students in Hungary. An online survey was conducted and the responses of 2998 respondents from 23 higher education institutions were pooled for analysis. Factor analysis was carried out to form variables of lifestyles and habits of consumptions; and cluster analysis was done to form clusters or groups of consumers based on their characteristics. The study revealed that students perceive themselves as being environmentally conscious. However, it was also found that environmental consciousness in the form of attitudes was not always congruent and consistent with actions. The study also reported that groups or individuals having consistent lifestyles, consumer behaviours and environmental activism rarely existed among university students.

Banumathi (2011) analysed environmental awareness and to evaluate the attitude towards green products by surveying students and general public as consumers. The sample for the study consisted of 100 general public constituting male and female and 100 students from Coimbatore, a city in Tamil Nadu, India. The findings of the study revealed that customers were aware of environmental problems and green products. However, the consumers possessed low level of attitude which needs to be enhanced for gaining better results.

McBride (2011) explored the current perspectives on the ecoliteracy, the investigator analysed the open-ended responses of more than 1,000 ecologists and other environmental scientists on the nature of ecological literacy and how it could be achieved. Factor analysis revealed the presence

of six common dimensions underlying respondents' views of ecological literacy (cycles and webs, ecosystem services, negative human impacts, critical thinking/application, nature of ecological science, and biogeography) and five common dimensions for how to achieve it (education by mass media, formal/traditional education, financial incentive, participatory/interactive education, and communication/outreach by scientists). A framework for eco-literacy was proposed that acted as a mechanism for creating a greater synergy between formal and informal education systems. The researcher analyzed pre- and post-fellowship surveys completed by participants in an ecologically focused K-12 outreach program at the University of Montana. The researcher recognised five means through which people achieve ecological literacy: informal education, formal education, financial incentives, exposure to nature and outreach.

Hammond and Herron (2012) emphasised there was an increasing apathy in the study of natural history in academic settings and in the scientific community. However, most studies of environmental knowledge do not address knowledge of local flora and fauna; they were concerned with the knowledge of environmental issues or broad ecological knowledge. Ecoliteracy established local natural history as fundamental to environmental knowledge and seeked to determine the knowledge of local environments and factors associated with that knowledge. This study investigated Ecoliteracy in Mississippi, determining knowledge of local flora and fauna of undergraduate and graduate students at the largest universities. Ecoliteracy levels in Mississippi were low. Students had a rudimentary knowledge of local flora and fauna, despite coursework in natural history. Students majoring in wildlife and fisheries and biology had more advanced knowledge of local flora and fauna than non-biology majors. Students were most knowledgeable of reptiles and amphibians, and least of fish and endangered species. The number of environmental courses taken and environmental sensitivity were

positively correlated with Ecoliteracy, and were strong predictors of Ecoliteracy. Ecoliteracy was influenced by coursework and experience with degree programs including fieldwork. Natural history knowledge was deficient at Mississippi universities. Researchers suggest reintroducing coursework focused on Ecoliteracy.

Almeida and Cutter-Mackenzie (2011) while studying about the environmental education in the Indian education system identified a theory-practice gap and a dire lack of research as some of the pertinent issues. Review of literature showed there was dearth in research at college level environmental education. Several state and national reports have expressed concerns about environmental education problems and many were anecdotal in nature. This evinced keen interest to find the status of implementation of environmental education at the college level.

Ermolaeva (2010) examined the green culture of college students which encompassed environmental awareness, environmental behaviour and lifestyles, environmental knowledge and environmental information. 378 students of Colorado State University in the United States of America were surveyed to determine the green culture of university students. Factor analysis yielded four types of green culture among university students like pure environmentalist type, proactive type, declare type and non-environmentalist type. The investigator also reported that not much gap was evident between environmental concern level and actual pro environmental behaviour among university students.

Davidson (2010) evaluated the ecological literacy of faculty, staff, and students of University of Iceland to collect baseline knowledge to inform the sustainability policy. The research was conducted through an online survey distributed to every person with a University of Iceland email account. The survey contained five sections, demographic information, environmental

attitudes, sustainable behaviours, environmental values, and visions for the University. The trends indicated that the older the participant, the better they did on the survey. Students, faculty, and staff from outside Iceland generally performed better on the survey except on the background knowledge section where nationality did not play a role.

Bruyere (2008) assessed the effect of environmental education on ecological literacy of undergraduate students. The study analysed which sustainable behaviours were influenced by knowledge of environmental systems and issues and which behaviours were not impacted by this same knowledge set. The study conducted at Colorado State University surveyed 136 first-year students in first year seminar classes where the professors allowed the researchers to give a presentation and conduct the survey. The study revealed that as individuals learned about ecological principles, biological cycles, and environmental systems, their environmental attitudes became more favourable and many of their environmental behaviours became more frequent. Consumer decisions stood out as an area where a significant number of participants shifted views in favour of a more environmentally conscious outlook. This study concluded that knowledge was a predictor of action, or at least a subset of actions; however, the study did not retest the students after a longer period of time to measure if they retained this new environmentally aware outlook.

Stern, Powell and Ardoin (2008) in a study entitled What Difference Does It Make? Assessing Outcomes From Participation in a Residential Environmental Education Program analysed the short and long term impacts of participation in three and five day residential environmental education programs. The study, surveyed 300 students during the 2006-’07 academic year. Items were measured on a 5point Likert type scale and evaluated four indices: connection with nature, environmental stewardship, interest in

learning and discovery, and knowledge and awareness of biological diversity. The researchers found that the residential environmental education experience appeared to achieve short term success in all of the measured outcomes. Analysis of a three month follow up survey revealed increase in students' commitments to environmental stewardship, their knowledge and awareness of the natural environment, and biological diversity remained significant. However, increases in students' interest in learning and discovery and their connection with nature faded over time. They also noted that five day programs and greater active engagement of visiting teachers onsite proved to be more successful in effecting desired outcomes than did the three day programs. The results suggested that longer program efforts enhanced the long term outcomes of residential environmental education programs.

Mostafa (2007) studied the gender difference in Egyptian consumers' green purchase behaviour. The study aimed to comprehend the influence of environmental knowledge, concern and attitude by conducting a survey on 1093 sample of consumers. The Multivariate Analysis of Variance (MANOVA) revealed that there exists gender difference in environmental knowledge, concern and attitudes of consumers. The study found that women were less aware of environmental issues when compared to their male counterparts. It was also found that men showed more concern and hold more positive attitude towards environment. The findings of the study were contrary to studies conducted in Western countries and other Asian countries.

Mostafa (2007) examined the influence of cultural and psychological factors on Green Purchase Behaviour of consumers in Egypt. A survey was conducted on 1093 consumers and a model was developed using the Structural Equation Modelling (SEM). The study revealed that the Environmental Orientation, Ecological Knowledge and Environmental Concern had influence on consumers Attitude towards Green Purchase

Behaviour. It was also found that there was a weak connection between Consumers Intentions and actual Consumer Behaviour.

Smith-Sebasto and Cavern (2006) found that students exposed to both pre visit and post visit activities supporting a residential environmental education experience in New Jersey showed more positive environmental attitudes. However, pre visit experiences alone had no significant effect on outcomes without the follow up experience; the reverse was also found (as cited by Stern, Powell, & Ardoin, 2008). It was important that pre and post visit activities have to be implemented to provide students with the greatest learning advantage.

Coyle (2005) in the descriptive survey interpreted the levels of ecological literacy of a range of demographics from minority students in the Netherlands to the entire University of Iceland. The finding was that there is a need for people to be better informed, and a need to have baseline data. In assessing correlations between knowledge and behaviour, the study found that environmental knowledge correlates significantly with sustainable behaviour. However, knowledge does not correlate with sustainable behaviours that necessitate greater changes in behaviour, and it does not correlate with lasting environmental stewardship which means that people do not fully incorporate environmental impacts into their day-to-day decision making in the short and long term. While some past studies have indicated that bolstering environmental education will increase ecological literacy, others have said that knowledge matters less than a person's worldview. Other scholars (Coyle, 2005 & Louv, 2008) suggested that informal education will yield more ecologically literate people than work inside of structured institutions.

Kaplowitz and Levine (2005) conducted a study which indicated that only 12% of four-year colleges and universities in the United States require environment-based coursework; the vast majority of undergraduate students

do not receive basic instruction in environmental literacy. Despite this concern, there was a gap in the scientific and educational literature regarding university student knowledge of natural history and whether or not Ecoliteracy was being supported at the university level.

Morrone *et al.* (2001) developed a survey instrument to test four components of ecoliteracy. The four components include knowledge, attitudes, sensitivities and personal beliefs. The survey was administered to four sample groups in the state of Ohio. Each sample group represented different demographic categories concluded that ideologies concerning the environment needed to be altered in order to increase ecoliteracy.

Tikka, Kuituned, and Tynys (2000) in a study found that there were distinctions in the level of environmental knowledge across academic fields. The study revealed that biology students scored the highest on tests of knowledge of nature and the environment, followed by students from the Institute of Forestry and students majoring in history.

A summary of the studies pertaining to the predictor variable Ecoliteracy are presented in the table given below.

Table 1

Summary of Review of Related Studies on Ecoliteracy

Year	Author	Variables of Study	Findings
2017	Lee *et al.*	Green Consumption Behaviour, Attitudes, Subjective Norms, Perceptions	• Green Consumption Intentions of college students were significantly predicted by Green Attitude, Green Subjective Norms and Green Perceived Behaviour.

2016	El Sakka	Green Awareness Purchasing, Green Marketing	• Students were not Aware about the benefits of green products and services. • There existed a positive correlation between Awareness and Consumer Behaviour.
2016	Cortes	Environmental Behaviours, Environmental Beliefs, Environmental Attitudes, Environmental Concern, Ecocentric Orientation, Green Consumption Patterns	• Environmental Beliefs were formed conflicting to anthropocentric views. • Environmental Attitudes were developed as a result of Environmental Concern. • The Ecocentric Orientations of students were evident through students' perspectives to decrease production and consumption. • Although students had Ecocentric Beliefs, Green Consumption Patterns were yet not evident among the students.
2016	Sethi and Tandon	Environmental Awareness, Perception, Attitude, Purchase Intentions, Environmental Concern	• The university students had high level of Environmental Concern. • The students possessed positive attitudes towards buying green products. • Students expressed high level of intention to buy green products in future.

			• No significant correlation existed between Gender, Income and Green Purchase Intention to buy Ecofriendly Products among university students.
2015	Nabila and Nazdrol	Green Product Purchase Behaviour, Environment Concern, Green Product Awareness, Green Products Benefits, Green Products Price	• The factors influencing Green Product Purchase Behaviour of university students included Environment Concern, Green Product Awareness and Benefits the consumers had by using Green Products. • Price of Green Products was not a significant factor.
2015	Joshi and Rahman	Green Purchase Behaviour, Green Purchase Intentions, Environmental Concern and Products Functional Attributes	• The consumers' environmental concern and products functional attributes emerged as the foremost determinants of the consumers green purchase behaviour.
2015	Dagher, Itani, and Kassar	Environmental Concern, Environmental Attitude, Green Purchasing	• Gender had a moderating effect on both Environmental Attitude and Environmental Concern of the sample towards Green Purchasing Behaviour.

		Behaviour, Gender	• There exists significant gender difference in the mean scores of Green Purchasing Behaviour, with the females having a high mean score indicating that females possess high level of Green Purchasing Behaviour when compared to their male counterparts. • A significant model was yielded with Environmental Attitude, Concern and Gender as significant predictors of Green Purchase Behaviour.
2014	Anvar and Venter	Social Influence, Environmental Awareness, Green Price, Consumer Attitudes, Consumers' Purchase Behaviour, Green Buying Behaviour.	• The factors like Social Influence, Environmental Awareness and Price, positively influenced individuals' Attitudes towards Green Products. • There was a positive effect of Attitude on Buying Behaviour and as a result, consumers with positive attitudes towards green products were more likely to purchase green products. • There was a significant difference between males and females with regards to Green Buying Behaviour.

2014	Jeger, Ham, and Leko	Environmental Attitudes, Green Consumer Intentions, Health Consciousness, Environmental Protection, Green Food Origin, Personal Attitudes	• Significant positive relationship was evident between Attitudes and Intention to buy green food products. • The study reaffirmed the potential of personal Attitudes in influencing Green Consumer Intentions among students as potential consumers.
2014	McGinn	Ecoliteracy, Caring, Practical Competency and Knowledge.	• There exists a definite gap in the college educational system with respect to Ecoliteracy.
2013	Stevenson *et al.*	Gender, Environmental Literacy, Knowledge, Cognitive Skills, Environmental Attitudes, Environmental Concern	• Gender was related to Environmental Literacy in complex ways and that females possessed lower knowledge pretest scores than males. • However, females out performed males in affect and cognitive skills and improved faster in knowledge over the course of the semester that they were studied. • Females possessed more positive Environmental Attitudes and greater levels of Concern for the environment. • Males had higher pre-test and post-test scores than females.

2013	Hai and Mai	Environmental Awareness, Environmental Attitude, Willingness, Environmental Concern, Green Purchasing Behaviour.	• Consumers with high level of education were more knowledgeable about Green products and Green Purchasing Behaviour. • Consumers with high level of education had more concerns about environmental issues prevailing. • Positive Attitude was found for highly educated consumers towards green purchasing along with willingness to continue this in future. • Educating consumers is vital for developing positive Attitudes and Green Consumer Behaviour.
2013	Yadav and Pathak	Environmental Awareness, Environmental Concern	• Female students possessed high level of Awareness and showed high level of Concern towards the existing environmental issues.
2013	Marques and Almeida	Consumers' Confidence, Consumers' Belief, Consumers' Trust, Consumer Competence,	• The frequency of Green Purchase Behaviour was directly related to the Knowledge of environmental issues which was a direct result of consumers' belief in the effectiveness of Green Behaviour of students and

		Consumer Effectiveness, Environmental Knowledge, Green Purchase Behaviour	the indirect result of the consumers' trust on green claims.
2013	Logeswari	Green Buying Behaviour, Environmental Awareness, Environmental Concern, Marketing Effectiveness and Intentions,	• The students possessed Environmental Awareness or Concern which mediated the Buying Behaviour of students. • Environmental Awareness or Concern, Marketing Effectiveness and Intentions contributed significantly in predicting the Green Buying Behaviour of undergraduate students.
2013	Keum	Green Consumer Behaviour, Environmental Knowledge, Attitudes	• Environmental Attitude of students in the University had a direct and positive effect on Green Consumer Behaviour. • Environmental Knowledge of the students had an indirect, positive effect on Green Consumer Behaviour.
2011	Szerenyi, Agnes, and Anna	Consumer Behaviour, Consumption Lifestyles and	• Students perceived themselves as being Environmentally Conscious. • Environmental Consciousness in

		Habits, Consumer Perception, Environmental Conscious. Environmental Attitudes, Environmental Activism	the form of attitudes was not always congruent and consistent with actions. • Groups or individuals having consistent lifestyles, Consumer Behaviours and Environmental Activism rarely existed among university students.
2011	Banumathi	Environmental Awareness, Attitude	• Customers were aware of environmental problems and green products. • Consumers possessed low level of Attitude which needs to be enhanced for gaining better results.
2011	McBride	Six common dimensions underlying respondents' views of ecological literacy (cycles and webs, ecosystem services, negative human impacts, critical thinking/application, nature of ecological	• A framework for eco-literacy was proposed that acts as a mechanism for creating a greater synergy between formal and informal education systems. • The research recognized five means through which people achieved Ecological Literacy: informal education, formal education, financial incentives, exposure to nature and outreach.

		science, and biogeography) and five common dimensions for how to achieve it (education by mass media, formal/traditional education, financial incentive, participatory/interactive education, and communication/outreach by scientists).	
2011	Hammond and Herron	Ecoliteracy, Environmental Knowledge, Environmental Sensitivity, Coursework and Experience of Degree Program	• Ecoliteracy levels in Mississippi were low. Students had a rudimentary knowledge of local flora and fauna, despite coursework in natural history. • Students majoring in wildlife and fisheries and biology had more advanced knowledge of local flora and fauna than non-biology majors. • The number of environmental courses taken and environmental

			sensitivity were positively correlated with Ecoliteracy, and were strong predictors of Ecoliteracy. • Ecoliteracy was influenced by coursework and experience with degree programs including fieldwork. Natural history knowledge was deficient at Mississippi universities. Researchers suggest reintroducing coursework focused on Ecoliteracy.
2011	Almeida and Cutter-Mackenzie	Environmental Education	• Several state and national reports have expressed concerns about environmental education problems and many are anecdotal in nature. • This has evinced keen interest to find the status of implementation of environmental education at the college level.
2010	Ermolaeva	Green Culture, Environmental Awareness, Environmental Behaviour and Lifestyles, Environmental	• Four types of green culture among university students like pure Environmentalist Type, Proactive Type, Declare Type and Non-Environmentalist Type. • Not much gap was evident between Environmental Concern

		Knowledge, Environmental Information, Environmental Concern, Pro Environmental Behaviour.	level and actual; Pro Environmental Behaviour among university students.
2010	Davidson	Ecological Literacy, Demographic Factors, Environmental Attitudes, Sustainable Behaviours, Environmental Values and Visions for the University.	• The older the participant, the better they did on the survey. • Students, faculty, and staff from outside Iceland generally performed better on the survey except on the background knowledge section where nationality did not play a role.
2008	Bruyere	Environmental Education, Ecological Literacy, Sustainable Behaviours, Knowledge of Environmental Systems and Issues,	• As individuals learn about ecological principles, biological cycles, and environmental systems, their Environmental Attitudes become more favourable and many of their Environmental Behaviours become more frequent. • Consumer decisions stood out as an area where a significant

		Environmental Attitudes, Environmental Behaviours, Consumer Decisions, Environmental Consciousness, Environmental Action	number of participants shifted their views in favour of a more Environmentally Conscious outlook. • Knowledge was a predictor of action, or at least a sub-set of actions.
2008	Stern, Powell, and Ardoin	Environmental Education, Knowledge and Awareness of the Natural Environment, and Biological Diversity, Connections with Nature, Environmental Stewardship, Interest in Learning and Discovery	• The residential Environmental Education experience appeared to achieve short term success in all of the measured outcomes. • Increases in students' commitments to Environmental Stewardship, their Knowledge and Awareness of the natural environment, and biological diversity remained significant. • Increases in students' interest in learning and discovery and their connection with nature faded over time. • They also noted that five day programs and greater active engagement of visiting teachers onsite proved to be more successful in effecting desired

			outcomes than did the three day programs. • Longer program efforts may enhance the long term outcomes of residential environmental education programs.
2007	Mostafa	Gender, Green Purchase Behaviour, Environmental Knowledge, Concern and Attitude	• There exists gender differences in Environmental Knowledge, Concern and Attitudes of consumers. • Women were less aware of environmental issues when compared to their male counterparts. • Men showed more concern and hold more positive attitude towards environment.
2007	Mostafa	Cultural Factors, Psychological Factors, Environmental Orientation, Ecological Knowledge, Environmental Concern, Consumer's Attitude, Consumers	• Environmental Orientation, Ecological Knowledge and Environmental Concern had influence on consumers Attitude towards Green Purchase Behaviour. • There was a weak connection between Consumers Intentions and actual Consumer Behaviour.

		Intentions, Actual Consumer Behaviour, Green Purchase Behaviour.	
2006	Smith Sebasto and Cavern	Environmental Education Environmental Attitudes, Environmental Education Experience.	• Students exposed to both pre visit and post visit activities supporting a residential environmental education experience in New Jersey showed more positive Environmental Attitudes. • Pre visit experiences alone had no significant effect on outcomes without the follow up experience. • The pre and post visit activities were implemented to provide students with the greatest learning advantage.
2005	Coyle	Ecological Literacy, Environmental Knowledge, Sustainable Behaviour. Environmental Stewardship Environmental Education	• Environmental Knowledge correlates significantly with sustainable behaviour. • Knowledge does not correlate with Sustainable Behaviours that necessitate greater changes in behaviour • Knowledge does not correlate with 'lasting Environmental Stewardship' which means that people do not fully incorporate environmental impacts into day-to-day decision

			making in the short and long term.
2005	Kaplowitz and Levine	Ecoliteracy	• Only 12% of four-year colleges and universities in the United States required environment-based coursework • The vast majority of undergraduate students do not receive basic instruction in environmental literacy. • There was a gap in the scientific and educational literature regarding university student knowledge of natural history and whether or not Ecoliteracy was being supported at the university level.
2001	Morrone *et al.*	Eco-Literacy, Knowledge, Attitudes, Sensitivities and Personal Beliefs.	• The four components in the research included Knowledge, Attitudes, Sensitivities and Personal Beliefs. • Ideologies concerning the environment needed to be altered in order to increase Eco-literacy.
2000	Tikka, Kuituned and Tynys	Environmental Knowledge, Academic Fields	• There were distinctions in the level of Environmental Knowledge across academic fields. • Biology students scored the highest on tests of knowledge of nature and the environment, followed by students from the Institute of Forestry and students majoring in history.

Theoretical Framework of Environmental Responsibility Attribution

Attribution is a cognitive process mostly included in social cognition. The psychological dimension of attribution has its origin from cognitive psychology and approaches to gestalt perspectives (Hamilton, 1978). This cognitive process of attribution is related to linking events, conditions or results to its causes. Attribution which is a form of social cognition was popularly discussed and used in the theories and models of sociological base. Several popular researches in attribution were centered around social cognition and specifically on attribution. The theories of attribution can be used effectively for explaining the socio-psychological aspects pertaining to an individual such as attitude, perception, behaviour, knowledge acquisition, etc. the theory has a wide application potentials in major areas of education, psychology, sociology, medicine, law, management, etc.

Attribution is defined as a process that begins with social perception, progresses through a causal judgment and social inference, and ends with behavioral consequences (Crittenden, 1983). The researches and theories related to attribution mainly focused on causal inferences. The personality of an individual constitutes the potential causes of behaviour which may be attributed to oneself and that of others. According to Fiske and Taylor (1991), Attribution *theory* dealt with how the social perceiver uses information to arrive at causal explanations for events. It examined what information was gathered and how it was combined to form a causal judgment.

Major Theories of Attribution

The attribution construct had been explained by several theorists from multi dimensions. These theories were used for explaining the causes of behaviours of individuals in different contexts. The theories of attribution are utilised in multiple areas like psychology, sociology, education, management,

etc. Popular theories of attribution include that of Heider's Theory of Attribution, Jones and Davis Theory of Deduced Attribution, Harold's Change Theory, Shaver Hybrid Attribution Theory and Weiner's Attribution Theory. Some of these important theories of attribution are discussed below.

Heider's Theory of Attribution

The major works in attribution began from the works of Heider (1958). The Theory of Attribution was discussed in a book entitled The Psychology of Interpersonal Relationships written by Heider. The popular formulation of Heider's theory is also known as the Simple Psychology Attribution Theory. According to Heider, individual tries to comprehend and explain about the events and outcomes happening around them. Heider presumed that, in day to day lives, individual tries to comprehend the reasons behind occurrences of events, predicts what events would occur and how they would occur. On the basis of these observations, individual tries to control events occurring around them. Similarly, individual forms theories about the social milieu. Based on further observations these theories are supported, rejected or modified accordingly. The two main ideas that became the popular formulations of Heider include internal attributions and external attributions.

Internal Attribution

The attribution or assignment of causes of events, conditions or outcomes to oneself forms the basis for internal attribution. Therefore, when an individual believes or explains causes of behaviour in terms of internal characteristics like that of personality, beliefs, attitudes, interests, motives, etc., it constitutes internal attribution. Here the behaviour is believed to be completely influenced by internal factors which are totally under ones control, and hence the individual tend to assume a sense of responsibility.

External Attribution

The attribution of causes of events or conditions or outcomes to situational factors or the external forces forms the external attribution. Therefore, when an individual believes or explains causes of behaviours in terms of external factors or situations like that of environmental factors or others, it constitutes external attribution. Here the behaviour is believed to be influenced ny external factors which are beyond the control of individual which makes the individual does not feel the sense of responsibility.

Kelley's Covariation Model

Harold Kelley (1967, 1973) proposed a theory of attribution popularly known as Kelley's Covariation Model. This is an advancement and extended form of Heider's theory. It was published in the book Attribution in Social Psychology written by Kelley in 1967. The Co variation Model extends from Heider's theory by including the hypotheses relating to factors that can affect the formation of attributions. These factors include consistency, distinctiveness and consensus. The application of Kelley's Covariation Model is mostly intended to make judgments about whether an individual's action is attributable to characteristics of a person or to situations / environment. According to this theory, the behaviour occurs owing to the presence of factors that very closely covariate with the behaviour. If the judgment about a particular behaviour is attributed to characteristics of an individual, then it is considered and judged as being internal; and if the behaviour is attributed to any situation or environment, then it is considered or judged as being external attribution.

The term co variation connotes the presence of information about the situation or event based on multiple observation already made earlier in different occasions. Owing to the fact that the individual is knowledgeable

about the event/situation from previous observations, the co variations of an observed effect and its cause can be perceived by the individual. According to this theory, the behaviour occurs owing to the presence of factors that very closely covariate with the behaviour. According to Kelly, individual considers three different types of causal information that affects judgment of behaviour. The combination of high consensus, high distinctiveness and high consistency predicts an attribution to the external stimulus, while a combination of low consensus, low distinctiveness and high consistency predicts an attribution to the individual. When the behavior is inconsistent, without any regard to the level of consensus or distinctiveness, an attribution is predicted to circumstances. The three major dimensions of covariation model are discussed below.

Consensus

The dimension Consensus pertains to the extent to which others behave or react to a same stimuli or event in the same way as the individual does. For instance, if an individual adheres to green behaviour while with friends, and the friends also have green behaviours, then the behaviour is said to be high in consensus.

Distinctiveness

The dimension Distinctiveness relates to the extent to which the individual behave in the same manner to other different stimuli or occasion ie., the reaction or whether the behaviour is common for all stimuli or common to one stimuli. For example, if an individual prefers to buy green products only while shopping with friends who prefer to buy the same, then the behaviour is said to be high in consensus. On the contrary, if the individual always prefer to buy green products, then the behavioural distinctiveness is low.

Consistency

The dimension Consistency is related with the extent to which an individual behaves to the same stimuli in the same way on similar occasions across the time. For instance, if an individual always prefer to buy green products while shopping with friends, then the behavioural consistency is high. If the individual prefers to buy green products only during selected occasions, then the behavioural consistency is low.

According to Kelley, the behavioural influences are mostly made by looking at the past experiences. The inference of behaviour pertaining to the cause of behaviour may either be based on *multiple necessary causes*, where the information about several factors are available that covariate with behaviour. The behavioural inference may also be based on *multiple sufficient causes,* where there aren't information about several factors, but there are information available on some factors that are sufficient enough to make inference about the causes of behaviour.

Jones and Davis Correspondence Inference Theory of Attribution

According to Jones and Davis (1965), individuals closely observe intentional behaviours rather than accidental behaviours. This theory gives an idea about how to comprehend an internal attribution. This happens when an individual's motives correspond to the behaviour. Jones and Davis further proposes that the future behaviour of an individual can be predicted from the internal factors or dispositions related to that person. The theorists have proposed certain conditions based on which dispositional attributes can be made with respect to behaviour that is perceived as intentional. Davis explicates correspondence with respect to an event when an observer makes inferences that, the person's behaviour matches or is in correspondence with their personality. This is an alternative of dispositional attribution. The

correspondence inference is done on the basis of five sources of information about behaviour.

'*Choice*' is one of the sources of information about an individual behaviour. Under this, if an individual behaves in a particular way which is based on the choice of that individual, then such behaviour is believed as being due to internal or dispositional factors. Another source of information about behaviour is whether the behaviour happens to be an '*accidental or intentional*.' If the behaviour of an individual happens to be an intentional one, then it is more likely to be attributed to person's personality or internal traits. On the contrary, if the behavior happens to an accidental one, then it is more likely to be attributed to external factors or situation. '*Social desirability*' also provides information about an individual's behaviour. According to this, if an individual's behaviour is in non conformity with that of others, then it is likely to be attributed to the personality or internal factors pertaining to the individual. Information about the behaviour also relates to '*hedonistic relevance*' wherein individuals behaviour is a direct intention to benefit or harm other individuals. '*Personalism*' is yet information about a person's behaviour wherein, if the behaviour is intentional and it appears to have impact on others, then the behaviour is attributed to be as personal or due to internal factors of the individual.

Weiner's Attribution Theory of Motivation

Attribution Theory of Motivation was propounded by an eminent psychologist called Bernard Weiner (1974). This theory is most popularly used in the field of Education. The theory of Motivation explains the way an individual is motivated based on the individual's reasons, alibis and vindications about oneself. Weiner has classified the various factors that influence an individual's achievement and motivation which happens to be

beyond the control of the individual. The factors include effort, ability, luck and task difficulty level.

Achievement can be attributed to a minimal of four factors. '*Effort*' is an attribute of achievement that is totally internal to an individual. Although it is unstable in nature, the individual can control it to a large extend. '*Ability*' is another factor that can be attributed to achievement. Ability is relatively stable and internal attribute of achievement over that the individual normally do not exercise much control. Another attribute of achievement is '*level of task difficulty*' that is totally external to an individual and beyond the control of an individual. '*Luck*' is yet another attribute of achievement that is characterised as being unstable and external over which the individual has very little control.

Applications of Attribution Theory

Attribution theory is used to learn the cause of a particular behaviour. The theory is used primarily in the social-psychology scenario. Attribution theory finds its application in the field of Psychology, Criminal Law, Ethics, Decision Making and understanding Cognitive bias. The sectors of Human Resource Management (HRM), Self Appraisals, Peer Appraisals also witnessed the application of this theory. The fields of Education and Marketing Communication also aspire for the application of attribution theory.

Steps in the Process of Attribution

Attribution as a process encompasses three stages. The first stage includes '*action perceptio*n' that essentially involves the perception or observation of behaviours or actions of individuals. The second stage pertains to '*intention judgement*' which involves the gauging of intention of behaviour of an individual. The third step relates to '*attribution of disposition*' which

involves determining whether the person was forced by an external factor or situation to behave in a particular manner or otherwise.

Consumers' Environmental Responsibility Attribution

Responsibility is a readiness of an individual to respond to the multiplicity of normative demands. Consumers' environmental responsibility means adhering to consumption related activities that do not cause any detrimental input on the environment (Ebreo, Hershey, & Vining, 1999 and Pieters, 1991). Responsibility Attribution is a belief correlated with cause of an event, a state of condition or the result of an action. This event, condition or result could be positive or negative. Responsibility attribution is often linked with negative events, conditions or results. It is a cognitive process that has varied affects on the emotions of an individual. For instance, if an individual is seen littering a public place, it results in a feeling of anger resulting in a disgust emotion. The greater the degree of perceived responsibility attribution, the greater will be the intensity of feelings and emotions. The connection between the thoughts and emotions is dependent on individual's responsibility judgments. Perceived responsibility of a negative event may result in a negative emotions and perceived absence of responsibility of a negative event may result in positive emotions. In this context, the action oriented behaviours of an individual totally depends upon the responsibility judgment pertinent to a situation and how it is connected to the individual's feelings. For example, consumer willingness to purchase green products of companies with eco friendly policies and on the contrary, if a company is found to be non-ecofriendly, the consumers tending to boycott products and services of that company.

Another important factor of responsibility attribution is the direction of applying the responsibility attribution. Responsibility attribution may either be attributed to self or to others. An instance of Environmental Responsibility

Attribution to self is, individual attribution of responsibility relating to environmental consequences to self, when there was availability of ecofriendly alternatives. An instance of Environmental Responsibility Attribution to others is, attributing responsibility of maintaining the quality of environment exclusively on the shoulder of government rather than believing that it is the responsibility of self also. The behaviour and its attributions are better explained by the theories related to it.

The major assumption of the Theory of Attribution is that the future behaviour of an individual is determined by attribution of behaviour of that individual. Halkier and Holm (2008) explains a 'responsible consumer' as being deeply involved in social as well as environmental issues by characterizing oneself as a social actor attributing duties and responsibilities to oneself. In other words, a 'responsible consumer' is completely committed towards activities that are environmentally and socially responsible with an intention to transform social life. The self attribution of responsibilities can be understood as extending the consumers' authority over oneself. When an individual realizes the meaning and consequences of individual action upon the environment, consumers develop a feeling of citizenship and a responsible position in the larger community (Halkier, 1999). This would boost up the morale o initiate activities for enhancing the state of environment for quality of life.

Human consumption activities have created several environmental destructions, the majority of which may be attributed to ignorance or unconscious usage of natural resources for meeting the needs of life ignorance or unconscious usage of natural resources for meeting the needs of life. Grunert (1993) observed that among several reasons for environmental degradations, 40% have been accounted for by human consumption activities occurring at house hold level. Hence it is vital for consumers to refine their

action at individual level, and go hand in hand with the initiatives by the government and other responsible authorities for heading towards sustainable consumption. For taking this big leap, knowledge, awareness and skills pertaining to the state of environment and the strategies that may be adopted for enhancing the environmental condition is essential (Stone *et al.*, 1995).

The Responsible Environmental Behaviour Model

The aim of education is moulding desired behaviours in individuals. Environmentally responsible behaviour is a complex form of behaviour. It entails from the feeling that all the living entities including humans form part of a common system having common basic needs. Hence it is felt vital to protect and preserve the same by checking on the human actions that plausibly impact the environment. Environmentally responsible behaviour can be understood as an outcome of an ecological paradigm shift centered on the idea that all living beings including humans together makes up the web of life.

Traditional line of thinking related to environmentally responsible behaviour pertains to the belief that if individuals are knowledgeable about the environment and its related issues, there is a possibility to induce behavioural change. Another popular model that was widely accepted was the belief that increased knowledge leads to favourable attitudes which in turn lead to action oriented environmentally responsible behaviours towards enhancing the environmental quality (Ramsey & Rickson, 1977). Several researches have been attempted to develop an understanding of the variables related to environmentally responsible behaviours. One popular work that gained attention during the late twentieth century was that of Hines *et al.*, (1986-87) who conducted a meta analysis of the environmentally responsible behaviours. This behaviour dimension research of environmental education was done by analyzing 128 studies that include variables assessed since 1971. The analysis outcome was a list of 15 variables that influenced

environmentally responsible behaviours. These variables were subjected to meta analysis gauging its association with responsible environmental behaviour. The analysis resulted in the emergence of a Model of Responsible Environmental Behaviour popularly known as the Hines Model of Responsible Environmental Behaviour. The model is presented in the Figure 1.

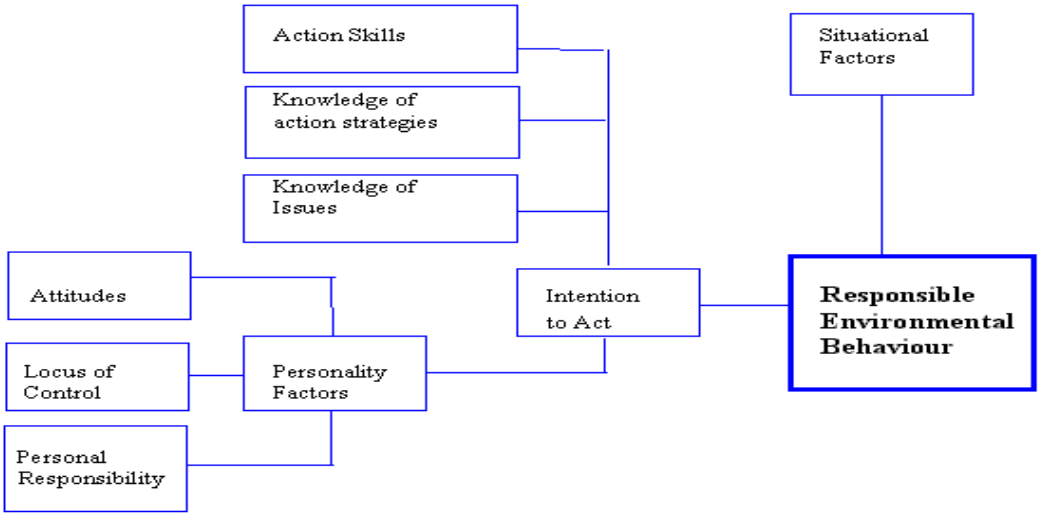

Figure: 1. The Hines Model of Responsible Environmental Behavior (Adapted from Hines *et al.* (1986/87)

According to Hines *et al.*, (1986-87) an individual is likely to perform action oriented behaviours only if there is an intention to take an action. However, before an individual develop an intention to act, knowledge about the issue and also the knowledge about the available choices of action most appropriately suited for the situation is also significant. This must be backed by the possession of the adequate skills required for performing action oriented behaviours. Similarly, an individual must possess personality factors like a positive attitude, a locus of control and a sense of personal responsibility towards the environment. Apart from this, situational factors like socio-economic conditions also determine environmentally responsible behaviour.

Review of Related Studies on Environmental Responsibility Attribution

Karunaratna, Naotunna, and Sachitra (2017) investigated the significant factors that influenced the green purchase behaviour of undergraduate students in Sri Lanka. Survey was conducted using structured questionnaires that were rated on a five point Likert scale ranging from strongly disagree to strongly agree. Multiple regression analysis was carried out to find out the significant predictors of green consumers' behaviour. The investigators identified certain predictors of green purchase behaviour like social influence, environmental attitude, environmental knowledge, perceived environmental responsibility, government initiative and exposure to environmental messages. From the result it was evident that factors like social influence, perceived environmental responsibility and government initiatives had significant relationship with green purchase behaviour of consumers. However, environmental attitude and exposure to environmental messages through media was not significant in influencing the young educated consumers selected for the study.

Thoufique, Siwar, Talib, and Chamhuir (2014) conducted a review analysis for synthesizing the factors to identify the scale of items that can be used for measuring consumers' environmental responsibility. Six dimensions were identified like (1) knowledge and awareness (2) attitude (3) green consumer value (4) emotional affinity towards nature (5) willingness to act and (6) environment related past behaviour. The investigators also proposed a conceptual model that would be useful for future empirical researches.

Witt (2013) explored the influence of spiritual dimensions of nature experiences on environmental responsibility. A qualitative survey was conducted by interviewing environmentalists and similar such people who had love for nature and individuals who practiced spirituality in Canada. The data pooled through interview was analysed and the findings revealed that

valuing nature developed and enhanced the sense of environmental responsibility of the participants. The spiritual; aspects of the nature experiences were characterized by labelled presence, interconnectedness and self explanation which formed the foundations for developing worldviews and a sense of environmental responsibility which at times also influenced their choice of careers. The study throws light on the potentials for developing environmental responsibility through spiritual nature experiences.

Fielding and Head (2012) investigated young Australians' determinants of environmental actions by examining responsibility attributions, locus of control, knowledge and attitudes. An online survey of 'Youth and Environment' was conducted with sample of 1529 participants between the age groups of 12-17 years and 2192 participants of 18-24 years who are in post secondary schooling were selected. The findings revealed that attributing greater responsibility to community to which individuals belong were positively related to intentions and environmental actions; while attributing greater responsibility to the government for protecting the environment was related to negative environmental intentions and actions. It was also found that individuals with higher level of environmental knowledge and concern along with an internal locus of control I relation to environment, showed a strong pro-environmental behavioural intentions and actions. It was also found that the environmental detrimental behaviour of such individuals was very meagre.

Jagers and Matti (2010) conducted an exploratory study to access the existence and strength of values for developing ecological citizenship among Swedish citizens. 4000 participants were surveyed using questionnaires. It was found that for majority of participants the persistence of value base demonstrated ecological citizenship. The study provided insights on the

strength of ecological citizenship values and beliefs for fostering individual environmental responsibilities and actions.

Middlemiss (2010) developed a new conceptual framework that explains environmental responsibility in relation to ecological foot print. This was done by comparing literatures on sustainable consumption, environmental justice and ecological citizenship. Newly developed framework recognizes the individual responsibility for sustainable practices and the limitations on action oriented behaviours. The paper emphasised the salience of assuming individual responsibility for ecological citizenship.

Montgomery and Stone (2009) substantiated the culture differences in consumer attitude towards environment. 459 samples were selected from 5 countries like Azerbaijan, Italy, Spain, United States and Venezuela. Factor analysis was carried out to identify the factors and analysis of variance to identify cultural differences in attitude of consumers towards the environment. The findings revealed that environmental responsibility was evident in individuals based on knowledge of environmental problems, knowledge of remedial alternatives for solving the problems, skills required for action oriented behaviours and characterisation of individual with genuine desire to act in an environmentally responsible manner.

Fahlquist (2009) conducted a critical thematic analysis distinguishing backward looking and forward looking responsibilities. The author criticised the idea of blaming individuals for environmental problems and proposed forward looking responsibility to individuals that focuses on the capacities and resources was provided that can be effectively used for addressing environmental problems. Towards this, a greater share of forward looking environmental responsibility was attributes to institutional agents and government had better opportunities for creating a society to act in an environmentally friendly manner.

Clump, Brandel, and Sharpe (2002) conducted a study to assess the level of environmental responsibility of individuals who differ in their materialism profiles. The materialism profiles were identified by using the Materialism Values Scale and the Possession Satisfaction Inventory were used. 271 undergraduate students responded to the ECOSCALE. Multivariate analysis was used to analyse data. The result revealed that three groups (high, medium and low level of responsibilities) significantly differed in materialism profiles. Students with high level of environmental responsibility scored lower than the students with low responsibility level on the three scales; and students with high level of environmental responsibility scored even significantly lower than students with medium level of environmental responsibility. The result highlighted that students possessing different levels of ER differ significantly in the way they perceive others and the environment owing to the evident differences in values, personality and materialism profiles.

Palmberg and Kuru (2000) examined the results of outdoor activity experiences of children in Finland. A qualitative approach by case study method was adopted by the investigators. Data was collected by using questionnaires, conducting interviews and observations. It was found that experiences in nature developed self confidence and a safety feeling s among students. Such experiences enhanced the connectivity of individuals with nature followed by the manifestation of better social behaviours with high moral judgments. Te investigators affirm the significant role of outdoor activities in schools and teacher education.

Kaiser, Ranney, Hartig, and Bowler (1999) attempted an expanded rational choice model of environmental attitude that extended to moral domain which was examined by considering the sense of responsibility as a predictor of intention to behave in an environmentally responsible manner.

The model was tested and validated through two studies. The data for this was collected from 436 respondents and analysed using the structural equation modelling. The findings revealed that 45% of variance of ecological behavioural intentions was attributed to environmental knowledge, environmental values and from the feeling of a sense of responsibility which in turn predicted 76% of variance of ecological behaviour. The findings also revealed that an increase in the sense of environmental responsibility enhanced ecological behavioural intentions. According to this study, the moral extension of proposed attitude model was more supported by the authors than the basic attitude model.

Macnaghten and Jacobs (1997) carried out an exploratory study to gain insight on the cultural and political importance of sustainable development discourse. The investigators also explored to what extent such discourses was publically accepted and to what extent its assumptions were valid. Focus groups were used for investigation for collecting data about the participants' attitudes, concerns and future plan of actions. It was found that only a few participants talked about quality of life. The participants' awareness about global and local environmental issues were relatively high and they perceived that the problems are getting worse day by day and impacting peoples' lives directly. Majority of people believed that it wass the responsibility of 'oneself' to change and improve the conditions. On the contrary, young men and the unemployed group did not express the sense of environmental responsibility attributing it to their lack of power to change the situation. Most participants opined that individual efforts were more important to address local issues, while more concerted and political efforts were needed for addressing wider range of problems.

Harrison, Burgess, and Filius (1996) conducted a cross cultural study involving citizens of United Kingdom and Netherlands comparing the

willingness of individuals to assume environmental responsibilities and behave in a pro environmental manner. The study revealed that Dutch citizens were more pro-environmental when compared to UK citizens. The factors that influenced individuals in assuming environmental responsibilities and being pro-environmental were identified. The main determining factor was the extent to which individuals were able to make judgments about how far the environmental claims and rhetoric were valid based on their personal knowledge and media. The second determinant was the confused nature of environmental 'truths' that raised doubt among the individuals, and the final determinant was the level of truth that existed between the citizens and government.

Eden (1993) examined the role of individual's environmental responsibility in taking up public environmentalism. A thematic representation of the area was done to address the issue of public environmentalism and how individuals engage in such activities. The investigator also pointed out that many a times individual environmental responsibility have been utilised by the business and government for fostering public environmentalism. The investigator also emphasised that such issues have not yet been discussed in the academic reading. This paper shed light on the need for individual environmental responsibility for fostering environmentally responsible consumer behaviour.

Hines, Hungerford, and Tomera (1987) conducted a meta analysis research to synthesize the factors influencing responsible environmental behaviour. The meta analysis encompassed empirical based researches on environmental behaviour. The analysis aimed at identifying the influencing variables, determining its strength of relationship and to formulate a model of environmental responsible behaviour. The Schmidt Hunter procedure of meta analysis was conducted involving locating relevant empirical based studies,

extracting information and finally analyzing and synthesising of information. A meta analysis of cognitive, psycho-social and demographic variables were carried out with specific reference to experimental studies. The result revealed that several variables were associated with responsible environmental behaviours. The variables identified include knowledge of issues, knowledge of action strategies, locus of control, attitude, verbal commitment and an individual's sense of responsibility. A model of responsible environmental behaviour was also proposed by the investigators.

A summary of the studies pertaining to the predictor variable Environmental Responsibility Attribution are presented in the table given below.

Table 2

Summary of Review of Related Studies on Environmental Responsibility Attribution

Year	Author	Variables of the study	Findings
2017	Karunaratna, Naotunna and Sachitra	Green Purchase Behaviour, Social Influence, Environmental Attitude, Environmental Knowledge, Perceived Environmental Responsibility, Government Initiative and Exposure to Environmental Messages.	• Factors like Social Influence, Perceived Environmental Responsibility and Government Initiatives had significant relationship with Green Purchase Behaviour of consumers. • Environmental Attitude and Exposure to Environmental Messages through media was not significant in influencing

			the young educated consumers selected for the study.
2014	Thoufique, Siwar, Talib and Chamhuir	Consumers' Environmental Responsibility, Knowledge and Awareness, Attitude, Green Consumer Value, Emotional Affinity towards Nature, Willingness to Act and Environment Related Past Behaviour	• Six dimensions were identified like (1) knowledge and awareness (2) attitude (3) green consumer value (4) emotional affinity towards nature (5) willingness to act and (6) environment related past behaviour. • The investigators also proposed a conceptual model that would be useful for future empirical researches.
2013	Witt	Environmental Responsibility	• Valuing nature developed and enhanced the sense of Environmental Responsibility of the participants. • The spiritual aspects of the nature experiences were characterized by labelled presence, interconnectedness and self explanation which formed the foundations for

			developing worldviews and a sense of environmental responsibility which at times also influenced their choice of careers.
2012	Fielding and Head	Environmental Actions, Responsibility Attributions, Locus of Control, Environmental Knowledge, Attitudes, Environmental Intentions and Actions. Environmental Concern, Pro-Environmental Behavioural Intentions	• Attributing greater Responsibility to community to which individuals belong were positively related to intentions and environmental actions; while attributing greater Responsibility to the government for protecting the environment was related to negative environmental intentions and actions. • Individuals with higher level of Environmental Knowledge and Concern along with an Internal Locus of Control in relation to environment, showed a strong pro-environmental behavioural intentions and actions. • Environmental detrimental

			behaviour of such individuals was very meagre.
2010	Jagers and Matti	Ecological Citizenship Values and Beliefs, Individual Environmental Responsibilities and Actions.	• Majority of participants expressed the persistence of value base demonstrated Ecological Citizenship. • The study provided insights on the strength of Ecological Citizenship Values and Beliefs for fostering individual Environmental Responsibilities and Actions.
2010	Middlemiss	Environmental Responsibility, Sustainable Consumption, Environmental Justice and Ecological Citizenship, Individual Responsibility for Sustainable Practices Ecological Citizenship	• Individual responsibility was found to be essential for Sustainable Practices and the limitations on action oriented behaviours. • Importance of assuming Individual Responsibility for Ecological Citizenship was highlighted
2009	Montgomery and Stone	Consumer Attitude, Cultural Differences,	• Environmental Responsibility was evident

		Environmental Responsibility, Knowledge of Environmental Problems, Knowledge of Remedial Alternatives for Solving the Problems, Skills Required for Action Oriented Behaviours and Characterization of Individual with Genuine Desire	in individuals based on Knowledge of Environmental problems, knowledge of remedial alternatives for solving the problems, skills required for action oriented behaviours and characterization of individual with genuine desire to act in an Environmentally Responsible manner.
2009	Fahlquist	Forward Looking Environmental Responsibility	• The author criticised the idea of blaming individuals for environmental problems and proposed forward looking responsibility to individuals that focuses on the capacities and resources being provided that can be effectively used for addressing environmental problems. • A greater share of forward looking Environmental Responsibility was

			attributed to institutional agents and government who have better opportunities for creating a society to act in an environmentally friendly manner
2002	Clump, Brandel and Sharpe	Environmental Responsibility, Materialism Values, Possession, Satisfaction, Environmental Responsibility Values, Personality	• Three groups (high, medium and low level of responsibilities) significantly differed in materialism profiles. • Students with high level of Environmental Responsibility scored lower than the students with low responsibility level on the three scales; and students with high level of environmental responsibility scored even significantly lower than students with medium level of environmental responsibility. • Students possessing different levels of ER differ significantly in the way they perceive others and

			the environment owing to the evident differences in values, personality and materialism profiles.
2000	Palmberg and Kuru	Experiences in Nature, Self Confidence, Safety Feelings, Connectivity with Nature, Social Behaviour, Moral Judgment	• Experiences in nature developed self confidence and a safety feelings among students. • Outdoor experiences enhanced the connectivity of individuals with nature followed by the manifestation of better social behaviours with high moral judgments. • The investigators affirmed the significant role of outdoor activities in schools and teacher education.
1999	Kaiser, Ranney, Hartig, and Bowler	Environmental Attitude, Moral Values, Environmental Responsibility, Ecological Behavioural Intentions Attributed to Environmental	• 45% of variance of ecological behavioural intentions were attributed to Environmental Knowledge, Environmental Values and from the feeling of a Sense of Responsibility which in turn predicted 76% of

		Knowledge, Environmental Values	variance of ecological behaviour. • An increase in the sense of Environmental Responsibility enhanced Ecological Behavioural Intentions.
1997	Macnaghten and Jacobs	Cultural and Political factors, Sustainable Development Discourse, Attitudes, Concerns and Future Plan of Actions. Environmental Awareness, Perceived Responsibility of 'Oneself', Sense of Environmental Responsibility Attribution	• The participants' awareness about global and local environmental issues were relatively high and they perceived that the problems are getting worse day by day and impacting peoples' lives directly. • Majority of people believed that it was the responsibility of 'oneself' to change and improve the conditions. • Young men and the unemployed group did not express the sense of Environmental Responsibility attributing it to their lack of power to change the situation. • Most participants opined that individual efforts were

			more important to address local issues, while more concerted and political efforts were needed for addressing wider range of problems.
1996	Harrison, Burgess, and Filius	Personal Knowledge and Media, Willingness of Individuals, Environmental Responsibilities, Pro Environmental Behaviour	• Dutch citizens were more pro-environmental when compared to UK citizens. • The factors that influenced individuals in assuming environmental responsibilities and being pro-environmental were identified. • The main determining factor was the extent to which individuals were able to make judgments about how far the environmental claims and rhetoric were valid based on their personal knowledge and media. • The second determinant was the confused nature of environmental 'truths' that raised doubt among the individuals, and the final determinant was the level of truth that existed between

			the citizens and government.
1993	Eden	Public Environmentalism, Environmentally Responsible Consumer Behaviour	• Issues like Environmentally Responsibility have not yet been discussed in the academic reading. • This paper shed light on the need for individual Environmental Responsibility for fostering Environmentally Responsible Consumer Behaviour.
1987	Hines, Hungerford, and Tomera	Environmental Responsible Behaviour, Cognitive, Psycho-Social and Demographic Variables, Knowledge of Issues, Knowledge of Action Strategies, Locus of Control, Attitude, Verbal Commitment and an Individual's Sense of Responsibility.	• Variables associated with responsible Environmental Behaviours - Knowledge of Issues, Knowledge of Action Strategies, Locus of Control, Attitude, Verbal Commitment and an Individual's Sense of Responsibility. • A model of responsible environmental behaviour was also proposed by the investigators.

Theoretical Framework of Social Influence

Humans form part of a society or a community where numerous interactions take place at varied levels. Individual's behaviour are affected by several factors. These factors can be internal or external to an individual. The internal factors that affected an individual are characterised by the traits and personality of an individual which was totally internal to an individual. While external factors that influence an individual include various social factors encompassing reference groups, family members, social roles and status of an individual and social media. The term Social Influence was derived from the concept of subjective norms. Rashotte (2007) defines influence as the change in an individual's thoughts, feelings, attitudes or behaviours that results from interaction with another individual or a group. Social Influence indicated the influence or social pressure exerted by parents, teachers, friends and media to perform or to restrain from behaviour.

In the context of green buying also, there are several factors that influence the individual towards green consumer behaviour. Social factors plays a vital role in influencing the buying decisions and Green Consumer Behaviour. Several researches have reported the presence of social forces especially family members, teachers, peer groups and media in influencing the buying and use of green products and services. A brief description on the various social influencing factors of Green Consumer Behaviour is given in the following section.

Social Factors Influencing Green Consumer Behaviour

The social factors that influence Green Consumer Behaviour include the external influences exerted on the individual while searching, evaluating, purchasing, using and disposing of green products and services. Some of the social factors are described below.

Reference Groups

Reference groups include family members, peer groups, teachers, educational institutions, etc that invariably influences the choice and use of green products and services. The reference groups have the power to influence the consumer values and behaviours paving way for ultimate influence in the ideas and opinion of the individual to buy green products and services. The reference group influences the individual by presenting a new behaviour or lifestyle, conveying new ideas and imaginations that affect individual's performance and by exercising the gripping conditions that forces the individual to choose specific products and services (Kotler, Armstrong, 2006).

Family

The family found the basic social unit that an individual forms a part. The family can be either the one which the individual is born and brought up reflecting the unique religion, culture, and education specific to that family. Family can also be the one that constituted children and other members under the supervision of that individual. Family also constitute one of the important economic units that takes vital decisions regarding the buying and using of goods and services. Feltham (1998) and Minahan & Huddleston (2013) confirmed that much of the information and attitude development towards specific products and consumer behaviour is based on the family.

Social Roles and Status

Social roles and status is a set of attitudes and activities of an individual according to which the profession, social status and gender roles determined the position of an individual in the family.

Media

Media is an important factor that influences the decision choices and behaviours of consumers. In this technological era, globalisation and information explosion, the revolutionary changes in the habits of consumers are far reaching. Substantial use of media such as television, news papers, radios, magazines, internet, social networking sites and blogs have advanced across nations transcending in the minds of individuals about the greater potential it holds in providing various kinds of information to consumers.

The most predominant form of media prevailing now is the different forms of social media. This included collaborative contents presented in websites, blogs that provide platforms for exchanging of information and ideas, website that enabled the sharing of visual and audio content, social networking through websites, virtual gaming environment, etc.

Types of Social Influence

Social influence takes place when the emotions, behaviours or opinion of individual are affected by other individual(s). There are several types of social influence like peer influence, parental influence, leadership, obedience, socialisation, persuasion etc. Kelman (1958) identified three types of social influence like compliance, identification and internalisation.

Compliance

Compliance involves acting favourably to a request that has been made by others explicitly or implicitly. Compliance was characterised by a change in behaviour, but not necessary that the attitude of the individual is changed. Compliance occured either if the individual wanted to be obedient in obeying the request made by others or it happened due to peer pressure or social pressure. The satisfaction derived from the compliance was an outcome of the

social acceptance or the reward obtained by obeying or complying to the request or with the need of others.

Identification

Identification occurs when an individual's attitude or behaviour changed due to the influence of a person who was admired by the individual. Here the identifier's desired relationship with the admired person manifested in the form of change in the attitude or behaviour in line with the admired.

Internalisation

Internalisation occurs when an individual recognises and accepts a set of norms put forth by others who were influential to the individual. The individual recognise the influence since the content of the norm accepted is in line with the values and rewarding to the individual at the intrinsic level. According to Kelman, the reward obtained by internalisation was evident in the form of new behavioural change.

Apart from these, there are other forms of social influence that are likely to change the behaviour or attitude of individuals. A few of them are discussed in the following section.

Persuasion

Persuasion is a kind of social influence which involve guiding of oneself or others towards a particular behaviour by logical or sensible means.

Informational Social Influence

Under informational social influence, people tend to assume the actions of others to be in congruent with the correct behaviour in a given context. This behavioural change often occurs in ambiguous situations where the individual is unaware of how to behave in a particular situation. This is also called social proof as it was believed by the individual that other people in the

situation possess more knowledge about how to behave in the situation. Informational social influence essentially a form of conformity as the individual in an indistinct situation behaved according to others to conform to the behaviour in the context. This led to public compliance as well as private acceptance.

Reactance

Reactance is contrary to conformity. This occur as a resultant feeling of an individual having threat to freedom to behave in a particular manner in situations. Hence it is also called anti-conformity and often arises out of social pressure.

Normative Social Influence

Normative social influence occurs in contrast to social proof. This is a type of social influence in which an individual behaved in conformity to others for being liked or accepted by them. The normative social influence thus strives for conformity that is deep rooted in ones feeling of being related or associated with others. Although this type of behavioural change leads to public compliance, it need not necessarily lead to private acceptance.

Self-fulfilling Prophecy

Self-fulfilling prophecy is a kind of prediction that directly or indirectly becomes true owing to the positive feedback that occurred between belief and behaviour of an individual. A prophecy that has been declared true while actually being false, influences individual either due to fear or logical confusion, and the individual believes that their reactions fulfilled the prophecy that was once considered as false.

Minority Influence

When a majority group of individuals are influenced to accept the

attitudes, beliefs and behaviours of a minority group, it is termed as minority influence. The factors that affect minority influence include the size of groups, level of consistency of minor group, prosperity and importance of minor group. In most cases the minority influence takes place through informational social influence since the majority are likely to exhibit indifferences towards the norms and behaviours of the minority group.

Obedience

Obedience is a kind of social influence that caused change in behaviour of an individual owing to the influence exerted by an authority.

Social Communication and its Related Theories

Humans are always concerned about the perceptions of others which in turn influence the behaviour of the individual. Individuals exert influence on others in many ways. They may observe other individuals and imitate the behaviour or they may induce or give instructions to others to behave in a particular manner through formal or informal means. This may either be done at individual level like within families and small groups of friends or through formal teaching mechanisms that are institutionalised. The communication that takes place within the families and small groups through informal means is often termed as 'social communication', buzz or word of mouth (Goldsmith, 2006). Once this is imbibed by individuals, it forms the basis for taking decisions that plans future thoughts and actions.

Lazarsfeld *et al.* (1944) propounded the social communication theory that emerged as a prominent area of social influence that mainly focused on the informal communication among individuals. The findings revealed that interpersonal communication was very popular among individuals and considered it most important than mass media in deciding the voting intentions of people. Another major work in this area forms the work of

Everett Rogers who proposed the diffusion Theory (Rogers, 1962/2005). The S shaped curve in the theory describes various factors related to social influence such as the spread of behaviour or an idea through a social system, time taken for individuals to adopt that particular idea, behaviour or a product and the distinctiveness in adoption of individual behaviours.

Social Influence Theories

Social influence theories establish the facts related to social influence of specific phenomenon. Social influence theories are prevalent in varied fields like education, marketing, sociology, medicine, management and similar fields. Lazarsfeld and E.M. Rogers did the pioneering works in the origins of social influence theories. The opinion leadership done by Lazarsfeld in the sociology discipline and the Diffusion of innovation theory carried out by E.M. Rogers are popular in the area of social influence. Some of the other popular theories of social influence like social learning theory, social cognitive theory and consumer socialisation theory are discussed in the following section.

Social Learning Theory

The social learning theory of Albert Bandura (1977) proposes that human behaviours are learned ones through direct experiences, observation and modelling which is a continuous interaction processes between cognitive, behavioural and environmental factors that exerts influence on the behaviour of an individual. An individual gains experience as a result of positive or negative effects produced as a result of an action. These positive and negative effects are the basis for reinforcement of a particular behaviour. A positive reinforcement guides the individual in performing the socially desirable behaviours and a negative reinforcement results in abandoning of socially undesirable behaviours. The social learning theory also give prominence to

the social context of learning that involves individual learning through cooperation and collaboration through interactions with each other (Howorth, Smith, & Parkinson, 2012).

Social Cognitive Theory

According to the social cognitive theory, learning occurs as a direct influence resulting from observing the role models (Bandura, 1986). These role models may be directly observed and includes parents, teachers and members of family. The role models may also include other members like celebrities, businessmen, media personnels, etc.

Consumer Socialisation Theory

Consumer socialisation theory is defined as a process by which young people develop consumer related skills, knowledge and attitudes. One of the three important components of this theory includes antecedents which constitute both personal characteristics and external environment. The personal characteristics consist of age, gender, ethnicity, education, socio economic status and family structure. These antecedent factors can have direct or indirect influence on the individual based on their mode of interaction with the socialising agents in influencing the behaviour (Moschis & Churchill, 1978).

The socialising agents are considered as the primary influencing factors which may include parents, teachers, friends, media and other family members. These agents are responsible for the development of attitudes and behavioural norms in an individual. Moschis & Churchill's (1978) Model of Consumer Socialisation is given in the Figure 2.

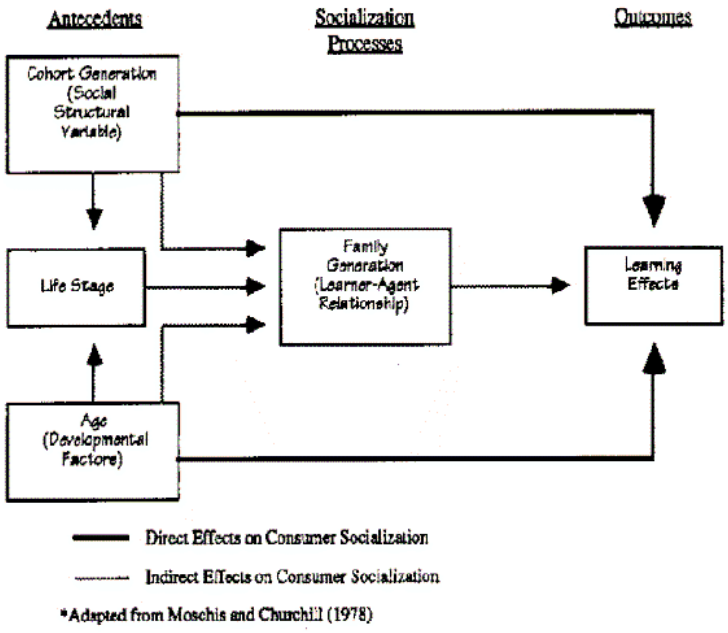

Figure: 2 Moschis & Churchill's (1978) Model of Consumer Socialisation

The Process of Social Influence

According to Goldsmith *et al.*, (2011) Consumer socialisation, observation, personal and social experiences are the major sources of formation of cognitive structures among consumers. Consumers comprehend the world around them by internalising the information gathered from external sources. The cognitive structures thus formed makes up an integrated network of information and dispositions related to the consumer decisions regarding green consumer choices. Apart from these schemata or cognitive structure, another distinctive type of cognitive structure called a script forms the step by step sequencing of actions to be performed by a consumer at a distinctive time of consumption process. These cognitive structures and scripts are influenced by the external forces or social influence that results in the formation of new attitudes, values and behaviours towards adopting newer ones. Hence social influence is an important concept that determines the development of new attitudes and behaviour. A proper typology of social influence can be a fruitful means for nurturing green consumer behaviour among individuals.

The inculcation of desirable behaviour in an individual may be channelised to induce other individuals too by social influence (Goldsmith *et al.*, 2011).

Strategies for Influencing Behaviours

Behaviour influencing strategies include the measures taken by individuals or institutions or organisations to persuade or force individuals to perform or behave in a prescribed manner as demanded or required by the individuals or organisation who intends to exert influence on the other. Policy makers, administrators as well as academics seek to enhance the behaviour of consumers for the well being of the individual as well as the society. According to Goldsmith there are four basic strategies adopted for influencing consumer behaviour. They are punishment, rewarding, persuasion and a combination of these can also be used accordingly (Goldsmith *et al.*, 2011).

Punishment strategy is one of the behaviour influencing strategies that seeks to influence behaviour by introducing negative consequences of behaviours. The negative consequences possibly curtail understandable behaviour and influence the positive behaviour in an individual. For example, imposing of penalties is an example of punishment strategy adopted by legal and government officials for the curtailment of non green behaviours. This can result in the alteration of undesirable behaviours to desirable behaviours so as to avoid the negative consequences of behaviour.

Rewarding or providing incentives for desirable behaviour is another strategy of influencing consumer behaviour so as to adopt positive behaviours. An instance of this is providing incentives for green behaviours of consumers by discounting the prices of products for larger access. The rewards provided at the instance of performing a desirable behaviour induce the individual to perform positive behaviours so as to encourage green lifestyles among individuals.

Persuasion is yet another strategy for influencing consumer behaviour. The persuasion strategy is based on the assumption that individuals will respond to information deliberated to change the minds. By this planned deliberation the desired behavioural change will occur. However, the effectiveness of the persuasion strategy depends on the source of the information that potentially intends to change behaviour, the path of communication of such information, the characteristics of the individual who receives the information and the nature of the information that is intended to persuade the behaviour of the individual.

Influencing of individual behaviour also takes the form of a combination of punishment, rewarding and persuasion strategies inorder to maximise the effects of inducing behavioural changes.

Goldsmith *et al.*, (2011) propose a fourth strategy to influence green behaviour among consumers. It involves the usage of social influence and social communication in tandem. The degree to which Social Influence takes place through social communication is substantial. This has the potential to influence behaviour in an evident manner and in most cases left unnoticed. Hence this strategy of influencing behaviour must be emphasised for getting effective results of behavioural modification by social influence thereby transforming consumers to adopt green lifestyles for sustainable living.

Social Influence and Sustainable Behaviour

Social Influence has a significant role in inducing green consumer behaviour (Ohman, 2011). The influence can be exerted by parents, educators, friends/peer group, colleagues and media (Klobas & Clyde, 2001). There are several studies that affirm the significant role of social influence in inducing green behaviour (Lee, 2008 & Wong *et al.*, 2012). The consumer socialisation in fact has a predominant in fostering green behaviours. The

initial influencing forces in an individual's life are parents which gradually grow and expand towards educators, peer group and media. By the time the child reaches adolescence, they become totally start to comprehend the matters relating to consumption and its significance in social setting. Media in all forms are also seen to influence young minds, especially the modern forms of media like the internet, blogs, social networking sites, etc which serves the purpose of information seeking as well as information sharing (Yang, Mai, & Ben-Ur, 2012).

The Social Influence theories provide a framework for underpinning the vast potentials of external factors involving human elements in inducing green consumer behaviour. It is highly relevant since human exists in communities by communicating and interacting with each other. The researchers in this area have acknowledged the far reaching effects of social influence in changing the behaviour of others. Hence it is imperative to utilise this factor in varied fields by educators, administrators, researchers, etc for affecting positive changes in behaviour. The factors of social influence will be sought by individuals all the times. This is likely to depend upon the contents, usefulness and ease of usage. In the light of this, individuals and groups like educators, administrators, governmental agencies, non-governmental agencies and other stakeholders can act coherently in promoting green consumer behaviour for sustainable living.

Review of Related Literature on Social Influence

Eszter and Jozsa (2017) explored the influence of parents and peers on consumer behaviour of youth. A survey utilizing scales were used to measure the variables under study. The study examined normative and informational influences on decisions and psychological aspects of young consumers. Data was collected from 605 young consumers through snow ball sampling. The relationships between the variables were determined through multiple

regression analysis. The findings of the study indicate that informational influence was found to be stronger than normative influence which is applicable to both parental and peer influence. It was also found that for young consumers, peer influence was more dominant when compared with parental influence which is applicable to normative and informational influence cases. Regarding gender differences, normative influence was found to be high in the case of male consumers. While female consumers pooled information from parents and friends before shopping i.e., females tend to have both normative as well as parental influence. It was also observed that the reference group influence was stronger for young generation, and parental influence diminishes at high rates as age increases.

Widjojo and Yudianto (2016) explored the factors that influenced college students in buying green products. The investigators followed a quantitative approach that was descriptive in nature. Five hundred college students were conveniently selected and surveyed both online and off line. Factor analysis was carried out by which two categories of factors like internal (personal value, motivation) and external (references, packaging, community, information, label, information at outlet etc were identified. The investigator urges educators, business and government to adopt strategies for inducing green behaviour among young students as potential consumers.

Jamal, Islam, and Barua (2016) conducted a causal research so as to analyse the varied factors affecting green purchase behaviour of Bangladeshi consumers. The study focused on the cause and effect relationship between the independent variables like attitude, local environmental awareness, peer, knowledge; and dependent variable green purchase behaviour. Data collection was done using a questionnaire rated on a seven point Likert scale ranging from strongly disagree (1) to strongly agree (7). 200 samples were randomly selected from which 171 responses were considered for analysis. The

statistical technique regression was carried out. The results revealed that the strongest predictor of green purchase behaviour was the peer influence followed by local environmental awareness. For the study it was found that knowledge was less influential in predicting the green purchase behaviour of the consumers when compared to other factors.

Wiese and Kruger (2016) carried out survey research to find out the parental influence on young consumers' purchase behaviour as well as consumer behaviour. Data was collected from a cohort group of young consumers by using a questionnaire. The study was based on Social Cognitive Theory (SCG) of Bandura (1986). The proposed model was tested by the investigators by using structural equation modeling (SEM) approach. The investigators reported that young consumers were highly influenced by parents and considered them as role models when it is about parental influence on consumer behaviour of students. However, parental influence did not have significant effect on purchase behavior of students. The study came up with another finding that the perception of students about parents as role models indeed has effect on consumer behaviour which I turn resulted in a significant effect on the purchase behaviour of young consumers.

Achchuthan (2016) analysed green consumerism among undergraduate students of Sri Lanka. The investigators propose a model which is based on the Theory of Planned behaviour (TPB). A sample constituting 1325 undergraduate students studying in 12 Sri Lankan State Universities were surveyed. The data collected for the study was subjected to exploratory factor analysis, confirmatory factor analysis and Structural Equation modeling (SEM). The results of analysis revealed that green consumers' purchase intentions were highly influenced by environmental attitude, perceived consumer effectiveness and health consciousness of students as consumers. On the other hand, media influence, environmental concern, social influence

and perceived governmental initiatives were not found to be influencing the students' green purchase intentions. The study highlights the need for enhancing the consciousness of students about green behaviour.

Biswas and Roy (2016) studied green consumption behaviour with respect to social media usage factors which was based on technology acceptance model. 600 young senior corporate executives were surveyed and dtat was collected using a questionnaire rated on a five point Likert scale. Data analysis was carried out using binary logistic regression analysis, one way MANOVA and factor analysis. The results indicated that social media factors had a positive influence on green consumer behaviour. This was enhanced eith the consumer perception of ease of use of media. The study affirms the use of social media in influencing consumers green behaviour.

Johnstone and Hooper (2016) analysed the influence of social environment on green consumer behaviour. The study was conducted by 20 individual and 10 joint interviews. The data collected was subjected to thematic analysis. The study revealed that consumers were influenced by other individuals in a social setting. The study also revealed the potential of government agencies to induce more commitment on consumers through proactive roles.

Jorgensen (2015) focussed on a mixed method of study to explored the various factors influencing the purchase behaviour of college students. The study followed an explanatory sequential research design. 236 college students were surveyed through online questionnaire. This was supported by interview of 10 students. The result of analysis showed that students sought information regarding products and services from family, peer, online information and VSNS prior to making purchases. The qualitative analysis revealed that for seeking ideas students used VSNS and peers; and students were found to seek information from family members and internet when they

actually indented to make purchases. The study also shed light on how the young consumers are more information seeking before making purchases so that they can make informed choices.

Nizam, Rajiani, Mansor, and Yahaya (2014) examined the factors influencing green purchase behaviour among generation Y in Malaysia. The study was conducted based on the frameworks of Theory of Reasoned Action (TRA). Sample consisted of 500 respondents who responded to the survey that utilized questionnaires for data collection. Statistical techniques like bivariate Pearson's correlation and ANOVA were carried out to find out the significant relationships between the variables and green consumer behaviour. Significant effect was found for social influence, environmental attitude and environmental concern; ecolabel and government's role were also found to have significant impact on green consumer behaviour. The investigators reported that when compared to adults, young consumers had a ore stronger conviction that environmental factors are vital for influencing green consumer behaviour.

Lasuin and Ng (2014) analysed the factors influencing green purchase intention among university students in Malaysia. The investigation was intended to disclose the association between environmental concern, social influence, self-image and moderating effect of demographic factors like gender and ethnic group on green purchase intention. Survey method was adopted for the study and the Theory of Reasoned Action (TRA) was used to test the modified framework. Sampling technique used was Non-probability sampling through convenience sampling with a sample size of 200 students. Multiple regression analysis was carried out to study the relationship between environmental concern, social influence, self-image and green purchase intention. Hierarchical regression analysis showed the moderating effects of gender and ethnic group. Result of the survey revealed that environmental

concern and self-image manifested a positive significant relationship toward green purchase intention.

Chaturvedi and Barbar (2014) investigated the influence of social media on consumer behaviour of 50 consumers categorized on the basis of age (lee than 20, 21-40 and greater than 44) and education (undergraduate, graduate and post graduate). Data was collected by administering questionnaire using five point Likert scale. The study revealed that consumers in age category 21-40 had greater influence of media. Significant media influence on green consumer behaviour was also evident among consumers falling under the age group less than 20 years. The findings revealed that consumers with undergraduate and graduate educational qualifications also had media influence on green consumer behaviour amongst which consumers having undergraduate education were found to be more influenced by media on matters of green consumer behaviour.

Gifford and Nilsson (2014) conducted a review analysis o examine the personal and social factors that influence pro environmental concern and behaviour. The investigators reported that understanding pro environmental concern was a complex process. A few influencing factors were identified and grouped that consisted of 18 personal and social factors influencing pro environmental concern and behaviour. Personal factors identified included knowledge and education, personality, sense of control, childhood experience, gender and personal bias, age, values, political and world views, goals, norms, felt responsibility, etc. the investigators also found that the aforesaid goals were often followed for non environmental reasons like to save money, for protecting health, etc. the review analysis also showed that the social factors that influenced pro environmental behaviour included religion, locale differences, social class, norms, differences in cultural and ethnic variations. The investigator proposed for more researches in the area for gaining insights on the moderating and mediating effects on green consumer behaviour.

Roberti (2014) studied how the socialization of family influenced consumer choices of university students. The study adopted a qualitative paradigm in which structured interview was conducted on focus groups of 46 participants. The findings of the study showed that families influenced the consumer behaviour of students, especially parents, and specifically, mothers. Students' consumer choices were also found to be influenced by the values and lifestyles of the family to which they belong.

Siringi (2012) undertook a descriptive study to explore the influencing factors of green consumer behaviour o post graduate teachers. A sample of 213 teachers was selected through o probability sampling technique out of which 160 responded to the questionnaire which was subjected to analysis. From the results of percentage analysis it was found that 33% used internal sources and external sources for information. 25% used print media and TV. It was also found that a huge majority of around 82.5% are aware of green products. All the teachers insisted upon the importance of quality of products. The findings also indicated no significant difference existed between the green consumer behaviour of teachers belonging to science and humanities faculty.

Dagher and Itani (2012) studied three factors like environmental attitude, environmental concern and social influence on green purchasing behaviour of undergraduate students. Data was collected from 101 undergraduate students by questionnaire with items rated o a five point Likert scale. Data analysis was carried out using correlation and regression analysis. Findings of the study revealed significant relationships exiting between social influence, environmental concern and green purchasing behaviour of undergraduate students.

Makgosa and Mohube (2007) examined peer influence among university students pertaining to purchase decisions. The study was conducted

by surveying 101 university students who were selected through convenient sampling. Structured questionnaire was used to measure peer influence which was measured and rated by five point Likert scale. Data was analysed using statistical techniques like ANOVA test and factor analysis. Two dimensions of peer influences were identified such as normative and informational influences. The findings of the study revealed that normative influence was more evident for public luxury products than for private luxury and necessity products. Similar findings also apply for informational influence. The results of the study also indicated that peer influences were different for different categories of products.

Lachance and Legault (2007) assessed the factors that influenced the consumer competence of undergraduate students. The study was conducted through a survey in which questionnaires were used to collect data from 960 college students selected through convenient sampling. The study investigated the sources of socialization towards consumption. The analysis revealed that the most influencing factors that determined the development of consumer competence among college students were found to be media first, then peers and finally schools. When it came to preventive and defensive consumer behaviour, the most influencing socializing force were found to be parents first, then schools and finally peers. Only parental influence was significant for developing consumer knowledge among the students. It was also found that parental influence and school influence on consumer competence had a positive relation; while the influence of peers and media were found to have negative relationship with consumer competence with no significance of result. The study emphasized the need for consumer education.

John (1999) conducted a review of a 25 years research work that focused on how the consumer knowledge, skills and values were formed and characterized in children throughout childhood and adolescence. A review

analysis was carried out and the conceptual framework was developed by the investigator for understanding consumer socialization that occurred as a series of stages where cognitive and social developments occurred through this transition. The findings revealed that in each stage children were knowledgeable about products, brands, shopping, advertising, decisions, strategies, parental influence, motives of consumption and values. From this it was inferred that a clear evidence of consumer socialization taking place at each stages of life of individual.

Feltham (1998) examined parental influence of undergraduate students by selecting a sample of 500 students and surveyed for comprehending the continued parental influence exerted on students with respect to brands purchased by parents. A discrete choice regression analysis was carried out using probit model for data analysis. The results showed that parental influence existed only till the students stays with family as a unit. Once they leave home for university education, their choice tends to shift towards the choice of peers.

A summary of the studies pertaining to the predictor variable Social Influence are presented in the table given below.

Table 3

Summary of Related Studies on Social Influence

Year	Author	Variables of Study	Findings
2017	Eszter and Jozsa	Parental Influence, Peer Influence, Consumer Behaviour	• Informational influence was found to be stronger than normative influence which is applicable to both Parental and Peer Influence. • Peer Influence was more dominant when compared

			with Parental Influence which was applicable to normative and informational influence cases. • Normative influence was found to be high in the case of male consumers. • Female consumers pooled information from parents and friends before shopping i.e., females tend to have both normative as well as Parental Influence. • Reference Group Influence was stronger for young generation, and Parental Influence diminishes at high rates as age increases.
2016	Widjojo and Yudianto	Internal Factors (Personal Value, Motivation) External Factors (References, Packaging, Community, Information, Label, Information At Outlet, Green Behaviour	• Factors like Internal (Personal Value, Motivation) and External (References, Packaging, Community, Information, Label, Information at outlet etc were identified. • Educators, business and government need to adopt strategies for inducing green behaviour among young students as potential consumers.

2016	Jamal, Islam, and Barua	Green Purchase Behaviour, Attitude, Local Environmental Awareness, Peer, Knowledge	• The strongest predictor of Green Purchase Behaviour was the Peer Influence followed by Local Environmental Awareness. • Knowledge was less influential in predicting the Green Purchase Behaviour of the consumers when compared to other factors.
2016	Wiese and Kruger	Parental Influence, Consumers' Purchase Behaviour, Consumer Behaviour	• Young consumers were highly influenced by parents and considered them as role models when it was about Parental Influence on Consumer Behaviour of students. • However, Parental Influence did not have significant effect on Purchase Behaviour of students. • The perception of students about parents as role models indeed has effect on Consumer Behaviour which in turn resulted in a significant effect on the Purchase Behaviour of young consumers.
2016	Achchuthan	Green Consumerism	• Green Consumers' Purchase Intentions were highly

		Green Purchase Intentions, Environmental Attitude, Perceived Consumer Effectiveness, Health Consciousness, Media Influence, Environmental Concern, Social Influence, Perceived Governmental Initiatives	influenced by Environmental Attitude, Perceived Consumer Effectiveness and Health Consciousness of students as consumers. • Media Influence, Environmental Concern, Social Influence and perceived Governmental Initiatives were not found to be influencing the students' green purchase intentions. • The study highlights the need for enhancing the consciousness of students about green behaviour.
2016	Biswas and Roy	Green Consumption Behaviour, Social Media Factors, Consumer Perception	• Social Media Factors had a positive influence on Green Consumer Behaviour. • This was enhanced with the consumer perception of ease of use of media. • The study affirms the use of social media in influencing consumers green behaviour.
2016	Johnstone and Hooper	Social Environment, Green Consumer Behaviour	• Consumers were influenced by other individuals in a social setting. • The potential of government agencies to induce more

			commitment on consumers through proactive roles.
2015	Jorgensen	Purchase Behaviour, Information Seeking, Family, Peer, Online Information and VSNS	• Students sought information regarding products and services from family, peer, online information and VSNS prior to making purchases. • For seeking ideas students used VSNS and peers; and students were found to seek information from family members and internet when they actually indented to make purchases. • Young consumers were more information seeking before making purchases so that they can make informed choices.
2014	Nizam, Rajiani, Mansor, and Yahaya	Green Purchase Behaviour, Social Influence, Environmental Attitude, Environmental Concern, Ecolabel, Government's Role	• There were significant relationships between the variables and Green Consumer Behaviour. • Significant effect was found for Social Influence, Environmental Attitude and Environmental Concern, Ecolabel and Government's Role were also found to have significant impact on

			green consumer behaviour. • When compared to adults, young consumers had a stronger conviction that environmental factors are vital for influencing green consumer behaviour.
2014	Lausin and Ng	Green Purchase Intention, Environmental Concern, Social Influence, Self-Image, Demographic Factors, Gender, Ethnic Groups	• Environmental Concern and Self-Image manifested a positive significant relationship toward Green Purchase Intention.
2014	Chaturvedi and Barbar	Influence of Social Media, Green Consumer Behaviour	• Consumers with undergraduate and graduate educational qualifications also had Media Influence on Green Consumer Behaviour • Consumers having undergraduate education were found to be more influenced by media on matters of Green Consumer Behaviour.
2014	Gifford and Nilsson	Pro Environmental Concern and Behaviour, Personal Factors,	• Influencing factors were identified and grouped that consisted of 18 Personal and Social Factors influencing

		Knowledge, Education, Personality, Sense of Control, Childhood Experience, Gender, Personal Bias, Age, Values, Political, World Views, Goals, Norms, Felt Responsibility, Social Factors, Religion, Locale Differences, Social Class, Norms, Differences in Cultural and Ethnic Variations.	Pro Environmental Concern and Behaviour. • Personal Factors identified included Knowledge and Education, Personality, Sense Of Control, Childhood Experience, Gender and Personal Bias, Age, Values, Political and World Views, Goals, Norms, Felt Responsibility, etc. • The goals were often followed for non environmental reasons like to save money, for protecting health, etc. • The Social Factors that influenced pro environmental behaviour included Religion, Locale Differences, Social Class, Norms, differences in Cultural and Ethnic Variations.
2014	Roberti	Socialization of Family, Consumer Choices	• Families influenced the Consumer Behaviour of students, especially parents, and specifically, mothers. • Students' consumer choices were also found to influence

			by the Values and Lifestyles of the family to which they belong.
2012	Siringi	Green Consumer Behaviour, Internal Sources and External Sources for Information.	• Internal Sources were used by 33% and External Sources for information. • Print Media and TV were used by 25%. • A huge majority of around 82.5% were aware of green products. • All the teachers insisted upon the importance of quality of products. • No significant difference exists between the Green Consumer Behaviour of teachers belonging to science and humanities faculty.
2012	Dagher and Itani	Environmental Attitude, Environmental Concern, Social Influence, Green Purchasing Behaviour	• Significant relationships exiting between Social Influence, Environmental Concern and Green Purchasing Behaviour of undergraduate students.
2007	Makgosa and Mohube	Influence of Parents and Peers, Consumer	• Informational Influence was found to be stronger than Normative Influence which

		Behaviour, Normative and Informational Influences, Psychological Aspects	was applicable to both Parental and Peer Influence. • Peer Influence was more dominant when compared with Parental Influence which was applicable to Normative and Informational Influence cases. • Normative Influence was found to be high in the case of male consumers. • Female consumers pooled information from parents and friends before shopping i.e., females tend to have both normative as well as parental influence. • Reference Group Influence was stronger for young generation, and Parental Influence diminishes at high rates as age increases.
2007	Lachance and Legault	Consumer Competence, Influence of Media, Peers and Schools, socialisation	• The most influencing factors that determined the development of consumer competence among college students were found to be media first, then peers and finally

		force, Preventive and Defensive Consumer Behaviour, Consumer Knowledge, Consumer Education	schools. • When it came to preventive and defensive consumer behaviour, the most influencing socializing force were found to be parents first, then schools and finally peers. • Only parental influence was significant for developing consumer knowledge among the students. • Parental Influence and School Influence on Consumer Competence had a positive relation • Influence of Peers and Media were found to have negative relationship with Consumer Competence with no significance of result. • The study emphasized the need for consumer education.
1999	John	Consumer Knowledge, Skills and Values, Consumer Socialization, Knowledge About Products, Brands,	• In each stage of life, children were knowledgeable about products, brands, shopping, advertising, decisions, strategies, parental influence, motives of consumption and values.

		Shopping, Advertising, Decisions, Strategies, Parental Influence, Motives of Consumption and Values	• A clear evidence of consumer socialization taking place at each stages of life of individual.
1998	Feltham	Parental Influence, Choice of Peer, Purchase Behaviour	• Parental Influence existed only till the students stays with family as a unit. • Once they leave home for university education, their choice tends to shift towards the choice of Peers.

Theoretical Framework of Green Consumer Behaviour

The increasing environmental problems have become an eye opener to all the fields of work and to different walks of life. This concern for environment are evident from the measures being taken by all including educators, administrators, marketers, businessmen, economists and policy makers in infusing ecofriendly modes of functionality. The degrading nature of environment has always been on top priorities of issues to be addressed around the globe. Its adverse effects have become so intense that it is high time people start refining their behaviour towards more ecofriendly in nature. The impact of human interventions with nature had left ecological footprints that are massive and started impacting humans and other forms of life in a

devastating manner. This heightened the need for education for raising awareness and developing skills and attitude for a concerted action towards sustainable living.

Across the globe, several concerted efforts are drawn towards solving the global issue. As human consumption happens to be one of the major issues impacting the environment, several initiatives have been introduced to address this issue. Amongst several mans identified for addressing these issues related to environment, the most significant one identified as education. This essentially paved the way for raising the awareness developing favourable dispositions and having the skills and capacities of individuals for acting in an environmentally responsible manner.

Today's young generation are witnessing the alarming state of environment by being exposed to huge information. This exposure have to a certain extend sensitised the youth to the urgency to adopt ecofriendly living. Several studies had reported the concern of individuals towards the environment especially among the youth (Sarigollu, 2009 and Chan & Lam, 2002). Students of higher education who are part of the youth population have considerable responsibility towards the environment owing to their educational attainments compared to uneducated youth.

However, what impedes individuals from taking responsible actions as pertaining to Green Consumer Behaviour has been identified as the lack of awareness about going green (Brown & Wahlers, 1998). However, gradual transition to green lifestyles are evident from individuals preferring to lead sustainable lifestyles. Several studies had reported the propensity of undergraduate students as youth oriented towards environmentally responsible consumption that were evident from their attitudes, values and dispositions towards the environment (Jeong, Jung, & Koo, 2015; Almossawi, 2014 and Synodinos, 2014).

A major part of consumer population around the world comprises of youth. Hence, undergraduate students who are potential consumers must be well nurtured in institutions with green values ideas and thoughts. Higher education institutions has a considerable role towards creating environmentally responsible citizens who are capacitated with skills, knowledge and attitude for making rational and informed choices to become a prudent and green consumer. For designing the right mode of education, it is vital to understand the influencing factors or the crucial determinants of Green Consumer Behaviour among students. This clearly would lead the path towards new avenues in education that enables in developing environmentally cognizant youth adorned with responsibilities and stewardship.

Determinants of Green Consumer Behaviour

Internal or individual and external or environmental variables impacted the decision making process of the consumers. It is very important to understand these variables for educators, marketers, policy makers and other stakeholders so as to develop an understanding of why individuals as consumers behave in a particular manner and how the mind is conditioned and influenced. A thorough knowledge of consumer behaviour theories will facilitate the understanding of the determinants of Green Consumer Behaviour. The utility of an analysis of the basic variables influencing the consumer behaviour is high for the transformers like to frame appropriate strategies for transforming individuals in to environmentally conscious orr green consumers.

Social and Behavioural Determinants

There are several social and behavioural determinants of Green Consumer behaviour. Several researchers had pondered this area for gaining insight into this vital influencing forces and the intensity of influence it exerts

on individual's green consumer behaviour (Widjojo & Yudianto, 2016; Nizam, Rajiani, Mansor, & Yahaya, 2014 and Makgosa & Mohube, 2007). These research attempts were directed to explicate the mode of behaviour of individuals and the manner in which it influences and conditions an individual's Green Consumer Behaviour in their daily life. The studies found that several factors influences the Green Consumer behaviour like family members especially parents, opinion leaders, reference groups, social class and caste, culture, media and several others.

Family

The role specialisations for every family and every member of the family in making family have immense influence in making decisions regarding consumption and purchases. The buyer may be influenced by the preferences of the other members of the family or the decision made unanimously. It becomes vital to consider the role of family in nurturing green consumption choices at early stages of life and carry on this habit in future stages of life as well. Family members, especially parents has the potential for transforming and developing green consumption habits among children through the rational choices they made and the decisions regarding sustainable lifestyles they adopted at familial level.

Opinion Leaders

A research conducted by Lazarfeld, Berelson and Gaudet (1944) led to the formulation of the concept of opinion leadership. Very often, consumers make a reference to an individual like opinion leaders so as to formulate the consumer behaviour pattern. Identification of the leaders who influenced and conditioned other's behaviour enabled the, transformers like parents, educators, policy makers, marketers and such stakeholders in formulating strategies to induce green consumer behaviour and sustainable lifestyle among young consumers.

Reference Group

The concept of reference group was put forth by Hyman, in 1942 in order to describe the type of group an individual uses as a point of reference for developing one's own belief, judgement and behaviour. The level of aspiration and type of behaviour of an individual will be affected by the reference group.

Social Class and Caste

Social class too has an influence on the green behavioural pattern of consumers. The members of a social class which forms a permanent and ordered division shared similar values, interests and behaviours. A social class that emphasised on sustainable lifestyle practices induced all its members to follow green consumption. The social class are determined by factors like income, education, occupation, and other variables. Caste refers to a group with a developed life of its own where the membership is determined by birth. The lifestyles and habits of consumers tend to be mostly dependent and unique to the class and caste they belong.

Cultural factors

Culture is a set of basic values, views, needs and behaviour learned by a member of a society from family and other institutions. Green Consumer Behaviour are deeply moulded by the value consumers add to the environment and sustainable lifestyle for improving the quality of life. Culture was the selective way of responding to experience to a set of behaviour patterns preset but individuals in a society. The societies and communities adopting green culture for maintaining the quality of environment are reflected in all the aspects of living. Such green cultures are to be nurtured among individuals for developing true environmental stewardship for action oriented transformations across generations.

Media

Media is yet another factor in the societal milieu that has immense potential in influencing Green Consumer Behaviour. Several forms of media like newspapers, magazines, radio, television, internet etc disseminated information that was useful and informative to consumers. Most recently several new forms of social networking and blogging has also emerged as strong influencers of Green Consumer Behaviour. Most of the times, consumers rely on these information for making choices of purchase and decisions. The environment related issues and strategies for tackling such issues that are communicated to consumers who in turn were influenced to make rational and informed choices of green consumption and sustainable lifestyles.

Individual Determinants of Green Consumer Behaviour

Personal and psychological characters have formidable effect on Green Consumer Behaviour along with external factors. These variables cannot be controlled and regulated by external forces, but can aid in moulding the strategies to be followed to induce individuals to adopt green lifestyles.

Personal Factors

Personal characters are inclusive of the age and life cycle stage, economic condition, occupation, lifestyle, personality and the self. On the other hand, psychological characters relate to their perception, learning, belief, attitude and motivation. The degree of influence and effectiveness of these factors on consumer's decision making process are given below.

Age and Lifecycle stage

Age and Lifecycle stage determine the buying patterns and habits of green consumers. Preferences of products and styles are age related and keep

on changing over lifetime. Individuals also undergo different stages of family life cycle that also determines the needs and choices that are different and unique to individuals.

Lifestyle

Lifestyle is an individual's pattern of living as expressed in psychographics. It reflects the ways chosen to spend time and money by the individual as green consumer. It also reflects how green values and ecofriendly preferences are included in consumption choices.

Self-identity

Self concepts are reflections of the attitudes of the consumers towards themselves. Individual's identity of self determines the environmental orientation of behaviour. Researches in the areas of environmental psychology have found that a sense of self-identity exerts influence on the ecofriendly behaviour of consumers. The concept of self image congruence emphasises that a consumer chooses products and services when its attribute matches the aspects of the self. Several self-identities have been identified like the anti hero who rejects the idea of being a green consumer, the environmental hero who takes up the environmental responsibility and the anarchist who takes up environmental responsibility challenging the consumerism (Autio *et al.*, 2009).

Personality

Personality refers to a person's unique psychological make-up and how it influences the response of consumers towards the environment. Individuals adorned with environmental dispositions like environmental attitudes, environmental values and environmental ethics tend to behave in a more ecofriendly manner towards maintaining the quality of environment for

sustainable living. Moreover, individuals who attribute greater sense of responsibility to the self tend to be more responsible in taking consumer decisions and choices of lifestyles.

Psychological Factors

The psychological factors include attitudes, motivation, perception, values learning, and belief of an individual. All these factors are expected to influence Green Consumer's Behaviour.

Motivation

Comprehending the motivational aspects of consumer is an important step in understanding Green Consumer Behaviour. Motivation can be either intrinsic or extrinsic in nature. Motivation for Green Consumer Behaviour tends to be greater when consumers perceive and gives importance to environmental aspects and well being of fellow beings to be personally significant. A motivated individual possess the readiness to act in an environmentally responsible manner. Therefore for undertaking environmentally responsible behaviours it is important to focus on the motivational aspects of consumers.

Perception

Perception involves the way individuals select, organise and interpret information in a meaningful manner. The perceptual processes like selective attention (screening out most of the information to which an individual is exposed), selective distortion (interpreting information in a way that supports an individual's belief) and selective retention (retaining information that supports an individual's attitudes and belief) leads to the formation of difference in perception towards the same stimuli. Consumers, who perceive green value and green culture as significant for maintaining the quality of

environment, behave in an ecofriendly manner by making green choices of lifestyles.

Learning

Knowledge is a pre-requisite for taking action oriented rational behaviours. Consumers' knowledge about the environment and the crucial nexus existing between humans and nature determines the quality of behaviour manifested while taking consumer decisions and choices. Knowledge can be developed through the constant process of learning. According to learning theorists, most of the human behaviours are learned ones. Learning is an outcome of interaction between drives, stimulus, cues, responses and reinforcement. Learning results in a permanent change in human behaviour occurring as a result of experiences. Hence developing adequate knowledge among consumers should be looked upon with intense priority.

Attitudes

Attitude is an individual's favourable or unfavourable evaluation of feelings, and tendencies towards a person, thing, idea or any aspect. It is very important to develop favourable attitudes since, attitudes once formed is quite difficult to alter. Therefore it is essential to develop a favourable attitude among consumers at the very young age itself for carrying it over to their future life as forming habits. Attitudes are learned in a sequence stating from formation of beliefs that are outcomes of cognitive process followed by evaluation which forms through affect and finally the behaviour that is manifested in terms of actions. Consumers should be informed about the benefits of adopting green lifestyles and green behaviours to oneself and for the existence and well being of others as well as the environment.

Beliefs

Belief is a descriptive thought that a person holds about something. Beliefs make up the images about a particular product, service or lifestyle that has a strong influence on the behaviour.

Green Consumption: Green Consumers, Green Products, Environmental Claims and Ecolabels

The HE institutions has the great responsibility of addressing the immediate issues prevailing in the society. Being adorned with the power of autonomy to act and take decisions and effectively implement it for the development of the community of which it was a part. As a centre of excellence and institution of social change, the green initiatives adopted at institutional level and by its members would rightly induce all the stakeholders to follow green paths for building a sustainable community. Green should be emphasised in all aspects of educational institution including curriculum, strategies, policies, purchases, using and disposing that in turn induces each and every stake holder associated with it to go green.

Green consumption signifies environmental aspects of consumption. Green consumers are the consumers who buy, consume green products and services. Mansvelt & Robbins, (2011) defines green consumption as ‘as process through social behaviours including purchase of bio foods, recycling reuses and limits to excessive use and using an environmentally friendly transport system.’ To be a green consumer, a better understanding of the green products and services were also important. Green products are also called as ecofriendly products or environmental friendly products that do not pollute the earth or damage the natural resources and could be recycled or conserved (Shamdasani *et al.*, 1993). These products are essentially recognised as green products with some organisations and authorities

providing green labels for some products that identify environmental criteria compared to ordinary products. Individuals should be motivated to use these green products so that they cause minimal impact on the environment.

Educational institutions, marketing management and other governmental and non governmental agencies could take up this responsibility of motivating the youth to adopt sustainable lifestyles by consuming green products. A drastic transformative change would be possible towards this by the HEIs taking up the responsibility of popularising green lifestyles and raising awareness about sustainable living. This also included imparting knowledge about green products and green services that were available in the market that met the needs of consumers with little impact on the environment. The students should also be informed about the varied environmental claims related to the products. A description of environmental claims is discussed in the following section.

Environmental Claims

1. ***Compostable:*** claims that the contents or materials of the product will disintegrate in to finer parts that become part of usable compost.

2. ***General Environmental Benefits:*** claims focus on the general environmental benefit offered by the product or service associated with it.

3. ***Refillable:*** claims that the package or part of the product can be refilled for reuse.

4. ***Degradable or Biodegradable or Photodegradable:*** claims about the product specifying that the product or its package will completely degrade in to elements that are naturally found in nature with the specific time period after the disposal of product.

5. ***Ozone safe:*** claims that a product does not contain any content that possibly harms the ozone layer in the atmosphere.

6. ***Source Reduction:*** claims that the product has been made such that the weight, volume or toxic content is in reduced form or in compact form.

7. ***Recycled:*** claims that the product or its contents have been made out of materials that have been derived from the solid waste produced during manufacture of other products or after consumer use of the product.

8. ***Recyclable:*** claims that a product can be recycled for reusing it or used in the manufacture of another product.

Ecolabels

The Central Pollution Control Board functioning under the Ministry of Environment and Forest, Government of India, addressed the environmental protection through a concerted effort of consumers, industry and the government to join on a common platform with distinctive roles to address these issues for attaining better living standards. As a step towards this, the Government of India launched 'Ecomark', an ecolabelling scheme in1991 so as to easily identify ecofriendly products. Several ecolabels are available worldwide that marks products with minimum impact on the environment. Brief descriptions about the ecolabels selected from the 'Ecolabel Index' (www.ecolabelindex.com/ecolabels/) available globally are discussed in the following section.

Sl.No.	Ecolabel	Name of the Ecolabel	Description
1		Carbon Neutral Certification	Business that reduces the carbon footprints

2		Earth Check	Travel and tourism conveying clean, safe, healthy and prosperous environment.
3		Electronic Product Environment Assessment Tool (EPEAT)	Greener electronics like personal computers, displays, television, printers, copiers, scanners, fax machines, etc.
4		Best Aqua Culture Practices	Sea food products developed by the Global Aqua Culture Alliance so as to protect bio diversity.
5		Bio Suisse	Fully organic products.
6		Better Environmental Sustainability Targets	Lead battery manufacturers developed with an objective to reduce emissions from lead battery plants and recycling units.
7		Compostability Mark of European Bio-plastics	Products that are compostable and that conveys information to waste disposal plant operators and customers.
8		Bonsucro	Reducing environmental impacts of sugar cane and to transform the sugar cane industry.

9		Ecocert	Sustainable development through promoting environment friendly/organic agriculture
10		Hong Kong Green Label	Certification of ecofriendly products launched by Green Council in December, 2000.
11		EU Ecolabel	Scheme for encouraging business to market green products.
12		Global Green Tag certified	Assessing the products through life cycle assessment processes.
13		Leaf Marque	Organic produce of farmers committed for the benefit of wildlife and country side
14		Good weave	Ending child labour in the carpet industry and to educate children in South Asia.
15		India Organic-National Programme for Organic Production (NPOP)	Accreditation programme for certification norms and promotion of organic farming.

16		Green globe Certification	Ecofriendly and sustainable travel and tourism.
17		Forest Stewardship Council (FSC)	Promoting sustainable management of world's forest.
18		Hand in Hand	Fair trade programme of a supplier of organic products.
19		Global Organic Textile Standard	Ecologically friendly textile production.
20		GEO Certified	Golf development and course/club management in an environmentally friendly manner.

Theories Explaining Green Consumer Behaviour

Several theories and models of consumption have been developed so as to better comprehend the underlying facts regarding environmentally friendly consumer behaviours. These theories are later applied in different contexts to gain insights about the green consumption patterns, choices attitudes and behaviours of consumers who adopt green lifestyles.

Some of the important theories of green consumption are discussed in the following section.

Theory of Reasoned Action (TRA) and Theory of Planned behaviour (TPB)

The TRA was developed by Ajzen & Fishbein (1975/1980) which later on led to the development of TPB by Ajzen (1991) which formed the frameworks for understanding environmentally friendly consumer behaviour. The TRA proposes that an individual's actual behaviour is directly dependent on the intention to act or not to act or behave in a particular manner. Intention in turn is the outcome of several other factors like dispositions of consumer characterised by favourable environmental attitudes, environmental values, environmental concern, environmental knowledge, etc and the subjective norm which is often formed as a result of social influence. One basic assumption of the theory is that the individual can take decision on whether or not to perform the behaviour.

The Theory of Planned behaviour emerged as an advancement of TRA by including the perceived behavioural control as a moderator of norms, intention and behaviour. The perceived behavioural control indicates a person's ability to undertake behaviour by rationally considering the possible results that could be yielded as a result of that behaviour. The difficulty and controllability of behaviour is determined by the perceived behavioural control of the individual.

Attitude Behaviour Context Model

The Attitude Behaviour Context model was developed by Stern (2000). The shortcomings in TRA and TPB were that it ignored context as one of the important influencing factors for behaviour. The basic assumption underlying this theory is that behaviour is a function of human element and its environment. Behaviour is an element produced as a product of attitudinal variable and the contextual factors. The attitudinal variables include beliefs,

values, norms, etc whereas, contextual factors include cost, economic condition, physical capabilities, etc. Stern further proposes that the link between attitude and behaviour is strongest in the absence or weak presence of the contextual factors. On the contrary, no link can be found between attitude and behaviour if the contextual factors are either strongly positive or negative.

Motivation Opportunity Ability Model

This model is yet another important integrative model for consumer action which is proposed by Olander & Thogersen (1995). Motivation Opportunity Ability model draws on TRA o provide explanation about motivation for particular behaviours. In addition to this, the theory incorporates the 'ability' element that further determines the facilitating conditions or opportunity to perform the behaviour in a particular way. The 'ability' element incorporates habit as well as the knowledge of how to perform the task. Habit often comes out as an independent determinant of intention to act or behave in a particular manner. The Motivation Opportunity Ability model has been widely used in studying the Green Consumer Behaviour or ecofriendly behaviour or the pro-environmental behaviours.

Norm Activation Theory

This theory was proposed by Schwartz (1977). According to this theory, personal norms are moulded by perceptions about the behavioural consequences of behaviour and the personal feeling of responsibility for the behavioural consequence.

Value Belief Norm Model

This model was propounded by Stern *et al.*, (1999). The value-Belief-Norm model perceives that it is important to develop pro-environmental

behaviours among consumers. This essentially fosters individual pro-environmental behaviour and develops a sense of environmental citizenship which in turn is vital for supporting public policies for fostering behaviours at community level. According to Stern, individuals develop pro-environmental belief norms as an outcome of the New Environmental Paradigm (NEP). As a result of NEP, the individualistic and materialistic values of individuals were replaced and balanced by social altruistic values as well as the biospheric values that were oriented towards the environment.

Consumer Decision Behavioural Models

Consumer Behavioural Models reflects upon the decision making or choice process of consumers. Comprehensive models of consumer behaviour is inclusive of Nilcosia model, Howard Sheth , Sheth family decision making, Bettman's information processing model and Seth-new-Gross model.

Nilcosia Model

The model emphasises on the relationship between the firm and its potential consumers. It affirms an interactive design where the firm exerts influence on the consumers, while the consumers by their behaviours exert their influence on the firm.

Howard Sheth Model

The model implies upon the levels of learning like extensive problem solving, limiting problem solving and routinised response behaviour. Extensive problem solving manifests itself when the consumer awareness about brands is very limited and the consumer vibrantly seeks information pertaining to various alternative brands. When the consumer awareness about the brands are only partially established and is incapable of assessing the brand disparities limited problem solving takes place. Routinised response

behaviour occurs when the consumers knowledge and beliefs about the brand and its alternatives are well cemented and consumer is conditioned to purchase one specific brand.

Engel Kollat Blackwell Model

The model identified the task of decision process like problem recognition, searching, evaluating the alternatives, purchasing and outcomes. Information disseminated from marketing and non marketing sources feeds in to the information processing section of the model which has its primary influence at the problem recognition stage of decision making process. The consumer will further process the information which consisting of consumer response, attention, comprehension and perception, yielding/ acceptance information. The model also emphasises that there are certain decisions that transpires the decision making process which includes individual characteristics like personality, motives, values, life styles and social factors like family, reference group, culture, and situational influence like consumers' economic conditions, etc.

Sheth Family Decision Making Model

Sheth family decision making model suggests that unanimous decision making tends to exist in families that are middle class newly married and those closely related with few prescribed family roles. In relation to product specific factors, it suggests that joint decision making is more evident in circumstances attributed with high risk or uncertainty, when the purchase decision is perceived to be significant and when there is enough time for decision making.

Bettman's Information Processing Model

The model puts forward the concept of consumer processing information. The model stresses upon the fact that consumer's information processing capacity is limited and does not frequently undertake analysis of available alternatives. The model suggests that consumer normally adopts simple decision strategies. This will capacitate the consumers to arrive at a choice by complete analysis of available alternatives. The system has the potential to facilitate the marketing managers to formulate marketing strategy by stimulating fresh insights about the consumers.

Consumer Decision Making Process

The process through which consumers arrive at decisions regarding consumption is called consumer decision process. This encompasses decisions regarding what, when, how, where and from whom to purchase the products/service/ideas that necessarily satisfies the needs and wants of a consumer. Generally a consumer goes through a series of steps in decision making process. These stages may vary depending on the degree of complexity of decisions. The steps that is normally followed in the consumer decision process include problem recognition, information search, evaluation of alternatives, purchase decisions, actual purchase and post purchase evaluation.

Problem recognition

Need recognition or problem identification is the initial stage of consumer buying decision making process. It is the needs, motives and perception of consumers that triggers the buying decision. Under this stage the consumer may have a motive to buy products or services for satisfying the needs and wants. The consumer may also confront with the problem of what, when, where, how and from whom to buy the products or services that meet

the requirements of consumer. Hence, needs, motives and perceptions of consumers have direct effect on problem recognition.

Information Search

Information search involves the cognitive and physical activities undertaken by the consumer in order to search and gather as much information about the product or service that possibly satisfies the needs and wants of the consumer. The consumer makes either an internal search based on own experience as well as an external search that involves searching information from outside sources. The information may be acquired through personal, commercial sources, public sources and experiential sources. The result of a successful research for information leads to availability of possible alternatives from which the consumer can choose the best one.

Evaluation of Alternatives

The next stage is to evaluate the alternatives available. This involves evaluation of alternative choices available to solve the problem identified and determining the relative merits and demerits of each alternative. This is done to compare the alternatives so as to choose the best one that possibly satisfies the needs and wants of the consumer.

Purchase Decision

In the purchase decision stage, the consumer decides to make purchase of the product or service by deciding on what product to buy, when to buy it, from where to buy it, how to buy it and from whom to buy it.

Actual Purchase

In the actual purchase phase, the consumer finally purchases the product that has been decided to buy. This also involves the using or consumption of the product or service.

Post-purchase Evaluation

The purchase of the product follows the post purchase evaluation that involves analysing the usefulness of the product or service and how far the product or service succeeded in satisfying the needs and wants of the consumer. The post purchase evaluation leads to satisfaction or dissatisfaction of the consumer. Under this stage, the consumer may also encounter the cognitive dissonance which relates to whether or not the decision taken was correct.

Review of Related Studies on Green Consumer Behaviour

Jamian and Tih (2016) investigated on managing green campus and examined the factors influencing student's recycling behaviour in universities. Research methodology involved the use of quantitative survey method employing structured questionnaire as the main tool for collecting primary data. Convenience sampling was carried out and the sample consisted of 313 undergraduate students from both private and public universities. Results of regression analysis revealed that university norm expectancy, recycling service expectancy and extrinsic reward were the leading motivational factors for students' recycling behaviour. The motivational factor, perceived recycling expectation on the other hand was not significantly influencing the recycling behaviour.

Lawrence (2016) conducted an exploratory research using primary and secondary data with major thrust given to youth's green buying behaviour in

Dombivli, Mumbai. The study aimed at throwing light on the relation between attitude and willingness to buy green product, relation between willingness to buy and pay green product, relation between attitude and perception towards green marketing, relation between perception and knowledge towards green marketing, relation between awareness on green marketing and willingness to pay for green product, etc. Convenient sampling technique was used and a structured questionnaire prepared on five point Likert scale was administered on a total sample of 500 respondents. Findings of the study using correlation analysis as the main statistical technique indicated that today's youth was evolving and were exposed to enormous information. They undoubtedly possessed environmental awareness and were also well informed about eco-friendly products. However, the respondents still lacked in the area of consumer education about green product and it features across any information. Results reflected that the market was mature and ready to accept novel and innovative product which was less detrimental to nature by paying extra. Findings also inferred that green marketing was more effectual than regular marketing.

Jeong, Jung, and Koo (2015) conducted a study entitled 'College Students' Perceptions on Sustainability: A Regional Survey' tried to capture their current experience levels, expectations, and perceptions with regard to various aspects of sustainability. A structured questionnaire consisting of questions related to sustainability knowledge/ familiarity levels, green product purchase behaviour, attitude-behaviour relationship, and sustainability education were utilized in the study. Researchers approached a sample of 242 students attending two regional universities in USA. Major findings revealed that majority of the college students considered the environment when they purchased products. However, when they had to spend extra money on the purchase, the attitude behaviour dilemma was triggered. It also manifested that the there was a gender difference in the students' familiarity and

knowledge of sustainability, with female students appearing to be more familiar and knowledgeable. Better academic standing students expressed a greater familiarity with sustainability concepts.

Lai and Cheng (2015) in a research aimed at examining the effects of undergraduate students' perceptions of green marketing practices on attitudes toward the environment, students' perceived environmental problem seriousness and students' environmental responsibility. It also identified whether their green products purchase willingness and behaviour eventually affected. Primary data was collected from a sample of undergraduate students in Hong Kong and data analysis was carried out with the help of partial least squares approach to structural equation modeling. The empirical investigation observed a parsimonious picture about undergraduate students' expectations of green marketing practices, environmental perception, and purchasing behaviour, and provided insights for green marketers to formulate strategies to encourage well-educated students to consume green products.

Ahmad and Nordin (2014) in a cross sectional survey examined the underlying structure of subjective green computing knowledge reported by Malaysian university students. The study attempted to corroborate the psychometric properties of students' subjective green computing knowledge in terms of the reliability, convergent validity and discriminant validity of the measure. It also compared the relationship between students' subjective green computing knowledge and reported pro-environmental behavior (PEB). The sample selected from universities in Malaysia comprised of 842 students. Statistical analysis using Factor Analysis procedures and Structural Equation Modelling (SEM) threw light on the facts that a strong influence of subjective Green Computing knowledge on PEB with its three extracted dimensions cumulatively explaining 37% of students' reported PEB. Findings established the study's hypotheses regarding the multidimensionality of subjective

knowledge, the adequacy of the measurement model of subjective knowledge and its significant positive role in influencing PEB.

Nittala (2014) conducted a descriptive study to observe multiple factors influencing the willingness of university teachers to purchase green products and to identify the predictor variables that distinguished teachers who showed willing or unwilling to purchase green products. Research methodology used survey as the main method of investigation. Questionnaire was administered on a sample of 160 teachers from Science and Humanities faculties and statistical tools employed comprised of regression analysis and discriminant analysis. Major findings showed that product recycling had a positive influence, whereas, comfort, ecolabeling and lack of information have a negative influence on the willingness of university teachers to purchase green products. It was found that plastic carry bags were more convenient and should not be banned and they were good discriminators between the groups willing to buy and not willing to buy green products. It was inferred that the teachers were aware of environmental activism, although their concerns did not always translate into green consumer behaviour.

Almossawi (2014) examined the impact of environmental knowledge, attitudes, and concerns on shaping and boosting green purchase behaviour of the youth in Bahrain. Research design included the use of a convenience sampling technique to collect data and the sample size composed of 243 undergraduate students, aged between 19 and 23 years drawn from both genders. Tool used for analysis included multiple regression and correlation analysis to find the relationship between the dependant variable, green buying behaviour and three independent variables, environmental knowledge, environmental attitudes, and environmental concern. Results reflected that the youth have poor knowledge and concern and to some extent showed a positive attitude about the environment. Findings also manifested that the

three determinant variables (knowledge, concern, and attitudes) are positively associated with green buying behaviour and they played a significant role in shaping green buying behaviour.

Synodinos (2014) in the survey empirically tested a model of the antecedents of black Generation Y students' green purchase behaviour within the South African context. Convenience sample of 332 students across these four campuses were approached for data and the investigator used statistical tools like exploratory factor analysis, descriptive statistical analysis, correlation analysis, structural equation modelling and independent sample t-tests for data analysis. The study found that students were knowledgeable about the environment. They considered the opinions of their peers regarding the environment, perceived their actions was having a positive effect on the environment and displayed strong pro-environmental attitudes towards the environment. Positive intentions toward purchase green products and behave in a pro-environmental manner was displayed by the respondents. Researched found that the influence of green purchase intentions on green purchase behaviour is partially mediated by the perceived price and quality of green products. Environmental knowledge and perceived behaviour control was found to have a significant direct influence on environmental attitude of black students under Generation Y. This consequently had a significant direct influence on black Generation Y students' green purchase intentions. Subjective norms and environmental knowledge had a significant direct effect on green purchase intentions of students.

Suki (2013) in the study entitled 'Green Awareness Effects on Consumers' Purchasing Decision: Some Insights from Malaysia' examined the influence of consumers' environmental concerns, awareness of green product, price and brand image on their purchasing decision of green products. Survey study used questionnaire administered on a total sample of

200 students randomly selected from the public university in Malaysia. Multiple regression analysis was carried out and the findings exhibited that the consumers' awareness of price and brand image significantly influences their purchasing decision of green products. Researcher also found that the persons who had some concern for the environment and its brand image had a stronger preference to buy a green product.

Keles and Bekimbetova (2013) empiricially examined the application of a sub-section of Theory of Planned Behavior, namely the measurement of Attitudes towards Green Purchases of university students in Kyrgyzstan. Ecological Affect was found to have a greater impact on Chinese and American consumers' attitude formation than does Ecological Knowledge. The study also analysed whether gender plays a role in AGP. Survey method was used and primary data was collected from a sample of 230 undergraduate university students by using convenience sampling. Tool used for data collection was questionnaire and the statistical analysis was carried out by using t-test. Major findings revealed that the study did not prove any of the hypotheses.

Arttachariya (2012) in the descriptive study analysed the influence of environmental consciousness, environmental attitude, concern for Thailand's environment, reference group influence and demographic factors on Thai graduate students' green purchasing behaviour. Questionnaire was administered on 399 undergraduate students from 14 educational institutions located in Bangkok. Multiple regression analysis threw light on the fact that environmental consciousness, concern for Thailand's environment and reference group influence were significant predictors of green purchasing behaviour. However, no significant relationship existed between age, gender, income and green purchasing behaviour of the respondents.

Tan and Lau (2011) investigated the influence of the select attitudinal variables and perceived consumer effectiveness variable on green purchase behaviour of 201 undergraduate students in Malaysia. The attitudinal variables constituted the general environmental attitudes and specific green purchase attitudes. The study used survey method in which data was collected from samples using questionnaires in which the respondents were required to report the frequencies of behaviours specified in the measuring tool. The responses were rated on a five point Likert scale and data was analysed using the statistical technique of stepwise regression analysis. The results showed that all the variables had significant correlations with green purchase behaviour. Amongst the predictors, green purchase attitude had the highest correlation with green purchase behaviour. A significant regression model was derived with green purchase attitude and perceived consumer effectiveness as significant predictors of green purchase behaviour. The findings of the study revealed that specific attitudinal variables are superior to general attitudinal variables in giving comprehensive explanations about specific consumer behaviour.

Young, Hwang, McDonald, and Oates (2010) investigated on the purchasing process for green consumers in relation to consumer technology products in the UK. Survey method using semi structured interviews focused 81 self declared green consumers of Yorkshire region in UK. Major findings threw light on the fact that incentives and single issue labels (like the current energy rating label) helped consumers to concentrate on their limited efforts. Further it was also revealed that 'being green' needs time and space in people's lives that was not available in increasingly busy lifestyles.

Leonidou, Leonidou, and Kvasova (2010) in a descriptive study substantiated on the factors that shape consumer environmental attitudes and behaviour, as well as on the resulting outcomes. Personal interview using

structured questionnaire consisted of factors like environmental attitude, consumer behaviour, consumer satisfaction and demographic characteristics. Primary data was collected from a total sample of 500 Cypriot consumers aged 15 and above by using the stratified random sampling technique. SEM using EQS statistical programs confirmed that both the inward and outward environmental attitudes of a consumer are positively influenced by their degree of collectivism, long-term orientation, political involvement, deontology, and law obedience; however, no significant relationship was found with liberalism. The adoption of environmental attitude with an inward orientation was also found to favour green purchasing behaviour that ultimately leads to high product satisfaction. While an environmental attitude with an outward orientation facilitates the adoption of a general environmental behaviour, which was responsible for greater satisfaction with life.

Chen and Chai (2010) conducted a survey based study on the topic 'Attitude towards the Environment and Green Products: Consumer's Perspectives'. The major objective of the study was to compare gender with attitudes towards the environment and green products. The researcher also investigated on the relationship between attitude towards the environment and green products. Survey instrument prepared on five point Likert scale was administered on a total sample of 200 undergraduate students from a major private university in Malaysia. Data was statistically analysed by using Independent sample t-test, Factor Analysis and Multiple Linear Regression Analysis. Results of the study manifested that there were no significant differences between gender in their environmental attitudes and attitudes on green products. Findings of factor analysis reflected that the rotated factor matrix validated the underlying dimensions of environmental attitudes into three major dimensions comprising of environmental protection, government's role, and personal norm. Multiple linear regression analysis

conveyed that consumer attitudes on the government's role and their personal norm towards the environment contributed significantly to their attitude on green product. Personal norm was the most significant contributor to the attitude towards green product whereas; environmental protection did not contribute significantly to consumers' attitudes on green products.

Vantomme, Geuens, De Houwer, and De Pelsmacker (2005) examined the utility of implicit or automatic attitudes in explaining the weak attitudes towards green consumer behaviour. The study analysed implicit attitudes using Implicit Association Test and explicit attitudes using an experiment. The study revealed the explicit measures showed positive attitudes towards ecological products or no difference in attitude at all. When the existing products were used, implicit attitudes related to intentions of behaviour.

Straughan and Roberts (1999) studied the green consumer behaviour in the new millennium. The study focused on environmental segmentation and green profiling of undergraduate students. The study revealed that demographic variables are not effective in profiling green consumers compared to psychographic criteria. The study showed that perceived consumer effectiveness was highly significant in explaining the green consumer behaviour. Altruism was also found to explain the green consumer behaviour of undergraduate students.

A summary of the studies pertaining to the predictor criterion variable Green Consumer Behaviour are presented in the table given below.

Table 4

Summary of Review of Related Studies on Green Consumer Behaviour

Year	Author	Variables of Study	Findings
2016	Jamian and Tih	Recycling Behaviour, Motivational Factors, University Norm Expectancy, Recycling Service Expectancy, Extrinsic Reward, Perceived Recycling Expectation	• University Norm Expectancy, Recycling Service Expectancy and Extrinsic Reward were the leading motivational factors for students' Recycling Behaviour. • The motivational factor, Perceived Recycling Expectation on the other hand was not significantly influencing the Recycling Behaviour.
2016	Lawrence	Green Buying Behaviour, Attitude and Willingness to Buy Green Product, Willingness to Pay for Green Product, Perception Towards Green Marketing,	• The respondents lack information in the area of Consumer Education about green product and it features across any information. • Market was mature and ready to accept novel and innovative product which was less detrimental to nature by paying extra. • Green Marketing was more effectual than regular

		Knowledge of Green Marketing, Awareness on Green Marketing, Environmental Awareness, Consumer Education	marketing.
2015	Jeong, Jung, and Koo	Perceptions on Sustainability, Sustainability Knowledge, Familiarity Levels, Green Product Purchase Behaviour, Attitude-Behaviour Relationship, Sustainability Education, Attitude	• Majority of the college students considered the environment when they purchased products. • When spending extra money on the purchase, the attitude-behaviour dilemma was triggered among students. • There exists gender difference in the students' familiarity and knowledge of sustainability, with female students appearing to be more familiar and knowledgeable. • Better academic standing students expressed a greater familiarity with sustainability concepts.
2015	Lai and Cheng	Perceptions of Green Marketing Practices,	• The empirical investigation observed a parsimonious picture about undergraduate

		Attitudes toward the Environment, Perceived Environmental Problem Seriousness, Environmental Responsibility, Green Products Purchase Willingness, Behaviour Will, Environmental Perception, Purchasing Behaviour	students' expectations of Green Marketing Practices, Environmental Perception, and Purchasing Behaviour • The study provided insights for green marketers to formulate strategies to encourage well-educated students to consume green products.
2014	Ahmad and Nordin	Green Computing Knowledge Reliability, Convergent Validity and Discriminant Validity of the Measure. Subjective Green Computing Knowledge, Pro-Environmental	• A strong influence of subjective Green Computing knowledge on PEB with its three extracted dimensions cumulatively explaining 37% of students' reported PEB. • Multidimensionality of Subjective Knowledge, the adequacy of the measurement model of Subjective Knowledge and its significant positive role in influencing PEB were

		Behaviour	highlighted in the study.
2014	Nittala	Willingness to Purchase Green Products, Product Recycling, Comfort, Eco-Labelling, Lack of Information, Awareness of Environmental Activism, Environmental Concerns, Green Consumer Behaviour	• Product recycling had a positive influence, whereas, comfort, eco-labeling and lack of information have a negative influence on the willingness of university teachers to purchase green products. • Plastic carry bags were more convenient and should not be banned and they were good discriminators between the groups willing to buy and not willing to buy green products. • Teachers were aware of Environmental Activism, although their concerns did not always translate into Green Consumer Behaviour.
2014	Almossawi	Green Buying Behaviour, Environmental Knowledge, Environmental Attitudes, Environmental Concern.	• The youth have poor Knowledge and Concern and to some extent showed a positive Attitude about the environment. • The three determinant variables (Knowledge, Concern, And Attitudes) are positively associated with Green Buying Behaviour and they played a significant role in shaping

			Green Buying Behaviour.
2014	Synodinos	Green Purchase Behaviour, Environmental Knowledge, Environmental Attitude, Subjective Norms, Peer Opinions, Perceived Actions Pro-Environmental Attitudes Green Purchase Intentions, Perceived Price and Quality of Green Products, Perceived Behaviour Control	• Students were knowledgeable about the environment. • Students considered the opinions of their peers regarding the environment, perceived their actions was having a positive effect on the environment and displayed strong Pro-Environmental Attitudes towards the environment. • Positive Intentions toward purchase green products and behave in a Pro-environmental manner was displayed by the respondents. • Influence of Green Purchase Intentions on Green Purchase Behaviour is partially mediated by the perceived price and quality of green products. • Environmental Knowledge and Perceived Behaviour Control had a significant direct effect on black Generation Y students' Environmental Attitude. • Significant direct influence was found on black Generation Y

			students' Green Purchase Intentions. • Subjective Norms and Environmental Knowledge had a significant direct effect on Green Purchase Intentions of students.
2013	Suki	Green Awareness, Consumers' Purchasing Decision, Environmental Concerns, Awareness of Green Product, Price and Brand Image, Purchasing Decision of Green Products.	• Awareness of price and brand image significantly influences their Purchasing Decision of Green Products. • Persons who had some concern for the environment and its Brand Image had a stronger preference to buy a Green Product.
2013	Keles and Bekimbetova	Theory of Planned Behaviour, Attitudes towards Green Purchases, Ecological Affect, Ecological	• Among American and Chinese consumers, Ecological Affect has a greater impact on their Attitude formation than does Ecological Knowledge.

		Knowledge.	
2012	Arttachariya	Environmental Consciousness, Environmental Attitude, Concern, Environment and Reference Group Influence, Demographic Factors, Green Purchasing Behaviour.	• Environmental Consciousness, Concern for Thailand's environment and Reference Group Influence were significant predictors of Green Purchasing Behaviour. • No significant relationship existed between age, gender, income and Green Purchasing Behaviour of the respondents.
2011	Tan and Lau	General Environmental Attitudes, Specific Green Purchase Attitudes	• Green Purchase Attitude had the highest correlation with Green Purchase Behaviour • A significant regression model was derived with Green Purchase Attitude and Perceived Consumer Effectiveness as significant predictors of green purchase behaviour. • Specific attitudinal variables are superior to general attitudinal variables in explaining specific Consumer Behaviour.
2010	Young, Hwang,	Purchasing Process of Green	• Incentives and single issue labels (like the current energy

	McDonald, and Oates	Consumers, Consumer Technology Products	rating label) helped consumers to concentrate on their limited efforts. • 'Being green' needs time and space in people's lives that was not available in increasingly busy lifestyles.
2010	Leonidou, Leonidou, and Kvasova	Environmental Attitude, Consumer Behaviour, Consumer Satisfaction, Demographic Characteristics. Degree of Collectivism, Long-Term Orientation, Political Involvement, Deontology, Law of Obedience, Liberalism. Inward Environmental Attitude, Green Purchasing Behaviour,	• Both the inward and outward environmental attitudes of a consumer are positively influenced by their degree of collectivism, long-term orientation, political involvement, deontology, and law obedience, but have no connection with liberalism. The adoption of an inward environmental attitude was also found to be conducive to green purchasing behaviour that ultimately leads to high product satisfaction. On the other hand, an outward environmental attitude facilitates the adoption of a general environmental behaviour, which was responsible for greater satisfaction with life.

		Product Satisfaction, Outward Environmental Attitude, General Environmental Behaviour, Satisfaction with Life.	
2010	Chen and Chai	Attitude towards Environment and Green Products, Consumer's Perspectives, Environmental Protection, Government's Role, Personal Norm	• No significant difference exists between gender in Environmental Attitudes and Attitudes towards Green Products. • Environmental Attitudes consisted of three major dimensions comprising of Environmental Protection, Government's Role, and Personal Norm. • Multiple linear regression analysis conveyed that Consumer Attitudes on the Government's Role and their Personal Norm towards the environment contributed significantly to their Attitude towards Green Product.

			• Personal Norm was the most significant contributor to the Attitude towards Green Product • Environmental Protection did not contribute significantly to Consumers' Attitudes towards Green Products.
2005	Vantomme, Geuens, De Houwer, and De Pelsmacker	Implicit Attitudes, Explicit Attitudes Green Consumer Behaviour	• Explicit measures showed positive attitudes towards ecological products or no difference in attitude at all. • When the existing products were used, implicit attitudes related to intentions of behaviour
1999	Straughan and Roberts	Demographics, Perceived Consumer Effectiveness, Altruism, Green Consumer behaviour	• Demographic variables are not effective in profiling green consumers compared to psychographic criteria • Perceived Consumer Effectiveness was highly significant in explaining the Green Consumer Behaviour. • Altruism was also found to explain the Green Consumer Behaviour of undergraduate students.

Conclusion

The investigator carried out an extensive review of researches on the Ecoliteracy, Environmental Responsibility Attribution, Social Influence and its influence on Green Consumer Behaviour. The review of literature revealed that a very few studies have been conducted so far in this area with specific contributions to the field of Education in the Indian context. No studies were found to be done in this area in the Kerala context either. Some researchers have studied Green Consumer Behaviour with its major contributions to the fields of business and marketing with suggestions to enhance education for raising awareness of consumers. A clear research gap was evident with a dearth of researches in Green Consumer Behaviour with contributions to the area of Education. The investigator hopes that the findings of the present study will be worthwhile and supportive of bringing about new transformations in the area of Education enhancing the Green Consumer Behaviour of students for promoting sustainable lifestyles among the teaching and learning community.

CHAPTER 3

METHODOLOGY

- Variables of the Study
- Methodology
- Tools for Data Collection
- Sample for the Study
- Data Collection Procedure
- Scoring and Consolidation of Data
- Statistical Techniques

METHODOLOGY

This chapter elaborates the methodology adopted for the present research. It encompasses the various methods used and the logic behind using those methods in the context of this research. The study aims at understanding the Green Consumer Behaviour of undergraduate students with regard to Ecoliteracy, Environmental Responsibility Attribution and Social Influences. The investigator used survey method to collect data from the sample. For this purpose, the investigator developed and standardised the tools with the help of supervising teacher. A quantitative approach was followed in which the data was analysed using parametric tests to reach at valid conclusions. The following section overviews the methodology of this research in which the details of the variables, objectives, hypotheses, method, tools, sample, data collection procedure, and statistical techniques used are given in detail.

Variables of the Study

Methodology

Tools for Data Collection

Sample for the Study

Data Collection Procedure

Scoring and Consolidation of Data

Statistical Techniques

Variables of the Study

For the present study, Ecoliteracy, Environmental Responsibility Attribution and Social Influence are the predictor variables and Green Consumer Behaviour is the criterion variable. Brief description of the variables selected for the study is given in the following section.

Predictor Variables

Ecoliteracy

Ecoliteracy is the knowledge that combines environmental awareness, attitudes and actions or skills resulting in knowing the impact of human behaviour on the environment and a kind of sensitivity to what happen in the environment and living in harmony with ecosystem. An ecoliterate understands the principles of organisation of the ecosystem and applies it for improving the quality of life and environment.

Environmental Responsibility Attribution

Environmental Responsibility Attribution is a process whereby an individual attributes the responsibility or obligation of conservation, preservation and protection of the environment either to oneself or to others.

Social Influence

Social Influence is the change in an individual's thoughts, feelings, attitudes or behaviours as a result of interaction with parents, teachers, peer group and media while making decisions as a green consumer.

Criterion Variable

Green Consumer Behaviour

Green Consumer Behaviour include all the psychological, social and physical behaviours that the consumer displays in searching, evaluating, purchasing, using and disposing of products and/or services that they expect will satisfy their needs and wants without any detrimental impact on the environment.

Methodology

The present study investigates Ecoliteracy, Environmental Responsibility Attribution and Social Influence as determinants of Green Consumer Behaviour of undergraduate students in Kerala. The investigator conducted survey to find out the influence of the predictor variables on criterion variable by giving due representation to gender of students, locale and type of management.

Tools Used for Data Collection

Data was collected from sample using the tools developed and standardised by the investigator with the help of supervising teacher. Four tools were developed inorder to measure the predictor and criterion variables. The tools are provided in the Appendix respectively.

The tools used for collecting data for the present study are given below.

- Ecoliteracy Inventory (Musthafa & Sajila, 2015)
- Environmental Responsibility Attribution Scale (Musthafa & Sajila, 2015)
- Scale of Social Influence on Green Consumer Behaviour (Musthafa & Sajila, 2015)
- Green Consumer Behaviour Scale (Musthafa & Sajila, 2015)

A brief description of the tools and the related components are given in the following section.

Ecoliteracy Inventory (Musthafa & Sajila, 2015)

The present study uses Ecoliteracy Inventory to assess the Ecoliteracy of undergraduate students. The tool was developed and standardised by the investigator with the help of supervising teacher. The strategy adopted for the

construction of the inventory followed a rationale one. A three point scale that consists of 60 items from three components from the theoretical frameworks of Ecoliteracy was prepared in a self reported format. Based on the thorough review of literature, identification of three components was made namely Environmental Awareness, Environmental Attitude and Environmental Action which formed the rationale for item preparation.

Initially, the tool consisted of 82 items pertaining to three components that were prepared in the form of a draft tool. This tool was then administered to a representative sample of 400 undergraduate students which was later subject to standardisation process using the procedure proposed by Likert (1932). Each inventory statement has three choices of response viz., 'Agree', 'Uncertain' and 'Disagree' which were rated as 3, 2 and 1 respectively. The tool consists of positive and negative statements. The positive statements were scored as 3, 2 and 1 and the negative statements were scored reversely, i.e., 1, 2 and 3 respectively. The validity and reliability of the tool was established.

Identifying the Components of Ecoliteracy

Literacy means the state of being informed about the basic principles and techniques. Ecoliteracy is defined as the ability of an individual to transform environmental knowledge in to actions (Roth, 1992 and Orr, 2002). It helps in building an environmentally educated society with citizens capable of solving environmental problems (Orr, 2002). Hence it becomes imperative for undergraduate students as young consumers to be ecoliterate inorder to build capacity for becoming green consumers who make more enlightened environmentally responsible decisions.

An ecoliterate must be able to understand the principles of organisation of ecosystems and the application of those principles for creating sustainable

communities (Capra, 1997; Cutter-Mackeinzie, and Smith, 2003). Inorder to measure Ecoliteracy of students, the Ecoliteracy Inventory was developed by identifying three components namely Environmental Awareness, Environmental Attitude and Environmental Action drawn mainly based on the theoretical frameworks of Orr which encompasses Knowledge, Caring and Practical Competence (Orr, 1992).

The components of the independent variable Ecoliteracy includes the following:

1) Environmental Awareness
2) Environmental Attitude
3) Environmental Action

Environmental Awareness

Environmental Awareness is the basic understanding about the general facts and concepts relating to the environment (Mostafa, 2007). It also includes an understanding about the impact of human behaviour on environment (Kolmuss & Ageyman, 2002). According to Grob (1995), there are two main components of awareness, viz., factual knowledge and recognition of environmental problems for testing more appropriate ecofriendly behaviour. According to Young *et al.*, (2010), there is heightened awareness about environmental issues among consumers. Apart from this, several other researchers have identified Environmental Awareness as one of the strongest predictors of environmental behaviour (Grob, 1995; Gatersleben *et al.*, 2002). Hence, the researcher felt it as important to include Environmental Awareness as a component of the tool Ecoliteracy.

Studies have shown that individuals who are aware of environmental issues are sensitive towards environment thereby adhering to green consumer decisions ensuring less damage to environment and society by acting

positively (Roberts, 1996). Coyle (2005) has found that environmental knowledge correlates significantly with sustainable behaviour. Bruyere (2008), in a study 'The Effect of Environmental Education on the Ecological Literacy of First Year College Students' identified how sustainable behaviours are influenced by knowledge of environmental systems and issues. Based on an extensive review of literature of related studies, the researcher identified the components for Environmental Awareness. Inorder to get a comprehensive coverage of the area, relevant aspects like awareness of important environmental concepts, environmental problems persisting at global level and local levels and knowledge of solutions to the existing environmental problems were also included.

Examples

- Food chain is the sequence of organisms through which the energy flows.
- Natural resources can be used extensively since it is a gift of nature that comes in plenty.
- Acid rain causes extensive destruction of forests, fisheries and other materials.
- An increase in agricultural productivity can only be attained by using chemical fertilizers.

Environmental Attitude

Attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour (Eagly & Chaiken, 1993). According to Kotler & Keller (2006), an attitude is an individual's persistent positive or negative evaluations, emotional feelings and action inclinations towards an entity or an idea. This attitude or attitude changes can influence a person's feeling and can have a direct or indirect effect upon their

behaviour in several situations (Cacioppo *et. al.*, 1991). Today's young generation are aware of the impact of global warming and value green facilities (McDougle, Greenspan, & Handy, 2011). Their attitude towards environment is positively related to environment friendly actions (Smith, 2010). As a result of this they are acting actively and responsibly as consumers (Lee, 2008). The question that arises in this context is that, whether the present education system has been able to develop such an attitude among students for performing environment friendly actions? If so, how far the educational endeavours have transformed the students as young responsible ecoliterates?

An individual's Environmental Attitude is defined as the body of favourable or unfavourable feelings towards some specific aspect of one's environment (Hines, Hungerford, & Tomera, 1987; Newhouse, 1990). Environmental Attitude which is a form of learned belief develops from an individual's knowledge and values regarding the environment and influences actions that functions as a supportive force for environmental sustainability (Uitto, Juuti, Lanoven, & Meisalo, 2004). Some authors consider Environmental Attitude as the individual's value judgement and it comprehends the individual's thought regarding the value of environmental protection. Bohlen, Schlegelmilch, & Diamantopoulos (1993) and Schlegelmilch *et al.*, (1996) concluded that Environmental Attitude is more closely related to Green Consumer Behaviour. This sheds light on the significance of fostering Green Consumer Behaviour through building up the right attitude towards the environment among students. This must rightly guide them to take intelligent decisions regarding their purchase and Environmental Actions.

Kaiser *et al.* (1999) indicated environmental knowledge and awareness as the precondition for the formation of attitude towards environment. This

type of knowledge is basically part of the action based knowledge within the cognitive psychology since individual with this knowledge understand the impact of their action on the environment (Frick, Kaiser, & Wilson, 2004). Studies have identified a positive relationship between Environmental Attitude and Environmental Behaviour (Kotchen & Reiling, 2000). Several studies have reported that Environmental Attitude have a significant impact on green purchasing intentions and behaviour (Beckford *et al.,* 2010; Cornelissen *et al.,* 2000; Lynne & Rola, 1998; Mostafa, 2009). Bruyere (2008) found that as individuals learn about the environment and the issues related to it, their environmental attitudes become more favourable and many of their environmental behaviours become more frequent. This knowledge and attitudinal change enlightened the consumers which made them to shift their views in favour of a more environmentally conscious outlook.

However, some studies have found weak or moderate relationship between Environmental Attitude and green purchasing behaviour (Axelrod & Lehman, 1993 and Smith *et al.*, 1994; Berger & Corbin,1992). So, by getting a better understanding of the attitude of students towards environment, and its influence on their Green Consumer Behaviour would help to orient the educational endeavours towards nurturing ecoliterates.

Incorporating all these aspects and based on several other studies conducted in this area, items for measuring the Environmental Attitude of students were prepared. Some sample items are given below.

Example

- It is necessary to understand the environmental impact of one's actions while making decisions.
- It is unwise to spend large amount of money on promoting environmental protection by a country like India.

- Irresponsible actions of industries causing pollution and destruction of natural environment cannot be tolerated.

Environmental Action

Environmental Action or behaviour includes all those elements in the psychology of individuals that reflect their sensitivity to environmental issues, such as saving energy, keeping places clean and avoiding waste (Kilbourne & Pickett, 2008). Studies have depicted that individuals who are concerned about environmental problems are very likely to be motivated to take Environmental Action which is in line with the cognitive consistency theory of Festinger (1957) which has been proved by several studies (Schlegelmilch *et al.*, 1996; Roberts & Bacon, 1997 and Mostafa, 2007). The findings clearly points out the need for sensitising students about the environment and the prevailing problems for orienting their actions and consumer behaviours towards becoming environmentally responsible citizens.

For the present study the Environment Action includes the behavioural actions undertaken by the students in the recent past viz., the environment related past behaviours were considered. The engagement of individuals in certain environmental behaviours is a must for being environmentally responsible consumers (Bennet, 1974; Dunlap & Van Liere, 1978). Moreover, the attitude and knowledge of individuals determine the engagements in such environmentally related behaviours (Maloney & Ward, 1973). Apparently consumers' environmental responsibility is said to be reflected in their environment related past behaviours. Hence this component include items that measures students' past behaviours related to environment such as those actions they had taken to help out in reducing or solving environmental problems. Some sample items used in the study for measuring the component of Ecoliteracy viz., Environment Action are given below.

- I donate money for environment related activities.
- I bury plastic wastes as they are non degradable.
- I plant trees for spreading greenery because I love nature.

Planning of Ecoliteracy Inventory

The planning of the Ecoliteracy Inventory which is intended to measure the predictor variable Ecoliteracy involved a thorough review of literature so as to study the various aspects of the variable from different dimensions. Based on this it was decided to prepare a three point scale with items by giving due weightage to the components and by expert consultation, the investigator planned to prepare a final draft tool comprising of 82 items. The items were to be prepared in a self reported format with each item provided with a choice of response 'Agree', 'Uncertain' and 'Disagree'. It was also decided to have positive and negative items to measure the favourableness and unfavourableness towards specific items in the inventory.

Preparation of the Inventory

The Ecoliteracy Inventory was prepared as a three point scale with self reporting format of statements for assessing the ecoliteracy of students. Based on a thorough literature review and expert consultations, the initial draft tool was prepared that consisted of 85 items from the three components namely, Environmental Awareness, Environmental Attitude and Environmental Action. After consultation with experts, the final draft tool was prepared with 82 items. It was decided to have positive and negative items with each question provided with a choice of response 'Agree', 'Uncertain' and 'Disagree'. All the items were arranged randomly. Necessary instructions for students regarding the modalities of response were provided in the tool. The students were given instructions to mark their responses by putting a tick mark in the column of their choice of response.

Examples of positive items in the inventory are

1) Extensive developmental activities cause global warming resulting in increase of earth's temperature.
2) Hazardous waste should be properly managed to minimise its harmful effect on the community.
3) Spending time in nature gives a pleasant feeling
4) I learn about how the existing environmental problems can be solved.

Examples of negative items in the inventory are

1) All organisms exist independent of each other.
2) Aquatic life is less affected by environmental pollution.
3) There is nothing wrong about using natural resources on a large scale because it is replaced by nature iteself.
4) It is better to drain sevage waste into rivers and sea of keep the environment clean.

The component-wise items of Ecoliteracy Inventory are presented in Table 5.

Table 5

Component-wise Items of Ecoliteracy Inventory

Sl. No	Components	Items
1	Environmental Awareness	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18, 19,20,21,22,23,24,25,26,27,28,29,30,31,32,3 3,34, 35,36,37,38,39,40.
2	Environmental Attitude	41,42,43,44,45,46,47,48,49,50,51,52,53,54,5 5, 56,57,58,59,60.
3	Environmental Action	61,62,63,64,65,66,67,68,69,70,71,72,73,74,7 5,76,77,78,79,80,81,82.

Try Out

The tool was administered to a representative sample of 400 undergraduate students by giving due representation to gender, locale and type of institution. The pilot study was conducted to analyse each item statistically inorder to select the significant ones to be included in the final tool.

Evaluation

Each inventory statement consisted of three choices of response viz., 'Agree', 'Uncertain' and 'Disagree' which were rated as 3, 2 and 1 respectively. The Ecoliteracy Inventory consisted of positive and negative statements. The positive inventory items were scored as 3, 2 and 1 for 'Agree', 'Uncertain' and 'Disagree' respectively. The negative statements were scored reversely, ie., 1, 2 and 3 for 'Agree', 'Uncertain' and 'Disagree' respectively. The evaluation process also comprised of establishing the validity and reliability of the tool.

Scoring Procedure of Ecoliteracy

The scoring procedure of the items in the Ecoliteracy Inventory is given in Table 6.

Table 6

Scoring of Ecoliteracy Inventory

Response	Positive Item	Negative Item
Agree	3	1
Uncertain	2	2
Disagree	1	3

Item Analysis

The item analysis of the Ecoliteracy Inventory was done according to the procedure suggested by Likert (1932). Out of the data collected from 400 students, responses of 370 were scored and arranged in ascending order of scores from low to high. Then two sub groups namely the lower group consisting of approximately 27 percent of the total group who got lowest scores and the upper group consisting of an equal number who got highest scores were selected separately. The response of each item in the lower group and upper group were subjected to item analysis. The 't' value of each item was then calculated separately using the following formula.

$$t = \frac{\overline{X}_H - \overline{X}_L}{\sqrt{\frac{\sigma_H^2}{N_H} + \frac{\sigma_L^2}{N_L}}}$$

X_H = mean score on a given item for high group

X_L = mean score on a given item for low group

σ_H = standard deviation of scores of the given item of high group

σ_L = standard deviation of scores of the given item of low group

N_H = number of individuals in high group

N_L = number of individuals in low group

Selection of Items

The 't' value of 82 items in the Ecoliteracy Inventory were calculated and items with 't' value 2.58 and above were selected for the final inventory.. The details of item analysis and the 't' values computed for each item of the Ecoliteracy Inventory are given in the Table 7.

Table 7

Item Analysis of Ecoliteracy Inventory

Sl. No	Items Selected	Positive/ Negative	t value
1	1	+	5.31
2	3	-	7.07
3	4	+	5.62
4	5	-	9.27
5	6	+	5.00
6	7	+	5.15
7	9	-	7.11
8	11	+	6.21
9	13	+	5.15
10	18	+	5.56
11	19	+	6.13
12	20	+	5.84
13	21	-	6.76
14	22	-	7.07
15	23	+	4.91
16	25	-	7.17
17	26	-	7.82
18	27	+	4.04
19	28	+	5.59
20	29	-	7.07
21	31	+	5.55
22	32	+	4.91
23	33	+	4.96
24	35	+	5.77
25	36	+	5.06
26	37	-	7.29
27	39	+	5.22
28	40	+	5.76
29	41	+	5.56
30	42	-	4.65
31	43	+	5.40

32	44	+	4.18
33	45	-	7.93
34	47	-	9.54
35	48	+	4.06
36	49	+	6.31
37	50	-	9.45
38	51	+	4.12
39	52	-	5.09
40	53	+	4.18
41	54	+	5.06
42	55	+	9.87
43	57	+	6.35
44	58	+	4.42
45	59	-	7.07
46	62	+	4.80
47	63	+	5.02
48	64	+	4.38
49	65	+	5.72
50	66	+	6.00
51	67	+	4.44
52	68	-	7.13
53	69	+	5.00
54	70	+	5.73
55	77	+	4.11
56	78	+	6.07
57	79	+	4.24
58	80	+	10.73
59	81	-	10.73
60	82	+	5.14

Estimation of Validity and Reliability

Validity

The content validity of the Ecoliteracy inventory was established by consultation with the experts and construct validity was established by giving due weightage to the major components of the construct Ecoliteracy like

Environmental Awareness, Environmental Attitude and Environmental Action.

Reliability

Reliability of the Ecoliteracy Inventory was established through test-retest method. The inventory was re-administered after an interval of three weeks on a representative sample of 50 students. The reliability coefficient was computed by correlating the scores obtained in the first assessment and the re-test scores. The formula used for computing the correlation coefficient (r) is given below.

$$r = \frac{N\sum XY - (\sum X \sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

Where,

r = Coefficient of correlation

X, Y = Variables to be compared

N = Size of sample

The coefficient of correlation (r) have been verbally interpreted by the following conventions (Garrett, 1981)

(i) r from .00 to ± .20 represents negligible relationship

(ii) r from ± .20 and ± .40 represents low relationship

(iii) r from ± .40 to ± .70 represents substantial relationship

(iv) r from ± .70 to ± 1.00 represents high relationship

The reliability coefficient obtained was .86 which shows that the Ecoliteracy Inventory is a highly reliable tool for assessing the Ecoliteracy of undergraduate students.

The final version of the Ecoliteracy Inventory and the Response Sheet is given in the Appendices I & II respectively.

Environmental Responsibility Attribution Scale (Musthafa & Sajila, 2015)

The present study uses Environmental Responsibility Attribution Scale to assess the attribution of environmental responsibility of undergraduate students. The tool was developed and standardised by the investigator with the help of supervising teacher. The strategy adopted for the construction of the scale followed a rationale approach. Environmental Responsibility Attribution Scale is a five point scale that consists of 25 items from two components of Environmental Responsibility Attribution. Based on a thorough review of literature, two components were identified namely Environmental Responsibility Attribution to Self and Environmental Responsibility Attribution to Others which formed the rationale for item preparation.

Initially, the tool consisted of 30 items pertaining to two components that were prepared in the form of a draft tool. This tool was then administered to a representative sample of 400 undergraduate students which was later subjected to standardisation process using the procedure proposed by Likert (1932). Each item of the scale has five ratings or choices of response viz., 'Strongly Agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly Disagree' which were rated as 5, 4, 3, 2 and 1 respectively. The tool consisted of positive and negative statements. The positive statements were scored as 5, 4, 3, 2 and 1 and the negative statements were scored reversely, ie., 1, 2, 3, 4 and 5 respectively. The validity and reliability of the tool was established.

Identifying the Components of Environmental Responsibility Attribution

The environmental responsibility of consumers means the undertaking of those activities that satisfies the needs and wants without causing any damage to the environment (Ebreo, Hershey & Vining, 1999 and Pieters,

1991). The environmental responsibility was found to be a strong and positive predictor of green purchase intention (Lu, *et al.*, 2014). Attribution literally means a grant of responsibility. Attribution theory explains how the individuals make sense of the events that occur around them and how it is related to their thinking and behavioural processes. It's a cognitive perception which affects their motivation. Generally behaviour is explained in two ways; either attributing the behaviour to a person or a situation (Heider, 1958). The theory was first proposed by Heider, later Edward E. Jones (1972) and Harold Kelley (1967) developed a theoretical structure, which divides the behaviour attributes in to two parts – internal or external factors.

- Environmental Responsibility Attribution to Self / Internal attribution: When an internal attribution is made, the cause of the given behaviour is within the person, i.e. the variables which make a person responsible like attitude, aptitude, character and personality.
- Environmental Responsibility Attribution to Others / External attribution: When an external attribution is made, the cause of the given behaviour is assigned to the situation in which the behaviour was seen. The person responsible for the behaviour may assign the causality to the environment or weather.

The Environmental Responsibility Attribution Scale was developed to assess the environmental responsibility attribution of undergraduate students. Based on the above mentioned theoretical structure, two components were identified for the variable like 'Environmental Responsibility Attribution to Self' and 'Environmental Responsibility Attribution to Others'. Environmental responsibility becomes more significant when the individual or self is perceived to be a responsible factor when compared to other social or external factors (Eden,1993). This throws light on the need for nurturing students with internal locus for developing a

better sense of responsibility towards the environment with the realisation of the fact that the actions of every individual is important for maintaining the quality of environment.

The components of the independent variable Environmental Responsibility Attribution include the following:

1) Environmental Responsibility Attribution to Self
2) Environmental Responsibility Attribution to Others

Environmental Responsibility Attribution to Self

When the effect or outcome is assigned to one's own actions, it is referred to as internal attribution (Kelly, 1973). In the present study, when the student assigns the environmental responsibility to self, it is considered as internal attribution of environmental responsibility.

Examples

- I consider that it is my responsibility too to follow the environmental laws and regulations.
- I consider that my environmental actions will have a positive impact on the environment.
- I believe that my environmental acations will also have an impact on the quality of environment.
- I believe that the efforts of environmental conservation should begin at individual level.

Environmental Responsibility Attribution to Others

When the effect or outcome is assigned to situations or external agents rather than one's own actions, it is referred to as external attribution (Kelly, 1973). In the present study when the students assign the effects on environment to factors other than one's own behaviour or assigns the

environmental responsibility to other external agents other than to self is considered as external attribution of environmental responsibility.

Example

- The environmental organisations should have more responsibility than individual.
- It is only through the governmental rules, regulations and laws that quality of life in the society can be maintained.
- An individual's choice to act in an environmentally responsible manner solely depends on the societal settings.

Planning of Environmental Responsibility Attribution Scale

The planning of the Environmental Responsible Attribution Scale which is intended to measure the predictor variable Environmental Responsible Attribution, involved a thorough review of literature so as to study the various aspects of the variable from different dimensions. Based on this it was decided to prepare a five point scale with items by giving due weightage to the components and by expert consultation, the investigator planned to prepare a final draft tool comprising of 30 items. Each item was prepared by providing a choice of response 'Strongly Agree' , 'Agree', 'Undecided', 'Disagree' and 'Strongly Disagree'. It was also decided to have positive and negative items to measure the favourableness and unfavourableness towards specific items in the scale.

Preparation of the Scale

The Environmental Responsible Attribution Scale was prepared as a five point scale with statements for assessing the Environmental Responsibility Attributions of students. Based on a thorough literature review and expert consultations, the initial draft tool was prepared that consisted of

35 items from the two components namely, 'Individual or Internal Attribution' and 'Others or External Attribution' of environmental responsibility. After consultation with experts, the final draft tool was prepared with 30 items. It was decided to have positive and negative items with each question provided with a choice of response 'Strongly Agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly Disagree'. All the items were arranged appropriately. Necessary instructions for students regarding the modalities of response were provided in the tool. Students were required to mark their responses by putting a tick mark in the column of their choice of response.

Examples of positive items in the scale

1) Environmental activism should begin at individual level.
2) My careless environmental behaviours can impact the quality of living of others

Examples of negative items in the scale

1) The environmental issues can be solved only through political interventions.
2) I believe that an individual's ecofriendly behaviour solely depends upon the economic status of the family.

The component wise items of Environmental Responsibility Attribution Scale are presented in Table 8.

Table 8

Component-wise Items of Environmental Responsibility Attribution Scale

Sl. No	Components	Items
1	Individual or Internal Attribution of Environmental Responsibility	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15.
2	Others or External Attribution of Environmental Responsibility	16,17,18,19,20,21,22,23,24,25,26,27, 28,29,30.

Try Out

The tool was administered to a representative sample of 400 undergraduate students by giving due representation to gender, locale and type of management. The pilot study was conducted to analyse each item statistically inorder to select the significant ones to be included in the final tool.

Evaluation

Each item of the scale consisted of five choices of response viz., 'Strongly Agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly Disagree' which were rated as 5, 4, 3, 2 and 1 respectively. The Environmental Responsible Attribution Scale consisted of positive and negative items. The positive items were scored as 5, 4, 3, 2 and 1 for 'Strongly Agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly Disagree' respectively. The negative items were scored reversely, ie., 1, 2, 3, 4 and 5 for 'Strongly Agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly Disagree' respectively. The evaluation process also comprised of establishing the validity and reliability of the tool.

Scoring Procedure of Environmental Responsibility Attribution

The scoring procedure of the items in the Environmental Responsibility Attribution Scale is given in Table 9.

Table 9

Scoring of Environmental Responsibility Attribution Scale

Response	Positive Item	Negative Item
Strongly Agree	5	1
Agree	4	2
Undecided	3	3
Disagree	2	4
Strongly Disagree	1	5

Item Analysis

The item analysis of the Environmental Responsibility Attribution Scale is done according to the procedure suggested by Likert (1932). Out of the data collected from 400 students, responses of 370 were scored and arranged in ascending order of scores from low to high. Then two sub groups namely the lower group consisting of approximately 27 percent of the total group who got lowest scores and the upper group consisting of an equal number who got highest scores were selected separately. The response of each item in the lower group and upper group were subjected to item analysis. The‘t’ value of each item was then calculated separately using the following formula.

$$t = \frac{\overline{X}_H - \overline{X}_L}{\sqrt{\frac{\sigma_H{}^2}{N_H} + \frac{\sigma_L{}^2}{N_L}}}$$

X_H = mean score on a given item for high group

X_L = mean score on a given item for low group

σ_H = standard deviation of scores of the given item of high group

σ_L = standard deviation of scores of the given item of low group

N_H = number of individuals in high group

N_L = number of individuals in low group

Selection of Items

The 't' value of 30 items in the Environmental Responsibility Attribution Scale were calculated and items with 't' value 2.58 and above were selected for the final inventory. The details of item analysis and the't' values computed for each item of the Environmental Responsibility Attribution Scale are given in the Table 10.

Table 10

Item Analysis of Environmental Responsibility Attribution Scale

Sl. No	Items Selected	Positive/ Negative	t value
1	1	+	5.77
2	2	+	5.99
3	3	+	5.96
4	4	+	6.14
5	5	+	5.36
6	6	+	6.62
7	7	+	5.64
8	8	-	4.98
9	9	+	5.63
10	10	+	6.57

11	11	+	5.58
12	12	+	6.27
13	13	+	5.37
14	14	-	6.22
15	15	-	7.31
16	17	-	6.04
17	18	-	5.83
18	19	-	6.26
19	21	-	12.24
20	23	-	6.10
21	25	-	8.95
22	26	-	5.21
23	27	-	6.09
24	28	-	6.15
25	29	-	6.87

Estimation of Validity and Reliability

Validity

The content validity and construct validity of the Environmental Responsible Attribution Scale was established by consultation with the experts. Further the construct validity of the tool was established by giving due weightage to the major components of the psychological construct Environmental Responsible Attribution like 'Environmental Responsibility Attribution to Self or Internal Attribution' and 'Environmental Responsibility Attribution to Others or External Attribution'.

Reliability

Reliability of the Environmental Responsibility Attribution Scale was established through test-retest method. The scale was re-administered after an interval of three weeks on a representative sample of 50 students. The reliability coefficient was computed by correlating the scores obtained in the

first assessment and the re-test scores. The formula used for computing the correlation coefficient (r) is given below.

$$r = \frac{N\sum XY - (\sum X \sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

Where,

r = Coefficient of correlation

X, Y = Variables to be compared

N = Size of sample

The coefficient of correlation (r) have been verbally interpreted by the following conventions (Garrett, 1981)

(i) r from .00 to ± .20 represents negligible relationship

(ii) r from ± .20 and ± .40 represents low relationship

(iii) r from ± .40 to ± .70 represents substantial relationship

(iv) r from ± .70 to ± 1.00 represents high relationship

The reliability coefficient obtained was .81 which shows that the Environmental Responsible Attribution Scale is a highly reliable tool for assessing the environmental responsible attribution of undergraduate students.

The final version of the Environmental Responsibility Attribution Scale and the Response Sheet is given in the Appendices III & IV respectively.

Scale of Social Influence on Green Consumer Behaviour (Musthafa & Sajila, 2015)

The present study uses Scale of Social Influence on Green Consumer Behaviour to assess the influence of social factors on the green consumer behaviour of undergraduate students. The tool was developed and

standardised by the investigator with the help of supervising teacher. The strategy adopted for the construction of the scale followed a rationale approach. The Scale of Social Influence on Green Consumer Behaviour is a five point scale that consists of 60 items from four components of Social Influence. Based on a thorough review of literature, four components were identified namely Parental Influence, Teacher Influence, Peer Group Influence and Media Influence which formed the rationale for item preparation.

Initially, the tool consisted of 61items pertaining to the four components that were prepared in the form of a draft tool. This tool was then administered to a representative sample of 400 undergraduate students which was later subject to standardisation process using the procedure proposed by Likert (1932). Each item of the scale has five ratings or choices of response viz., 'Strongly Agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly Disagree' which were rated as 5, 4, 3, 2 and 1 respectively. The validity and reliability of the tool was established.

Identifying the Components of Social Influence

The influencer is a person or any factor that can affect the final decision of an individual in many ways. In consumer decision making, an influencer affects the final decision of the consumer. The influencer's role is relevant during the stages of searching the information and evaluation of alternatives of consumer decision making process. The Social Influence in the decision making process of consumers involve the influence of social factors such as family, reference groups, media, role in the society, social class, etc. An individual can be highly influenced by the social surroundings including friends, relatives, and colleagues (Han *et al.*, 2010). Studies have shown that social factors influence green behaviour (Cole & Fieselman, 2013; Lee, 2008, 2009). In the case of young consumers, it was found that the peer group to

strongly affects the decisions and are open to change more easily (Baker & Ozaki, 2008). Grob (1995) also says that differences in environmental attitudes and behaviours may occur as a result of social group memberships and associations.

Bush, Martin & Clark (2001) have elaborated on the consumer socialisation process through the use of social learning theory. According to them, direct role models like parents and teachers have the greatest impact especially on the attitudes of young consumers' knowledge of the market place and their decision making processes. Consumer socialisation is the process through which consumers gain knowledge, skills and form attitudes towards becoming an efficient consumer (Bush et al., 2001). Researchers have found that social influences have said to promote many recycling activities specifically among young consumers (Baker & Ozaki, 2008). Several other researchers have identified peer and parental influence as significant predictors of young consumers' decision to buy green products (Lee, 2010; Vongmahadlek, 2012 and Thogersen, Haugaard & Olesen, 2010). However, there are also certain contradicting findings that the influence of others didn't make any difference in terms of green purchase (Young, Hwang, McDonald &Oates, 2010).

Media is another most influential factor of Green Consumer Behaviour in the 21st century. Consumers are increasingly using social media sites before making purchase and are greatly being influenced by it (Chaturvedi & Barbar, 2014). Studies have also shown that social media can be used as a platform of dissemination of information to and from consumers with a great ease and efficiency (Shao, 2009; Krishnamurthy & Dou, 2008; Greer & Fergusan, 2011; Lukas, 2013 and Stafford, Stafford & Schkade, 2004).

Inorder to assess the Social Influence of Green Consumer Behaviour of undergraduate students, the Social Influence on Green Consumer Behaviour

was developed. Drawing upon all the above studies, the investigator realised the significant role played by the media including social media, which the young generation are very much clinging to drawing and sharing of new information and ideas. The influential role played by it regarding consumer decisions is also seen to be enormous. Hence, the investigator developed an appropriate tool to measure this variable by identifying four components.

The components of the independent variable Social Influence include the following:

1) Parental Influence
2) Teacher Influence
3) Peer Group Influence
4) Media Influence

Examples

- I have greater trust when parents guide me in my decisions as consumer.
- I learn about the benefits of green lifestyles from teachers.
- I am motivated to use ecofriendly products when my friends use them.

Planning of Scale of Social Influence on Green Consumer Behaviour

The planning of the Scale of Social Influence on Green Consumer Behaviour which is intended to measure the predictor variable Social Influence of undergraduate students pertaining to Green Consumer Behaviour involved a thorough review of literature so as to study the various aspects of the variable from different dimensions. Based on this it was decided to prepare a five point scale with items by giving due weightage to the components and by expert consultation, the investigator planned to prepare a

final draft tool comprising of 61 items. The items were to be prepared with each item provided with a choice of response ‘Strongly Agree’, ‘Agree’, ‘Undecided’, ‘Disagree’ and ‘Strongly Disagree’.

Preparation of the Scale

The Scale of Social Influence on Green Consumer Behaviour was prepared as a five point scale with statements for assessing the influence of social factors on the Green Consumer Behaviour of undergraduate students. Based on a thorough literature review and expert consultations, the initial draft tool was prepared that consisted of 65 items from the four components namely, influence of ‘Parental Influence’, ‘Teacher Influence’, ‘Peer Group Influence’ and ‘Media Influence’ in nurturing Green Consumer Behaviour. After consultation with experts, the final draft tool was prepared with 61 items. Each item of the scale is provided with a choice of response ‘Strongly Agree’, ‘Agree’, ‘Undecided’, ‘Disagree’ and ‘Strongly Disagree’. All the items were arranged randomly. Necessary instructions for students regarding the modalities of response were provided in the tool. Students were required to mark their responses by putting a tick mark in the column of their choice of response.

The component wise items of Scale of Social Influence on Green Consumer Behaviour are presented in Table 11.

Table 11

Component-wise Items of Scale of Social Influence on Green Consumer Behaviour

Sl. No	Components	Items
1	Parental Influence	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15.
2	Teacher Influence	16,17,18,19,20,21,22,23,24,25,26,27,28,29,30.
3	Peer Group Influence	31,32,33,34,35,36,37,38,39,40,41,42,43,44,45.
4	Media Influence	46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61.

Try Out

The tool was administered to a representative sample of 400 undergraduate students by giving due representation to gender, locale and type of institution. The pilot study was conducted to analyse each item statistically inorder to select the significant ones to be included in the final tool.

Evaluation

Each item of the scale consisted of five choices of response viz., 'Strongly Agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly Disagree' which were rated as 5, 4, 3, 2 and 1 respectively. The evaluation process also comprised of establishing the validity and reliability of the tool.

Scoring Procedure of Scale of Social Influence on Green Consumer Behaviour

The scoring procedure of the items in the Scale of Social Influence on Green Consumer Behaviour is given in Table 12.

Table 12

Scoring of Scale of Social Influence on Green Consumer Behaviour

Response	Item Score
Strongly Agree	5
Agree	4
Undecied	3
Disagree	2
Strongly Disagree	1

Item Analysis

The item analysis of the Scale of Social Influence on Green Consumer Behaviour is done according to the procedure suggested by Likert (1932). Out of the data collected from 400 students, responses of 370 were scored and arranged in ascending order of scores from low to high. Then two sub groups namely the lower group consisting of approximately 27 percent of the total group who got lowest scores and the upper group consisting of an equal number who got highest scores were selected separately. The response of each item in the lower group and upper group were subjected to item analysis. The‘t’ value of each item was then calculated separately using the following formula.

$$t = \frac{\overline{X}_H - \overline{X}_L}{\sqrt{\frac{\sigma_H^2}{N_H} + \frac{\sigma_L^2}{N_L}}}$$

X_H = mean score on a given item for high group

X_L = mean score on a given item for low group

σ_H = standard deviation of scores of the given item of high group

σ_L = standard deviation of scores of the given item of low group

N_H = number of individuals in high group

N_L = number of individuals low group

Selection of Items

The 't' value of 61 items in the Scale of Social Influence on Green Consumer Behaviour were calculated and items with 't' value 2.58 and above were selected for the final inventory. The details of item analysis and the't' values computed for each item of the Scale of Social Influence on Green Consumer Behaviour are given in the Table 13.

Table 13

Item Analysis of Scale of Social Influence on Green Consumer Behaviour

Sl. No	Items Selected	t value
1	1	5.11
2	2	5.76
3	3	7.42
4	4	5.08
5	5	5.55
6	6	5.08
7	7	4.72
8	8	5.04
9	9	4.78
10	10	6.68
11	11	5.14
12	12	5.63
13	13	5.40
14	14	6.69
15	15	8.42
16	16	4.18
17	17	6.10
18	18	3.74
19	19	5.33
20	20	5.53
21	21	4.01
22	22	5.56
23	23	6.37
24	24	6.44

25	25	6.53
26	26	6.23
27	27	9.17
28	28	6.24
29	29	7.77
30	30	6.29
31	31	4.98
32	32	4.43
33	33	4.71
34	34	6.26
35	35	5.68
36	36	4.15
37	37	5.13
38	38	5.22
39	39	6.20
40	40	4.52
41	41	6.01
42	42	6.64
43	43	5.89
44	44	6.61
45	45	8.60
46	46	4.27
47	47	4.62
48	48	4.32
49	49	4.82
50	50	5.71
51	51	5.09
52	52	5.63
53	53	5.24
54	54	4.14
55	55	7.34
56	56	4.48
57	57	5.76
58	58	4.20
59	59	4.63
60	60	6.95

Estimation of Validity and Reliability

Validity

The content validity and face validity of the Scale of Social Influence on Green Consumer Behaviour were established by consultation with the experts.

Reliability

Reliability of the Scale of Social Influence on Green Consumer Behaviour was established through test-retest method. The scale was re-administered after an interval of three weeks on a representative sample of 50 students. The reliability coefficient was computed by correlating the scores obtained in the first assessment and the re-test scores. The formula used for computing the correlation (r) coefficient is given below.

$$r = \frac{N\sum XY - (\sum X \sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

Where,

r = Coefficient of correlation

X, Y = Variables to be compared

N = Size of sample

The coefficient of correlation (r) have been verbally interpreted by the following conventions (Garrett, 1981)

(i) r from .00 to ± .20 represents negligible relationship

(ii) r from ± .20 and ± .40 represents low relationship

(iii) r from ± .40 to ± .70 represents substantial relationship

(iv) r from ± .70 to ± 1.00 represents high relationship

The reliability coefficient obtained was .84 which shows that the scale is a highly reliable tool for assessing the social influence of green consumer behaviour of undergraduate students.

The final version of the Scale of Social Influence on Green Consumer Behaviour and the Response Sheet is given in the Appendices V & VI resepectively.

Green Consumer Behaviour Scale (Musthafa & Sajila, 2015)

The Green Consumer Behaviour Scale measures the Green Consumer Behaviour of undergraduate students. The tool was developed and standardised by the investigator with the help of supervising teacher. The strategy adopted for the construction of the scale was a rationale one. The Green Consumer Behaviour Scale is a five point rating scale that consists of 45 items from five components of consumer decision making process in Green Consumer Behaviour. Based on the thorough review of literature, five components were identified namely Searching, Evaluating, Purchasing, Using and Discarding of products and services which formed the rationale for item preparation.

Initially, the tool consisted of 65 items pertaining to the five components prepared in the form of a draft tool. This tool was then administered to a representative sample of 400 undergraduate students which was later subject to standardisation process using the procedure proposed by Likert (1932). Each item of the scale has five ratings or choices of response viz., ‘Always’, ‘Frequently’, ‘Sometimes’, ‘Rarely’ and ‘Never’ which were rated as 5, 4, 3, 2 and 1 respectively for positive items and reverse scoring was for negative items. The validity and reliability of the tool was established.

A description of Green Consumer Behaviour and its dimensions are given in the following section.

Green Consumer Behaviour which is a sub set of human behaviour, involves the study of decision process and physical activities in which the individual engage while evaluating, acquiring, using or disposing of goods and services that they expect will satisfy their needs and wants without any detrimental input on the environment. With the rising environmental problems and issues that are widely acknowledged and deliberated, consumers have started to realise that their behaviour can cause a huge impact to the environment (Wahid *et al.*, 2011). In this context it is highly relevant to understand how far undergraduate students as youth consumers are environmentally oriented. Have the educational endeavours have succeeded in instilling environmental orientation for the undergraduate students up till this stage? Are they ecoliterates? Are they environmentally responsible? What are the influencing factors that make them take environmental friendly decisions? Ultimately it all depends upon their choice. This is a grave matter of concern, since the undergraduate students are at a crucial stage where they have started taking crucial responsible decisions that would impact the environmental quality of life.

There are studies conducted in the Indian context exploring the consumer attitude and behaviour towards green practices, green buying behaviour and opportunity and challenges in green consumerism (Jain & Kaur, 2004; Manaktola & Jauhari, 2007; Mishra & Sharma, 2010 and Datta, 2011). But very few studies have been attempted in understanding the Green Consumer Behaviour of students at undergraduate levels focusing on the influence of education on Green Consumer Behaviour.

The thought process that students go through, to arrive at their consumer decisions is known as the consumer decision process. They go through a series of steps mainly like problem recognition, information, search, evaluation of alternatives, decision on alternatives and assessment. The same

procedure can be applied in understanding the Green Consumer Behaviour also. Based on this, the Green Consumer Behaviour Scale was developed for assessing the Green Consumer Behaviour of undergraduate students with respect to the psychological, social and physical behaviours that they display in searching, evaluating, purchasing, using and disposing of products and/or services without any damage to the environment.

The components of the predictor variable Green Consumer Behaviour related to aspects such as

1) Searching for products and services
2) Evaluating products and services
3) Purchasing products and services
4) Using products and services
5) Discarding materials after use

Searching for Products and Services

Searching for information regarding green products may involve searching of different information about the product that would satisfy the need of consumers with minimum impact on the environment. The amount of information search depends upon the strength of the drive. The source of information can be family, friends or media.

This dimension of the Green Consumer Behaviour Scale include items for measuring the psychological, social and physical behaviours that the students display while searching for products and services that satisfies their needs without any damage to the environment.

Example

1) I search for products that are ecofriendly
2) I search for products that degrade through a natural process.
3) I search for products that are reusable

Evaluating Products and Services

Evaluation involves comparing and choosing among the best alternatives available that fulfils the needs of green consumer. This process involves evaluating the attributes of products or services from various dimensions before reaching at final purchase decision. The evaluation may either follow a careful consideration or little evaluation depending upon the individual consumer and the specific buying situations. This may be either done by the individually or with the involvement of others.

The components of the Green Consumer Behaviour Scale include items for measuring the psychological, social and physical behaviours that the students display while evaluating the products and services that satisfies their needs without any damage to the environment.

Example

1) I do not prefer to buy those products that cause damage to the environment.
2) Before purchase I check that the product and package are design to be recycled.
3) I trust the quality of green products.

Purchasing Products and Services

The consumer purchase decision is the outcome of the evaluation of the various alternatives available. Evaluation results in the development of attitudes towards specific products that influences a decision as to buy or not. Thus the consumer finally decides the choice of product.

This dimension of the Green Consumer Behaviour Scale include items for measuring the psychological, social and physical behaviours that the

students display while purchasing the products and services that satisfies their needs without any damage to the environment.

Example

1) I purchase products that can be recycled.
2) I buy products made using materials available locally.
3) I buy products with less packaging.

Using Products and Services

After making the choice and actually purchasing the product or service, the consumer uses it inorder to satisfy the need. This is a post purchase stage which either result in satisfaction or dissatisfaction on using the product or service. If the consumer is satisfied, it may result in the development of attitude that in turn leads to intention to repurchase.

This component of the Green Consumer Behaviour Scale include items for measuring the psychological, social and physical behaviours that the students display while using the products and services that satisfies their needs without any damage to the environment.

Example

1) I reduce the use of plastic bags
2) I use home appliances in the most energy efficient manner.
3) I take my on bags when I go for shopping.

Discarding Materials after Use

After using the product or service, the consumer disposes or discards the waste materials of the products if any. The consumer may involve different strategies to get rid of the waste that is left over after using the product.

This component of the Green Consumer Behaviour Scale include items for measuring the psychological, social and physical behaviours that the students display while discarding the waste materials left after using the products without any damage to the environment.

Example

1) I keep the degradable and non degradable wastes separately while disposing.
2) I discard materials after use according to my convenience.
3) I don't throw away waste materials at the places I visit.

Planning of Green Consumer Behaviour Scale

The planning of the Green Consumer Behaviour Scale, which is intended to measure the dependent variable Green Consumer Behaviour involved a thorough review of literature so as to study the various aspects of the variable from different dimensions. Based on this it was decided to prepare a five point scale with items by giving due weightage to the components and by expert consultation, the investigator planned to prepare a final draft tool comprising of 65 items. The items were to be prepared with each item provided with a choice of response 'Always', 'Frequently', 'Sometimes', 'Rarely' and 'Never'. It was also decided to have positive and negative items to measure the favourableness and unfavourableness towards specific items in the scale.

Preparation of the Scale

The Green Consumer Behaviour Scale was prepared as a five point scale with items for assessing the Green Consumer Behaviour of students. Based on a thorough literature review and expert consultations, the initial draft tool was prepared that consisted of 68 items from the five components of

Green Consumer Behavioural aspects while Searching for products and services, Evaluating products and services, Purchasing products and services, Using products and services and Discarding materials after use. After consultation with experts, the final draft tool was prepared with 65 items. It was decided to have positive and negative items with each question provided with a choice of response 'Always', 'Frequently', 'Sometimes', 'Rarely' and 'Never'. All the items were arranged randomly. Necessary instructions for students regarding the modalities of response were provided in the tool. Students were required to mark their responses by putting a tick mark in the column of their choice of response.

Examples of positive items in the scale

1) I buy products that are available in refillable packages.
2) I turn off home electronics when not in use.

Examples of negative items in the scale

1) I discard materials after use according to my convenience.
2) I am more concerned about using products than in disposing it after use.

The component wise items of Green Consumer Behaviour Scale are presented in Table 14.

Table 14

Component-wise Items of Green Consumer Behaviour Scale

Sl. No	Components	Items
1	Searching Products & Services	1,2,3,4,5,6,7,8,9,10,11.
2	Evaluating Products & Services	12,13,14,15,16,17,18,19,20,21, 22,23.
3	Purchasing Products & Services	24,25,26,27,28,29,30,31,32,33, 34,35.
4	Using Products & Services	36,37,38,39,40,41,42,43,44,45, 46,47, 48,49,50,51,52,53.
5	Disposing Materials after Use	54,55,56,57,58,59,60,61,62,63, 64,65.

Try Out

The tool was administered to a representative sample of 400 undergraduate students by giving due representation to gender, locale and type of institution. The pilot study was conducted to analyse each item statistically inorder to select the significant ones to be included in the final tool.

Evaluation

Each item of the scale consisted of five choices of response viz., 'Always', 'Frequently', 'Sometimes' , 'Rarely' and 'Never', which were rated as 5, 4, 3, 2 and 1 respectively. The Green Consumer Behaviour Scale consisted of positive and negative items. The positive items were scored as 5, 4, 3, 2 and 1 for 'Always', 'Frequently', 'Sometimes', 'Rarely' and 'Never', respectively. The negative statements were scored reversely, ie., 1, 2, 3, 4 and 5 for 'Always', 'Frequently', 'Sometimes', 'Rarely' and 'Never' respectively.

The evaluation process also comprised of establishing the validity and reliability of the tool.

Scoring Procedure of Green Consumer Behaviour

The scoring procedure of the items in the Green Consumer Behaviour Scale is given in Table 15.

Table 15

Scoring of Green Consumer Behaviour Scale

Response	Positive Item	Negative Item
Always	5	1
Frequently	4	2
Sometimes	3	3
Rarely	2	4
Never	1	5

Item Analysis

The item analysis of the Green Consumer Behaviour Scale is done according to the procedure suggested by Likert (1932). Out of the data collected from 400 students, responses of 370 were scored and arranged in ascending order of scores from low to high. Then two sub groups namely the lower group consisting of approximately 27 percent of the total group who got lowest scores and the upper group consisting of an equal number who got highest scores were selected separately. The response of each item in the lower group and upper group were subjected to item analysis. The‘t’ value of each item was then calculated separately using the following formula.

$$t = \frac{\overline{X}_H - \overline{X}_L}{\sqrt{\frac{\sigma_H^2}{N_H} + \frac{\sigma_L^2}{N_L}}}$$

X_H = mean score on a given item for high group

X_L = mean score on a given item for low group

σ_H = standard deviation of scores of the given item of high group

σ_L = standard deviation of scores of the given item of low group

N_H = number of individuals in high group

N_L = number of individuals in low group

Selection of Items

The 't' value of 65 items in the Green Consumer Behaviour Scale were calculated and items with 't' value 2.58 and above were selected for the final inventory. The details of item analysis and the't' values computed for each item of the Green Consumer Behaviour Scale are given in the Table 16.

Table 16

Item Analysis of Green Consumer Behaviour Scale

Sl. No	Items Selected	Positive/Negative	t value
1	1	+	5.74
2	2	+	5.46
3	3	+	5.10
4	5	+	6.20
5	6	+	6.95
6	7	+	5.25
7	8	+	5.73
8	9	+	5.67
9	10	+	4.93
10	11	+	4.53
11	12	+	5.89
12	13	+	5.53
13	14	+	5.39
14	16	+	6.04

15	17	+	5.51
16	19	+	6.54
17	20	+	5.21
18	21	+	5.71
19	22	+	4.55
20	24	+	4.24
21	25	+	4.49
22	26	+	6.17
23	27	+	5.87
24	29	+	4.54
25	31	+	6.35
26	33	+	4.38
27	34	+	5.37
28	35	+	5.03
29	37	+	3.19
30	39	+	3.78
31	40	+	2.64
32	45	+	2.65
33	48	+	5.58
34	49	+	3.05
35	50	+	4.37
36	53	+	5.39
37	54	-	5.93
38	55	+	5.20
39	56	+	5.22
40	58	+	5.46
41	59	-	5.53
42	60	+	4.53
43	61	+	5.16
44	63	+	4.89
45	64	+	5.12

Estimation of Validity and Reliability

Validity

The content validity and construct validity of the Green Consumer Behaviour Scale was established by consultation with the experts. Further the construct validity was established by giving due weightage to the major components of green consumer behavioural aspects while Searching for products and services, Evaluating products and services, Purchasing products and services, Using products and services and Discarding materials after use.

Reliability

Reliability of the Green Consumer Behaviour Scale was established through test-retest method. The scale was re-administered after an interval of three weeks on a representative sample of 50 students. The formula used for computing the correlation coefficient (r) is given below.

$$r = \frac{N\Sigma XY - \Sigma X \Sigma Y}{\sqrt{[N\Sigma X^2 - (\Sigma X)^2][N\Sigma Y^2 - (\Sigma Y)^2]}}$$

Where,

r = Coefficient of correlation
X, Y = Variables to be compared
N = Size of sample

The coefficient of correlation (r) have been verbally interpreted by the following conventions (Garrett, 1981)

(i) r from .00 to ± .20 represents negligible relationship
(ii) r from ± .20 and ± .40 represents low relationship
(iii) r from ± .40 to ± .70 represents substantial relationship
(iv) r from ± .70 to ± 1.00 represents high relationship

The reliability coefficient was computed by correlating the scores obtained in the first assessment and the re-test scores. The reliability coefficient obtained was .83 which shows that the Green Consumer Behaviour Scale is a highly reliable tool for assessing the green consumer behaviour of undergraduate students.

The final version of the Green Consumer Behaviour Scale and the Response Sheet is given in the Appendices VII & VIII respectively.

Sample for the Study

The population for the present study consists of all students attending the final semester Commerce Bachelor Degree Course of University of Calicut in Kerala. A representative sample of 1000 undergraduate students attending B. Com Degree Courses of University of Calicut in Aided and Government colleges situated in five districts of Kerala was selected viz., Malappuram, Kozhikode, Thrissur, Palakkad and Wayanad are selected. The samples were drawn with the assumption that they will adequately represent B. Com students of University of Calicut.

The research design is quantitative and descriptive in nature. The present study is conducted by field survey method with stratified random sampling technique by giving due representation to factors like gender, locale and type of institution. Descriptions of the factors are given below.

Gender of Students

Gender of students is an important factor to be considered in the selection of sample. Several studies have reported the main and moderating effects of gender on Ecoliteracy, Environmental Responsibility Attribution, Social Influence and Green Consumer Behaviour of students. Therefore, the

investigator decided to include a strata based on gender by giving due representation to male and female students.

Locale

Locale of institution is an important factor that can be considered for gauging the behaviour of students which is impacted by the variations in the distribution of institutions, facilities, infrastructure, accessibility and similar such factors in the urban and rural milieu. Therefore, the investigator decided to give due representation to institutions located in urban and rural areas.

Type of Institution

The educational environment settings of government institutions and aided institutions may vary in strategies and functioning which may have implications on the behaviour of students. Therefore, the investigator selected the sample by giving due representation to students studying in government and aided institutions.

Size of the Sample

The initial sample selected for the study was 1045 undergraduate students. The details regarding the initial sample selected for the study are presented in Table 17.

Table 17

Distribution of the Initial Sample

Gender		Locale		Type of Institution	
Male	Female	Urban	Rural	Govt.	Aided
455	590	497	548	457	588
1045		1045		1045	

Data Collection Procedure

A survey was conducted to collect the primary data required for the study. The data collection was done by administering the tools developed by the investigators. The data was collected during February to October of the year 2015.

The investigator visited the selected govt. and aided colleges. Permission was sought from the heads of the institutions for collecting the data. After getting the permission, the investigator met the students and the purpose of the study was made clear. The tools along with the response sheets were then distributed to the students and proper instructions were given. Sufficient time interval was given between the administrations of tools. The investigator followed a uniform procedure for data collection in all the institutions. After the administration of the tools was complete, the investigator collected the tools from the students.

Scoring and Consolidation of Data

The data collected for the study was scored and consolidated. Ecoliteracy of students was assessed using Ecoliteracy Inventory in which three choices of response like Agree, Uncertain and Disagree were rated as 3, 2 and 1 respectively for positive items and reverse scoring was done for negative items. Environmental Responsibility Attribution of students was measured using the Environmental Responsibility Attribution Scale in which five choices of response like Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree were rated as 5, 4, 3, 2 and 1 respectively for positive items and reverse scoring was done for negative items. The Social Influence of students regarding Green Consumer Behaviour was measured using the Scale of Social Influence on Green Consumer behaviour in which five choices of response like Strongly Agree, Agree, Neither Agree nor Disagree, Disagree

and Strongly Disagree were rated as 5, 4, 3, 2 and 1 respectively. The Green Consumer Behaviour of students was assessed using Green Consumer Behaviour Scale in which five choices of responses like Always, Frequently, Sometimes, Rarely and Never were rated as 5, 4, 3, 2 and 1 respectively for positive items and reverse scoring for negative items. The score sheets that were incomplete were rejected and finally a sample of 1000 students was considered for the analysis. The details of distribution of the final sample based on district, locale, type of institution and gender are presented in Table 18.

Table 18

Institution-wise Distribution of the Final Sample

Sl. No	Institution	District	Locale	Type of Institution	Gender		Total
					Male	Female	
1	Government College, Malappuram	Mprm*	Urban	Govt.	14	15	29
2	Government Arts And Science College, Mankada	Mprm*	Rural	Govt.	23	14	37
3	Pocker Sahib Memorial(PSMO) College, Tirurangadi	Mprm*	Urban	Aided	15	25	40
4	NSS College, Manjeri	Mprm*	Urban	Aided	15	19	34
5	Amal College of Advanced Studies, Santhigramam Nilambur	Mprm*	Rural	Aided	30	14	44
6	E.M.E.A College of Arts And Science, Kondotty	Mprm*	Rural	Aided	15	20	35
7	Govt. Arts And Science College, Meenchanda	Kzde*	Urban	Govt.	18	30	48

8	Sayyid Abdul Rahiman Bafakhy Thangal Memoral (S.A.R.B.T.M) Govt College, Koyilandy	Kzde*	Rural	Govt.	14	26	40
9	Govt. College, Madappally	Kzde*	Rural	Govt.	14	16	30
10	Farook College, Feroke	Kzde*	Urban	Aided	18	13	31
11	Zamorins Guruvayurappan College, Pokkunnu	Kzde*	Rural	Aided	10	21	31
12	Sree Narayana Guru College, Chelannur	Kzde*	Rural	Aided	22	22	44
13	Sri.C.Achutha Menon Govt. College, Kuttanellur	Thsr*	Urban	Govt.	13	25	38
14	Panampilly Memorial Govt. (P.M.G) College, Chalakkudy	Thsr*	Urban	Govt.	13	15	28
15	Government Arts And College, Chelakkara	Thsr*	Rural	Govt.	13	16	29
16	St. Aloysius College, Elthuruth	Thsr*	Urban	Aided	17	25	42
17	Sree Keralavarma College, Thrissur	Thsr*	Urban	Aided	15	20	35
18	Sree Narayana College, Nattika	Thsr*	Rural	Aided	17	20	37
19	M.E.S. Asmabi College, Vemballur	Thsr*	Rural	Aided	10	20	30
20	Sree Neelakanta Govt. Sanskrit College, Pattambi	Plkd*	Urban	Govt.	18	25	43
21	Government College, Chittur	Plkd*	Urban	Govt.	13	15	28

22	Govt. Arts & Science College, Thrithala	Plkd*	Rural	Govt.	14	21	35
23	M.E.S Kalladi College, Mannarkkad	Plkd*	Urban	Aided	20	21	41
24	N.S.S College, Nemmara	Plkd*	Rural	Aided	15	15	30
25	M.P.Moothedath Memorial Sree Narayana (M.P.M.M.S.N) Trust College, Shornur	Plkd*	Rural	Aided	15	18	33
26	N.M.S.M Govt. College, Kalpetta	Wynd*	Urban	Govt.	13	29	42
27	St.Mary's College, Sulthan Bathery	Wynd*	Rural	Aided	9	20	29
28	W.M.O. Arts & Science College, Muttil	Wynd*	Rural	Aided	17	20	37

*Mprm- Malappuram, *Kzde- Kozhikode, *Thsr- Thrissur, *Plkd- Palakkad

The consolidated form of final sample of the present study is presented in Table 19.

Table 19

Distribution of the Final Sample Selected for the Study

Gender		Locale		Type of Institution	
Male	Female	Urban	Rural	Govt.	Aided
440	560	479	521	427	573
1000		1000		1000	

Statistical Techniques

The present study being quantitative in nature, both descriptive and inferential statistics were used for analysing the data inorder to reach valid generalisable conclusions. The statistical techniques used in the present study are described below.

Preliminary Analysis

The preliminary analysis was done to determine the nature of distribution of data. For this, basic descriptive statistics like mean, median, mode, standard deviation, skewness and kurtosis were computed for each predictor and criterion variable for the total sample and sub samples based on gender, locale and type of institution.

Mean Difference Analysis

Test of significance of differences between means of large independent sample was used to find the differences in the predictor variables Ecoliteracy, Environmental Responsibility Attribution and Social Influence and the criterion variable Green Consumer Behaviour of the students based on gender, locale and type of institution.

For computing the Mean Difference Analysis, the means and standard deviations of the variables of the selected sample were subject to two tailed test by finding the critical ratio.

$$t = \frac{M_1 - M_2}{\sqrt{\frac{SD_1^2}{N_1} + \frac{SD_2^2}{N_2}}}$$

Where,

t	=	critical ratio
M_1 and M_2	=	Means of the groups

SD_1 and SD_2 = Standard Deviations of the groups

N_1 and N_2 = Number of observations in the groups

The differences in mean scores are significant depending upon the critical ratio (CR). If the CR obtained is ≥ 2.58, it is considered as significant at .01 level. If the CR obtained is ≥ 1.96, it is considered as significant at .05 level.

Stepwise Multiple Regression Analysis

Stepwise Multiple Regression Analysis was conducted to predict the individual and joint contributions of predictor variables in predicting the criterion variable. Regression equation was also was also developed to predict the criterion variable from the selected predictor variables.

For the present study data was analysed using SPSS version 20 for Windows. The details of analysis and findings are presented in Chapter IV.

CHAPTER 4

ANALYSIS AND INTERPRETATIONS

- Preliminary Analysis
- Percentage Analysis
- Test of Significance of Difference between Mean Scores
- Stepwise Multiple Regression Analysis

ANALYSIS AND INTERPRETATIONS

This chapter deals with the statistical analysis of data and interpretation of the results. In the present study, Ecoliteracy, Environmental Responsibility Attribution and Social Influence are the predictor variables and Green Consumer Behaviour is the criterion variable. A representative sample was selected using the stratified random sampling technique and the data pertaining to the predictor variables and the criterion variable were collected using standardised instruments. Tabulation of the data was done and statistically analysed using the SPSS 20 software. The statistical technique Percentage analysis was done to assess the levels of the predictors and the criterion variable for the total sample and sub samples based on gender, locale and type of institution. Test of Significance of Difference between Mean Scores was done to find out the differences of mean scores of the variables under study. Stepwise Multiple Regression Analysis was also employed to find out the relative efficiency of predictors (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) in predicting the criterion variable (Green Consumer Behaviour) of the students.

The statistical analysis rightly gives an insight on the objectives of the study. This chapter overview the study followed by statistical analysis along with the presentation and discussion of results. The details of this chapter are presented under the following heads

- Preliminary Analysis
- Percentage Analysis
- Test of Significance of Difference between Mean Scores
- Stepwise Multiple Regression Analysis

Preliminary Analysis

The data collected was tabulated and subject to various statistical techniques to arrive at varied generalisable conclusions. As an initial step, the preliminary analysis was done to provide a vision on the nature of data which is complementary to the other stages of statistical analysis. As a part of this, the important statistical constants like mean, median, mode, standard deviation, skewness and kurtosis of the selected predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) were determined.

The statistical constants of the predictor variables like Ecoliteracy, Environmental Responsibility Attribution and Social Influence and the criterion variable Green Consumer Behaviour are presented in the Table 20.

Table 20

Statistical Constants of EL, ERA, SI and GCB for the Total Sample

Sl. No.	Variable	Sample	Mean	Median	Mode	SD	Skew	Kurtosis
1	EL	1000	61	60	58	6	.267	-.182
2	ERA	1000	58	58	55	5	.161	-.308
3	SI	1000	61	61	58	6	.570	.823
4	GCB	1000	65	64	63	7	.260	.325

Table 20 reveals that, for Ecoliteracy, the mean (61), median (60) and mode (59) are almost equal. The standard deviation (6) shows that the scores do not deviate largely from the mean. From the value of skewness (.267) it can be seen that the distribution of scores of Ecoliteracy is approximately symmetric. The value of kurtosis (-.182) indicates that the distribution is slightly platy kurtic. All the measures of central tendency, standard deviation,

skewness and kurtosis indicate that the Ecoliteracy scores are approximately normal.

For the predictor variable Environmental Responsibility Attribution, the mean (58), median (58) and mode (55) are almost equal. The standard deviation (5) indicates that the scores do not deviate largely from the mean. The value of skewness (.161) shows that the distribution of scores is approximately symmetric. From the value of kurtosis (-.308) it is clear that the distribution is slightly platy kurtic. All the measures of central tendency, standard deviation, skewness and kurtosis indicate that the distribution of Environmental Responsibility Attribution scores is approximately normal.

In the case of Social Influence, the mean (61), median (61) and mode (58) are almost equal. The standard deviation (6) shows that the scores do not deviate largely from the mean. From the skewness (.570) it is evident that the distribution of scores is approximately symmetric. The value of kurtosis (.823) indicates a slightly platy kurtic nature of distribution. All the measures of central tendency, standard deviation, skewness and kurtosis indicate that the scores of Social Influence are approximately normal.

From Table 20 it is evident that, for Green Consumer Behaviour, the mean (65), median (64) and mode (63) are almost equal. The standard deviation (7) reveals that the deviation of scores from mean is not so large. From the value of skewness (.260) it can be seen that the distribution of scores is approximately symmetric. The kurtosis (.325) indicates a slightly platy kurtic nature of distribution. Thus, the measures of central tendency, standard deviation, skewness and kurtosis show that the distribution of Green Consumer Behaviour scores is approximately normal.

Graphical Representation

The nature of distribution of the predictor variables and the criterion variable were examined by plotting graphs. The graphical representation of scores of selected variables is presented in the form of histogram with frequency curve in the Figure 3.

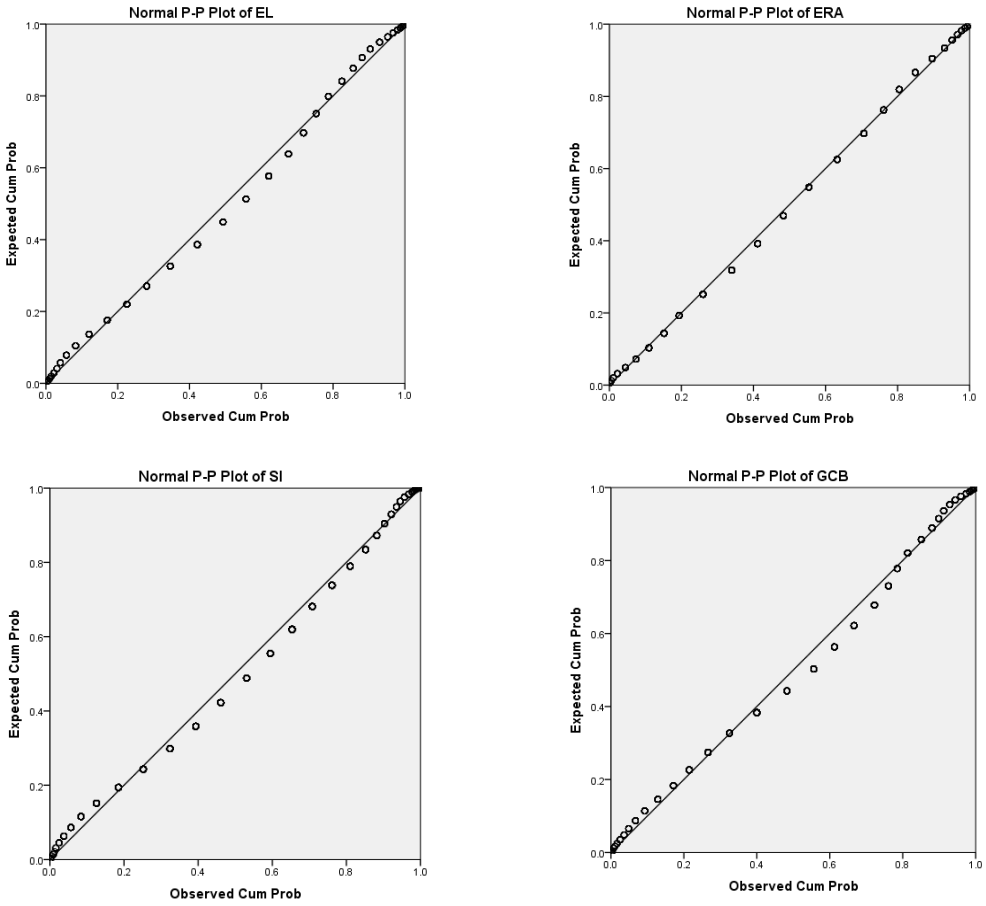

Figure 3 The P-P Plot of the EL, ERA, SI, GCB

Percentage Analysis

The determination of levels enables to ascertain the present status of students regarding the variables selected for the study. Percentage analysis was carried out to assess the existing levels of Ecoliteracy, Environmental

Responsibility Attribution, Social Influence and Green Consumer Behaviour of students for the total sample and sub samples based on gender, locale and type of institution. The details of percentage analysis are given below.

Percentage analysis was done to find out the level of Ecoliteracy, Environmental Responsibility Attribution, Social Influence and Green Consumer Behaviour for the total sample. The details relating to this are presented in Table 21.

Table 21

Level of Ecoliteracy, Environmental Responsibility Attribution, Social Influence and Green Consumer Behaviour for the Total Sample

Variable	High (%)	Moderate (%)	Low (%)
Green Consumer Behaviour	17	68	15
Ecoliteracy	19	61	20
Environmental Responsibility Attribution	22	61	17
Social Influence	17	68	15

Table 21 shows that majority of students (68%) possess only a moderate level of Green Consumer Behaviour. Only 17% of students have high level of Green Consumer Behaviour and 15% of students possess low level of Green Consumer Behaviour. The level of Ecoliteracy of students is such that, 61% of students possess a moderate level of Ecoliteracy. It can also be seen that only 19% students possess high level of Ecoliteracy, while 20% students possess low level of Ecoliteracy. The Environmental Responsibility Attribution level of students is such that, 61% students possess a moderate level, 22% with high level and 17% students possess low level of Environmental Responsibility Attribution. The level of Social Influence of students reveals that a majority of students (68%) are moderately influenced

by social factors. It can also be seen that 17% and 15% students possess high and low rates of Social Influence.

Percentage analysis was carried out inorder to determine the level of Ecoliteracy for the sub samples based on gender, locale and type of institution. The details of analysis are given in Table 22.

Table 22

Level of Ecoliteracy on the Basis of Gender, Locale and Type of Institution

Variable	Sub sample		High (%)	Moderate (%)	Low (%)
Ecoliteracy	Gender	Male	18	69	13
		Female	18	62	20
	Locale	Urban	18	64	18
		Rural	18	62	20
	Type of Institution	Govt.	17	70	13
		Aided	19	61	20

From Table 22 it is clear that the percentage of students possessing moderate level of Ecoliteracy is 69% and 62% for male and female students. The percentage of students with high level of Ecoliteracy is meagre constituting to 18% for males and 18 % for females respectively. Whereas, 13% males and 20% females possesses a low level of Ecoliteracy. It is also evident that 64% students studying in institutions of urban area possess a moderate level of Ecoliteracy, while it is 62% for students in rural area. Only 18% students in rural area and 18% students in urban area possess high level of Ecoliteracy. The percentage of students possessing low level of Ecoliteracy in this category constitute 18% and 20% respectively. 70% students studying in government institutions possess moderate level of Ecoliteracy, while it is 61% for students studying in aided institutions. Only 17% and 19% students of government and aided institutions possess a high level of Ecoliteracy. Students possessing low level of Ecoliteracy of government and aided institution constitute 13% and 20% respectively.

Percentage analysis was done to find out the level of Environmental Responsibility Attribution for the sub samples based on gender, locale and type of institution. The details of analysis are presented in Table 23.

Table 23

Level of Environmental Responsibility Attribution on the Basis of Gender, Locale and Type of Institution

Variable	Sub sample		High (%)	Moderate (%)	Low (%)
Environmental Responsibility Attribution	Gender	Male	25	55	20
		Female	19	66	15
	Locale	Urban	24	56	20
		Rural	19	67	14
	Type of Institution	Govt.	26	55	19
		Aided	18	66	16

Table 23 reveals that 55% males and 66% females have only moderate levels of Environmental Responsibility Attribution. Only 25% of males and 19% of females possess a high level of Environmental Responsibility Attribution. While students who possess low level of Environmental Responsibility Attribution constitute to 20% for males and 15% for females respectively. The moderate level of Environmental Responsibility Attribution level of students studying in institutions located in urban and rural areas is 56% and 67% respectively. Only 24% students in urban area and 19% students in rural area possess high level of Environmental Responsibility Attribution. While 20% students of urban area and 14% students of rural area possess low level of Responsibility Attribution. 55% students studying in government institutions possess a moderate level of Environmental Responsibility Attribution, while it is 66% for students studying in aided colleges. 26% and 18% students of government and aided colleges possess high level of Environmental Responsibility Attribution. It can be seen that

students possessing low Environmental Responsibility Attribution level is 19% and 16 % respectively for both the categories.

Percentage analysis was carried out to determine the level of Social Influence for the sub samples based on gender, locale and type of institution. The details of analysis are given in Table 24.

Table 24

Level of Social Influence on the Basis of Gender, Locale and Type of Institution

Variable	Sub sample		High (%)	Moderate (%)	Low (%)
Social Influence	Gender	Male	15	69	16
		Female	18	55	27
	Locale	Urban	16	67	17
		Rural	13	70	17
	Type of Institution	Govt.	15	69	16
		Aided	14	68	18

Table 24 reveals that the level of Social Influence is moderate for 69% males and 55% females. Only 15% of males and 18% of females are highly influenced by social factors. The percentage of male and female students who are least influenced by social factors constitute to 16% and 27% respectively. 70% students of institutions in rural area and 67% of students studying in urban area are moderately influenced by social factors. Only 16% students in urban area and 13% in rural area possess high level of Social Influence. 17% of students in urban and rural areas possess low level of Social Influence. 69% students of government institutions and 68% studying in aided institutions possess moderate level of Social Influence. Only 15% of government institution students and 14% of aided institution students possess high level of Social Influence. It is also evident that students with low level of Social Influence of this category constitute to 16% and 18% for students of government and aided institutions respectively.

Percentage analysis was done to know the level of Green Consumer Behaviour for the sub samples based on gender, locale and type of institution. The details of analysis are presented in Table 25.

Table 25

Level of Green Consumer Behaviour on the Basis of Gender, Locale and Type of Institution

Variable	Sub sample		High (%)	Moderate (%)	Low (%)
Green Consumer Behaviour	Gender	Male	12	72	16
		Female	23	61	16
	Locale	Urban	13	72	15
		Rural	23	61	16
	Type of Institution	Govt.	17	66	17
		Aided	22	61	17

From Table 25 it is evident that 72% of males and 61% of females have moderate level of Green Consumer Behaviour. 23% of females and only 12% of males possess high level of Green Consumer Behaviour while 16% of males and females possess low level of Green Consumer Behaviour. Majority of the students in urban area (72%) and rural area (61%) possess a moderate level of Green Consumer Behaviour. Only 13% students in urban area and 23% students in rural area possess high level of Green Consumer Behaviour. It is clear that 15% students studying in urban area and 16% studying in rural area possess low level of Green Consumer Behaviour. It can also be seen that 66% students studying in government colleges and 61% students studying in aided colleges possess a moderate level of Green Consumer Behaviour. Only17% students studying in government colleges and 22%students studying in aided colleges possess high level of Green Consumer Behaviour while, the percentage of students having low level of Green Behaviour is equal (17%) for students of government and aided colleges.

Major Analysis

The major analysis of the study consists of Test of Significance of Difference between the Mean Scores and Stepwise Multiple Regression Analysis. The following section presents the major statistical analysis carried out in the study.

Test of Significance of Difference between Mean Scores

The test of significance of difference between mean scores was carried out inorder to examine whether there exists any significant differences in the mean scores of predictors (total and dimensions) and criterion for the sub samples based on gender, locale and type of institution. The t value which is the critical ratio was determined. The significance of results was evaluated by considering the critical ratios. The critical ratio 1.96 and above was considered to be significant at .05 level and the critical ratio of 2.58 and above was considered to be significant at .01 level. The details of mean difference analysis are presented in the following section. The results of mean difference analysis of predictors and criterion based on subsamples are presented in tables under the heads gender difference, locale difference and institutional difference. This was done to present the results in a condensed format.

Difference in Mean Scores of Predictor Variables on the Basis of Gender

Gender difference in the variables selected for the study was found out by using the statistical technique Test of Significance of Difference between the Mean Scores. The data and results of mean difference analysis that reveal the significance of difference between the mean scores of Predictors on the basis of gender of students (Male/Female) are presented in Table 26.

Table 26

Significance of Difference in Mean Scores of Predictor Variables on the Basis of Gender

Predictor Variable	Male			Female			t value	Sig.
	N_1	M_1	SD_1	N_2	M_2	SD_2		
EL	440	59.44	6.261	560	61.86	5.962	6.230**	p<.01
ERA	440	58.41	5.465	560	58.37	4.713	0.115 NS	p>.01
SI	440	61.88	6.170	560	60.62	5.800	3.314**	p<.01

** Significant at .01 level, NS Not Significant

Table 26 reveals that there exists significant difference in Ecoliteracy between male and female students. The critical ratio (t = 6.230, **p<.01) is significant at .01 level. The mean score of female students is higher which shows that Ecoliteracy of female students is higher when compared to their male counterparts. It is also evident that there does not exist any significant difference in Environmental Responsibility Attribution between male and female students. The critical ratio (t = 0.115, p>.01) is not significant at .01 and .05 levels. In the case of Social Influence, there exists significant difference in the mean scores between male and female students. The critical ratio (t = 3.314, **p<.01) is significant at .01 level. The mean score of male students is higher which shows that male students are more influenced by social factors compared to their female counterparts.

Difference in Mean Scores of Dimensions of Predictor Variables on the Basis of Gender

Mean difference analysis was carried out to find out the gender difference in the dimensions of the predictors. The data and results of significance of difference between the mean scores of dimensions of predictors on the basis of Gender of students (Male/Female) are presented in Table 27.

Table 27

Significance of Difference in Mean Scores of Dimensions of Predictor Variables on the Basis of Gender

Predictor Variable		Male			Female			t value	Sig.
		N_1	M_1	SD_1	N_2	M_2	SD_2		
EL	EAW	440	56.21	7.801	560	58.69	7.449	5.102**	p<.01
	EAT	440	60.40	6.838	560	64.19	6.839	8.695**	p<.01
	EAC	440	61.76	8.408	560	62.72	9.023	1.744NS	p>.01
ERA	ERAS	440	65.09	9.312	560	64.74	6.699	0.676 NS	p>.01
	ERAO	440	51.19	9.713	560	51.55	6.785	0.666 NS	p>.01
SI	PI	440	60.50	8.421	560	58.54	7.380	3.863**	p<.01
	TI	440	61.31	7.098	560	58.82	6.855	5.621**	p<.01
	PGI	440	61.09	8.724	560	59.94	7.777	2.184*	p<.05
	MI	440	64.11	8.341	560	64.76	7.378	1.287 NS	p>.01

** Significant at .01 level, * Significant at .05 level, NS Not Significant

Table 27 reveals that there exists significant difference in Environmental Awareness between male and female students. The critical ratio (t= 5.102, **p<.01) is significant at .01 level. The mean score of female students is higher which shows that the female students have more Environmental Awareness compared to their male counterparts. In the case of Environmental Attitude there exists significant difference between male and female students. The critical ratio (t = 8.695, **p<.01) is significant at .01 level. The mean score of female students is higher which shows that Environmental Attitude of female students is higher compared to males. For Environmental Action, there does not exist any significant difference between male and female students. The critical ratio (t = 1.744, p>.01) is not significant at .01 and .05 levels.

In the case of Environmental Responsibility Attribution to Self, there does not exist any significant difference between male and female students.

The critical ratio (t = 0.676, p>.01) is not significant at .01 and .05 levels. For the variable Environmental Responsibility Attribution to Others, there does not exist any significant difference between male and female students. The critical ratio (t = 0.666, p>.01) is not significant at .01 and .05 levels.

There exists significant difference in Parental Influence between male and female students. The critical ratio (t = 3.863, **p<.01) is significant at .01 level. It can be seen that the mean score of male students is higher which indicates that male students are more influenced by parents compared to their female counterparts. The difference in Teacher Influence between male and female students is significant with a critical ratio (t = 5.621, **p<.01) that is significant at .01 level. The mean score of male students is higher which shows that male students are more influenced by teachers when compared to females. In the case of Peer Group Influence, there exists significant difference between male and female students. The critical ratio (t = 2.184, *p<.05) is significant at .05 level. The mean score of male students is higher which reveals that male students are more influenced by their peer groups compared to females. The difference in Media influence is not significant between male and female students. The critical ratio (t = 1.287, p>.01) is not significant at .01and .05 levels.

Difference in Mean Scores of Predictor Variables on the Basis of Locale of Institution

Mean difference analysis was done to find out the difference in the mean scores of predictors between students of urban and rural areas. The data and results of significance of difference between the mean scores of Predictors on the basis of Locale of Institution (Urban/Rural) are presented in Table 28.

Table 28

Significance of Difference in Mean Scores of Predictor Variables on the Basis of Locale of Institution

Predictor Variable	Urban			Rural			t value	Sig.
	N_1	M_1	SD_1	N_2	M_2	SD_2		
EL	479	60.63	6.009	521	60.95	6.393	0.828 ^{NS}	p>.01
ERA	479	58.22	5.100	521	58.54	5.013	1.000 ^{NS}	p>.01
SI	479	61.06	5.952	521	61.28	6.038	0.574 ^{NS}	p>.01

^{NS} Not Significant

From Table 28 it is evident that there does not exist any significant difference in Ecoliteracy between students of institutions in urban and rural areas. The critical ratio (t = 0.828, p>.01) is not significant at .01 and .05 levels. In the case of Environmental Responsibility Attribution, there does not exist any significant difference between students of institutions in urban and rural areas. The critical ratio (t = 1.000, p>.01) is not significant at .01 and .05 levels. For Social influence, there does not exist any significant difference between students of institutions in urban and rural areas. The critical ratio (t = 0.574, p>.01) is not significant at .01 and .05 levels.

Difference in Mean Scores of Dimensions of Predictor Variables on the Basis of Locale of Institution

Mean difference analysis was done to determine the significant differences in mean scores of dimensions of predictors between students studying in institutions located at urban and rural areas. The data and results of significance of difference between the mean scores of Dimensions of Predictors on the basis of Locale of Institution (Urban/Rural) are presented in Table 29.

Table 29

Significance of Difference in Mean Scores of Dimensions of Predictor Variables on the Basis of Locale of Institution

Predictor Variable		Urban			Rural			t value	Sig.
		N_1	M_1	SD_1	N_2	M_2	SD_2		
EL	EAW	479	57.25	7.618	521	57.92	7.769	1.385 ^{NS}	p>.01
	EAT	479	62.34	7.063	521	62.69	7.117	0.773 ^{NS}	p>.01
	EAC	479	62.34	8.259	521	62.26	9.216	0.143 ^{NS}	p>.01
ERA	ERAS	479	64.63	7.968	521	65.14	7.939	1.013 ^{NS}	p>.01
	ERAO	479	51.34	8.374	521	51.45	8.045	0.206 ^{NS}	p>.01
SI	PI	479	59.44	7.868	521	59.37	7.958	0.128 ^{NS}	p>.01
	TI	479	59.69	6.897	521	60.12	7.224	0.979 ^{NS}	p>.01
	PGI	479	60.38	8.187	521	60.51	8.263	0.255 ^{NS}	p>.01
	MI	479	64.28	7.386	521	64.65	8.200	0.753 ^{NS}	p>.01

^{NS} Not Significant

Table 29 reveals that there does not exist any significant difference in dimensions of Ecoliteracy between students of institutions in urban and rural areas. The critical ratio for Environmental Awareness (t = 1.385, p>.01), Environmental Attitude (t= 0.773, p>.01) and Environmental Action (t = 0.143, p>.01) are not significant at .01 and .05 levels. For dimensions of Environmental Responsibility Attribution, there does not exist any significant difference between students of institutions in urban and rural areas. The critical ratio obtained for Environmental Responsibility Attribution to Self (t= 1.013, p>.01) and Environmental Responsibility Attribution to Others (t = 0.206, p>.01) are not significant at .01 and .05 levels. There is no significant locale difference in dimensions of Social Influence between students of institutions in urban and rural areas. The critical ratios obtained for Parental Influence (t = 0.128, p>.01), Teacher Influence (t = 0.979, p>.01), Peer Group Influence (t = 0.255, p>.01) and Media Influence (t = 0.753, p>.01) are not significant at .01 and .05 levels.

Difference in Mean Scores of Predictor Variables on the Basis of Type of Institution

Test of significance of differences was conducted to find out the differences in the mean scores of Ecoliteracy, Environmental Responsibility Attribution and Social Influence between students of government and aided institutions. The data and results of significance of difference between the mean scores of Predictors on the basis of Type of Institution (Government/Aided) are presented in Table 30.

Table 30

Significance of Difference in Mean Scores of Predictor Variables on the Basis of Type of Institution

Predictor Variable	Government			Aided			t value	Sig.
	N_1	M_1	SD_1	N_2	M_2	SD_2		
EL	427	60.71	5.646	573	60.86	6.605	0.378 ^{NS}	p>.01
ERA	427	58.41	5.054	573	58.37	5.060	0.143 ^{NS}	p>.01
SI	427	61.49	5.739	573	60.94	6.174	1.436 ^{NS}	p>.01

^{NS} Not Significant

From the Table 30 it is clear that there does not exist any significant difference in Ecoliteracy, Environmental Responsibility Attribution and Social Influence between students of government and aided institutions. The critical ratio for Ecoliteracy (t = 0.378, p>.01), Environmental Responsibility Attribution (t = 0.143, p>.01) and Social Influence (t = 1.436, p>.01) are not significant at .01 and .05 levels.

Difference in Mean Scores of Dimensions of Predictor Variables on the Basis of Type of Institution

Mean difference analysis was carried out to assess the significance of differences in the mean scores of dimensions of predictors based on locale.

The data and results of significance of difference between the mean scores of Dimensions of Predictors on the basis of Type of Institution (Government/Aided) are presented in Table 31.

Table 31

Significance of Difference in Mean Scores of Dimensions of Predictor Variable on the Basis of Type of Institution

Predictor Variable		Government			Aided			t value	Sig.
		N_1	M_1	SD_1	N_2	M_2	SD_2		
EL	EAW	427	57.99	7.460	573	57.30	7.869	1.401 ^{NS}	p>.01
	EAT	427	62.47	6.511	573	62.56	7.497	0.199 ^{NS}	p>.01
	EAC	427	61.75	8.234	573	62.70	9.129	1.718 ^{NS}	p>.01
ERA	ERAS	427	65.10	7.430	573	64.74	8.324	0.713 ^{NS}	p>.01
	ERAO	427	51.22	7.864	573	51.52	8.447	0.571^{NS}	p>.01
SI	PI	427	59.85	7.572	573	59.07	8.145	1.537 ^{NS}	p>.01
	TI	427	60.17	6.516	573	59.73	7.455	0.990 ^{NS}	p>.01
	PGI	427	60.96	8.122	573	60.06	8.284	1.704 ^{NS}	p>.01
	MI	427	64.53	7.639	573	64.43	7.957	0.203^{NS}	p>.01

NS Not Significant

From the Table 31 it is clear that there does not exist any significant difference in the mean score of dimensions of Ecoliteracy of students based on type of institution. The critical ratio obtained for the dimensions Environmental Awareness (t = 1.401, p>.01), Environmental Attitude (t = 0.199, p>.01) and Environmental Action (t = 1.718, p>.01) are not significant at .01 and .05 levels. It is also evident that there does not exist any significant difference in the dimensions of Environmental Responsibility Attribution between students of government and aided institutions. The critical ratio obtained for Environmental Responsibility Attribution to Self (t = 0.713, p>.01) and Environmental Responsibility Attribution to Others (t = 0.571, p>.01) are not significant at .01 and .05 levels. In the case of dimensions of Social Influence, there does not exist any significant difference between

students of government and aided institutions. The critical ratio obtained for Parental Influence (t = 1.537, p>.01), Teacher Influence (t = 0.990, p>.01), Peer Group Influence (t = 1.704, p>.01) and Media Influence (t = 0.203, p>.01) are not significant at .01 and .05 levels.

Difference in Mean Scores of Green Consumer Behaviour on the Basis of Gender, Locale and type of Institution

Mean Difference analysis was carried out to determine the significance of difference between the mean scores of Green Consumer Behaviour students for the subsamples. The data and results of significance of difference between the mean scores of Green Consumer Behaviour on the basis of gender of students (Male/Female), locale of institution (Urban/Rural) and type of institution (Government/Aided) are presented in Table 32.

Table 32

Significance of Difference in Mean Scores of Green Consumer Behaviour on the Basis of Gender, Locale and Type of Institution

Gender	Government			Aided			t value	Sig.
	N_1	M_1	SD_1	N_2	M_2	SD_2		
	440	63.09	6.505	560	66.42	6.288	8.196^{**}	p<.01
Locale of Institution	Urban			Rural			t value	Sig.
	N_1	M_1	SD_1	N_2	M_2	SD_2		
	479	64.93	6.360	521	64.97	6.805	0.101^{NS}	p>.01
Type of Institution	Government			Aided			t value	Sig.
	N_1	M_1	SD_1	N_2	M_2	SD_2		
	427	65.47	6.153	573	64.57	6.881	2.183^{*}	p<.05

*Significant at .01 level, ^{NS} Not Significant

Table 32 reveals that there exists significant difference in Green Consumer Behaviour between male and female students. The critical ratio (t = 8.196, **p<.01) is significant at .01 level. The mean score of female students is higher which shows that the Green Consumer Behaviour is more

predominant in females compared to their male counterparts. The locale difference reveals that there does not exist any significant difference in Green Consumer Behaviour between students of institutions in urban and rural areas. The critical ratio ($t = 0.101$, $p>.01$) is not significant at .01 and .05 level. The type of institutional difference shows that there exists significant difference in Green Consumer Behaviour between students of government and aided institutions. The critical ratio ($t = 2.183$, $^{*}p<.05$) is significant at.05 level. The mean score of government students is higher which shows that Green Consumer Behaviour is more predominant in students of government institutions compared to students of aided institutions.

Stepwise Multiple Regression Analysis

A Stepwise Multiple Regression Analysis was carried out for identifying the significant predictor variables and their relative efficiency in predicting the criterion variable. The dimension-wise analysis of the predictor variables was also done and its relative efficiencies were analysed to determine their predictability of the criterion variable. This analysis paved the way for gaining insights about the determinants of Green Consumer Behaviour of undergraduate students by identifying the individual and collective contribution of the predictors and its dimensions in effectively predicting the criterion variable. The analysis was conducted using Statistical Packages for Social Sciences (SPSS) by IBM version 20.

Relative Efficiency of Predictor Variables (individual and collective contribution) in Predicting the Criterion Variable for the Total Sample

Stepwise multiple regression analysis was conducted to determine the relative efficiency of predictor variables in the individual and collective

contribution in predicting the criterion variable for the total sample. The details of analysis are presented in this section.

Table 33 presents the inter correlation matrix between the predictors and the criterion variable for total sample of students.

Table 33

Pearson's Correlation Matrix of Predictor Variables (EL, ERA, SI) and Criterion Variable (GCB) for the Total Sample

Variables	EL	ERA	SI	GCB
EL	1			
ERA	.497**	1		
SI	.586**	.534**	1	
GCB	.694**	.521**	.687**	1

** Correlation is significant at .01 level

From Table 33 it is evident that there exists significant positive correlation among the predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) for the total sample. It is also seen that Ecoliteracy (r = .694, **p<.01) is having the highest correlation with the criterion variable followed by Social Influence (r = .687, **p<.01) and thirdly Environmental Responsibility Attribution (r = .521, **p<.01). All the correlation indices obtained are significant at .01 level.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of predictors (individual and joint contribution) in predicting the criterion variable.

The model summary of stepwise multiple regression analysis with the factors of Green Consumer Behaviour (GCB) constituting Ecoliteracy (EL), Environmental Responsibility Attribution (ERA) and Social Influence (SI) for the total sample is presented in Table 34.

Table 34

Regression Model Summary of Predictor Variables (EL, ERA, SI) and Criterion Variable (GCB) for the Total Sample

Model		R	R Square	Adjusted R Square	R Square Change
1	EL	.694	.482	.482	.482
2	EL, SI	.776	.602	.601	.120
3	EL, SI, ERA	.781	.610	.608	.008

Criterion Variable: GCB

Table 34 reveals the variable that first enters the model is EL. For Model 1, the R value (.694) which is the correlation between the predictor (EL) and the criterion (GCB) shows a positive correlation. The R^2 value (.482) which is the coefficient of determination shows that 48% of the variance of the criterion variable has been significantly explained by the predictor variable. The Adjusted R Square (.482) determines how well the model can be generalised.

In step 2 of multiple regression analysis, the variable that enters the model next to EL is SI. For Model 2, the multiple correlations between the predictors (EL and SI) and the criterion (GCB) yielded R value of .776 which shows a strong positive correlation. The coefficient of determination (R^2) .602 shows that 60% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EL and SI. The percentage increase of the variance of GCB by the inclusion of SI, depicted by R Square Change (.120) is 12%. The Adjusted R Square value of .601shows that 60% of the variance in the predictor variables is accounted for if the model has been derived from the population from which the sample was taken.

In step 3 of multiple regression analysis, ERA enters the model next to EL and SI. Model 3 shows that multiple correlations between the predictors

(EL, SI and ERA) and the criterion (GCB) yielded R value of .781 showing a relatively strong positive correlation. The coefficient of determination R^2 is .610 which shows that 61% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EL, SI and ERA collectively. The percentage increase of the variance of GCB by the inclusion of ERA, depicted by R Square Change (.008) is .8%. The Adjusted R Square value of .608 shows that 61% of the variance in the predictor variables is accounted for if the model has been derived from the population from which the sample was taken.

The ANOVA table in regression analysis gives the significance of the models derived. It shows the significance of collective contributions of predictors in predicting the criterion. Table 35 presents the ANOVA in regression analysis.

Table 35

Results of ANOVA in Regression of Predictors and Criterion for the Total Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	EL	Regression	20934.937	1	20934.937	929.413	p<.01
		Residual	22479.854	998	22.525		
		Total	43414.791	999			
2	EL, SI	Regression	26129.123	2	13064.561	753.536	p<.01
		Residual	17285.668	997	17.338		
		Total	43414.791	999			
3	EL, SI, ERA	Regression	26468.053	3	8822.684	518.530	p<.01
		Residual	16946.738	996	17.015		
		Total	43414.791	999			

Criterion Variable: GCB

From Table 35 it is clear that, for Model 1, the obtained F (1,998) = 929.413, $^{**}p<.01$ is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (1, 998) = 6.69, $^{**}p<.01$. This implies that the contribution of Ecoliteracy significantly predicts Green Consumer Behaviour of students for the total sample. For Model 2, the F (2,997) = 753.536, $^{**}p<.01$ is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (2, 997) = 4.65, $^{**}p<.01$. This reveals that the collective contributions of Ecoliteracy and Social Influence are significant in predicting the Green Consumer Behaviour for the total sample. In the case of Model 3, F (3,996) = 518.530, $^{**}p<.01$is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (3, 996) = 3.82, $^{**}p<.01$. This shows that the collective contributions of Ecoliteracy, Social Influence and Environmental Responsibility Attribution are significant in predicting the Green Consumer Behaviour for the total student sample.

The Stepwise multiple regression analysis enabled in finding out the individual contribution of predictors in predicting the criterion variable. Table 36 shows the regression coefficients related to the individual contribution of predictors in predicting the criterion variable (Green Consumer Behaviour) for the total sample.

Table 36

Regression Coefficients of Predictors' Individual Contribution in Predicting the Criterion Variable for the Total Sample

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	20.148	1.477		13.638	.000
	EL	.737	.024	.694	30.486	.000
2	(Constant)	7.572	1.486		5.096	.000
	EL	.472	.026	.444	18.021	.000
	SI	.469	.027	.427	17.309	.000
3	(Constant)	3.974	1.678		2.368	.018
	EL	.439	.027	.414	16.320	.000
	SI	.425	.029	.387	14.853	.000
	ERA	.142	.032	.109	4.463	.000

Dependent Variable: GCB

From Table 36 it is evident that for Model 1, Beta value (ß) is .694 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. A positive beta value represents an increase criterion variable. The B value (B_1) .737 represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 20.148 relates to the amount of criterion variable without the contribution of predictor variable. Thus, for Model 1, if Ecoliteracy is increased by one unit, the model predicts .737 units increase in Green Consumer Behaviour. The t = 30.486, $^{**}p<.01$ is statistically significant at .01 level. Hence, it can be inferred that the individual contribution of Ecoliteracy is significant in predicting the Green Consumer Behaviour of students for the total sample.

Multiple Regression Equation for Model 1

The general regression equation of the criterion variable (Y) in terms of the predictor variables ($X_1, X_2, X_3,....., X_n$) is given below.

$Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$

Where,

Y	=	Criterion variable
$X_1, X_2,...,X_n$	=	Predictor variables
$ß_0$	=	Constant term of the model
$ß_1, ß_2,..., ß_n$	=	B values of predictor variables
εt	=	Error term

The regression equation is as follows:

$GCB = ß_0 + ß_1 EL + εt$

$GCB = 20.148 + .737 EL$

According to this equation, for one unit increase in the predictor variable Ecoliteracy, the criterion variable (Green Consumer Behaviour) will increase by .74 units.

For Model 2, Beta (ß) values of EL is .444 and that of SI is .427 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value (B_1) of EL is .472 and that of SI is .469 represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 7.572 relates to the amount of criterion variable without the contribution of predictor variable. The critical ratio t = 18.021, $^{**}p<.01$ and t = 17.309, $^{**}p<.01$ are statistically significant at .01 level for EL and SI. Hence, it can be inferred that the collective contribution of Ecoliteracy and Social Influence is significant in predicting the Green Consumer Behaviour of students for the total sample.

Multiple Regression Equation for Model 2

The B value of Ecoliteracy is .472 and that of Social Influence is .469. The standard error of B for Ecoliteracy is .026 and that of Social Influence .027. The regression equation for predicting Green Consumer Behaviour (Y) by Ecoliteracy (X_1) and Social Influence (X_3) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 EL + ß_2 SI + \varepsilon t$

$GCB = 7.572 + .472 EL + .469 SI$

According to this equation, for unit increase in Ecoliteracy, Green Consumer Behaviour increases by .472 units when the effects of Social Influence is held constant and that for unit increase in Social Influence, Green Consumer Behaviour increases by .469 units provided the effects of Ecoliteracy is held constant.

For Model 3, Beta (ß) values of EL, SI and ERA are .414, .387 and .109 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EL, SI and ERA are .439, .425 and .142 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 3.974 relates to the amount of criterion variable without the contribution of predictor variable. The critical ratio t values are t = 16.320, $^{**}p<.01$ for EL, t = 14.853, $^{**}p<.01$ for SI and t = 4.463, $^{**}p<.01$for ERA which are significant at .01 level. Hence, it can be inferred that the collective contribution of Ecoliteracy, Social Influence and Environmental Responsibility Attribution is significant in predicting the Green Consumer Behaviour of students for the total sample.

Multiple Regression Equation for Model 3

The B value of Ecoliteracy is .439, that of Social Influence is .425 and that of Environmental Responsibility Attribution is .142. The standard error of B for Ecoliteracy is .027, that of Social Influence is .029 and for Environmental Responsibility Attribution is .032. The regression equation for predicting Green Consumer Behaviour (Y) by Ecoliteracy (X_1), Environmental Responsibility Attribution(X_2) and Social Influence (X_3) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EL + ß_2 SI + ß_3 ERA + εt$

$GCB = 3.974 + .439 EL + .425 SI + .142 ERA$

According to this equation, for unit increase in Ecoliteracy, Green Consumer Behaviour increases by .439 units when the effects of Social Influence and Environmental Responsibility Attribution are held constant. Similarly, for unit increase in Social Influence, Green Consumer Behaviour increases by .425 units provided the effects of Ecoliteracy and Environmental Responsibility Attribution are held constant. In the same way, for unit increase in Environmental Responsibility Attribution, Green Consumer Behaviour increases by .142 units provided the effects of Ecoliteracy, Social Influence and Environmental Responsibility Attribution are held constant.

Discussion

The result reveals that Ecoliteracy (r = .694, $^{**}p<.01$) is having the highest correlation with GCB followed by Social Influence (r = .687, $^{**}p<.01$) and Environmental Responsibility Attribution (r = .521, $^{**}p<.01$). The multiple correlations (R = .781) indicate that the three variables jointly have significant relationship in explaining GCB of total student sample. In the stepwise regression analysis, the variable is seen to enter in this order of influence thereby yielding a significant model (EL, SI, ERA) with F (3, 996)

= 518.530, $^{**}p<.01$ with R^2 = .610. This shows that the collective contributions of the predictors has accounted for 61% variation in GCB of the total sample. The individual contribution of predictors significantly influencing GCB is equal to 3.974 + .439 EL + .425 SI + .142 ERA. The results reveal that Ecoliteracy plays a major influencing role in the GCB of students. Education that fosters sustainability in HE has a vital role in sensitising students to be more aware of their environmental impacts as consumers. This in turn would help in developing a sense of responsibility towards the environment. Moreover, the influence exerted by parents, teachers, peer group and media also have effects on the GCB of students. Hence it is important to develop awareness among oneself and influence others to adopt green lifestyles with longevity for sustainability.

Relative Efficiency of Dimensions of Predictor Variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) in Predicting the Criterion Variable (Green Consumer Behaviour) for the Total Sample

The details regarding relative efficiency of dimensions of predictor variables in the individual and collective contribution in predicting the criterion variable for the total sample are presented in this section.

Table 37 presents inter correlation matrix between the dimensions of predictors and the criterion variable for the total sample of students.

Table 37

Pearson's Correlation Matrix of Dimensions of Predictor Variables and Criterion Variable for the Total Sample

Variable	EAW	EAT	EAC	ERAS	ERAO	PI	TI	PGI	MI	GCB
EAW	1									
EAT	.592**	1								
EAC	.187**	.562**	1							
ERAS	.493**	.484**	.355**	1						
ERAO	.065*	.073*	.044	-.215**	1					
PI	.383**	.371**	.284**	.398**	.109**	1				
TI	.432**	.383**	.269**	.455**	.038	.472**	1			
PGI	.401**	.356**	.251**	.431**	.069*	.447**	.494**	1		
MI	.493**	.441**	.284**	.468**	.117**	.415**	.421**	.489**	1	
GCB	.663**	.608**	.394**	.611**	.052	.475**	.534**	.516**	.599**	1

** *Correlation significant at .01 level*

* *Correlation significant at .05 level*

Table 37 reveals that there exists significant positive correlation among most of the dimensions of predictor variables and the criterion variable, except for ERAO for the total sample. It is observed that EAW (r = .663, **p<.01) has the highest correlation with GCB followed by ERAS (r = .611, **p<.01) and EAT (r = .608, **p<.01). All the predictor variables are also fairly correlated with each other except for ERAO. It can also be observed that ERAO is having a negative correlation (r = -.215) with ERAS and nearly a zero (r = 0.052) with GCB. Majority of correlation indices obtained are significant at .01 level and a few significant at .05 levels. Since ERAO was not significantly correlated with GCB and with other predictors as well, it was not considered for regression analysis. All the significant variables were considered for regression analysis.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of dimension of predictors (individual and joint

contribution) in predicting the criterion variable. The model summary of stepwise multiple regression analysis with the factors of Green Consumer Behaviour (GCB) for the total sample is presented in Table 38.

Table 38

Regression Model Summary of Dimensions of Predictor variables and Criterion Variable for the Total Sample

	Model	R	R Square	Adjusted R Square	R Square Change
1	EAW	.663	.439	.439	.439
2	EAW, ERAS	.739	.546	.545	.107
3	EAW, ERAS, MI	.772	.597	.595	.051
4	EAW, ERAS, MI, EAT	.788	.621	.619	.024
5	EAW, ERAS, MI, EAT, TI	.799	.638	.636	.017
6	EAW, ERAS, MI, EAT, TI, PGI	.803	.645	.642	.007
7	EAW, ERAS, MI, EAT, TI, PGI, EAC	.806	.649	.647	.005
8	EAW, ERAS, MI, EAT, TI, PGI, EAC, PI	.807	.651	.649	.002

Criterion Variable: GCB

Table 38 reveals that in the step 1 of regression analysis, the first variable to enter the model is EAW. For Model 1, the R value (.663) is the correlation between the predictor (EAW) and the criterion (GCB) shows a relatively strong positive correlation. The R^2 value (.439) which is the coefficient of determination shows that 44% of the variance of the criterion variable has been significantly explained by the predictor variable. The Adjusted R Square (.439) determines how well the model can be generalised.

In step 2, the next variable that enters the model is ERAS. For Model 2, the multiple correlations between the predictors (EAW, ERAS) and the criterion (GCB) yielded R value of .739 which shows a relatively strong positive correlation. The coefficient of determination (R^2) .546 shows that 55% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW and ERAS. The percentage

increase of the variance of GCB (R^2 Change = .107) is 11% by the inclusion of ERAS. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.546 - .545 =.001) of .1% shows the amount of decrease in variance if the model were derived from the population.

In step 3 of the regression analysis, the variable entering the model is MI. For Model 3, the multiple correlations between the predictors (EAW, ERAS, MI) and the criterion (GCB) yielded R value of .772 which shows a relatively strong positive correlation. The coefficient of determination (R^2) .597 shows that 60% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, ERAS, MI). The percentage increase of the variance of GCB (R^2 Change) is .051 which shows a 5.1% by the inclusion of MI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.597 - .595 = .002) of .2% shows the amount of decrease in variance if the model were derived from the population.

In step 4 of multiple regression, the variable entering the model is EAT. For Model 4, the multiple correlations between the predictors (EAW, ERAS, MI, EAT) and the criterion (GCB) yielded R value of .788 which shows a relatively strong positive correlation. The coefficient of determination (R^2) .621 shows that 62% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, ERAS, MI, EAT). The percentage increase of the variance of GCB (R^2 Change= .024) is 2.4% by the inclusion of EAT. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.621 - .619= .002) of .2% shows the amount of decrease in variance if the model were derived from the population.

In step 5 of analysis, the variable that enters the model is TI. For Model 5, the multiple correlations between the predictors (EAW, ERAS, MI,

EAT, TI) and the criterion (GCB) yielded R value of .799 which shows a relatively high positive correlation. The coefficient of determination (R^2) .638 shows that 64% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, ERAS, MI, EAT, TI). The percentage increase of the variance of GCB (R^2 Change = .017) is 2% by the inclusion of TI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.638 - .636 = .002) of .2% shows the amount of decrease in variance if the model were derived from the population.

In step 6 of stepwise multiple regression, PGI enters the model. For Model 6, the multiple correlations between the predictors (EAW, ERAS, MI, EAT, TI, PGI) and the criterion (GCB) yielded R value of .803 which shows a relatively high positive correlation. The coefficient of determination (R^2) .645 shows that 65% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, ERAS, MI, EAT, TI, PGI). The percentage increase of the variance of GCB (R^2 Change = .007) is .7% by the inclusion of PGI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.645 - .642 = .003) of .3% shows the amount of decrease in variance if the model were derived from the population.

In step 7 of regression analysis, the variable entering the model is EAC. For Model 7, the multiple correlations between the predictors (EAW, ERAS, MI, EAT, TI, PGI, EAC) and the criterion (GCB) yielded R value of .806 which shows a relatively high positive correlation. The coefficient of determination (R^2) .649 shows that 65% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, ERAS, MI, EAT, TI, PGI, EAC). The percentage increase of the variance of GCB (R^2 Change = .005) is .5% by the inclusion of EAC. The

Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.649 - .647 = .002) of .2% shows the amount of decrease in variance if the model were derived from the population.

In the final step 8, the variable that lastly enters the model is PI. For Model 8, the multiple correlations between the predictors (EAW, ERAS, MI, EAT, TI, PGI, EAC, PI) and the criterion (GCB) yielded R value of .807 which shows a relatively high positive correlation. The coefficient of determination (R^2) .651 shows that 65% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, ERAS, MI, EAT, TI, PGI, EAC, PI). The percentage increase of the variance of GCB (R^2 Change = .002) is .2% by the inclusion of PI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.651 - .649 = .002) of .2% shows the amount of decrease in variance if the model were derived from the population.

The ANOVA table in regression shows the significance of the models derived. It determines the significance of the collective contributions of predictors in predicting the criterion variable. Table 39 presents the ANOVA in regression analysis

Table 39

Results of ANOVA in Regression of Dimensions of Predictors and Criterion for the Total Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	EAW	Regression	19068.241	1	19068.241	781.635	p<.01
		Residual	24346.550	998	24.395		
		Total	43414.791	999			
2	EAW, ERAS	Regression	23692.329	2	11846.164	598.841	p<.01
		Residual	19722.462	997	19.782		
		Total	43414.791	999			
3	EAW, ERAS, MI	Regression	25905.090	3	8635.030	491.184	p<.01
		Residual	17509.701	996	17.580		
		Total	43414.791	999			
4	EAW, ERAS, MI, EAT	Regression	26942.388	4	6735.597	406.857	p<.01
		Residual	16472.403	995	16.555		
		Total	43414.791	999			
5	EAW, ERAS, MI, EAT, TI	Regression	27687.976	5	5537.595	349.999	p<.01
		Residual	15726.815	994	15.822		
		Total	43414.791	999			
6	EAW, ERAS, MI, EAT, TI, PGI	Regression	27981.955	6	4663.659	300.075	p<.01
		Residual	15432.836	993	15.542		
		Total	43414.791	999			
7	EAW, ERAS, MI, EAT, TI, PGI, EAC	Regression	28197.666	7	4028.238	262.600	p<.01
		Residual	15217.125	992	15.340		
		Total	43414.791	999			
8	EAW, ERAS, MI, EAT, TI, PGI, EAC, PI	Regression	28282.685	8	3535.336	231.529	p<.01
		Residual	15132.106	991	15.270		
		Total	43414.791	999			

Criterion Variable: GCB

From Table 39 it is clear that, for Model 1, F (1,998) = 781.635, $^{**}p<.01$. The table value of F (1, 998) = 6.69, $^{**}p<.01$. As the F value is greater than the table value of F, the model is significant at .01 level. This reveals that the contribution of EAW significantly predicts GCB for the total sample. In the case of Model 2, F (2,997) = 598.841, $^{**}p<.01$. The table value of F (2, 997) = 4.65, $^{**}p<.01$. Since the F value is greater than the table value of F, the model is significant at .01 level. This shows that the collective contributions of predictors (EAW and ERAS) are significant in predicting the GCB for the total sample. For Model 3, F (3,996) = 491.184, $^{**}p<.01$. The table value of F (3, 996) = 3.82, $^{**}p<.01$. Since the F value is greater than the table value of F, the model is significant at .01 level. From this it is clear that the combined contributions of the predictors (EAW, ERAS and MI) significantly predict GCB for the total sample. In the case of Model 4, F (4,995) = 406.857, $^{**}p<.01$. The table value of F (4, 995) = 3.36. As the F value is greater than the table value of F, the model is significant at .01 level. This means that the collective contributions of the predictors (EAW, ERAS, MI and EAT) is significant in predicting GCB for the total sample. In Model 5, F (5,994) = 349.999, $^{**}p<.01$. The table value of F (5, 994) = 3.05. Since the F value is greater than the table value of F, the model is significant at .01 level. This means that the joint contributions of predictors (EAW, ERAS, MI, EAT, TI) significantly predict GCB for the total sample. For Model 6, F (6,993) = 300.075, $^{**}p<.01$. The table value of F (6, 993) = 2.84. The F value is greater than the table value of F, and hence the model is significant at .01 level. This implies that the combined contribution of predictors (EAW, ERAS, MI, EAT, TI, PGI) significantly predict GCB of students for the total sample. In the case of Model 7, F (7, 992) = 262.600, $^{**}p<.01$. The table value of F (7, 992) = 2.84. Since the F value is greater than the table value of F, the model is significant at .01 level. This means that the collective contributions of predictors (EAW, ERAS, MI, EAT, TI, PGI, EAC) significantly predict

GCB of students for the total sample. For the final Model 8, F (8, 991) = 231.529, $^{**}p<.01$. The table value of F 8 df (8, 991) = 2.55. As the F value is greater than the table value of F, the model is significant at .01 level. This implies that the joint contributions of predictors (EAW, ERAS, MI, EAT, TI, PGI, EAC, PI) is significant in predicting GCB for the total sample.

Table 40 shows the regression coefficients related to the individual contribution of dimensions of predictor variables in predicting the criterion variable (Green Consumer Behaviour) for the total sample.

Table 40

Regression Coefficients of Dimensions of Predictors' Individual Contribution in Predicting the Criterion Variable for the Total Sample

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.275	1.179		27.369	.000
	EAW	.567	.020	.663	27.958	.000
2	(Constant)	21.213	1.285		16.508	.000
	EAW	.409	.021	.478	19.481	.000
	ERAS	.311	.020	.375	15.289	.000
3	(Constant)	15.428	1.317		11.719	.000
	EAW	.328	.021	.384	15.585	.000
	ERAS	.244	.020	.295	12.162	.000
	MI	.229	.020	.272	11.219	.000
4	(Constant)	11.675	1.363		8.568	.000
	EAW	.256	.022	.299	11.407	.000
	ERAS	.208	.020	.251	10.422	.000
	MI	.207	.020	.245	10.314	.000
	EAT	.187	.024	.202	7.916	.000

	(Constant)	8.642	1.404		6.158	.000
	EAW	.233	.022	.272	10.504	.000
	ERAS	.177	.020	.213	8.811	.000
5	MI	.182	.020	.216	9.146	.000
	EAT	.176	.023	.189	7.563	.000
	TI	.145	.021	.156	6.865	.000
	(Constant)	7.993	1.399		5.713	.000
	EAW	.227	.022	.265	10.305	.000
	ERAS	.166	.020	.200	8.250	.000
6	MI	.159	.020	.189	7.804	.000
	EAT	.173	.023	.186	7.517	.000
	TI	.118	.022	.127	5.391	.000
	PGI	.083	.019	.103	4.349	.000
	(Constant)	7.052	1.412		4.993	.000
	EAW	.251	.023	.294	11.013	.000
	ERAS	.155	.020	.187	7.700	.000
	MI	.155	.020	.184	7.632	.000
7	EAT	.121	.027	.130	4.533	.000
	TI	.113	.022	.121	5.179	.000
	PGI	.080	.019	.099	4.220	.000
	EAC	.067	.018	.090	3.750	.000
	(Constant)	6.636	1.420		4.673	.000
	EAW	.248	.023	.290	10.855	.000
	ERAS	.152	.020	.183	7.526	.000
	MI	.150	.020	.178	7.343	.000
8	EAT	.119	.027	.128	4.464	.000
	TI	.101	.022	.109	4.545	.000
	PGI	.072	.019	.090	3.762	.000
	EAC	.064	.018	.085	3.567	.000
	PI	.045	.019	.054	2.360	.018

Criterion Variable: GCB

From Table 40 it is evident that for Model 1, Beta (ß) value of EAW is .663 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value of EAW .567 represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 32.275 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t=27.958, $^{**}p<.01$ is a significant predictor of GCB for the total sample.

Multiple Regression Equation for Model 1

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 EAW + \varepsilon t$

$GCB = 32.275 + .567 EAW$

For Model 2, Beta (ß) values of EAW and ERAS are .478 and .375 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW and ERAS are .409 and .311 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 21.213 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t=19.481, $^{**}p<.01$ and ERAS, t=15.289, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW and ERAS are significant in predicting the Green Consumer Behaviour of students for the total sample.

Multiple Regression Equation for Model 2

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) and ERAS (X_2) of general form $Y= ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ ERAS + \varepsilon t$

$GCB = 21.213 + .409\ EAW + .311\ ERAS$

For Model 3, Beta (ß) values of EAW, ERAS and MI are .384, .295 and .272 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS and MI are .328, .244 and .229 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 15.428 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 15.585, $^{**}p<.01$; ERAS, t=12.162, $^{**}p<.01$ and MI, t = 11.219, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS and MI are significant in predicting the Green Consumer Behaviour of students for the total sample.

Multiple Regression Equation for Model 3

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2) and MI (X_3) of general form $Y=ß_0 + ß_1\ X_1 + ß_2\ X_2 +.....+ ß_n\ X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ ERAS + ß_3\ MI + \varepsilon t$

$GCB = 15.428 + .328\ EAW + .244\ ERAS + .229\ MI$

For Model 4, Beta (ß) values of EAW, ERAS, MI and EAT are .299, .251, .245 and .202 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, MI and EAT are .256, .208, .207 and .187 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 11.675 relates to the amount of criterion variable without the contribution of predictor variable.

For this model EAW, t = 11.407, **p<.01; ERAS, t=10.422, **p<.01; MI, t = 10.314, **p<.01 and EAT, t = 7.916, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, MI and EAT are significant in predicting the Green Consumer Behaviour of students for the total sample.

Multiple Regression Equation for Model 4

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), MI (X_3) and EAT (X_4) of general form $Y= ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1$ EAW $+ ß_2$ ERAS $+ ß_3$ MI $+ ß_4$ EAT $+ εt$

GCB = 11.675 + .256 EAW + .208 ERAS + .207 MI + .187 EAT

For Model 5, Beta (ß) values of EAW, ERAS, MI, EAT and TI are .272, .213, .216, .189 and .156 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, MI, EAT and TI are .233, .177, .182, .176 and .145 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 8.642 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 10.504, p<.01; ERAS, t=8.811, **p<.01; MI, t = 9.146, **p<.01; EAT, t = 7.563, **p<.01 and TI, t = 6.865, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, MI, EAT and TI are significant in predicting the Green Consumer Behaviour of students for the total sample.

Multiple Regression Equation for Model 5

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), MI (X_3), EAT (X_4) and TI (X_5) general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ ERAS + ß_3\ MI + ß_4\ EAT + ß_5\ TI + εt$

$GCB = 8.642 + .233\ EAW + .177\ ERAS + .182\ MI + .176\ EAT + .145\ TI$

For Model 6, Beta (ß) values of EAW, ERAS, MI, EAT, TI and PGI are .265, .200, .189, .186, .127 and .103 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, MI, EAT, TI and PGI are .227, .166, .159, .173, .118 and .083 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 7.993 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 10.305, ** p<.01; ERAS, t=8.250, **p<.01; MI, t = 7.804, **p<.01; EAT, t = 7.517, **p<.01; TI, t = 5.391, **p<.01 and PGI, t = 4.349, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, MI, EAT, TI and PGI are significant in predicting the Green Consumer Behaviour of students for the total sample.

Multiple Regression Equation for Model 6

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), MI (X_3), EAT (X_4), TI (X_5) and PGI (X_6) general form $Y=ß_0 + ß_1\ X_1 + ß_2\ X_2 +.....+ ß_n\ X_n + εt$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ ERAS + ß_3\ MI + ß_4\ EAT + ß_5\ TI + ß_6\ PGI + εt$

$GCB = 7.993 + .227\ EAW + .166\ ERAS + .159\ MI + .173\ EAT + .118\ TI + .083\ PGI$

For Model 7, Beta (ß) values of EAW, ERAS, MI, EAT, TI, PGI and EAC are .294, .187, .184, .130, .121, .099 and .090 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, MI,

EAT, TI, PGI and EAC are .251, .155, .155, .121, .113, .080 and .067 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 7.052 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 11.013, **p<.01; ERAS, t=7.700, **p<.01; MI, t = 7.632, **p<.01; EAT, t = 4.533, **p<.01; TI, t = 5.179, **p<.01; PGI, t = 4.220, **p<.01 and EAC, t = 3.750, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, MI, EAT, TI, PGI and EAC are significant in predicting the Green Consumer Behaviour of students for the total sample.

Multiple Regression Equation for Model 7

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), MI (X_3), EAT (X_4), TI (X_5), PGI (X_6) and EAC (X_7) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1$ EAW $+ ß_2$ ERAS $+ ß_3$ MI $+ ß_4$ EAT $+ ß_5$ TI $+ ß_6$ PGI $+ ß_7$ EAC $+ \varepsilon t$

GCB = 7.052 + .251 EAW + .155 ERAS + .155 MI + .121 EAT + .113 TI + .080 PGI + .067 EAC

For Model 8, Beta (ß) values of EAW, ERAS, MI, EAT, TI, PGI, EAC and PI are .290, .183, .178, .128, .109, .090, .085 and .054 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, MI, EAT, TI, PGI, EAC and PI are .248, .152, .150, .119, .101, .072, .064 and .045 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 6.636 relates to the amount of criterion variable without the contribution of predictor variable.

For this model EAW, t = 10.855, **p<.01; ERAS, t = 7.526, **p<.01; MI, t = 7.343, **p<.01; EAT, t = 4.464, **p<.01; TI, t = 4.545, **p<.01; PGI, t = 3.762, **p<.01; EAC, t = 3.567, **p<.01 and PI, t = 2.360, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, MI, EAT, TI, PGI, EAC and PI are significant in predicting the Green Consumer Behaviour of students for the total sample.

Multiple Regression Equation for Model 8

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), MI (X_3), EAT (X_4), TI (X_5), PGI (X_6), EAC (X_7) and PI (X_8) of general form $Y= ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1$ EAW $+ ß_2$ ERAS $+ ß_3$ MI $+ ß_4$ EAT $+ ß_5$ TI $+ ß_6$ PGI $+ ß_7$ EAC $+ ß_8$ PI $+ εt$

GCB = 6.636 + .248 EAW + .152 ERAS + .150 MI + .119 EAT + .101 TI + .072 PGI + .064 EAC + .045 PI

Discussion

Results show that eight dimensions of predictor variables are seen to have significant relationship in explaining the Green Consumer behaviour (R = .807) of undergraduate students. Amongst these predictors EAW (r = .663, **p<.01) has the highest correlation with GCB followed by ERAS (r = .611, **p<.01), EAT (r = .608, **p<.01) and MI (r = .599, **p<.01). A significant model is yielded (EAW, ERAS, MI, EAT, TI, PGI, EAC, PI) with F (8, 991) = 231.529, p<.01) with R^2 = .651. This shows that the collective contributions of the predictors have accounted for 65% variation in GCB of the total student sample. The individual contribution of predictors significantly predicting GCB is equal to 6.636 + .248 EAW + .152 ERAS + .150 MI + .119 EAT +

.101 TI + .072 PGI + .064 EAC + .045 PI. It is also evident that ERAO is excluded from the model owing to its least influence (.052) on GCB. The results reveal that EAW is having the highest influence on the GCB of total student sample. Apart from this, students' feeling an individual sense of responsibility is also seen to have an influence on the green behaviour of the students. The other influencing factors is the social influence, amongst which media influence, teacher influence, peer group as well as parental influence also have significantly predicted the GCB. Another important aspect is the Environmental Attitudes and Environment related past behaviours also determines the GCB of students. Awareness about the deteriorating condition of the environment gained through social influencing factors, specifically from media, teachers, peer group and even parents, along with a sensitivity to be pro-environmental might have induced the GCB of students. Moreover, the influence of media happens to be one of the most influencing factors of today's young generation. The green signals through such media become cues and stimuli that awaken their sense of responsibility towards the environment. Moreover, education institution, specifically, the Higher Education Institutions have to assume a major role towards building up a generation sensitised towards sustainability.

Relative Efficiency of Predictor Variables (Individual and Collective Contribution) In Predicting the Criterion Variable for the Sub Sample Based on Gender

The details of relative efficiency of predictor variables in the individual and collective contribution in predicting the criterion variable for the sub sample based on gender (Male/Female) are presented in this section.

Relative Efficiency of Predictor Variables (individual and collective contribution) in Predicting the Criterion Variable of Male Student Sample

Stepwise regression analysis was done to determine the relative efficiency of predictors (individual and collective contribution) in predicting the criterion for the male student sample. Table 41presents the inter correlation matrix between the predictors and the criterion variable of male students.

Table 41

Pearson's Correlation Matrix of Predictor Variables (EL, ERA, SI) and Criterion Variable (GCB) for the Male Student Sample

Variables	EL	ERA	SI	GCB
EL	1			
ERA	.434**	1		
SI	.596**	.490**	1	
GCB	.666**	.507**	.742**	1

**Correlation significant at .01 level

Table 41 reveals that there exists significant positive correlation among the predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) for the male student sample. It is evident that SI is having the highest correlation (r = .742, **p<.01) with GCB followed by EL (r = .666, **p<.01) and ERA (r = .507, **p<.01). All the correlation indices obtained are significant at .01 level. The significant variables were considered for regression analysis.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of predictors (individual and joint contribution) in predicting the criterion variable.

The model summary of stepwise multiple regression analysis with the factors of Green Consumer Behaviour (GCB) constituting Ecoliteracy (EL),

Environmental Responsibility Attribution (ERA) and Social Influence (SI) of male student sample is presented in Table 42.

Table 42

Regression Model Summary of Predictor Variables (EL, ERA, SI) and Criterion Variable (GCB) for the Male Student Sample

	Model	R	R Square	Adjusted R Square	R Square Change
1	SI	.742	.551	.550	.551
2	SI, EL	.793	.628	.626	.077
3	SI, EL, ERA	.800	.640	.638	.012

Criterion Variable: GCB

Table 42 reveals that for Model 1, the first variable that enters the model in multiple regression analysis is SI. The R value (.742) which is the correlation between the predictor (SI) and the criterion (GCB) shows a relatively strong positive correlation. The R^2 value (.551) which is the coefficient of determination shows that 55% of the variance of the criterion variable has been significantly explained by the predictor variable. The Adjusted R Square (.550) determines how well the model can be generalised.

In step 2 of regression, the variable that enters the model is EL. For Model 2, the multiple correlations between the predictors (SI and EL) and the criterion (GCB) yielded R value of .793 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .628) shows that 63% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables SI and EL. The percentage increase of the variance of GCB (R^2 Change = .077) is 8% by the inclusion of EL. The Adjusted R Square value reflects how well the model can be generalised. The

shrinkage value (.628 - .626 =.002) of .2% shows the amount of decrease in variance if the model were derived from the population.

In step 3, the next variable entering the model in regression is ERA. For Model 3, the multiple correlations between the predictors (SI, EL and ERA) and the criterion (GCB) yielded R value of .800 which shows a relatively high positive correlation. The coefficient of determination (R^2 =.640) shows that 64% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables SI, EL and ERA. The percentage increase of the variance of GCB (R^2 Change = .012) is 1.2% by the inclusion of ERA. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.640 - .638 =.002) of .2% shows the amount of decrease in variance if the model were derived from the population.

The significance of the models derived in regression analysis is evident from the ANOVA table. Table 43 presents the ANOVA in regression analysis of male student sample.

Table 43

Results of ANOVA in Regression of Predictors and Criterion for the Male Student Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	SI	Regression	10234.406	1	10234.406	537.341	p<.01
		Residual	8342.312	438	19.046		
		Total	18576.718	439			
2	SI, EL	Regression	11667.637	2	5833.818	368.990	p<.01
		Residual	6909.081	437	15.810		
		Total	18576.718	439			
3	SI, EL, ERA	Regression	11893.401	3	3964.467	258.630	p<.01
		Residual	6683.317	436	15.329		
		Total	18576.718	439			

Criterion Variable: GCB

From Table 43 it is clear that, for Model 1, the obtained F (1, 438) = 537.341, $^{**}p<.01$ is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (1, 438) = 6.70, $^{**}p<.01$. This means that the contribution of Social Influence significantly predicts Green Consumer Behaviour of male student sample. In the case of Model 2, the obtained F (2, 437) = 368.990, $^{**}p<.01$ which is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (2, 437) = 4.66, $^{**}p<.01$. This implies that the collective contributions of Social Influence and Ecoliteracy are significant in predicting Green Consumer Behaviour of male student sample. It is evident that for Model 3, the obtained F (3, 436) = 258.630, $^{**}p<.01$ is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (3, 436) = 3.83, $^{**}p<.01$. This shows that the combined contributions of Social Influence, Ecoliteracy and Environmental Responsibility Attribution are significant in predicting Green Consumer Behaviour of male student sample.

The stepwise multiple regression analysis determined the regression coefficients related to the individual contribution of predictors (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) in predicting the criterion variable (Green Consumer Behaviour) for male student sample. The details of results are presented in Table 44.

Table 44

Regression Coefficients of Predictors' Individual Contribution in Predicting the Criterion Variable for the Male Student Sample

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.666	2.099		6.986	.000
	SI	.783	.034	.742	23.181	.000
2	(Constant)	6.756	2.085		3.240	.001
	SI	.565	.038	.536	14.747	.000
	EL	.360	.038	.346	9.521	.000
3	(Constant)	2.554	2.327		1.098	.273
	SI	.516	.040	.490	12.962	.000
	EL	.330	.038	.318	8.694	.000
	ERA	.154	.040	.129	3.838	.000

Dependent Variable: GCB

From Table 44 it is evident that for Model 1, Beta value (ß) of SI is .742 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value (B_1 = .783) represents 78% change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 14.666 relates to the amount of criterion variable without the contribution of predictor variable. Thus, for Model 1, if SI is increased by one unit, the model predicts .783 units increase in Green Consumer Behaviour. The t = 23.181, $^{**}p<.01$ is statistically significant at .01 level. Hence, it can be inferred that the individual contribution of SI is significant in predicting the Green Consumer Behaviour of male students.

Multiple Regression Equation for Model 1

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 SI + εt$

$GCB = 14.666 + .783 SI$

From Table _ it is evident that for Model 2, Beta values (ß) of SI and EL are .536 and .346 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of SI and EL .565 and .360 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 6.756 relates to the amount of criterion variable without the contribution of predictor variable. For this model SI, t = 14.747, $^{**}p<.01$; EL and t = 9.521, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of SI and EL is significant in predicting the Green Consumer Behaviour of male students.

Multiple Regression Equation for Model 2

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1) and EL (X_2) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 SI + ß_2 EL + εt$

$GCB = 6.756 + .565 SI + .360 EL$

From Table _ it is evident that for Model 3, Beta values (ß) of SI, EL and ERA are .490, .318 and .129 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor

variable. The B values of SI, EL and ERA are .516, .330 and .154 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 2.554 relates to the amount of criterion variable without the contribution of predictor variable. For this model SI, t = 12.962, $^{**}p<.01$; EL, t = 8.694, $^{**}p<.01$ and ERA, t = 3.838, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of SI, EL and ERA is significant in predicting the Green Consumer Behaviour of male students.

Multiple Regression Equation for Model 3

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1), EL (X_2) and ERA (X_3) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 SI + ß_2 EL + ß_3 ERA + εt$

GCB = 2.554 + .516 SI + .330 EL + .154 ERA

Discussion

From the analysis it is clear that for the male student sample, SI (r = .742, $^{**}p<.01$) is having the highest correlation with GCB followed by EL (r = .666, $^{**}p<.01$) and ERA (r = .507, $^{**}p<.01$). The multiple correlations of SI, EL and ERA with GCB (R = .800) reveals that the variables have significant relationship explaining the GCB of male student sample. All the variables have significant correlation with the criterion, yielding F (3, 436) = 258.630, $p<.01$ with $R^2 = .640$. This reveals that the collective contributions of SI, EL and ERA has accounted for 64% variation in GCB of the male student sample. The individual contribution of predictors significantly influencing GCB is equal to 2.554 + .516 SI + .330 EL + .154 ERA. The results of analysis show that Social Influence is very high among the male student sample in inducing GCB. Ecoliteracy has also seen to have a prominent role

followed by a sense of Environmental Responsibility Attribution to Self as factors influencing GCB. Proper education with an environmental orientation focusing on consumer dispositions increases the propensity of Green Consumer behaviour paving the way for least detrimental impact on the environment. Such robust behaviours must be nurtured and conditioned among today's young generation for transforming them as green or environmentally responsible prodigies.

Relative Efficiency of Dimensions of Predictor Variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) in Predicting the Criterion Variable (Green Consumer Behaviour) for the Male Student Sample

The details regarding relative efficiency of dimensions of predictor variables in the individual and collective contribution in predicting the criterion variable (Green Consumer Behaviour) of male student sample are presented in this section.

Table 45 presents inter correlation matrix between the dimensions of predictors and the criterion variable for male student sample.

Table 45

Pearson's Correlation Matrix of Dimensions of Predictor Variables and Criterion Variable for the Male Student Sample

Variable	EAW	EAT	EAC	ERAS	ERAO	PI	TI	PGI	MI	GCB
EAW	1									
EAT	.619**	1								
EAC	.305**	.586**	1							
ERAS	.459**	.442**	.310**	1						
ERAO	-.016	.014	.033	-.343**	1					
PI	.402**	.387**	.280**	.325**	.033	1				
TI	.490**	.478**	.316**	.444**	-.018	.453**	1			
PGI	.338**	.356**	.307**	.400**	.005	.389**	.472**	1		
MI	.464**	.384**	.245**	.422**	.110*	.351**	.430**	.444**	1	
GCB	.660**	.574**	.399**	.651**	-.057	.511**	.600**	.540**	.592**	1

** *Correlation significant at .01 level*

* *Correlation significant at .05 level*

From Table 45 it is evident that there exists significant positive correlation among most of the dimensions of predictor variables and the criterion variable, except for ERAO for the total sample. It is observed that EAW (r = .660, **p<.01) has the highest correlation with GCB followed by ERAS (r = .651, **p<.01) and TI (r = .600, **p<.01). All the predictor variables are also fairly correlated with each other except for ERAO. It can also be observed that ERAO is having a negative correlation (r = -.343) with ERAS and with GCB (r = -.057). Majority of correlation indices obtained are significant at .01 level and a few significant at .05 levels. Since ERAO was not significantly correlated with GCB and with other predictors also, it was not considered for regression analysis. All the significant variables were considered for a stepwise multiple regression analysis.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of dimension of predictors (individual and joint contribution) in predicting the criterion variable. The model summary of stepwise multiple regression analysis with the factors of Green Consumer Behaviour (GCB) for male student sample is presented in Table 46.

Table 46

Regression Model Summary of Dimensions of Predictor Variables and Criterion Variable for the Male Student Sample

Model		R	R Square	Adjusted R Square	R Square Change
1	EAW	.660	.436	.434	.436
2	EAW, ERAS	.767	.589	.587	.153
3	EAW, ERAS, PGI	.802	.643	.640	.054
4	EAW, ERAS, PGI, MI	.819	.670	.667	.028
5	EAW, ERAS, PGI, MI, PI	.829	.688	.684	.018
6	EAW, ERAS, PGI, MI, PI, TI	.836	.699	.695	.011
7	EAW, ERAS, PGI, MI, PI, TI, EAC	.839	.703	.698	.004

Criterion Variable: GCB

Table 46 reveals that in the first step of multiple regression analysis, the variable that enters the model is EAW. For Model 1, the R value (.660) is the correlation between the predictor (EAW) and the criterion (GCB) that shows a positive correlation. The R^2 value (.436) which is the coefficient of determination shows that 44% of the variance of the criterion variable has been significantly explained by the predictor variable. The Adjusted R Square (.434) determines how well the model can be generalised.

In step 2 of regression analysis, ERAS is the variable that enters the model. For Model 2, the multiple correlations between the predictors (EAW, ERAS) and the criterion (GCB) yielded R value of .767 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .589) shows that 59% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW and ERAS. The percentage increase of the variance of GCB (R^2 Change = .153) is 15% by the inclusion of ERAS. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.589 - .587 =.002) .2% shows the amount of decrease in variance if the model were derived from the population.

In step 3, PGI enters the model. For Model 3, the multiple correlations between the predictors (EAW, ERAS, PGI) and the criterion (GCB) yielded R value of .802 which shows a relatively high positive correlation. The coefficient of determination ($R^{2\,=}$ .643) shows that 64% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, ERAS, PGI). The percentage increase of the variance of GCB (R^2 Change = .054) is 5.4% by the inclusion of PGI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.643 - .640 = .003) of .3% shows the amount of decrease in variance if the model were derived from the population.

In step 4, the variable MI enters the model. For Model 4, the multiple correlations between the predictors (EAW, ERAS, PGI, MI) and the criterion (GCB) yielded R value of .819 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .670) shows that 67% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, ERAS, PGI, MI). The percentage increase of the variance of GCB (R^2 Change = .028) is 3% by the inclusion of MI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.670 - .667 = .003) of .3% shows the amount of decrease in variance if the model were derived from the population.

In step 5, the variable PI enters the model. For Model 5, the multiple correlations between the predictors (EAW, ERAS, PGI, MI, PI) and the criterion (GCB) yielded R value of .829 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .688) shows that 69% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, ERAS, PGI, MI, PI). The percentage increase of the variance of GCB (R^2 Change = .018) is 2% by the inclusion of PI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.688 - .684 = .004) of .4% shows the amount of decrease in variance if the model were derived from the population.

In step 6, the variable included in the model is TI. For Model 6, the multiple correlations between the predictors (EAW, ERAS, PGI, MI, PI, TI) and the criterion (GCB) yielded R value of .836 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .699) shows that 70% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, ERAS, PGI, MI, PI, TI). The percentage increase of the variance of GCB (R^2 Change = .011) is 1% by the

inclusion of TI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.699 - .695 = .004) of .4% shows the amount of decrease in variance if the model were derived from the population.

Finally in step 7of the regression analysis, the variable included in the model is EAC. For Model 7, the multiple correlations between the predictors (EAW, ERAS, PGI, MI, PI, TI, EAC) and the criterion (GCB) yielded R value of .839 which shows a relatively high positive correlation. The coefficient of determination ($R^{2 =}$ .703) shows that 70% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, ERAS, PGI, MI, PI, TI, EAC). The percentage increase of the variance of GCB (R^2 Change = .004) is .4% by the inclusion of EAC. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.703 - .698 = .00) of .5% shows the amount of decrease in variance if the model were derived from the population.

The significance of the regression models derived in analysis can be determined from the F values in ANOVA table. Table 47 presents the ANOVA in regression analysis of Male Student Sample

Table 47

Results of ANOVA in Regression of Dimensions of Predictors and Criterion for the Male Student Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	EAW	Regression	8091.113	1	8091.113	337.978	p<.01
		Residual	10485.605	438	23.940		
		Total	18576.718	439			
2	EAW, ERAS	Regression	10935.703	2	5467.852	312.714	p<.01
		Residual	7641.015	437	17.485		
		Total	18576.718	439			
3	EAW, ERAS, PGI	Regression	11936.684	3	3978.895	261.263	p<.01
		Residual	6640.034	436	15.229		
		Total	18576.718	439			
4	EAW, ERAS, PGI, MI	Regression	12451.043	4	3112.761	221.045	p<.01
		Residual	6125.675	435	14.082		
		Total	18576.718	439			
5	EAW, ERAS, PGI, MI, PI	Regression	12781.235	5	2556.247	191.427	p<.01
		Residual	5795.483	434	13.354		
		Total	18576.718	439			
6	EAW, ERAS, PGI, MI, PI, TI	Regression	12983.581	6	2163.930	167.523	p<.01
		Residual	5593.137	433	12.917		
		Total	18576.718	439			
7	EAW, ERAS, PGI, MI, PI, TI, EAC	Regression	13063.506	7	1866.215	146.231	p<.01
		Residual	5513.212	432	12.762		
		Total	18576.718	439			

Criterion Variable: GCB

From Table 47 it is clear that, for Model 1, F (1, 438) = 337.978, **p<.01. The table value of F (1, 438) = 6.70, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This means that the contribution of predictor EAW significantly predicts the GCB of male student sample. In Model 2, F (2, 437) = 312.714, **p<.01. The table

value of F (2, 437) = 4.66, **p<.01. Since the F value is greater than the table value of F, the model is significant at .01 level which implies that the combined contributions of the predictors EAW and ERAS significantly predict GCB of male student sample. In the case of Model 3, F (3, 436) = 261.263, **p<.01. The table value of F (3, 436) = 3.83, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This shows that the joint contributions of the predictors EAW, ERAS and PGI significantly predict GCB of male student sample. For Model 4, F (4, 435) = 221.045, **p<.01. The table value of F (4, 435) = 3.37, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. From this it is evident that the collective contributions of predictors EAW, ERAS, PGI and MI significantly predict GCB of male student sample. It can be seen that for Model 5, F (5, 434) = 191.427, **p<.01. The table value of F (5, 434) = 3.06, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This means that the joint contributions of the predictors EAW, ERAS, PGI, MI and PI significantly predict GCB of male student sample. It is also evident that for Model 6, F (6, 433) = 167.523, **p<.01. The table value of F (6, 433) = 2.85, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This implies that the combined contributions of the predictors EAW, ERAS, PGI, MI, PI and TI significantly predict GCB of students of male student sample. Finally for Model 7, F (7, 432) = 146.231, **p<.01. The table value of F (7, 432) = 2.85, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This implies that the collective contributions of the predictors EAW, ERAS, PGI, MI, PI, TI and EAC significantly predict GCB of male student sample.

Table 48 shows the regression coefficients related to the individual contribution of dimensions of predictor variables in predicting the criterion variable (Green Consumer Behaviour) of male student sample.

Table 48

Regression Coefficients of Dimensions of Predictors' Individual Contribution in Predicting the Criterion Variable for the Male Student Sample

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.149	1.699		18.924	.000
	EAW	.550	.030	.660	18.384	.000
2	(Constant)	21.599	1.671		12.926	.000
	EAW	.382	.029	.458	13.254	.000
	ERAS	.308	.024	.440	12.755	.000
3	(Constant)	15.849	1.713		9.251	.000
	EAW	.340	.027	.407	12.413	.000
	ERAS	.252	.024	.360	10.693	.000
	PGI	.192	.024	.258	8.107	.000
4	(Constant)	12.638	1.731		7.301	.000
	EAW	.291	.028	.349	10.562	.000
	ERAS	.226	.023	.324	9.817	.000
	PGI	.151	.024	.202	6.321	.000
	MI	.159	.026	.204	6.044	.000
5	(Constant)	10.144	1.759		5.768	.000
	EAW	.260	.028	.312	9.455	.000
	ERAS	.218	.022	.312	9.677	.000
	PGI	.124	.024	.167	5.220	.000
	MI	.146	.026	.187	5.686	.000
	PI	.119	.024	.154	4.973	.000
6	(Constant)	8.112	1.804		4.496	.000
	EAW	.235	.028	.281	8.436	.000
	ERAS	.204	.022	.291	9.085	.000
	PGI	.102	.024	.137	4.253	.000
	MI	.136	.025	.174	5.341	.000
	PI	.098	.024	.127	4.087	.000
	TI	.124	.031	.136	3.958	.000
7	(Constant)	6.634	1.888		3.514	.000
	EAW	.228	.028	.273	8.202	.000
	ERAS	.197	.022	.282	8.786	.000
	PGI	.095	.024	.128	3.954	.000
	MI	.136	.025	.174	5.364	.000
	PI	.093	.024	.120	3.872	.000
	TI	.118	.031	.129	3.766	.000
	EAC	.056	.022	.072	2.503	.013

Criterion Variable: GCB

From Table 48 it can be seen that for Model 1, Beta (ß) value of EAW is .660 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value of EAW .550 represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 32.149 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 18.384, $^{**}p<.01$ is a significant predictor of GCB of male student sample.

Multiple Regression Equation for Model 1

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 EAW + \varepsilon t$

$GCB = 32.149 + .550 EAW$

For Model 2, Beta (ß) values of EAW and ERAS.458, .440 respectively represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW and ERAS are .382, .308 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 21.599 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 13.254, $^{**}p<.01$ and ERAS, t = 12.755, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW and ERAS are significant in predicting the Green Consumer Behaviour of male student sample.

Multiple Regression Equation for Model 2

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) and ERAS (X_2) of general form $Y= ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ ERAS + \varepsilon t$

$GCB = 21.599 + .382\ EAW + .308\ ERAS$

For Model 3, Beta (ß) values of EAW, ERAS and PGI are .407, .360 and .258 respectively represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS and PGI are .340, .252 and .192 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 15.849 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 12.413, $^{**}p<.01$; ERAS, t = 10.693, $^{**}p<.01$ and PGI, t = 8.107, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS and PGI are significant in predicting the Green Consumer Behaviour of male student sample.

Multiple Regression Equation for Model 3

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2) and PGI (X_3) of general form $Y=ß_0 + ß_1\ X_1 + ß_2\ X_2 +.....+ ß_n\ X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ ERAS + ß_3\ PGI + \varepsilon t$

$GCB = 15.849 + .340\ EAW + .252\ ERAS + .192\ PGI$

For Model 4, Beta (ß) values of EAW, ERAS, PGI and MI are .349, .324, .202 and .204 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, PGI and MI are .291, .226, .151 and .159 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 12.638 relates to the amount of criterion variable without the contribution of predictor variable.

For this model EAW, t = 10.562, **p<.01; ERAS, t = 9.817, **p<.01; PGI, t = 6.321, **p<.01 and MI, t = 6.044, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, PGI and MI are significant in predicting the Green Consumer Behaviour of male student sample.

Multiple Regression Equation for Model 4

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), PGI (X_3) and MI (X_4) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1$ EAW $+ ß_2$ ERAS $+ ß_3$ PGI $+ ß_4$ MI $+ \varepsilon t$

GCB = 12.638 + .291 EAW + .226 ERAS + .151 PGI + .159 MI

For Model 5, Beta (ß) values of EAW, ERAS, PGI, MI and PI are .312, .312, .167, .187 and .154 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, PGI, MI and PI are .260, .218, .124, .146 and .119 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 10.144 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 9.455, **p<.01; ERAS, t = 9.667, **p<.01; PGI, t = 5.220, **p<.01; MI, t = 5.686, **p<.01 and PI, t = 4.973 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, PGI, MI and PI are significant in predicting the Green Consumer Behaviour of male student sample.

Multiple Regression Equation for Model 5

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), PGI (X_3), MI (X_4) and PI (X_5) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ ERAS + ß_3\ PGI + ß_4\ MI + ß_5\ PI + εt$

$GCB = 10.144 + .260\ EAW + .218\ ERAS + .124\ PGI + .146\ MI + .119\ PI$

For Model 6, Beta (ß) values of EAW, ERAS, PGI, MI, PI and TI are .281, .291, .137, .174, .127 and .136 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, PGI, MI, PI and TI are .235, .204, .102, .136, .098 and .124 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 8.112 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 8.436, $^{**}p<.01$; ERAS, t = 9.085, $^{**}p<.01$; PGI, t = 4.253, $^{**}p<.01$; MI, t = 5.341, $^{**}p<.01$; PI, t = 4.087, $^{**}p<.01$ and TI, t = 3.958, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, PGI, MI, PI and TI are significant in predicting the Green Consumer Behaviour of male student sample.

Multiple Regression Equation for Model 6

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), PGI (X_3), MI (X_4), PI (X_5) and TI (X_6) of general form $Y= ß_0 + ß_1\ X_1 + ß_2\ X_2 +.....+ ß_n\ X_n + εt$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ ERAS + ß_3\ PGI + ß_4\ MI + ß_5\ PI + ß_6\ TI + εt$

$GCB = 8.112 + .235\ EAW + .204\ ERAS + .102\ PGI + .136\ MI + .098\ PI + .124\ TI$

Finally, for Model 7, Beta (ß) values of EAW, ERAS, PGI, MI, PI, TI and EAC are .273, .282, .128, .174, .120, .129 and .072 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, PGI,

MI, PI, TI and EAC are .228, .197, .095, .136, .093, .118 and .056 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 6.634 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 8.202, **p<.01; ERAS, t = 8.786, **p<.01; PGI, t = 3.954, **p<.01; MI, t = 5.364, **p<.01; PI, t = 3.872, **p<.01; TI, t = 3.766, **p<.01 and EAC, t = 2.503, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, PGI, MI, PI, TI and EAC are significant in predicting the Green Consumer Behaviour of male student sample.

Multiple Regression Equation for Model 7

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), PGI (X_3), MI (X_4), PI (X_5), TI (X_6) and EAC (X_7) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1$ EAW $+ ß_2$ ERAS $+ ß_3$ PGI $+ ß_4$ MI $+ ß_5$ PI $+ ß_6$ TI $+ ß_7$ EAC $+ \varepsilon t$

GCB = 6.634 + .228 EAW + .197 ERAS + .095 PGI + .136 MI + .093 PI + .118 TI + .056 EAC

Discussion

From the analysis it is evident that 7 dimensions of predictors have significant relationship in explaining the GCB (r = .839, **p<.01) of male student sample. It is observed that EAW (r = .660, **p<.01) is having the highest correlation with GCB followed by ERAS (r = .651, **p<.01), TI (.600), MI (r = .592, **p<.01) and PGI (r = .540, p<.01). All the significant variables enters the model except for EAT (.574, **p<.01) and ERAO (-.057, **p>.01). It is to be taken in to account that even though EAT does not enters

the model, it is found to have a positive correlation with GCB. This implies that EAT has a significant influence on GCB of the male student sample. ERAO seems to have a negative correlation with GCB for the male student sample. A significant model (EAW, ERAS, PGI, MI, PI, TI, EAC) yielding F (7, 432) = 146.231, $p<.01$, and $R^2 = .703$. This reveals that the collective contributions of the predictors have accounted for 70% of variance of GCB applicable to the male student sample. The individual contribution of predictors significantly contributing to GCB is equal to 6.634 + .228 EAW + .197 ERAS + .095 PGI + .136 MI + .093 PI + .118 TI + .056 EAC. The results reveal that the dimensions of Ecoliteracy has a greater influence on GCB followed by Social Influence, amongst which Peer Groups and Media having greater impact on the GCB of male student sample. The results also reveal that the influence of parents and teachers is also influencing the students. The environment related past behaviours reinforces their propensity towards being ecofriendly which is also manifested in the consumer behaviour of male students. A proper reaffirming is needed whereby environmental education with a consumer focus that broadens the knowledge horizons by gaining insights on the principles, facts and concepts through imparting indepth knowledge of content and process skills in tandem. This must heighten the knowledge such that students are capacitated to re-evaluate their actions towards the environment as responsible consumers.

Relative Efficiency of Predictor Variables (individual and collective contribution) in Predicting the Criterion Variable for the Female Student Sample

The relative efficiency of predictor variables in the individual and collective contribution in predicting the criterion variable for female student sample was determined. The details regarding this are presented in this section.

Table 49 presents the inter correlation matrix between the predictors and the criterion variable of female students.

Table 49

Pearson's Correlation Matrix of Predictor Variables (EL, ERA, SI) and Criterion Variable (GCB) for the Female Student Sample

Variables	EL	ERA	SI	GCB
EL	1			
ERA	.579**	1		
SI	.643**	.583**	1	
GCB	.692**	.571**	.740**	1

**Correlation significant at .01 level

Table 49 reveals that there exists significant positive correlation among the predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) for the female student sample. It is evident that SI is having the highest correlation ($r = .740$, $^{**}p<.01$) with GCB followed by EL ($r = .692$, $^{**}p<.01$) and ERA ($r = .571$, $^{**}p<.01$). All the correlation indices obtained are significant at .01 level and hence were considered for a stepwise multiple regression analysis.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of predictors (individual and joint contribution) in predicting the criterion variable.

The model summary of stepwise multiple regression analysis with the factors of Green Consumer Behaviour (GCB) constituting Ecoliteracy (EL), Environmental Responsibility Attribution (ERA) and Social Influence (SI) of female student sample is presented in Table 50.

Table 50

Regression Model Summary of Predictor Variables (EL, ERA, SI) and Criterion Variable (GCB) for the Female Student Sample

Model		R	R Square	Adjusted R Square	R Square Change
1	SI	.740	.548	.547	.548
2	SI, EL	.792	.628	.626	.080
3	SI, EL, ERA	.797	.635	.633	.007

Criterion Variable: GCB

From Table 50 it is clear that in step 1 of multiple regression analysis, the variable that enters the model is SI. For Model 1the R value (.740) which is the correlation between the predictor (SI) and the criterion (GCB) shows a relatively strong positive correlation. The R^2 value (.548) which is the coefficient of determination shows that 55% of the variance of the criterion variable has been significantly explained by the predictor variable. The Adjusted R Square (.547) determines how well the model can be generalised.

In step 2 of the analysis, the next variable that enters the model is EL. For Model 2, the multiple correlations between the predictors (SI and EL) and the criterion (GCB) yielded R value of .792 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .628) shows that 63% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables SI and EL. The percentage increase of the variance of GCB (R^2 Change = .080) is 8% by the inclusion of EL. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.628 - .626 =.002) of .2% shows the amount of decrease in variance if the model were derived from the population.

In step 3 of multiple regression analysis, the variable that enters the model is ERA. For Model 3, the multiple correlations between the predictors

(SI, EL and ERA) and the criterion (GCB) yielded R value of .797 which shows a relatively high positive correlation. The coefficient of determination (R^2 =.635) shows that 64% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables SI, EL and ERA. The percentage increase of the variance of GCB (R^2 Change = .007) is .7% by the inclusion of ERA. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.635 - .633 =.002) of .2% shows the amount of decrease in variance if the model were derived from the population.

The ANOVA table obtained in regression analysis shows the significance of the models derived. This can be determined by looking at the F values in the ANOVA table. Table 51 presents the ANOVA in regression analysis of male student sample.

Table 51

Results of ANOVA in Regression of Predictors and Criterion for the Female Student Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	SI	Regression	12103.967	1	12103.967	675.643	p<.01
		Residual	9996.417	558	17.915		
		Total	22100.384	559			
2	SI, EL	Regression	13872.323	2	6936.162	469.545	p<.01
		Residual	8228.061	557	14.772		
		Total	22100.384	559			
3	SI, EL, ERA	Regression	14027.215	3	4675.738	322.019	p<.01
		Residual	8073.169	556	14.520		
		Total	22100.384	559			

Dependent Variable: GCB

Table 51 shows that, for Model 1, the obtained F (1, 558) = 675.643, **p<.01is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (1, 558) = 6.69, **p<.01 that implies the contribution of Social Influence significantly predicts Green Consumer

Behaviour of female student sample. Considering Model 2, the obtained F (2, 557) = 469.545, **p<.01is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (2, 557) = 4.65, **p<.01. This means that the collective contributions of Social Influence and Ecoliteracy are significant in predicting Green Consumer Behaviour of female student sample. Finally, in the case of Model 3, the obtained F (3, 556) = 322.019, **p<.01is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (3, 556) = 3.82, **p<.01. This shows that the joint contributions of Social Influence, Ecoliteracy and Environmental Responsibility Attribution significantly predict Green Consumer Behaviour of female student sample.

Table 52 shows the regression coefficients related to the individual contribution of predictors (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) in predicting the criterion variable (Green Consumer Behaviour) for female student sample.

Table 52

Regression Coefficients of Predictors' Individual Contribution in Predicting the Criterion Variable for the Female Student Sample

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17.783	1.880		9.461	.000
	SI	.802	.031	.740	25.993	.000
2	(Constant)	9.307	1.874		4.965	.000
	SI	.545	.037	.503	14.892	.000
	EL	.389	.036	.369	10.941	.000
3	(Constant)	5.865	2.136		2.746	.006
	SI	.502	.039	.463	13.036	.000
	EL	.349	.037	.331	9.350	.000
	ERA	.146	.045	.109	3.266	.001

Dependent Variable: GCB

From Table 52 it can be seen that for Model 1, Beta value (ß) of SI is .740 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value (B_1 = .802) represents 80% change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 17.783 relates to the amount of criterion variable without the contribution of predictor variable. Thus, for Model 1, if SI is increased by one unit, the model predicts .802 units increase in Green Consumer Behaviour. The t value 25.993 is statistically significant at .01 level. Hence, it can be inferred that the individual contribution of SI is significant in predicting the Green Consumer Behaviour of female students.

Multiple Regression Equation for Model 1

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 SI + \varepsilon t$

$GCB = 17.783 + .802 SI$

From Table 52 it is evident that for Model 2, Beta values (ß) of SI and EL are .503 and .369 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of SI and EL are .545 and .389 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 9.307 relates to the amount of criterion variable without the contribution of predictor variable. For this model SI, t = 14.892, $^{**}p<.01$ and EL, t = 10.941, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of SI and EL is significant in predicting the Green Consumer Behaviour of female students.

Multiple Regression Equation for Model 2

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1) and EL (X_2) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 SI + ß_2 EL + \varepsilon t$

$GCB = 9.307 + .545 SI + .389 EL$

From Table _ it is evident that for Model 3, Beta values (ß) of SI, EL and ERA are .463, .331 and .109 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of SI, EL and ERA are .502, .349 and .146 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 5.865 relates to the amount of criterion variable without the contribution of predictor variable. For this model SI, t = 13.036, $^{**}p<.01$; EL, t = 9.350, $^{**}p<.01$ and ERA, t = 3.266, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of SI, EL and ERA is significant in predicting the Green Consumer Behaviour of female students.

Multiple Regression Equation for Model 3

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1), EL (X_2) and ERA (X_3) of general form $Y= ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 SI + ß_2 EL + ß_3 ERA + \varepsilon t$

$GCB = 5.865 + .502 SI + .349 EL + .146 ERA$

Discussion

The results of analysis reveal that SI (r = .740, **p<.01) is having the highest correlation with GCB followed by EL (r = .692, **p<.01) and ERA (r = .571, **p<.01) for the female student sample. All the significant variables enter the model yielding F (3,556) = 322.019, **p<.01, and R^2 = .635.this shows that the joint contributions of SI, EL and ERA has accounted for 64% of variance of GCB for the female student sample. The individual contribution of predictors that significantly influence GCB of female student sample is equal to 5.865 + .502 SI + .349 EL + .146 ERA. The result of analysis reveals that social factors are highly influential to female students in inducing GCB similar to their male counterparts. In addition to this, Ecoliteracy and Environmental Responsibility Attribution to Self also play a major role in influencing the Green Consumer behaviour of female students. The result reiterates that educating students on environment along with developing sensitivity and sense of responsibility towards the environment is a cardinal part of education towards sustainability. Apart from this, the results are reaffirming the fact that students are influenced by parents, teachers and peer groups. This emphasises the need for educating oneself and educating others providing adequate influence for bringing about transformational changes in the society. Media being yet another immense source of influence, there is an essentiality to capacitate students to become tech savvy for exploring information at the same time being able to evaluate the credibility of such information burgeoning in media in this technological age.

Relative Efficiency of Dimensions of Predictor Variable (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) in Predicting the Criterion Variable (Green Consumer Behaviour) for the Female Student Sample

The details regarding relative efficiency of dimensions of predictor variables in the individual and collective contribution in predicting the criterion variable of female student sample are presented in this section.

Table 53 presents inter correlation matrix between the dimensions of predictors and the criterion variable of female student sample.

Table 53

Pearson's Correlation Matrix of Dimensions of Predictor Variables and Criterion Variable for the Female Student Sample

variable	EAW	EAT	EAC	ERAS	ERAO	PI	TI	PGI	MI	GCB
EAW	1									
EAT	.545**	1								
EAC	.086*	.557**	1							
ERAS	.564**	.594**	.420**	1						
ERAO	.156**	.135**	.056	-.015	1					
PI	.419**	.455**	.308**	.495**	.218**	1				
TI	.458**	.432**	.259**	.485**	.114**	.469**	1			
PGI	.494**	.419**	.217**	.473**	.154**	.497**	.509**	1		
MI	.522**	.503**	.315**	.532**	.125**	.496**	.441**	.543**	1	
GCB	.645**	.585**	.390**	.636**	.171**	.542**	.611**	.566**	.625**	1

** *Correlation significant at .01 level*
* *Correlation significant at .05 level*

Table 53 reveals that there exists significant positive correlation among most of the dimensions of predictor variables and the criterion variable, except for ERAO for the female student sample. It is observed that EAW (r = .645, **p<.01) has the highest correlation with GCB followed by ERAS (r = .636, **p<.01) and MI (r = .625, **p<.01). All the predictor variables are also

fairly correlated with each other except for ERAO. It can also be observed that ERAO is having the lowest correlation (r = .171) with GCB. Majority of correlation indices obtained are significant at .01 level and a few significant at .05 levels. All the significant variables are entered for regression analysis.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of dimensions of predictors (individual and collective contribution) in predicting the criterion variable. The model summary of stepwise multiple regression analysis with the factors of Green Consumer Behaviour (GCB) for the female student sample is presented in Table 54.

Table 54

Regression Model Summary of Dimensions of Predictor Variables and Criterion Variable for the Female Student Sample

Model		R	R Square	Adjusted R Square	R Square Change
1	EAW	.645	.415	.414	.415
2	EAW, TI	.736	.542	.540	.126
3	EAW, TI, EAC	.779	.607	.605	.065
4	EAW, TI, EAC, MI	.802	.644	.641	.036
5	EAW, TI, EAC, MI, ERAS	.809	.654	.651	.011
6	EAW, TI, EAC, MI, ERAS, PGI	.812	.660	.656	.005
7	EAW, TI, EAC, MI, ERAS, PGI, PI	.815	.663	.659	.004

Criterion Variable: GCB

From Table 54 it is evident that in the step 1 of multiple regression analysis the variable that enters the model is EAW. For Model 1, the R value (.645) is the correlation between the predictor (EAW) and the criterion (GCB) shows a strong positive correlation. The R^2 value (.415) which is the coefficient of determination shows that 42% of the variance of the criterion

variable has been significantly explained by the predictor variable. The Adjusted R Square (.414) determines how well the model can be generalised.

In step 2 of regression, the next variable included in the model is TI. For Model 2, the multiple correlations between the predictors (EAW, TI) and the criterion (GCB) yielded R value of .736 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .542) shows that 54% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW and TI. The percentage increase of the variance of GCB (R^2 Change = .126) is 13% by the inclusion of TI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.542 - .540 =.002) .2% shows the amount of decrease in variance if the model were derived from the population.

In step 3 of regression analysis, the next variable that enters the model is EAC. For Model 3, the multiple correlations between the predictors (EAW, TI, EAC) and the criterion (GCB) yielded R value of .779 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .607) shows that 61% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, TI, EAC). The percentage increase of the variance of GCB (R^2 Change = .065) is 7% by the inclusion of EAC. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.607 - .605 = .002) of .2% shows the amount of decrease in variance if the model were derived from the population.

In step 4, the variable included in the model is MI. For Model 4, the multiple correlations between the predictors (EAW, TI, EAC, MI) and the criterion (GCB) yielded R value of .802 which shows a relatively high positive correlation. The coefficient of determination (R^2 =.644) shows that 64% of the variance of the criterion variable (GCB) has been significantly

explained by the predictor variables (EAW, TI, EAC, MI). The percentage increase of the variance of GCB (R^2 Change = .036) is 4% by the inclusion of MI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.644 - .641 = .003) of .3% shows the amount of decrease in variance if the model were derived from the population.

In step 5 of multiple regression analysis, the variable that enters the model is ERAS. For Model 4, the multiple correlations between the predictors (EAW, TI, EAC, MI, ERAS) and the criterion (GCB) yielded R value of .809 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .654) shows that 65% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, TI, EAC, MI, ERAS). The percentage increase of the variance of GCB (R^2 Change = .011) is 1% by the inclusion of ERAS. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.654 - .651 = .003) of .3% shows the amount of decrease in variance if the model were derived from the population.

In step 6 of regression, the variable included in the model is PGI. For Model 4, the multiple correlations between the predictors (EAW, TI, EAC, MI, ERAS, PGI) and the criterion (GCB) yielded R value of .812 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .660) shows that 66% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, TI, EAC, MI, ERAS, PGI). The percentage increase of the variance of GCB (R^2 Change = .005) is .5% by the inclusion of PGI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.660 - .656 = .004) of .4% shows the amount of decrease in variance if the model were derived from the population.

In step 7, the variable PI is included in the model. For Model 4, the multiple correlations between the predictors (EAW, TI, EAC, MI, ERAS, PGI, PI) and the criterion (GCB) yielded R value of .815 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .663) shows that 66% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables (EAW, TI, EAC, MI, ERAS, PGI, PI). The percentage increase of the variance of GCB (R^2 Change = .004) is .4% by the inclusion of PI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.663 - .659 = .004) of .4% shows the amount of decrease in variance if the model were derived from the population.

The significance of the models derived from regression analysis can be determined from the F values in the ANOVA table. Table 55 presents the ANOVA in regression analysis of female student sample.

Table 55

Results of ANOVA in Regression of Dimensions of Predictors and Criterion for the Female Student Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	EAW	Regression	9182.475	1	9182.475	396.645	p<.01
		Residual	12917.909	558	23.150		
		Total	22100.384	559			
2	EAW, TI	Regression	11971.917	2	5985.959	329.189	p<.01
		Residual	10128.467	557	18.184		
		Total	22100.384	559			
3	EAW, TI, EAC	Regression	13419.052	3	4473.017	286.477	p<.01
		Residual	8681.332	556	15.614		
		Total	22100.384	559			
4	EAW, TI, EAC, MI	Regression	14222.259	4	3555.565	250.483	p<.01
		Residual	7878.125	555	14.195		
		Total	22100.384	559			
5	EAW, TI, EAC, MI, ERAS	Regression	14464.522	5	2892.904	209.887	p<.01
		Residual	7635.862	554	13.783		
		Total	22100.384	559			
6	EAW, TI, EAC, MI, ERAS, PGI	Regression	14584.585	6	2430.764	178.852	p<.01
		Residual	7515.799	553	13.591		
		Total	22100.384	559			
7	EAW, TI, EAC, MI, ERAS, PGI, PI	Regression	14662.958	7	2094.708	155.468	p<.01
		Residual	7437.426	552	13.474		
		Total	22100.384	559			

Criterion Variable: GCB

From Table 55 it is clear that, for Model 1, F (1, 558) = 396.645, **p<.01. The table value of F (1, 558) = 6.69. As the F value is greater than the table value of F, the model is significant at .01 level. This implies that the contribution of predictor EAW significantly predicts GCB of female student sample. For Model 2, F (2, 557) = 329.189, **p<.01. The table value of F (2, 557) = 4.65. As the F value is greater than the table value of F, the model is

significant at .01 level. This means that the collective contributions of predictors EAW and TI significantly predict GCB of female student sample. In the case of Model 3, F (3, 556) = 286.477, $^{**}p<.01$. The table value of F (3, 556) = 3.82. Since the F value is greater than the table value of F, the model is significant at .01 level which means that the joint contributions of predictors EAW, TI and EAC significantly predict GCB of female student sample. For Model 4, F (4, 555) = 250.483, $^{**}p<.01$. The table value of F(4, 555) = 3.36. As the F value is greater than the table value of F, the model is significant at .01 level. This means that the combined contributions of predictors EAW, TI, EAC and MI significantly predict GCB of female student sample. For Model 5, F (5, 554) = 209.887, $^{**}p<.01$. The table value of F for 5 (5, 554) = 3.05. As the F value is greater than the table value of F, the model is significant at .01 level. From this it is evident that the collective contributions of predictors EAW, TI, EAC, MI and ERAS significantly predict GCB of female student sample. In the case of Model 6, F (6, 553) = 178.852, $^{**}p<.01$. The table value of F (6, 553) = 2.84. As the F value is greater than the table value of F, the model is significant at .01 level. This means that the collective contributions of predictors EAW, TI, EAC, MI, ERAS and PGI significantly predict GCB of female student sample. Finally for Model 7, F (7, 552) = 155.468, $^{**}p<.01$. The table value of F (7, 552) = 2.84. As the F value is greater than the table value of F, the model is significant at .01 level. This implies that the joint contributions of predictors EAW, TI, EAC, MI, ERAS, PGI and PI significantly predict GCB of female student sample.

Table 56 shows the regression coefficients related to the individual contribution of dimensions of predictor variables in predicting the criterion variable (Green Consumer Behaviour) for female student sample.

Table 56

Regression Coefficients of Dimensions of Predictors' Individual Contribution in Predicting the Criterion Variable for the Female Student Sample

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	34.490	1.616		21.341	.000
	EAW	.544	.027	.645	19.916	.000
2	(Constant)	21.994	1.752		12.554	.000
	EAW	.390	.027	.462	14.305	.000
	TI	.367	.030	.400	12.386	.000
3	(Constant)	13.843	1.831		7.560	.000
	EAW	.399	.025	.472	15.790	.000
	TI	.299	.028	.326	10.561	.000
	EAC	.185	.019	.265	9.627	.000
4	(Constant)	10.401	1.805		5.764	.000
	EAW	.315	.027	.373	11.844	.000
	TI	.257	.028	.280	9.312	.000
	EAC	.146	.019	.210	7.695	.000
	MI	.205	.027	.241	7.522	.000
5	(Constant)	8.736	1.822		4.794	.000
	EAW	.268	.028	.317	9.404	.000
	TI	.235	.028	.256	8.483	.000
	EAC	.116	.020	.167	5.786	.000
	MI	.183	.027	.215	6.687	.000
	ERAS	.140	.033	.149	4.192	.000
6	(Constant)	8.331	1.815		4.591	.000
	EAW	.254	.029	.301	8.854	.000
	TI	.212	.029	.231	7.440	.000
	EAC	.116	.020	.166	5.812	.000
	MI	.159	.028	.187	5.629	.000
	ERAS	.131	.033	.139	3.937	.000
	PGI	.078	.026	.097	2.972	.003
7	(Constant)	7.929	1.814		4.370	.000
	EAW	.250	.029	.296	8.738	.000
	TI	.201	.029	.219	6.964	.000
	EAC	.111	.020	.159	5.542	.000
	MI	.148	.029	.174	5.187	.000
	ERAS	.119	.033	.127	3.580	.000
	PGI	.066	.027	.082	2.482	.013
	PI	.065	.027	.076	2.412	.016

Criterion Variable: GCB

It is clear From Table 56 that for Model 1, Beta (ß) value of EAW is .645 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value of EAW .544 represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 34.490 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 21.341, p<.01 is a significant predictor of GCB of female student sample.

Multiple Regression Equation for Model 1

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EAW + εt$

$GCB = 34.490 + .544 EAW$

For Model 2, Beta (ß) values of EAW and TI are .462 and .400 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW and TI are .390 and .367 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 21.994 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 14.305, **p<.01 and TI, t = 12.386, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW and TI are significant in predicting the Green Consumer Behaviour of female student sample.

Multiple Regression Equation for Model 2

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) and TI (X_2) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 TI + εt$

$GCB = 21.994 + .390 EAW + .367 TI$

For Model 3, Beta (ß) values of EAW, TI and EAC are .472, .326 and .265 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI and EAC are .399, .299 and .185 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 13.843 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 15.790, $^{**}p<.01$; TI, t = 10.561, $^{**}p<.01$ and EAC, t = 9.627, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, TI and EAC are significant in predicting the Green Consumer Behaviour of female student sample.

Multiple Regression Equation for Model 3

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2) and EAC (X_3) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 TI + ß_3 EAC + εt$

$GCB = 13.843 + .399 EAW + .299 TI + .185 EAC$

For Model 4, Beta (ß) values of EAW, TI, EAC and MI are .373, .280, .210 and .241 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI, EAC and MI are .315, .257, .146 and .205 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 10.401 relates to the amount of criterion variable without the contribution of predictor variable.

For this model EAW, t = 11.844, **p<.01; TI, t = 9.312, **p<.01; EAC, t = 7.695, **p<.01 and MI, t = 7.522, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, TI, EAC and MI are significant in predicting the Green Consumer Behaviour of female student sample.

Multiple Regression Equation for Model 4

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2), EAC (X_3) and MI (X_4) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 TI + ß_3 EAC + ß_4 MI + εt$

$GCB = 10.401 + .315 EAW + .257 TI + .146 EAC + .205 MI$

For Model 5, Beta (ß) values of EAW, TI, EAC, MI and ERAS are .317, .256, .167, .215 and .149 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI, EAC, MI and ERAS are .268, .235, .116, .183 and .140 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 8.736 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 9.404, **p<.01; TI, t = 8.483, **p<.01; EAC, t = 5.786, **p<.01; MI, t = 6.687, **p<.01 and ERAS, t = 4.192, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, TI, EAC, MI and ERAS are significant in predicting the Green Consumer Behaviour of female student sample.

Multiple Regression Equation for Model 5

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2), EAC (X_3), MI (X_4) and ERAS (X_5) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ TI + ß_3\ EAC + ß_4\ MI + ß_5\ ERAS + εt$

$GCB = 8.736 + .268\ EAW + .235\ TI + .116\ EAC + .183\ MI + .140\ ERAS$

For Model 6, Beta (ß) values of EAW, TI, EAC, MI, ERAS and PGI are .301, .231, .166, .187, .139 and .097 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI, EAC, MI, ERAS and PGI are .254, .212, .116, .159, .131 and .078 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 8.331 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 8.854, $^{**}p<.01$; TI, t = 7.440, $^{**}p<.01$; EAC, t = 5.812, $^{**}p<.01$; MI, t = 5.629, $^{**}p<.01$; ERAS, t = 3.937, $^{**}p<.01$ and PGI, t = 2.927, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, TI, EAC, MI, ERAS and PGI are significant in predicting the Green Consumer Behaviour of female student sample.

Multiple Regression Equation for Model 6

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2), EAC (X_3), MI (X_4), ERAS (X_5) and PGI (X_6) of general form $Y=ß_0 + ß_1\ X_1 + ß_2\ X_2 +.....+ ß_n\ X_n + εt$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ TI + ß_3\ EAC + ß_4\ MI + ß_5\ ERAS + ß_6\ PGI + εt$

$GCB = 8.331 + .254\ EAW + .212\ TI + .116\ EAC + .159\ MI + .131\ ERAS + .078\ PGI$

For Model 7, Beta (ß) values of EAW, TI, EAC, MI, ERAS, PGI and PI are .296, .219, .159, .174, ,127, .082 and .076 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI, EAC, MI, ERAS, PGI and PI

are .250, .201, .111, .148, .119, .066 and .065 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 7.929 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 8.738, **p<.01; TI, t = 6.964, **p<.01; EAC, t = 5.542, **p<.01; MI, t = 5.187, **p<.01; ERAS, t = 3.580, **p<.01; PGI, t = 2.482, **p<.01 and PI, t = 2.412, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, TI, EAC, MI, ERAS, PGI and PI are significant in predicting the Green Consumer Behaviour of female student sample.

Multiple Regression Equation for Model 7

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2), EAC (X_3), MI (X_4), ERAS (X_5), PGI (X_6) and PI (X_7) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1$ EAW $+ ß_2$ TI $+ ß_3$ EAC $+ ß_4$ MI $+ ß_5$ ERAS $+ ß_6$ PGI $+ ß_7$ PI $+ \varepsilon t$

GCB = 7.929 + .250 EAW + .201 TI + .111 EAC + .148 MI + .119 ERAS + .066 PGI + .065 PI

Discussion

The analysis of result reveals that 7 dimensions of predictors have significant relationship in explaining the GCB (R = .815, **p<.01) of the female student sample. Amongst these predictors, EAW (r = .645, **p<.01) has the highest correlation with GCB followed by ERAS (r = .636, **p>01) and MI (r = .625, **p<.01). The significant variables enter the model except for EAT (r = .585, **p<.01) and ERAO (r = .171, **p<.01). It is observed that even though EAT did not enter the model, it is having a significant positive correlation with GCB which implies that it has significant influence on the Green Consumer Behaviour of the female student sample. ERAO is having a

low correlation and hence it is excluded from the model owing to its insignificant relationship to influence GCB of female student sample. A significant model is yielded (EAW, TI, EAC, MI, ERAS, PGI, PI) with F (7, 552) = 155.468, $^{**}p<.01$), and R^2 = .663. This indicates that the collective contributions of predictors have accounted for 66% of variance of GCB which is applicable to the female student sample. The individual contribution of predictors significantly contributing to GCB is equal to 7.929 + .250 EAW + .201 TI + .111 EAC + .148 MI + .119 ERAS + .066 PGI + .065 PI. From this it is clear that the female students' GCB is highly influenced by EAW. The influence of teachers and media are also evident in inducing green behaviour. Upholding a sense of responsibility towards the environment also has significant influence on students to manifest GCB. Apart from this, social factors like Peer group Influence and Parental Influence also become motivational factors for GCB among female students. The results throw light on the prominent role of Higher Education Institutions as centres for learning for sustainability. One of the major purpose of HE is to address the immediate issues of society, the present day educational efforts to some extent take initiatives and implements it at societal levels. However, the results indicate that the strength of influence of predictors needs to be much more to produce a highly significant impact. Hence HE endeavours need to be much more organised in tandem with the increasing demands of an emerging society and nation.

Relative Efficiency of Predictor Variables (individual and collective contribution) in Predicting the Criterion Variable for the Urban Student Sample

The relative efficiency of predictor variables in the individual and collective contributions in predicting the criterion variable for urban student

sample was determined. The details regarding this are presented in this section.

Table 57 presents the inter correlation matrix between the predictors and the criterion variable of urban students.

Table 57

Pearson's Correlation Matrix of Predictor Variables (EL, ERA, SI) and Criterion Variable (GCB) for the Urban Student Sample

Variables	EL	ERA	SI	GCB
EL	1			
ERA	.438**	1		
SI	.595**	.499**	1	
GCB	.673**	.500**	.727**	1

**Correlation significant at .01 level

Table 57 reveals that there exists significant positive correlation among the predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) for urban student sample. It is evident that SI is having the highest correlation ($r = .727$, $^{**}p<.01$) with GCB followed by EL ($r = .673$, $^{**}p<.01$) and ERA ($r = .500$, $^{**}p<.01$). All the correlation indices obtained are significant at .01 level. The significant predictor variables were considered for the regression analysis.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of predictors (individual and collective contribution) in predicting the criterion variable.

The model summary of stepwise multiple regression analysis with the factors of Green Consumer Behaviour (GCB) constituting Ecoliteracy (EL), Environmental Responsibility Attribution (ERA) and Social Influence (SI) of urban student sample is presented in Table 58.

Table 58

Regression Model Summary of Predictor Variables (EL, ERA, SI) and Criterion Variable (GCB) for the Urban Student Sample

	Model	R	R Square	Adjusted R Square	R Square Change
1	SI	.727	.529	.528	.529
2	SI, EL	.786	.618	.616	.089
3	SI, EL, ERA	.792	.628	.626	.010

Criterion Variable: GCB

Table 58 reveals that in the step 1 of multiple regression analysis, the first variable included in the model is SI. The R value (.727) which is the correlation between the predictor (SI) and the criterion (GCB) shows a relatively strong positive correlation. The R^2 value (.529) which is the coefficient of determination shows that 53% of the variance of the criterion variable has been significantly explained by the predictor variable. The Adjusted R Square (.528) determines how well the model can be generalised.

In step 2 of regression, the next variable that enters the model is EL. For Model 2, the multiple correlations between the predictors (SI and EL) and the criterion (GCB) yielded R value of .786 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .618) shows that 62% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables SI and EL. The percentage increase of the variance of GCB (R^2 Change = .089) is 9% by the inclusion of EL. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.618 - .616 =.002) of .2% shows the amount of decrease in variance if the model were derived from the population.

In step 3 of regression, the variable ERA is included in the model. For Model 3, the multiple correlations between the predictors (SI, EL and ERA)

and the criterion (GCB) yielded R value of .792 which shows a relatively high positive correlation. The coefficient of determination (R^2 =.628) shows that 63% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables SI, EL and ERA. The percentage increase of the variance of GCB (R^2 Change = .010) is 1% by the inclusion of ERA. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.628 - .626 =.002) of .2% shows the amount of decrease in variance if the model were derived from the population.

The F values in the ANOVA table in regression analysis gives the significance of the regression models derived from analysis. Table 59 presents the ANOVA in regression analysis of urban student sample.

Table 59

Results of ANOVA in Regression of Predictors and criterion for the Urban Student Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	SI	Regression	10752.286	1	10752.286	534.899	p<.01
		Residual	9588.424	477	20.102		
		Total	20340.710	478			
2	SI, EL	Regression	12567.508	2	6283.754	384.792	p<.01
		Residual	7773.202	476	16.330		
		Total	20340.710	478			
3	SI, EL, ERA	Regression	12772.108	3	4257.369	267.189	p<.01
		Residual	7568.602	475	15.934		
		Total	20340.710	478			

Dependent Variable: GCB

From Table 59 it is clear that, for Model 1, the obtained F (1, 477) = 534.899, **p<.01 is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (1, 477) = 6.70, **p<.01. This means that the contribution of Social Influence significantly predicts Green

Consumer Behaviour of urban student sample. For Model 2, the obtained F (2, 476) = 384.792, $^{**}p<.01$is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (2, 476) = 4.66, $^{**}p<.01$. This implies that the collective contributions of Social Influence and Ecoliteracy significantly predict Green Consumer Behaviour of urban student sample. As for Model 3, the obtained F (3, 475) = 267.189, $^{**}p<.01$is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (3, 475) = 3.83, $^{**}p<.01$. This shows that the combined contributions of Social Influence, Ecoliteracy and Environmental Responsibility Attribution significantly predict Green Consumer Behaviour of urban student sample.

Table 60 shows the regression coefficients related to the individual contribution of predictors (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) in predicting the criterion variable (Green Consumer Behaviour) for the urban student sample.

Table 60

Regression Coefficients of Predictors' Individual Contribution in Predicting the Criterion Variable for the Urban Student Sample

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.499	2.034		8.112	.000
	SI	.756	.033	.727	23.128	.000
2	(Constant)	7.822	2.010		3.892	.000
	SI	.526	.037	.506	14.339	.000
	EL	.385	.037	.372	10.543	.000
3	(Constant)	3.980	2.256		1.764	.078
	SI	.480	.038	.462	12.523	.000
	EL	.358	.037	.346	9.727	.000
	ERA	.141	.039	.118	3.583	.000

Dependent Variable: GCB

From Table 60 it is evident that for Model 1, Beta value (ß) of SI is .727 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value (B_1 = .756) represents 76% change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 16.499 relates to the amount of criterion variable without the contribution of predictor variable. Thus, for Model 1, if SI is increased by one unit, the model predicts .756 units increase in Green Consumer Behaviour. The t = 23.128, $^{**}p<.01$ is statistically significant at .01 level. Hence, it can be inferred that the individual contribution of SI is significant in predicting the Green Consumer Behaviour of urban students.

Multiple Regression Equation for Model 1

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 SI + εt$

$GCB = 16.499 + .756 SI$

From Table _ it can be seen that for Model 2, Beta values (ß) of SI and EL are .506 and .372 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of SI and EL are .526 and .385 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 7.822 relates to the amount of criterion variable without the contribution of predictor variable. For this model SI, t = 14.339, $^{**}p<.01$ and EL, t = 10.543, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of SI and EL is significant in predicting the Green Consumer Behaviour of urban students.

Multiple Regression Equation for Model 2

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1) and EL (X_2) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 SI + ß_2 EL + \varepsilon t$

$GCB = 7.822 + .526 SI + .385 EL$

From Table _ it is clear that for Model 3, Beta values (ß) of SI, EL and ERA are .462, .346 and .141 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of SI, EL and ERA are .480, .358 and .141 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 3.980 relates to the amount of criterion variable without the contribution of predictor variable. For this model SI, t = 12.523, $^{**}p<.01$; EL, t = 9.727, $^{**}p<.01$ and ERA, t = 3.583, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of SI, EL and ERA is significant in predicting the Green Consumer Behaviour of urban students.

Multiple Regression Equation for Model 3

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1), EL (X_2) and ERA (X_3) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 SI + ß_2 EL + ß_3 ERA + \varepsilon t$

$GCB = 3.980 + .480 SI + .358 EL + .141 ERA$

Discussion

The result of stepwise multiple regression analysis reveals that SI (r = .727, **p<.01) is having the highest correlation with GCB followed by EL (r = .67, **p<.01) and ERA (r = .500, **p<.01) for the urban student sample. All the variables were found to be significant and hence enters the model yielding F (3, 475) = 267.189, **p<.01, and R^2 = .628. this indicates that the joint contributions of SI, EL and ERA has accounted for 63% of variance of GCB of the urban student sample. The individual contribution of predictors significantly predicting GCB is equal to 3.980 + .480 SI + .358 EL + .141 ERA. The result reveals that Social Influence has a greater impact on the GCB of urban students. Since urban areas are affluent with most modern technologies of communication and broadcasting, students studying in urban institutions have more avenues foe seeking, exploring and sharing of information regarding environment and green products that are safe for environment. Moreover, institutions in urban areas are much more organised in terms of infrastructural facilities, the quality and quantity of educational opportunities for broadening the horizons of knowledge will be to some extent satisfactory or even good. Apart from this environmental degradation will be more prominent in urban areas and that it might have a direct impact on the life of people forcing them to adopt green lifestyles for sustainable living. In addition to this, the availability of green products and services more in urban areas also creates awareness and interest among students to be a beneficiary of it. The results indicate that the strength of influence need to be enhanced much over what is prevailing now which is very much possible through concerted educational efforts by involving all the stakeholders for a lasting effect.

Relative Efficiency of Dimensions of Predictor Variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) in Predicting the Criterion Variable (Green Consumer Behaviour) for the Urban Student Sample

The details regarding relative efficiency of dimensions of predictor variables in the individual and collective contribution in predicting the criterion variable of the urban student sample are presented in this section.

Table 61presents inter correlation matrix between the dimensions of predictors and the criterion variable of urban student sample.

Table 61

Pearson's Correlation Matrix of Dimensions of Predictor Variables and Criterion Variable for the Urban Student Sample

Variable	EAW	EAT	EAC	ERAS	ERAO	PI	TI	PGI	MI	GCB
EAW	1									
EAT	.626**	1								
EAC	.291**	.584**	1							
ERAS	.461**	.463**	.328**	1						
ERAO	-.016	.007	.020	-.329**	1					
PI	.402**	.400**	.286**	.345**	.033	1				
TI	.496**	.488**	.318**	.461**	-.009	.466**	1			
PGI	.351**	.369**	.294**	.408**	.009	.409**	.485**	1		
MI	.467**	.391**	.232**	.429**	.107*	.368**	.433**	.470**	1	
GCB	.664**	.584**	.401**	.649**	-.059	.499**	.597**	.534**	.592**	1

** *Correlation significant at .01 level*

* *Correlation significant at .05 level*

Table 61 reveals that there exists significant positive correlation among most of the dimensions of predictor variables and the criterion variable, except for ERAO for the urban student sample. It is observed that EAW (r = .664, **p<.01) has the highest correlation with GCB followed by ERAS (r = .649, **p<.01) and TI (r = .597, **p<.01). All the predictor variables are also

fairly correlated with each other except for ERAO. It can also be observed that ERAO is having the lowest and a negative correlation (r = -.059) with GCB. Majority of correlation indices obtained are significant at .01 level and a few significant at .05 levels. All the significant variables are entered for regression analysis.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of dimensions of predictors (individual and collective contribution) in predicting the criterion variable. The model summary of stepwise multiple regression analysis with the factors of Green Consumer Behaviour (GCB) for the urban student sample is presented in Table 62.

Table 62

Regression Model Summary of Dimensions of Predictor Variables and Criterion Variable for the Urban Student Sample

Model		R	R Square	Adjusted R Square	R Square Change
1	EAW	.664	.441	.440	.441
2	EAW, ERAS	.768	.590	.589	.149
3	EAW, ERAS, MI	.800	.639	.637	.049
4	EAW, ERAS, MI, TI	.815	.665	.662	.026
5	EAW, ERAS, MI, TI, PGI	.823	.678	.675	.013
6	EAW, ERAS, MI, TI, PGI, EAC	.828	.685	.682	.007
7	EAW, ERAS, MI, TI, PGI, EAC, PI	.832	.692	.687	.006

Criterion Variable: GCB

Table 62 shows that in step 1 of multiple regression analysis, the variable included in the model is EAW. For Model 1, the R value (.664) is the correlation between the predictor (EAW) and the criterion (GCB) shows a strong positive correlation. The coefficient of determination (R^2 = .441) shows that 44% of the variance of the criterion variable has been significantly

explained by the predictor variable. The Adjusted R Square (.440) determines how well the model can be generalised.

In step 2, the next variable included in the model is ERAS. For Model 2, the multiple correlations between the predictors (EAW, ERAS) and the criterion (GCB) yielded R value of .768 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .590) shows that 59% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW and ERAS. The percentage increase of the variance of GCB (R^2 Change = .149) is 15% by the inclusion of ERAS. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.590 - .589 =.001) .1% shows the amount of decrease in variance if the model were derived from the population.

In step 3 of regression analysis, the variable included in the model is MI. For Model 3, the multiple correlations between the predictors (EAW, ERAS and MI) and the criterion (GCB) yielded R value of .800 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .639) shows that 64% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, ERAS and MI. The percentage increase of the variance of GCB (R^2 Change = .049) is 5% by the inclusion of MI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.639 - .637 =.002) .2% shows the amount of decrease in variance if the model were derived from the population.

In step 4, the next variable included in the model is TI. For Model 4, the multiple correlations between the predictors (EAW, ERAS, MI and TI) and the criterion (GCB) yielded R value of .815 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .665) shows that 67% of the variance of the criterion variable (GCB) has been significantly

explained by the predictor variables EAW, ERAS, MI and TI. The percentage increase of the variance of GCB (R^2 Change = .026) is 3% by the inclusion of TI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.665 - .662 =.003) .3% shows the amount of decrease in variance if the model were derived from the population.

In step 5 of multiple regression analysis, the variable included in the model is PGI. For Model 5, the multiple correlations between the predictors (EAW, ERAS, MI, TI and PGI) and the criterion (GCB) yielded R value of .823 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .678) shows that 68% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, ERAS, MI, TI and PGI. The percentage increase of the variance of GCB (R^2 Change = .013) is 1% by the inclusion of PGI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.678 - .675 =.003) .3% shows the amount of decrease in variance if the model were derived from the population.

In step 6, EAC is included in the model. For Model 6, the multiple correlations between the predictors (EAW, ERAS, MI, TI, PGI and EAC) and the criterion (GCB) yielded R value of .828 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .685) shows that 69% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, ERAS, MI, TI, PGI and EAC. The percentage increase of the variance of GCB (R^2 Change = .007) is .7% by the inclusion of EAC. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.685 - .682 =.003) .3% shows the amount of decrease in variance if the model were derived from the population.

In step 7 of regression analysis, PI is included in the model. For Model 7, the multiple correlations between the predictors (EAW, ERAS, MI, TI, PGI, EAC and PI) and the criterion (GCB) yielded R value of .832 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .692) shows that 69% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, ERAS, MI, TI, PGI, EAC and PI. The percentage increase of the variance of GCB (R^2 Change = .006) is .6% by the inclusion of PI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.692 - .687 =.005) .5% shows the amount of decrease in variance if the model were derived from the population.

The significance of models derived can be identified from F values in the ANOVA table. Table 63 presents the ANOVA in regression analysis of urban student sample.

Table 63

Results of ANOVA in Regression of Dimensions of Predictors and Criterion for the Urban Student Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	EAW	Regression	8976.803	1	8976.803	376.801	p<.01
		Residual	11363.907	477	23.824		
		Total	20340.710	478			
2	EAW, ERAS	Regression	12006.504	2	6003.252	342.870	p<.01
		Residual	8334.205	476	17.509		
		Total	20340.710	478			
3	EAW, ERAS, MI	Regression	13004.217	3	4334.739	280.652	p<.01
		Residual	7336.493	475	15.445		
		Total	20340.710	478			
4	EAW, ERAS, MI, TI	Regression	13525.419	4	3381.355	235.172	p<.01
		Residual	6815.290	474	14.378		
		Total	20340.710	478			
5	EAW, ERAS, MI, TI, PGI	Regression	13791.941	5	2758.388	199.231	p<.01
		Residual	6548.768	473	13.845		
		Total	20340.710	478			
6	EAW, ERAS, MI, TI, PGI, EAC	Regression	13943.552	6	2323.925	171.466	p<.01
		Residual	6397.158	472	13.553		
		Total	20340.710	478			
7	EAW, ERAS, MI, TI, PGI, EAC, PI	Regression	14066.042	7	2009.435	150.836	p<.01
		Residual	6274.667	471	13.322		
		Total	20340.710	478			

Criterion Variable: GCB

From Table 63 it is clear that, for Model 1, F (1, 477) = 376.801, **p<.01. The table value of F (1, 477) = 6.70, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This shows that the contribution of predictor EAW significantly predicts GCB of urban student sample. For Model 2, F (2, 476) = 342.870, **p<.01. The table

value of F (2, 476) = 4.66, $^{**}p<.01$. Since the F value is greater than the table value of F, the model is significant at .01 level. This implies that the collective contributions of predictors EAW and ERAS significantly predict GCB of urban student sample. In the case of Model 3, F (3, 475) = 280.652, $^{**}p<.01$. The table value of F (3, 475) = 3.83, $^{**}p<.01$. As the F value is greater than the table value of F, the model is significant at .01 level. This implies that the joint contributions of predictors EAW, RAS and MI significantly predict GCB of students of urban student sample. As for Model 4, F (4, 474) = 235.172, $^{**}p<.01$. The table value of F (4, 474) = 3.37, $^{**}p<.01$. As the F value is greater than the table value of F, the model is significant at .01 level. This means that the combined contributions of predictors EAW, ERAS, MI and TI significantly predict GCB of urban student sample. For Model 5, F (5, 473) = 199.231, $^{**}p<.01$. The table value of F (5, 473) = 3.06, $^{**}p<.01$. As the F value is greater than the table value of F, the model is significant at .01 level. This shows that the joint contributions of predictors EAW, ERAS, MI, TI and PGI significantly predict GCB of urban student sample. In the case of Model 6, F (6, 472) = 171.466, $^{**}p<.01$. The table value of F (6, 472) = 2.85, $^{**}p<.01$. Since the F value is greater than the table value of F, the model is significant at .01 level. This shows that the combined contributions of predictors EAW, ERAS, MI, TI, PGI and EAC significantly predict GCB of urban student sample. Finally, for Model 7, F (7, 471) = 150.836, $^{**}p<.01$. The table value of F (7, 471) = 2.85, $^{**}p<.01$. Since the F value is greater than the table value of F, the model is significant at .01 level. This means that the collective contributions of predictors EAW, ERAS, MI, TI, PGI, EAC and PI significantly predict GCB of urban student sample.

Table 64 shows the regression coefficients related to the individual contribution of dimensions of predictor variables in predicting the criterion variable (Green Consumer Behaviour) of urban student sample.

Table 64

Regression Coefficients of Dimensions of Predictors' Individual Contribution in Predicting the Criterion Variable for the Urban Student Sample

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	31.927	1.632		19.568	.000
	EAW	.556	.029	.664	19.411	.000
2	(Constant)	21.419	1.611		13.297	.000
	EAW	.388	.028	.464	14.041	.000
	ERAS	.307	.023	.435	13.154	.000
3	(Constant)	15.757	1.669		9.442	.000
	EAW	.314	.028	.375	11.373	.000
	ERAS	.257	.023	.364	11.287	.000
	MI	.204	.025	.260	8.037	.000
4	(Constant)	11.606	1.752		6.626	.000
	EAW	.265	.028	.317	9.535	.000
	ERAS	.223	.023	.316	9.833	.000
	MI	.175	.025	.223	6.984	.000
	TI	.179	.030	.197	6.021	.000
5	(Constant)	10.569	1.735		6.092	.000
	EAW	.264	.027	.316	9.680	.000
	ERAS	.208	.023	.295	9.238	.000
	MI	.144	.025	.184	5.666	.000
	TI	.142	.030	.156	4.669	.000
	PGI	.103	.023	.140	4.388	.000
6	(Constant)	8.468	1.828		4.632	.000
	EAW	.256	.027	.306	9.427	.000
	ERAS	.197	.023	.279	8.726	.000
	MI	.145	.025	.185	5.744	.000
	TI	.131	.030	.144	4.333	.000
	PGI	.094	.023	.128	4.027	.000

	EAC	.073	.022	.094	3.345	.001
	(Constant)	7.600	1.835		4.142	.000
	EAW	.244	.027	.292	9.000	.000
	ERAS	.194	.022	.275	8.681	.000
7	MI	.139	.025	.177	5.524	.000
	TI	.112	.031	.123	3.641	.000
	PGI	.083	.023	.113	3.535	.000
	EAC	.067	.022	.086	3.060	.002
	PI	.072	.024	.093	3.032	.003

Criterion Variable: GCB

From Table 64 it is evident that for Model 1, Beta (ß) value of EAW is .664 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value of EAW .556 represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 31.927 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 19.411, $^{**}p<.01$ is a significant predictor of GCB of urban student sample.

Multiple Regression Equation for Model 1

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EAW + εt$

$GCB = 31.927 + .556 EAW$

In the case of Model 2, Beta (ß) values of EAW and ERAS are .464 and .435 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW and ERAS are .388 and .307 respectively which represents the

change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 21.419 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 14.041, $^{**}p<.01$ and ERAS, t = 13.154, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW and ERAS are significant in predicting the Green Consumer Behaviour of urban student sample.

Multiple Regression Equation for Model 2

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) and ERAS (X_2) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 ERAS + \varepsilon t$

$GCB = 21.419 + .388 EAW + .307 ERAS$

For Model 3, Beta (ß) values of EAW, ERAS and MI are .375, .364 and .260 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS and MI are .314, .257 and .204 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 15.757 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 11.373, $^{**}p<.01$; ERAS, t = 11.287, $^{**}p<.01$ and MI, t = 8.037, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS and MI are significant in predicting the Green Consumer Behaviour of urban student sample.

Multiple Regression Equation for Model 3

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2) and MI (X_3) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 ERAS + ß_3 MI + \varepsilon t$

$GCB = 15.757 + .314 EAW + .257 ERAS + .204 MI$

In the case of Model 4, Beta (ß) values of EAW, ERAS, MI and TI are .317, .316, .223 and .197 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, MI and TI are .265, .223, .175 and .179 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 11.606 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 9.535, $^{**}p<.01$; ERAS, t = 9.833, $^{**}p<.01$; MI, t = 6.984, $^{**}p<.01$ and TI, t = 6.021 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, MI and TI are significant in predicting the Green Consumer Behaviour of urban student sample.

Multiple Regression Equation for Model 4

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), MI (X_3) and TI (X_4) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 ERAS + ß_3 MI + ß_4 TI + \varepsilon t$

$GCB = 11.606 + .265 EAW + .223 ERAS + .175 MI + .179 TI$

In Model 5, Beta (ß) values of EAW, ERAS, MI, TI and PGI are .316, .295, .184, .156 and .140 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, MI, TI and PGI are .264, .208, .144, .142 and .103 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 10.569 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 9.680, p<.01; ERAS, t = 9.238, **p<.01; MI, t = 5.666, **p<.01; TI, t = 4.669, **p<.01 and PGI, t = 4.388, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, MI, TI and PGI are significant in predicting the Green Consumer Behaviour of urban student sample.

Multiple Regression Equation for Model 5

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), MI (X_3), TI (X_4) and PGI (X_5) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1$ EAW $+ ß_2$ ERAS $+ ß_3$ MI $+ ß_4$ TI $+ ß_5$ PGI $+ \varepsilon t$

GCB = 10.569 + .264 EAW + .208 ERAS + .144 MI + .142 TI + .103 PGI

For Model 6, Beta (ß) values of EAW, ERAS, MI, TI, PGI and EAC are .306, .279, .185, .144, .128 and .094 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, MI, TI, PGI and EAC are .256, .197, .145, .131, .094 and .073 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 8.468 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 9.427, **p<.01; ERAS, t = 8.726, **p<.01; MI, t = 5.744, **p<.01; TI, t = 4.333, **p<.01; PGI, t

= 4.027, **p<.01 and EAC, t = 3.345, **p<.01 level are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, MI, TI, PGI and EAC are significant in predicting the Green Consumer Behaviour of urban student sample.

Multiple Regression Equation for Model 6

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), MI (X_3), TI (X_4), PGI (X_5) and EAC (X_6) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1$ EAW + $ß_2$ ERAS+ $ß_3$ MI + $ß_4$ TI + $ß_5$ PGI + $ß_6$ EAC + εt

GCB = 8.468 + .256 EAW + .197 ERAS + .145 MI + .131 TI + .094 PGI + .073 EAC

In the case of Model 7, Beta (ß) values of EAW, ERAS, MI, TI, PGI, EAC and PI are .292, .275, .177, .123, .113, .086 and .093 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, MI, TI, PGI, EAC and PI are .244, .194, .139, .112, .083, .067 and .072 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 7.600 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 9.000, **p<.01; ERAS, t = 8.681, **p<.01; MI, t = 5.524, **p<.01; TI, t = 3.641, **p<.01; PGI, t = 3.535, **p<.01; EAC, t = 3.060, **p<.01 and PI, t = 3.032, **p<.01 level are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, MI, TI, PGI, EAC and PI are significant in predicting the Green Consumer Behaviour of urban student sample.

Multiple Regression Equation for Model 7

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), MI (X_3), TI (X_4), PGI (X_5), EAC (X_6) and PI (X_7) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1$ EAW $+ ß_2$ ERAS $+ ß_3$ MI $+ ß_4$ TI $+ ß_5$ PGI $+ ß_6$ EAC $+ ß_7$ PI $+ \varepsilon t$

GCB = 7.600 + .244 EAW + .194 ERAS + .139 MI + .112 TI + .083 PGI + .067 EAC + .072 PI

Discussion

From the results, it is evident that 7 dimensions of predictor variables are seen to have significant relationship in explaining the Green Consumer behaviour (R = .832) of undergraduate students for the urban student sample. Amongst these predictors EAW (r = .664, $^{**}p<.01$) has the highest correlation with GCB followed by ERAS (r = .649, $^{**}p<.01$) and TI (r = .597, $^{**}p<.01$). A significant model is yielded (EAW, ERAS, MI, TI, PGI, EAC, PI) with F (7, 471) = 150.836, $^{**}p<.01$, and R^2 = .692. This shows that the collective contributions of the predictors have accounted for 69% variation in GCB of the urban student sample. The individual contribution of predictors significantly predicting GCB is equal to 7.600 + .244 EAW + .194 ERAS + .139 MI + .112 TI + .083 PGI + .067 EAC + .072 PI. It is also evident that although EAT is not in the model, its correlation (.584, $^{**}p<.01$) with GCB is significant which implies that EAT significantly influences GCB of urban student sample. Another variable excluded ERAO is excluded from the model owing to its least influence (-.059) on GCB. The results show that the dimension of Ecoliteracy EAW is having the highest predictive power followed by ERAS and Social Influence dimensions like MI, TI and PGI. Environment related past behaviours or EAC also seems to have a significant

impact in influencing the GCB of urban students. Lastly, the variable that enters the model is PI which shows that students in urban area are influenced by parents in relation to GCB. The findings sheds light on the idea that the education imparted in the HE has to some extent been able to influence the Green Consumer behaviour of students. However, in the fast overwhelming nature of environmental degradations, the strength of influence of such predictors that have immense potential to transform individual behaviour needs much focused educational interventions.

Relative Efficiency of Predictor Variables (individual and collective contribution) in Predicting the Criterion Variable for the Rural Student Sample

The relative efficiency of predictor variables' individual and collective contributions in predicting the criterion variable for the rural student sample was determined. The details regarding this are presented in this section.

Table 65 presents the inter correlation matrix between the predictors and the criterion variable of rural students.

Table 65

Pearson's Correlation Matrix of Predictor Variables (EL, ERA, SI) and Criterion Variable (GCB) for the Rural Student Sample

Variables	EL	ERA	SI	GCB
EL	1			
ERA	.579**	1		
SI	.654**	.590**	1	
GCB	.689**	.570**	.759**	1

**Correlation significant at .01 level

Table 65 reveals that there exists significant positive correlation among the predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour)

for rural student sample. It is evident that SI (r = .759, **p<.01) is having the highest correlation with GCB followed by EL (r = .689, **p<.01) and ERA (r = .570, **p<.01). All the correlation indices obtained are significant at .01 level. The significant predictors were all considered for the stepwise multiple regression analysis.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of predictors (individual and collective contribution) in predicting the criterion variable.

The model summary of stepwise multiple regression analysis with the factors of Green Consumer Behaviour (GCB) constituting Ecoliteracy (EL), Environmental Responsibility Attribution (ERA) and Social Influence (SI) of rural student sample is presented in Table 66.

Table 66

Regression Model Summary of Predictors Variables (EL, ERA, SI) and Criterion Variable (GCB) for the Rural Student Sample

	Model	R	R Square	Adjusted R Square	R Square Change
1	SI	.759	.576	.575	.576
2	SI, EL	.801	.641	.639	.065
3	SI, EL, ERA	.804	.646	.644	.006

Criterion Variable: GCB

Table 66 shows that in step 1 of the multiple regression analysis the first variable included in the model is SI. For Model 1, the first variable considered for regression is SI. The R value (.759) which is the correlation between the predictor (SI) and the criterion (GCB) shows a relatively strong positive correlation. The coefficient of determination (R^2 = .576) shows that 58% of the variance of the criterion variable has been significantly explained

by the predictor variable. The Adjusted R Square (.575) determines how well the model can be generalised.

In step 2 of the regression, the next variable included in the model is EL. For Model 2, the multiple correlations between the predictors (SI and EL) and the criterion (GCB) yielded R value of .801 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .641) shows that 64% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables SI and EL. The percentage increase of the variance of GCB (R^2 Change = .065) is 7% by the inclusion of EL. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.641 - .639 =.002) of .2% shows the amount of decrease in variance if the model were derived from the population.

In step 3 of the regression analysis, ERA is the variable included in the model. For Model 3, the multiple correlations between the predictors (SI, EL and ERA) and the criterion (GCB) yielded R value of .804 which shows a relatively high positive correlation. The coefficient of determination (R^2 =.646) shows that 65% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables SI, EL and ERA. The percentage increase of the variance of GCB (R^2 Change = .006) is .6% by the inclusion of ERA. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.646 - .644 =.002) of .2% shows the amount of decrease in variance if the model were derived from the population.

The statistical significance of the models derived in regression can be determined from the F values in the ANOVA table. Table 67 presents the ANOVA in regression analysis of rural student sample.

Table 67

Results of ANOVA in Regression of Predictors and Criterion for the Rural Student Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	SI	Regression	11846.815	1	11846.815	705.343	p<.01
		Residual	8717.031	519	16.796		
		Total	20563.846	520			
2	SI, EL	Regression	13177.334	2	6588.667	462.049	p<.01
		Residual	7386.512	518	14.260		
		Total	20563.846	520			
3	SI, EL, ERA	Regression	13293.633	3	4431.211	315.113	p<.01
		Residual	7270.213	517	14.062		
		Total	20563.846	520			

Criterion Variable: GCB

Table 67 shows that, for Model 1, the obtained F (1, 519) = 705.343, **p<.01is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (1, 519) is 6.69, **p<.01. This implies that the contribution of Social Influence significantly predicts Green Consumer Behaviour of rural student sample. In Model 2, the obtained F (2, 518) = 462.049, **p<.01 is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (2, 518) = 4.65, **p<.01. This means that the combined contributions of Social Influence and Ecoliteracy significantly predict Green Consumer Behaviour of rural student sample. For Model 3, the obtained F (3, 517) = 315.113, **p<.01 is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (3, 517) = 3.82, **p<.01. This shows that the joint contributions of Social Influence, Ecoliteracy and Environmental Responsibility Attribution significantly predict Green Consumer Behaviour of rural student sample.

Stepwise multiple regression analysis determined the individual contribution of the predictor variables in significantly predicting the criterion. Table 68 shows the regression coefficients related to the individual contribution of predictors (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) in predicting the criterion variable (Green Consumer Behaviour) for rural student sample.

Table 68

Regression Coefficients of Predictors' Individual Contribution in Predicting the Criterion Variable for the Rural Student Sample

Model		Unstandardsed Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.362	1.933		7.948	.000
	SI	.845	.032	.759	26.558	.000
2	(Constant)	8.035	1.936		4.151	.000
	SI	.600	.039	.539	15.473	.000
	EL	.358	.037	.336	9.660	.000
3	(Constant)	4.913	2.208		2.225	.026
	SI	.559	.041	.503	13.652	.000
	EL	.323	.039	.303	8.323	.000
	ERA	.132	.046	.098	2.876	.004

Criterion Variable: GCB

From Table 68 it is evident that for Model 1, Beta value (ß) of SI is .759 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value (B_1 = .845) represents 85% change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 15.362 relates to the amount of criterion variable without the contribution of predictor variable. Thus, for Model 1, if SI is increased by one unit, the model predicts .845 units increase in Green Consumer Behaviour. The t = 26.558, $^{**}p<.01$ is statistically

significant at .01 level. Hence, it can be inferred that the individual contribution of SI is significant in predicting the Green Consumer Behaviour of rural students.

Multiple Regression Equation for Model 1

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 SI + εt$

$GCB = 15.362 + .845 SI$

From Table 68 it can be seen that for Model 2, Beta values (ß) of SI and EL are .539 and .336 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of SI and EL are .600 and .358 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 8.035 relates to the amount of criterion variable without the contribution of predictor variable. For this model SI, t = 15.473, $^{**}p<.01$ and EL, t = 9.660, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of SI and EL is significant in predicting the Green Consumer Behaviour of rural students.

Multiple Regression Equation for Model 2

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1) and EL (X_2) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 SI + ß_2 EL + εt$

$GCB = 8.035 + .600 SI + .358 EL$

Table 68 reveals that for Model 3, Beta values (ß) of SI, EL and ERA are .503, .303 and .098 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of SI, EL and ERA are .559, .323 and .132 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 4.913 relates to the amount of criterion variable without the contribution of predictor variable. For this model SI, t = 13.652, $^{**}p<.01$; EL, t = 8.323, $^{**}p<.01$ and ERA, t = 2.876, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of SI, EL and ERA is significant in predicting the Green Consumer Behaviour of rural students.

Multiple Regression Equation for Model 3

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1), EL (X_2) and ERA (X_3) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 SI + ß_2 EL + ß_3 ERA + \varepsilon t$

$GCB = 4.913 + .559 SI + .323 EL + .132 ERA$

Discussion

It can be seen that SI (r = .759, $^{**}p<.01$) is having the highest correlation with GCB followed by EL (r = .689, $^{**}p<.01$) and ERA (r = .570, $^{**}p<.01$). In the stepwise regression analysis, the variables enter the model in this order of influence thereby yielding a significant model (SI, EL, ERA) with F (3, 517) = 315.113, $^{**}p<.01$, and R^2 = .646. This shows that the combined contributions of the predictors have accounted for 65% of variance of GCB for the rural student sample. The individual contribution of predictors significantly influencing GCB is equal to 4.913 + .559 SI + .323 EL + .132

ERA. From the result it is evident that rural student sample also have an increased influence of social factors on GCB. This may be because the facilities available in rural areas are almost like in urban areas though not similar throughout since there is not much disparity of distribution of resources and facilities in the two locales in the Kerala state. Never the less, social factors being more closely related to the involvement of human element, students of HE who are at their formative stage of education show much propensity to develop creative thinking through group dynamics and social interactions. Ecoliteracy is also an influencing factor of GCB of rural students. Ecoliteracy along with a sense of Environmental Responsibility Attribution have also exerted much influence on the Green Consumer Behaviour of urban students. The HE endeavours should be directed towards enhancing these determinants of Green Consumer Behaviour by giving due emphasis to environmental and consumer education in tandem thereby developing consumers who are capacitated with adequate skills and knowledge for enduring sustainable lifestyles.

Relative Efficiency of Dimensions of Predictor Variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) in Predicting the Criterion Variable (Green Consumer Behaviour) for the Rural Student Sample

The details regarding relative efficiency of dimensions of predictor variable in the individual and collective contribution in predicting the criterion variable of rural student sample are presented in this section.

Table 69 presents inter correlation matrix between the dimensions of predictors and the criterion variable of rural student sample.

Table 69

Pearson's Correlation Matrix of Dimensions of Predictor Variables and Criterion Variable for the Rural Student Sample

variable	EAW	EAT	EAC	ERAS	ERAO	PI	TI	PGI	MI	GCB
EAW	1									
EAT	.536**	1								
EAC	.079	.548**	1							
ERAS	.568**	.575**	.410**	1						
ERAO	.164**	.144**	.070	-.002	1					
PI	.415**	.442**	.308**	.485**	.243**	1				
TI	.447**	.419**	.262**	.467**	.126**	.455**	1			
PGI	.497**	.416**	.227**	.470**	.173**	.483**	.496**	1		
MI	.525**	.512**	.334**	.533**	.131**	.485**	.435**	.522**	1	
GCB	.644**	.581**	.380**	.631**	.183**	.553**	.618**	.580**	.632**	1

** *Correlation significant at .01 level*

Table 69 reveals that there exists significant positive correlation among most of the dimensions of predictor variables and the criterion variable, except for ERAO for the rural student sample. It is observed that EAW (r = .664, **p<.01) has the highest correlation with GCB followed by MI (r = .632, **p<.01) and ERAS (r = .631, **p<.01). All the predictor variables are also fairly correlated with each other except for ERAO. It can also be observed that ERAO is having the lowest correlation (r = .183) with GCB. Majority of correlation indices obtained are significant at .01 level. All the significant variables are considered for a stepwise multiple regression analysis.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of dimensions of predictors (individual and collective contribution) in predicting the criterion variable. The model summary of stepwise multiple regression analysis with the factors of Green Consumer Behaviour (GCB) for the rural student sample is presented in Table 70.

Table 70

Regression Model Summary of Dimensions of Predictor Variables and Criterion Variable for the Rural Student Sample

Model		R	R Square	Adjusted R Square	R Square Change
1	EAW	.644	.415	.413	.415
2	EAW, TI	.742	.551	.549	.136
3	EAW, TI, MI	.785	.617	.615	.066
4	EAW, TI, MI, EAC	.805	.648	.645	.031
5	EAW, TI, MI, EAC, PI	.812	.659	.656	.012
6	EAW, TI, MI, EAC, PI, ERAS	.817	.667	.664	.008
7	EAW, TI, MI, EAC, PI, ERAS, PGI	.821	.673	.669	.006

Criterion Variable: GCB

Table 70 reveals that in the step 1 of multiple regression analysis the first variable included in the model is EAW. For Model 1, the R value (.644) is the correlation between the predictor (EAW) and the criterion (GCB) shows a positive correlation. The coefficient of determination (R^2 = .415) shows that 42% of the variance of the criterion variable has been significantly explained by the predictor variable. The Adjusted R Square (.413) determines how well the model can be generalised.

In step 2 of regression analysis, the next variable included in the model is TI. For Model 2, the multiple correlations between the predictors (EAW, TI) and the criterion (GCB) yielded R value of .742 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .551) shows that 55% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW and TI. The percentage increase of the variance of GCB (R^2 Change = .136) is 14% by the inclusion of TI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.551 - .549 =.002) .2% shows the

amount of decrease in variance if the model were derived from the population.

In step 3 of multiple regression analysis, MI enters the model. For Model 3, the multiple correlations between the predictors (EAW, TI and MI) and the criterion (GCB) yielded R value of .785 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .617) shows that 62% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, TI and MI. The percentage increase of the variance of GCB (R^2 Change = .066) is 7% by the inclusion of MI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.617 - .615 =.002) .2% shows the amount of decrease in variance if the model were derived from the population.

In step 4, the next variable that enters the model is EAC. For Model 4, the multiple correlations between the predictors (EAW, TI, MI and EAC) and the criterion (GCB) yielded R value of .805 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .648) shows that 65% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, TI, MI and EAC. The percentage increase of the variance of GCB (R^2 Change = .031) is 3% by the inclusion of EAC. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.648 - .645 =.003) .3% shows the amount of decrease in variance if the model were derived from the population.

In step 5 of multiple regression analysis, PI is included in the model. For Model 5, the multiple correlations between the predictors (EAW, TI, MI, EAC and PI) and the criterion (GCB) yielded R value of .812 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .659) shows that 66% of the variance of the criterion variable (GCB) has been

significantly explained by the predictor variables EAW, TI, MI, EAC and PI. The percentage increase of the variance of GCB (R^2 Change = .012) is 1% by the inclusion of PI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.659 - .656 =.003) .3% shows the amount of decrease in variance if the model were derived from the population.

In step 6, the next variable included in the model is ERAS. For Model 6, the multiple correlations between the predictors (EAW, TI, MI, EAC, PI and ERAS) and the criterion (GCB) yielded R value of .817 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .667) shows that 67% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, TI, MI, EAC, PI and ERAS. The percentage increase of the variance of GCB (R^2 Change = .008) is .8% by the inclusion of ERAS. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.667 - .664 =.003) .3% shows the amount of decrease in variance if the model were derived from the population.

In step 7, the last variable that enters the model is PGI. For Model 7, the multiple correlations between the predictors (EAW, TI, MI, EAC, PI, ERAS and PGI) and the criterion (GCB) yielded R value of .821 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .673) shows that 67% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, TI, MI, EAC, PI, ERAS and PGI. The percentage increase of the variance of GCB (R^2 Change = .006) is .6% by the inclusion of PGI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.673 - .669 =.004) .4% shows the amount of decrease in variance if the model were derived from the population.

The regression model significance can be determined from the F values in the ANOVA table. Table 71 presents the ANOVA in regression analysis of rural student sample.

Table 71

Results of ANOVA in Regression of Dimensions of Predictors and Criterion for the Rural Student Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	EAW	Regression	8525.282	1	8525.282	367.537	p<.01
		Residual	12038.564	519	23.196		
		Total	20563.846	520			
2	EAW, TI	Regression	11329.464	2	5664.732	317.762	p<.01
		Residual	9234.382	518	17.827		
		Total	20563.846	520			
3	EAW, TI, MI	Regression	12684.209	3	4228.070	277.413	p<.01
		Residual	7879.638	517	15.241		
		Total	20563.846	520			
4	EAW, TI, MI, EAC	Regression	13322.546	4	3330.637	237.334	p<.01
		Residual	7241.300	516	14.034		
		Total	20563.846	520			
5	EAW, TI, MI, EAC, PI	Regression	13560.538	5	2712.108	199.439	p<.01
		Residual	7003.308	515	13.599		
		Total	20563.846	520			
6	EAW, TI, MI, EAC, PI, ERAS	Regression	13726.284	6	2287.714	171.974	p<.01
		Residual	6837.563	514	13.303		
		Total	20563.846	520			
7	EAW, TI, MI, EAC, PI, ERAS, PGI	Regression	13848.658	7	1978.380	151.136	p<.01
		Residual	6715.189	513	13.090		
		Total	20563.846	520			

Criterion Variable: GCB

Table 71 reveals that, for Model 1, F (1, 519) = 367.537, **p<.01. The table value of F (1, 519) = 6.69. As the F value is greater than the table value of F, the model is significant at .01 level. This means that the contribution of predictor EAW significantly predicts GCB of rural student sample. In the case of Model 2, F (2, 518) = 317.762, **p<.01. The table value of F (2, 518) = 4.65, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This means that the joint contributions of predictors EAW and TI significantly predict GCB of rural student sample. In Model 3, F (3, 517) = 277.413, **p<.01. The table value of F (3, 517) = 3.82, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This shows that the combined contributions of predictors EAW, TI and MI significantly predict GCB of rural student sample. For Model 4, F (4, 516) = 237.334, **p<.01. The table value of F (4, 516) = 3.36, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This implies that the collective contributions of predictors EAW, TI, MI and EAC significantly predict GCB of rural student sample. In the case of Model 5, F (5, 515) = 199.439, **p<.01. The table value of F (5, 515) = 3.05, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This shows that the combined contributions of predictors EAW, TI, MI, EAC and PI significantly predict GCB of rural student sample. For Model 6, F (6, 514) = 171.974, **p<.01. The table value of F (6, 514) = 2.84, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This implies that the collective contributions of predictors EAW, TI, MI, EAC, PI and ERAS significantly predict GCB of rural student sample. Lastly, for Model 7, F (7, 513) = 151.136, **p<.01. The table value of F (7, 513) = 2.84, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This implies that the collective contributions of predictors EAW, TI, MI, EAC, PI, ERAS and PGI significantly predict GCB of rural student sample.

Table 72 shows the regression coefficients related to the individual contribution of dimensions of predictor variables in predicting the criterion variable (Green Consumer Behaviour) of rural student sample.

Table 72

Regression Coefficients of Dimensions of Predictors' Individual Contribution in Predicting the Criterion Variable for the Rural Student Sample

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	34.652	1.673		20.711	.000
	EAW	.543	.028	.644	19.171	.000
2	(Constant)	21.166	1.819		11.638	.000
	EAW	.387	.028	.459	13.948	.000
	TI	.386	.031	.413	12.542	.000
3	(Constant)	14.492	1.825		7.942	.000
	EAW	.278	.028	.330	9.880	.000
	TI	.313	.029	.335	10.611	.000
	MI	.268	.028	.313	9.428	.000
4	(Constant)	10.055	1.870		5.376	.000
	EAW	.309	.027	.367	11.282	.000
	TI	.278	.029	.297	9.661	.000
	MI	.211	.029	.246	7.367	.000
	EAC	.133	.020	.191	6.744	.000
5	(Constant)	8.855	1.863		4.752	.000
	EAW	.290	.027	.344	10.603	.000
	TI	.249	.029	.266	8.544	.000
	MI	.183	.029	.213	6.331	.000
	EAC	.119	.020	.171	6.040	.000
	PI	.114	.027	.133	4.183	.000
6	(Constant)	7.342	1.892		3.880	.000
	EAW	.250	.029	.297	8.528	.000
	TI	.235	.029	.252	8.099	.000
	MI	.168	.029	.196	5.812	.000
	EAC	.096	.021	.137	4.632	.000
	PI	.100	.027	.116	3.648	.000
	ERAS	.123	.035	.128	3.530	.000
7	(Constant)	6.871	1.883		3.649	.000
	EAW	.235	.029	.279	7.957	.000
	TI	.216	.030	.231	7.293	.000
	MI	.149	.029	.174	5.099	.000
	EAC	.095	.020	.137	4.658	.000
	PI	.084	.028	.098	3.062	.002
	ERAS	.116	.035	.121	3.350	.001
	PGI	.085	.028	.101	3.058	.002

Criterion Variable: GCB

From Table 72 it is clear that for Model 1, Beta (ß) value of EAW is .644 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value of EAW .543 represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 34.652 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 19.171, p<.01 is a significant predictor of GCB of rural student sample.

Multiple Regression Equation for Model 1

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EAW + εt$

$GCB = 34.652 + .543 EAW$

For Model 2, Beta (ß) values of EAW and TI are .459 and .413 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW and TI are .387 and .386 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 21.166 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 13.948, **p<.01 and TI, t = 12.542, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW and TI are significant in predicting the Green Consumer Behaviour of rural student sample.

Multiple Regression Equation for Model 2

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) and TI (X_2) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 TI + \varepsilon t$

$GCB = 21.166 + .387 EAW + .386 TI$

For Model 3, Beta (ß) values of EAW, TI and MI are .330, .335 and .313 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI and MI are .278, .313 and .268 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 14.492 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 9.880, $^{**}p<.01$; TI, t = 10.611, $^{**}p<.01$ and MI, t = 9.428, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, TI and MI are significant in predicting the Green Consumer Behaviour of rural student sample.

Multiple Regression Equation for Model 3

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2) and MI (X_3) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 TI + ß_3 MI + \varepsilon t$

$GCB = 14.492 + .278 EAW + .313 TI + .268 MI$

For Model 4, Beta (ß) values of EAW, TI, MI and EAC are .367, .297, .246 and .191 respectively which represents the estimated change in criterion

variable with one standard deviation change in predictor variable. The B values of EAW, TI, MI and EAC are .309, .278, .211 and .133 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 10.055 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 11.282, **p<.01; TI, t = 9.661, **p<.01; MI, t = 7.367, **p<.01 and EAC, t = 6.744 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, TI, MI and EAC are significant in predicting the Green Consumer Behaviour of rural student sample.

Multiple Regression Equation for Model 4

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2), MI (X_3) and EAC (X_4) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 TI + ß_3 MI + ß_4 EAC + \varepsilon t$

$GCB = 10.055 + .309 EAW + .278 TI + .211 MI + .133 EAC$

In Model 5, Beta (ß) values of EAW, TI, MI, EAC and PI are .344, .266, .213, .171 and .133 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI, MI, EAC and PI are .290, .249, .183, .119 and .114 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 8.855 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 10.603, **p<.01; TI, t = 8.544, ** p<.01; MI; t = 6.331, **p<.01; EAC, t = 6.040, **p<.01 and PI, t = 4.183, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective

contribution of EAW, TI, MI, EAC and PI are significant in predicting the Green Consumer Behaviour of rural student sample.

Multiple Regression Equation for Model 5

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2), MI (X_3), EAC (X_4) and PI (X_5) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 TI + ß_3 MI + ß_4 EAC + ß_5 PI + εt$

$GCB = 8.855 + .290 EAW + .249 TI + .183 MI + .119 EAC+ .114 PI$

For Model 6, Beta (ß) values of EAW, TI, MI, EAC, PI and ERAS are .297, .252, .196, .137, .116 and .128 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI, MI, EAC, PI and ERAS are .250, .235, .168, .096, .100 and .123 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 7.342 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 8.528, $^{**}p<.01$; TI, t = 8.099, $^{**}p<.01$; MI, t = 5.812, $^{**}p<.01$; EAC, t = 4.632, $^{**}p<.01$; PI, t = 3.648, $^{**}p<.01$ and ERAS, t = 3.530, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, TI, MI, EAC, PI and ERAS are significant in predicting the Green Consumer Behaviour of rural student sample.

Multiple Regression Equation for Model 6

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2), MI (X_3), EAC (X_4), PI (X_5) and ERAS (X_6) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ TI + ß_3\ MI + ß_4\ EAC + ß_5\ PI + ß_6\ ERAS + \varepsilon t$

GCB = 7.342 + .250 EAW + .235 TI + .168 MI + .096 EAC+ .100 PI + .123 ERAS

For Model 7, Beta (ß) values of EAW, TI, MI, EAC, PI, ERAS and PGI are .279, .231, .174, .137, .098, .121 and .101 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI, MI, EAC, PI, ERAS and PGI are .235, .216, .149, .095, .084, .116 and .085 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 6.871 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 7.957, $^{**}p<.01$; TI, t = 7.293, $^{**}p<.01$; MI, t = 5.099, $^{**}p<.01$; EAC, t = 4.658, $^{**}p<.01$; PI, t = 3.062, $^{**}p<.01$; ERAS, t = 3.350, $^{**}p<.01$ and PGI, t = 3.058, $^{**}p<.01$ level are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, TI, MI, EAC, PI, ERAS and PGI are significant in predicting the Green Consumer Behaviour of rural student sample.

Multiple Regression Equation for Model 7

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2), MI (X_3), EAC (X_4), PI (X_5), ERAS (X_6) and PGI (X_7) of general form $Y=ß_0 + ß_1\ X_1 + ß_2\ X_2 + \ldots\ldots\ldots\ldots\ldots + ß_n\ X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ TI + ß_3\ MI + ß_4\ EAC + ß_5\ PI + ß_6\ ERAS + ß_7\ PGI + \varepsilon t$

GCB = 6.871 + .235 EAW + .216 TI + .149 MI + .095 EAC + .084 PI + .116 ERAS + .085 PGI

Discussion

The analysis reveals that 7 dimensions of predictors have significant relationship in explaining the GCB (r = .821, **p<.01) of rural student sample. It is observed that EAW (r = .664, **p<.01) has the highest correlation with GCB followed by MI (r = .632, **p<.01) and ERAS (r = .631, **p<.01). All the significant variables enters the model except for EAT (.581, **p<.01) and ERAO (.183, **p<.01). It is to be noted that even though EAT does not enter the model, it is found to have a positive correlation with GCB. This means that EAT has a significant influence on GCB of the rural student sample. While ERAO seems to have a low correlation with GCB for the male student sample and owing to its insignificance to influence GCB, it was excluded from the model. The regression analysis derived a significant model (EAW, TI, MI, EAC, PI, ERAS, PGI) with F (7, 513) = 151.136, **p<.01, and R^2 = .673. This indicates that the joint contributions of the predictors have accounted for 67% of variance of GCB applicable to the rural student sample. The individual contribution of predictors significantly contributing to GCB is equal to 6.871 + .235 EAW + .216 TI + .149 MI + .095 EAC + .084 PI + .116 ERAS + .085 PGI. This shows that students studying in rural areas are much influenced to adopt Green Consumer Behaviour by the influence of awareness related to environment, social influence specifically that of media, parents and peer group. The results reveal that education involving socialisation strategies and practical experiences for enrichment of knowledge related to consumer awareness in relation with environment must be adopted. The knowledge and experiences gained by students from the institutions must be life oriented in such a way that students must be able to relate each and every aspect they learn to their real life situations.

Relative Efficiency of Predictor Variables (individual and collective contribution) in Predicting the Criterion Variable for the Government Student Sample

The relative efficiency of predictor variables in the individual and collective contribution in predicting the criterion variable for government student sample was determined. The details regarding this are presented in this section.

Table 73 presents the inter correlation matrix between the predictors and the criterion variable of government students.

Table 73

Pearson's Correlation Matrix of Predictor Variables (EL, ERA, SI) and Criterion Variable (GCB) for the Government Student Sample

Variables	EL	ERA	SI	GCB
EL	1			
ERA	.444**	1		
SI	.590**	.496**	1	
GCB	.659**	.522**	.730**	1

**Correlation significant at .01 level

Table 73 reveals that there exists significant positive correlation among the predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) for government student sample. It is evident that SI ($r = .730$, $^{**}p<.01$) is having the highest correlation with GCB followed by EL ($r = .659$, $p<.01$) and ERA ($r = .522$, $p<.01$). All the correlation indices obtained are significant at .01 level. All the significant predictors were considered for regression analysis.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of predictors (individual and collective contribution) in predicting the criterion variable.

The model summary of stepwise multiple regression analysis with the factors of Green Consumer Behaviour (GCB) constituting Ecoliteracy (EL), Environmental Responsibility Attribution (ERA) and Social Influence (SI) of government student sample is presented in Table 74.

Table 74

Regression Model Summary of Predictor Variables (EL, ERA, SI) and criterion Variable (GCB) for the Government Student Sample

Model		R	R Square	Adjusted R Square	R Square Change
1	SI	.730	.533	.532	.533
2	SI, EL	.783	.613	.611	.080
3	SI, EL, ERA	.793	.629	.626	.016

Criterion Variable: GCB

From Table 74 it is evident that the first predictor that enters the model is SI. For Model 1, the first variable considered for regression is SI. The R value (.730) which is the correlation between the predictor (SI) and the criterion (GCB) shows a relatively strong positive correlation. The coefficient of determination (R^2 = .533) shows that 53% of the variance of the criterion variable has been significantly explained by the predictor variable. The Adjusted R Square (.532) determines how well the model can be generalised.

In step 2 of regression analysis, the next variable included in the model is EL. For Model 2, the multiple correlations between the predictors (SI and EL) and the criterion (GCB) yielded R value of .783 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .613) shows that 61% of the variance of the criterion variable (GCB) has been

significantly explained by the predictor variables SI and EL. The percentage increase of the variance of GCB (R^2 Change = .080) is 8% by the inclusion of EL. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.613 - .611 =.002) of .2% shows the amount of decrease in variance if the model were derived from the population.

In step 3, ERA is the next variable included in the model. For Model 3, the multiple correlations between the predictors (SI, EL and ERA) and the criterion (GCB) yielded R value of .793 which shows a relatively strong positive correlation. The coefficient of determination (R^2 =.629) shows that 63% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables SI, EL and ERA. The percentage increase of the variance of GCB (R^2 Change = .016) is 2% by the inclusion of ERA. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.629 - .626 =.003) of .3% shows the amount of decrease in variance if the model were derived from the population.

The significance of the models derived from stepwise multiple regression analysis is determined from the F values in the ANOVA table. Table 75 presents the ANOVA in regression analysis of government student sample.

Table 75

Results of ANOVA in Regression of Predictors and Criterion for the Government Student Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	SI	Regression	9118.119	1	9118.119	485.311	p<.01
		Residual	7984.991	425	18.788		
		Total	17103.110	426			
2	SI, EL	Regression	10485.554	2	5242.777	335.915	p<.01
		Residual	6617.556	424	15.607		
		Total	17103.110	426			
3	SI, El, ERA	Regression	10756.185	3	3585.395	238.954	p<.01
		Residual	6346.925	423	15.005		
		Total	17103.110	426			

Criterion Variable: GCB

It is clear from Table 75, for Model 1, the obtained F (1, 425) = 485.311, **p<.01 is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (1, 425) = 6.70, **p<.01. This implies that the contribution of Social Influence significantly predict Green Consumer Behaviour of government student sample. As for Model 2, the obtained F (2, 424) = 335.915, **p<.01is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (2, 424) = 4.66, **p<.01. This means that the combined contributions of Social Influence and Ecoliteracy significantly predict Green Consumer Behaviour of government student sample. In the case of Model 3, the obtained F (3, 423) = 238.954, **p<.01 is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (3, 423) = 3.83, **p<.01. This shows that the combined contributions of Social Influence, Ecoliteracy and Environmental Responsibility Attribution significantly predict Green Consumer Behaviour of government student sample.

Stepwise multiple regression analysis determined the individual contribution of predictors in significantly predicting the criterion variable. Table 76 shows the regression coefficients related to the individual contribution of predictors (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) in predicting the criterion variable (Green Consumer Behaviour) of government student sample.

Table 76

Regression Coefficients of Predictors' Individual Contribution in Predicting the Criterion Variable for the Government Student Sample

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.255	2.143		7.585	.000
	SI	.758	.034	.730	22.030	.000
2	(Constant)	8.232	2.133		3.859	.000
	SI	.543	.039	.523	13.983	.000
	EL	.359	.038	.350	9.360	.000
3	(Constant)	3.745	2.343		1.598	.111
	SI	.488	.040	.470	12.119	.000
	EL	.324	.038	.316	8.409	.000
	ERA	.171	.040	.148	4.247	.000

Criterion Variable: GCB

From Table 76 it is evident that for Model 1, Beta value (ß) of SI is .730 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value (B_1 = .758) represents 76% change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 16.255 relates to the amount of criterion variable without the contribution of predictor variable. Thus, for Model 1, if SI is increased by one unit, the model predicts .758 units increase in Green Consumer Behaviour. The t = 22.030, $^{**}p<.01$ is statistically

significant at .01 level. Hence, it can be inferred that the individual contribution of SI is significant in predicting the Green Consumer Behaviour of government students.

Multiple Regression Equation for Model 1

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 SI + εt$

$GCB = 16.255 + .758 SI$

From Table _ it is evident that for Model 2, Beta values (ß) of SI and EL are .523 and .350 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of SI and EL are .543 and .359 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 8.232 relates to the amount of criterion variable without the contribution of predictor variable. For this model SI, t = 13.983, $^{**}p<.01$ and EL, t = 9.360, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of SI and EL is significant in predicting the Green Consumer Behaviour of government students.

Multiple Regression Equation for Model 2

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1) and EL (X_2) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 SI + ß_2 EL + εt$

$GCB = 8.232 + .543 SI + .359 EL$

From Table 76 it is evident that for Model 3, Beta values (ß) of SI, EL and ERA are .470, .316 and .148 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of SI, EL and ERA are .488, .324 and .171 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 3.745 relates to the amount of criterion variable without the contribution of predictor variable. For this model SI, t = 12.119, $^{**}p<.01$; EL, t = 8.409, $^{**}p<.01$ and ERA, t = 4.247, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of SI, EL and ERA is significant in predicting the Green Consumer Behaviour of government students.

Multiple Regression Equation for Model 3

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1), EL (X_2) and ERA (X_3) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 SI + ß_2 EL + ß_3 ERA + \varepsilon t$

$GCB = 3.745 + .488 SI + .324 EL + .171 ERA$

Discussion

The result of analysis shows that for the government student sample, SI (r = .730, $^{**}p<.01$) is having the highest correlation with GCB followed by EL (r = .659, $^{**}p<.01$) and ERA (r = .522, $^{**}p<.01$). All the variables have significant correlation with GCB and hence enters the model yielding F (3, 423) = 238.954, $^{**}p<.01$, and R^2 = .629. From this, it is evident that the combined contributions of SI, EL and ERA has accounted for 63% variation in GCB of the government student sample. The individual contribution of predictors significantly influencing GCB is equal to 3.745 + .488 SI + .324

EL + .171 ERA. From the results it is clear that Social Influence is the strongest determinant of GCB of government student sample. It is also evident that Ecoliteracy is the next most influencing factor determining Green Behaviour of students as consumers. Apart from this, Environmental Responsibility Attribution is also found t have a significant impact on students regarding their GCB. From the results it is clear that Social Influence is the determinant that has the strongest influence on the GCB of government student sample. Ecoliteracy has the next highest influence on the Green Behaviour of students as consumers. Environmental Responsibility Attribution is also found to have a significant impact on GCB of students. The myriad educational programmes and interventions of government agencies which is more prominent in government educational institutions might have influenced the students to comply with the norms of sustainability in HE institutions. Such activities spur the sense of responsibility among the students to contribute their bit towards environment. Moreover, the results reflect that youths being at formative stage of life, adorns the tendency of conformity to the choices of large groups especially teachers, parents and peers mainly for acceptance. However, the strength of influence gauged reveals that more educational efforts need to be initiated in an organised manner that the students can directly relate it to life for enduring sustainability through HE.

Relative Efficiency of Dimensions of Predictor Variable (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) in Predicting the Criterion Variable (Green Consumer Behaviour) for the Government Student Sample

Regression analysis was carried out to determine the relative efficiency of dimensions of predictor variables in predicting the criterion variable of

government student sample are presented in this section. The results of analysis are presented in Table_.

Table 77 presents inter correlation matrix between the dimensions of predictors and the criterion variable of government student sample.

Table 77

Pearson's Correlation Matrix of Dimensions of Predictor Variables and Criterion Variable for the Government Student Sample

variable	EAW	EAT	EAC	ERAS	ERAO	PI	TI	PGI	MI	GCB
EAW	1									
EAT	.615**	1								
EAC	.289**	.594**	1							
ERAS	.455**	.448**	.299**	1						
ERAO	.006	.030	.052	-.312**	1					
PI	.399**	.391**	.260**	.314**	.053	1				
TI	.483**	.471**	.294**	.421**	.013	.440**	1			
PGI	.328**	.352**	.289**	.389**	.022	.379**	.457**	1		
MI	.470**	.407**	.230**	.433**	.117*	.344**	.427**	.436**	1	
GCB	.661**	.582**	.373**	.643**	-.021	.498**	.581**	.526**	.587**	1

** *Correlation significant at .01 level*

* *Correlation significant at .05 level*

From Table 77 it is evident that there exists significant positive correlation among most of the dimensions of predictor variables and the criterion variable, except for ERAO for the government student sample. It is observed that EAW (r = .661, **p<.01) has the highest correlation with GCB followed by ERAS (r = .643, **p<.01) and MI (r = .587, **p<.01). All the predictor variables are also fairly correlated with each other except for ERAO. It can also be observed that ERAO is having the lowest correlation with a negative index (r = -.021) with GCB. Majority of correlation indices obtained are significant at .01 level and a few at .05 level. All the significant variables are entered for regression analysis.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of dimensions of predictors (individual and collective contribution) in predicting the criterion variable. The model summary of stepwise multiple regression analysis with the factors of Green Consumer Behaviour (GCB) for the government student sample is presented in Table 78.

Table 78

Regression Model Summary of Dimensions of Predictor Variables and Criterion Variable for the Government Student Sample

Model		R	R Square	Adjusted R Square	R Square Change
1	EAW	.661	.437	.436	.437
2	EAW, ERAS	.764	.584	.582	.147
3	EAW, ERAS, PGI	.798	.636	.634	.052
4	EAW, ERAS, PGI, MI	.813	.661	.657	.024
5	EAW, ERAS, PGI, MI, PI	.823	.677	.674	.017
6	EAW, ERAS, PGI, MI, PI, TI	.829	.687	.683	.010
7	EAW, ERAS, PGI, MI, PI, TI, EAT	.831	.691	.686	.004

Criterion Variable: GCB

Table 78 reveals that in the first step of multiple regression analysis, the variable that enters the model is EAW. For Model 1, the R value (.661) is the correlation between the predictor (EAW) and the criterion (GCB) which shows a positive correlation. The coefficient of determination (R^2 = .437) shows that 44% of the variance of the criterion variable has been significantly explained by the predictor variable. The Adjusted R Square (.436) determines how well the model can be generalised.

In step 2 of analysis, ERAS is the next variable included in the model. For Model 2, the multiple correlations between the predictors (EAW, ERAS)

and the criterion (GCB) yielded R value of .764 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .584) shows that 58% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW and ERAS. The percentage increase of the variance of GCB (R^2 Change = .147) is 15% by the inclusion of ERAS. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.584 - .582 =.002) .2% shows the amount of decrease in variance if the model were derived from the population.

In step 3 of analysis, PGI is included in the model. For Model 3, the multiple correlations between the predictors (EAW, ERAS and PGI) and the criterion (GCB) yielded R value of .798 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .636) shows that 64% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, ERAS and PGI. The percentage increase of the variance of GCB (R^2 Change = .052) is 5% by the inclusion of PGI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.636 - .634 =.002) .2% shows the amount of decrease in variance if the model were derived from the population.

In step 4, MI is included in the model. For Model 4, the multiple correlations between the predictors (EAW, ERAS, PGI and MI) and the criterion (GCB) yielded R value of .813 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .661) shows that 66% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, ERAS, PGI and MI. The percentage increase of the variance of GCB (R^2 Change = .024) is 2% by the inclusion of MI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.661 - .657 =.004) .4% shows the

amount of decrease in variance if the model were derived from the population.

In step 5 of multiple regression analysis, PI enters the model. For Model 5, the multiple correlations between the predictors (EAW, ERAS, PGI, MI and PI) and the criterion (GCB) yielded R value of .823 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .677) shows that 68% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, ERAS, PGI, MI and PI. The percentage increase of the variance of GCB (R^2 Change = .017) is 2% by the inclusion of PI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.677 - .674 =.003) .3% shows the amount of decrease in variance if the model were derived from the population.

In step 6, TI is included next in the model. For Model 6, the multiple correlations between the predictors (EAW, ERAS, PGI, MI, PI and TI) and the criterion (GCB) yielded R value of .829 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .687) shows that 69% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, ERAS, PGI, MI, PI and TI. The percentage increase of the variance of GCB (R^2 Change = .010) is 1% by the inclusion of TI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.687 - .683 =.004) .4% shows the amount of decrease in variance if the model were derived from the population.

In step 7, last variable that enters the model is EAT. For Model 7, the multiple correlations between the predictors (EAW, ERAS, PGI, MI, PI, TI and EAT) and the criterion (GCB) yielded R value of .831 which shows a relatively high positive correlation. The coefficient of determination (R^2 =

.691) shows that 69% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, ERAS, PGI, MI, PI, TI and EAT. The percentage increase of the variance of GCB (R^2 Change = .004) is .4% by the inclusion of EAT. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.691 - .686 =.005) .5% shows the amount of decrease in variance if the model were derived from the population.

Significance of the models derived in the regression analysis can be determined from the ANOVA table. Table 79 presents the ANOVA in regression analysis of government student sample.

Table 79

Results of ANOVA in Regression of Dimensions of Predictors and Criterion for the Government Student Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	EAW	Regression	7474.584	1	7474.584	329.926	p<.01
		Residual	9628.526	425	22.655		
		Total	17103.110	426			
2	EAW, ERAS	Regression	9994.784	2	4997.392	298.086	p<.01
		Residual	7108.326	424	16.765		
		Total	17103.110	426			
3	EAW, ERAS, PGI	Regression	10881.989	3	3627.330	246.637	p<.01
		Residual	6221.121	423	14.707		
		Total	17103.110	426			
4	EAW, ERAS, PGI, MI	Regression	11299.635	4	2824.909	205.413	p<.01
		Residual	5803.475	422	13.752		
		Total	17103.110	426			
5	EAW, ERAS, PGI, MI, PI	Regression	11585.061	5	2317.012	176.777	p<.01
		Residual	5518.049	421	13.107		
		Total	17103.110	426			
6	EAW, ERAS, PGI, MI, PI, TI	Regression	11757.372	6	1959.562	153.957	p<.01
		Residual	5345.738	420	12.728		
		Total	17103.110	426			
7	EAW, ERAS, PGI, MI, PI, TI, EAT	Regression	11822.671	7	1688.953	134.018	p<.01
		Residual	5280.439	419	12.602		
		Total	17103.110	426			

Criterion Variable: GCB

From Table 79 it is clear that, for Model 1, F (1, 425) = 329.926, **p<.01. The table value of F (1, 425) = 6.70, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This shows that the contribution of predictor EAW significantly predicts GCB of government student sample. In the case of Model 2, F (2, 424) = 298.086,

$^{**}p<.01$. The table value of F (2, 424) = 4.66, $^{**}p<.01$. As the F value is greater than the table value of F, the model is significant at .01 level which means that the joint contributions of predictors EAW and ERAS significantly predict GCB of government student sample. For Model 3, F (3, 423) = 246.637, $^{**}p<.01$. The table value of F (3, 423) = 3.83. As the F value is greater than the table value of F, the model is significant at .01 level which implies that the combined contributions of predictors EAW, ERAS and PGI significantly predict GCB of government student sample. In Model 4, F (4, 422) = 205.413, $^{**}p<.01$. The table value of F (4, 422) = 3.37, $^{**}p<.01$. Since the F value is greater than the table value of F, the model is significant at .01 level which means that the collective contributions of predictors EAW, ERAS, PGI and MI significantly predict GCB of government student sample. As for Model 5, F (5, 421) = 176.777, $^{**}p<.01$. The table value of F (5, 421) = 3.06. As the F value is greater than the table value of F, the model is significant at .01 level. This shows that the joint contributions of predictors EAW, ERAS, PGI, MI and PI significantly predict GCB of government student sample. For Model 6, F (6, 420) = 153.957, $^{**}p<.01$. The table value of F (6, 420) = 2.85, $^{**}p<.01$. As the F value is greater than the table value of F, the model is significant at .01 level which means that the collective contributions of predictors EAW, ERAS, PGI, MI, PI and TI significantly predict GCB of government student sample. Finally, for Model 7, F (7, 419) = 134.018, $^{**}p<.01$. The table value of F (7, 419) = 2.85, $^{**}p<.01$. As the F value is greater than the table value of F, the model is significant at .01 level. This implies that the joint contributions of predictors EAW, ERAS, PGI, MI, PI, TI and EAT significantly predict GCB of government student sample.

Regression analysis was done to determine the regression coefficients related to the individual contribution of dimensions of predictor variables in predicting the criterion variable (Green Consumer Behaviour) of the government student sample. The details of results are given in Table 80.

Table 80

Regression Coefficients of Dimensions of Predictors' Individual Contribution in Predicting the Criterion Variable for the Government Student Sample

	Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	33.089	1.676		19.747	.000
	EAW	.536	.030	.661	18.164	.000
2	(Constant)	22.619	1.675		13.501	.000
	EAW	.377	.029	.465	13.219	.000
	ERAS	.298	.024	.431	12.261	.000
3	(Constant)	17.068	1.724		9.899	.000
	EAW	.338	.027	.417	12.443	.000
	ERAS	.245	.024	.355	10.338	.000
	PGI	.182	.023	.252	7.767	.000
4	(Constant)	14.108	1.752		8.054	.000
	EAW	.292	.028	.360	10.602	.000
	ERAS	.219	.023	.317	9.355	.000
	PGI	.146	.024	.201	6.163	.000
	MI	.148	.027	.192	5.511	.000
5	(Constant)	11.707	1.786		6.555	.000
	EAW	.263	.028	.324	9.499	.000
	ERAS	.212	.023	.307	9.246	.000
	PGI	.121	.024	.167	5.125	.000
	MI	.136	.026	.177	5.194	.000
	PI	.112	.024	.148	4.667	.000
6	(Constant)	9.660	1.846		5.234	.000
	EAW	.239	.028	.294	8.528	.000
	ERAS	.200	.023	.290	8.799	.000
	PGI	.101	.024	.140	4.230	.000
	MI	.126	.026	.164	4.840	.000
	PI	.093	.024	.124	3.861	.000
	TI	.116	.032	.129	3.679	.000
7	(Constant)	8.327	1.928		4.320	.000
	EAW	.211	.030	.260	6.912	.000
	ERAS	.193	.023	.279	8.397	.000
	PGI	.098	.024	.136	4.122	.000
	MI	.123	.026	.160	4.754	.000
	PI	.087	.024	.116	3.625	.000
	TI	.106	.032	.118	3.348	.001
	EAT	.078	.034	.083	2.276	.023

Criterion Variable: GCB

From Table 80 it is evident that for Model 1, Beta (ß) value of EAW is .661 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value of EAW .536 represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 33.089 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 18.164, $^{**}p<.01$ is a significant predictor of GCB of government student sample.

Multiple Regression Equation for Model 1

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EAW + εt$

$GCB = 33.089 + .536 EAW$

For Model 2, Beta (ß) values of EAW and ERAS are .465 and .431 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW and ERAS are .377 and .298 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 22.619 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 13.219, p<.01 and ERAS, t = 12.261, p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW and ERAS are significant in predicting the Green Consumer Behaviour of government student sample.

Multiple Regression Equation for Model 2

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) and ERAS (X_2) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 ERAS + εt$

$GCB = 22.619 + .377 EAW + .298 ERAS$

For Model 3, Beta (ß) values of EAW, ERAS and PGI are .417, .355 and .252 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS and PGI are .338, .245 and .182 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 17.068 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 12.443, $^{**}p<.01$; ERAS, t = 10.338, $^{**}p<.01$ and PGI, t = 7.767, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS and PGI are significant in predicting the Green Consumer Behaviour of government student sample.

Multiple Regression Equation for Model 3

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2) and PGI (X_3) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 ERAS + ß_3 PGI + εt$

$GCB = 17.068 + .338 EAW + .245 ERAS + .182 PGI$

For Model 4, Beta (ß) values of EAW, ERAS, PGI and MI are .360, .317, .201 and .192 respectively which represents the estimated change in

criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, PGI and MI are .292, .219, .146 and .148 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 14.108 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 10.602, **p<.01; ERAS, t = 9.355, **p<.01; PGI, t = 6.163, **p<.01 and MI, t = 5.511, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, PGI and MI are significant in predicting the Green Consumer Behaviour of government student sample.

Multiple Regression Equation for Model 4

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), PGI (X_3) and MI (X_4) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1$ EAW + $ß_2$ ERAS + $ß_3$ PGI + $ß_4$ MI + εt

GCB = 14.108 + .292 EAW + .219 ERAS + .146 PGI + .148 MI

For Model 5, Beta (ß) values of EAW, ERAS, PGI, MI and PI are .324, .307, .167, .177 and .148 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, PGI, MI and PI are .263, .212, .121, .136 and .112 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 11.707 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 9.499, **p<.01; ERAS, t = 9.246, **p<.01; PGI, t = 5.125, **p<.01; MI, t = 5.194, **p<.01 and PI, t = 4.667, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective

contribution of EAW, ERAS, PGI, MI and PI are significant in predicting the Green Consumer Behaviour of government student sample.

Multiple Regression Equation for Model 5

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), PGI (X_3), MI (X_4) and PI (X_5) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 ERAS + ß_3 PGI + ß_4 MI + ß_5 PI + \varepsilon t$

$GCB = 11.707 + .263 EAW + .212 ERAS + .121 PGI + .136 MI + .112 PI$

For Model 6, Beta (ß) values of EAW, ERAS, PGI, MI, PI and TI are .294, .290, .140, .164, .124 and .129 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, PGI, MI, PI and TI are .239, .200, .101, .126, .093 and .116 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 9.660 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 8.528, $^{**}p<.01$; ERAS, t = 8.799, $^{**}p<.01$; PGI, t = 4.230, $^{**}p<.01$; MI, t = 4.840, $^{**}p<.01$; PI, t = 3.861, $^{**}p<.01$ and TI, t = 3.679, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, PGI, MI, PI and TI are significant in predicting the Green Consumer Behaviour of government student sample.

Multiple Regression Equation for Model 6

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), PGI (X_3), MI (X_4), PI (X_5) and TI (X_6) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ ERAS + ß_3\ PGI + ß_4\ MI + ß_5\ PI + ß_6\ TI + \varepsilon t$

GCB = 9.660 + .239 EAW + .200 ERAS + .101 PGI + .126 MI+ .093 PI + .116 TI

For Model 7, Beta (ß) values of EAW, ERAS, PGI, MI, PI, TI and EAT are .260, .279, .136, .160, .116, .118 and .083 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, ERAS, PGI, MI, PI, TI and EAT are .211, .193, .098, .123, .087, .106 and .078 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 8.327 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 6.192, $^{**}p<.01$; ERAS, t = 8.397, $^{**}p<.01$; PGI, t = 4.122, $^{**}p<.01$; MI, t = 4.754, $^{**}p<.01$; PI, t = 3.625, $^{**}p<.01$; TI, t = 3.348, $^{**}p<.01$ and EAT, t = 2.276, $^{**}p<.01$ level are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, ERAS, PGI, MI, PI, TI and EAT are significant in predicting the Green Consumer Behaviour of government student sample.

Multiple Regression Equation for Model 7

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), ERAS (X_2), PGI (X_3), MI (X_4), PI (X_5), TI (X_6) and EAT (X_7) of general form $Y=ß_0 + ß_1\ X_1 + ß_2\ X_2 + \ldots\ldots\ldots\ldots\ldots + ß_n\ X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ ERAS + ß_3\ PGI + ß_4\ MI + ß_5\ PI + ß_6\ TI + ß_7\ EAT + \varepsilon t$

GCB = 8.327 + .211 EAW + .193 ERAS + .098 PGI + .123 MI + .087 PI + .106 TI + .078 EAT

Discussion

The results of regression analysis show that 7 dimensions of predictors have significant relationship in explaining the Green Consumer behaviour (R = .831, p<.01) of undergraduate students. Amongst these predictors EAW (r = .661, p<.01) has the highest correlation with GCB followed by ERAS (r = .643, p< .01) and MI (r = .587, p<.01). All the significant variables enter the model except for EAC (.582, **p<.01) and ERAO (r = -.021, **p>.01). It is to be noted that although EAC is excluded from the model it is significantly correlated to GCB which implies its significant influence on GCB of government student sample. On the contrary ERAO is excluded from the model owing to its insignificant relationship to influence the GCB. A significant model is yielded (EAW, ERAS, PGI, MI, PI, TI, EAT) with F (7, 419) = 134.018, **p<.01, R^2 = .691. This shows that the joint contributions of the predictors accounts for 69% of variance of GCB for the government student sample. The individual contribution of predictors significantly predicting GCB is equal 8.327 + .211 EAW + .193 ERAS + .098 PGI + .123 MI + .087 PI + .106 TI + .078 EAT. The results indicate that the awareness pertaining to environment has significant influence on GCB of government student sample. Another determinant of GCB is the sense of responsibility that the students behold towards environment. It is evident that Social Influence has spurred the students towards going green amongst which Peer Group and Media Influence have heightened the impact in addition to Parental and Teacher Influence. It is also clear that EAT has also exerted significant influence on GCB of the government student sample. These findings can be a pathfinder to educationists and other stakeholders to reinvent action oriented initiatives that trails qualities of environmental consciousness, responsibility and dispositions in young consumers to rethink about their ecofriendly actions that lasts for a lifetime.

Relative Efficiency of Predictor Variables (individual and collective contribution) in Predicting the Criterion Variable for the Aided Student Sample

The relative efficiency of predictor variables in the individual and collective contribution in predicting the criterion variable for aided student sample was determined. The details regarding this are presented in this section.

Table 81presents the inter correlation matrix between the predictors and the criterion variable of aided students.

Table 81

Pearson's Correlation Matrix of Predictor Variables (EL, ERA, SI) and Criterion Variable (GCB) for the Aided Student Sample

Variables	EL	ERA	SI	GCB
EL	1			
ERA	.567**	1		
SI	.650**	.576**	1	
GCB	.698**	.553**	.743**	1

**Correlation significant at .01 level

Table 81 reveals that there exists significant positive correlation among the predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) for aided student sample. It is evident that SI (r = .743, **p<.01) is having the highest correlation with GCB followed by EL (r = .698, **p<.01) and ERA (r = .553, **p<.01). All the correlation indices obtained are significant at .01 level. All the significant predictors were considered for regression analysis.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of predictors (individual and collective contribution) in predicting the criterion variable.

The model summary of stepwise multiple regression analysis with the factors of Green Consumer Behaviour (GCB) constituting Ecoliteracy (EL), Environmental Responsibility Attribution (ERA) and Social Influence (SI) of aided student sample is presented in Table 82.

Table 82

Regression Model Summary of Predictor Variables (EL, ERA, SI) and Criterion Variable (GCB) for the Aided Student Sample

	Model	R	R Square	Adjusted R Square	R Square Change
1	SI	.743	.553	.552	.553
2	SI, EL	.795	.633	.631	.080
3	SI, EL, ERA	.798	.637	.636	.005

Criterion Variable: GCB

From Table 82 it is evident that in step 1 of multiple regression analysis, the first variable included in the model is SI. For Model 1, the first variable considered for regression is SI. The R value (.743) which is the correlation between the predictor (SI) and the criterion (GCB) shows a relatively strong positive correlation. The coefficient of determination (R^2 = .553) shows that 55% of the variance of the criterion variable has been significantly explained by the predictor variable. The Adjusted R Square (.552) determines how well the model can be generalised.

In step 2 of regression analysis, the variable that enters next in the model is EL. For Model 2, the multiple correlations between the predictors (SI and EL) and the criterion (GCB) yielded R value of .795 which shows a relatively strong positive correlation. The coefficient of determination (R^2 =

.633) shows that 63% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables SI and EL. The percentage increase of the variance of GCB (R^2 Change = .080) is 8% by the inclusion of EL. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.633 - .631 =.002) of .2% shows the amount of decrease in variance if the model were derived from the population.

In step 3 of analysis, ERA is included in the model. For Model 3, the multiple correlations between the predictors (SI, EL and ERA) and the criterion (GCB) yielded R value of .798 which shows a relatively strong positive correlation. The coefficient of determination (R^2 =.637) shows that 64% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables SI, EL and ERA. The percentage increase of the variance of GCB (R^2 Change = .005) is .5% by the inclusion of ERA. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.637 - .636 =.001) of .1% shows the amount of decrease in variance if the model were derived from the population.

The significance of regression models can be determined from the F values in ANOVA table. Table 83 presents the ANOVA in regression analysis of aided student sample.

Table 83

Results of ANOVA in Regression of Predictors and Criterion for the Aided Student Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	SI	Regression	13326.054	1	13326.054	705.201	p<.01
		Residual	10790.075	571	18.897		
		Total	24116.129	572			
2	SI, EL	Regression	15260.129	2	7630.064	491.095	p<.01
		Residual	8856.001	570	15.537		
		Total	24116.129	572			
3	SI, EL, ERA	Regression	15371.942	3	5123.981	333.427	p<.01
		Residual	8744.187	569	15.368		
		Total	24116.129	572			

Criterion Variable: GCB

From Table 83 it is clear that, for Model 1, the obtained F (1, 571) = 705.201, **p<.01 is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (1, 571) = 6.69, **p<.01. This means that the contribution of Social Influence significantly predicts Green Consumer Behaviour of aided student sample. For Model 2, the obtained F (2, 570) = 491.095, **p<.01 which is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (2, 570) = 4.65, **p<.01. This means that the combined contributions of Social Influence and Ecoliteracy significantly predict Green Consumer Behaviour of aided student sample. In the case of Model 3, the obtained F (3, 569) = 333.427, **p<.01 which is greater than the table value for corresponding degrees of freedom at .01 level. The table value of F (3, 569) = 3.82, **p<.01. This implies that the collective contributions of Social Influence, Ecoliteracy and Environmental Responsibility Attribution significantly predict Green Consumer Behaviour of aided student sample.

Stepwise regression analysis carried out determined the regression coefficients related to the individual contribution of predictors in predicting the criterion variable for aided student sample. The details of results of analysis are presented in Table 84.

Table 84

Regression Coefficients of Predictors' Individual Contribution in Predicting the Criterion Variable for the Aided Student Sample

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.220	1.892		8.573	.000
	SI	.826	.031	.743	26.556	.000
2	(Constant)	7.754	1.876		4.133	.000
	SI	.557	.037	.501	15.021	.000
	EL	.400	.036	.372	11.157	.000
3	(Constant)	4.766	2.170		2.197	.028
	SI	.522	.039	.470	13.355	.000
	EL	.369	.038	.343	9.828	.000
	ERA	.121	.045	.088	2.697	.007

Criterion Variable: GCB

Table 84 reveals that for Model 1, Beta value (ß) of SI is .743 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value (B_1 = .826) represents 83% change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 16.220 relates to the amount of criterion variable without the contribution of predictor variable. Thus, for Model 1, if SI is increased by one unit, the model predicts .826 units increase in Green Consumer Behaviour. The t = 26.556, $^{**}p<.01$ is statistically significant at .01 level. Hence, it can be inferred that the individual contribution of SI is significant in predicting the Green Consumer Behaviour of aided students.

Multiple Regression Equation for Model 1

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 SI + εt$

$GCB = 16.220 + .826 SI$

Table 84 shows that for Model 2, Beta values (ß) of SI and EL are .501 and .372 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of SI and EL are .557 and .400 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 7.754 relates to the amount of criterion variable without the contribution of predictor variable. For this model SI, t = 15.021, $^{**}p<.01$ and EL, t = 11.157, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of SI and EL is significant in predicting the Green Consumer Behaviour of aided students.

Multiple Regression Equation for Model 2

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1) and EL (X_2) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 SI + ß_2 EL + εt$

$GCB = 7.754 + .557 SI + .400 EL$

From Table 84 it can be seen that for Model 3, Beta values (ß) of SI, EL and ERA are .470, .343 and .088 respectively which represents the estimated change in criterion variable with one standard deviation change in

predictor variable. The B values of SI, EL and ERA are .522, .369 and .121 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 4.766 relates to the amount of criterion variable without the contribution of predictor variable. For this model SI, t = 13.355, $^{**}p<.01$; EL, t = 9.828, $^{**}p<.01$ and ERA, t = 2.697, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of SI, EL and ERA is significant in predicting the Green Consumer Behaviour of aided students.

Multiple Regression Equation for Model 3

The regression equation for predicting Green Consumer Behaviour (Y) by SI (X_1), EL (X_2) and ERA (X_3) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 SI + ß_2 EL + ß_3 ERA + εt$

$GCB = 4.766 + .522 SI + .369 EL + .121 ERA$

Discussion

The results of analysis indicate that SI (r = .743, $^{**}p<.01$) is having the highest correlation with GCB followed by EL (r = .698, $^{**}p<.01$) and ERA (r = .553, $^{**}p<.01$) for the aided student sample. The multiple correlations of predictors (R = .798) have significant relationship in explaining GCB. All the variables are found to be significant and hence enters the model yielding F (3, 569) = 333.427, $^{**}p<.01$, and R^2 =.637. This implies that the collective contributions of the predictors has accounted for 64% variation in GCB of the aided student sample. The individual contribution of predictors significantly influencing GCB is equal to 4.766 + .522 SI + .369 EL + .121 ERA. The result reflects the vital influence of consumer socialisation which is evident with the Social Influence having the highest correlation with GCB.

Ecoliteracy of students is seen to have a significant impact which sheds light on the importance of fostering GCB through heightened awareness about environment among young consumers. ERA is the last variable that enters the model with a significant influence on GCB. However, the result highlights the need for enhanced influence of certain variables, specifically the ERA which is a cardinal pre-requisite for rejuvenating GCB among students. Education for revitalising the power and potential of young consumers through variegated programmes would enable in producing a better results for heeding sustainability.

Relative Efficiency of Dimensions of Predictor Variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) in Predicting the Criterion Variable (Green Consumer Behaviour) for the Aided Student Sample

The details regarding relative efficiency of dimensions of predictor variables in predicting the criterion variable of aided student sample are presented in this section.

Table 85 presents inter correlation matrix between the dimensions of predictors and the criterion variable of aided student sample.

Table 85

Pearson's Correlation Matrix of Dimensions of Predictor Variables and Criterion Variable for the Aided Student Sample

variable	EAW	EAT	EAC	ERAS	ERAO	PI	TI	PGI	MI	GCB
EAW	1									
EAT	.553**	1								
EAC	.104*	.552**	1							
ERAS	.565**	.587**	.425**	1						
ERAO	.118**	.103*	.036	-.084*	1					
PI	.420**	.450**	.323**	.493**	.186**	1				
TI	.466**	.443**	.279**	.499**	.078	.478**	1			
PGI	.499**	.423**	.234**	.478**	.128**	.503**	.519**	1		
MI	.518**	.487**	.325**	.513**	.116**	.493**	.438**	.544**	1	
GCB	.647**	.586**	.406**	.646**	.112**	.542**	.616**	.571**	.630**	1

** *Correlation significant at .01 level*

* *Correlation significant at .05 level*

Table 85 reveals that there exists significant positive correlation among most of the dimensions of predictor variables and the criterion variable, except for ERAO for the government student sample. It is observed that EAW ($r = .647$, $^{**}p<.01$) has the highest correlation with GCB followed by ERAS ($r = .646$, $^{**}p<.01$) and MI ($r = .630$, $^{**}p<.01$). All the predictor variables are also fairly correlated with each other except for ERAO. It can also be observed that ERAO is having the lowest correlation index ($r = .112$) with GCB. Majority of correlation indices obtained are significant at .01 level and a few at .05 level. All the significant variables are entered for regression analysis.

The next stage of analysis followed a stepwise multiple regression to assess the relative efficiency of dimensions of predictors (individual and collective contribution) in predicting the criterion variable. The model summary of stepwise multiple regression analysis with the factors of Green

Consumer Behaviour (GCB) for the aided student sample is presented in Table 86.

Table 86

Regression Model Summary of Dimensions of Predictor Variables and Criterion Variable for the Aided Student Sample

	Model	R	R Square	Adjusted R Square	R Square Change
1	EAW	.647	.419	.418	.419
2	EAW, TI	.738	.545	.543	.126
3	EAW, TI, MI	.783	.613	.611	.068
4	EAW, TI, MI, EAC	.806	.650	.648	.037
5	EAW, TI, MI, EAC, ERAS	.815	.664	.661	.014
6	EAW, TI, MI, EAC, ERAS, PGI	.818	.669	.665	.004
7	EAW, TI, MI, EAC, ERAS, PGI, PI	.819	.671	.667	.003

Criterion Variable: GCB

Table 86 reveals that in step 1 of regression analysis, the first variable included in the model is EAW. For Model 1, the R value (.647) is the correlation between the predictor (EAW) and the criterion (GCB) which shows a positive correlation. The coefficient of determination (R^2 = .419) shows that 42% of the variance of the criterion variable has been significantly explained by the predictor variable. The Adjusted R Square (.418) determines how well the model can be generalised.

In step 2 of analysis, the next variable that enters the model is TI. For Model 2, the multiple correlations between the predictors (EAW, TI) and the criterion (GCB) yielded R value of .738 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .545) shows that 55% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW and TI. The percentage increase of

the variance of GCB (R^2 Change = .126) is 3% by the inclusion of TI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.545 - .543 =.002) .2% shows the amount of decrease in variance if the model were derived from the population.

In step 3, the variable that enters the model is MI. For Model 3, the multiple correlations between the predictors (EAW, TI and MI) and the criterion (GCB) yielded R value of .783 which shows a relatively strong positive correlation. The coefficient of determination (R^2 = .613) shows that 61% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, TI and MI. The percentage increase of the variance of GCB (R^2 Change = .068) is 7% by the inclusion of MI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.613 - .611 =.002) .2% shows the amount of decrease in variance if the model were derived from the population.

In step 4, EAC enters the model in regression. For Model 4, the multiple correlations between the predictors (EAW, TI, MI and EAC) and the criterion (GCB) yielded R value of .806 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .650) shows that 65% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, TI, MI and EAC. The percentage increase of the variance of GCB (R^2 Change = .037) is 4% by the inclusion of EAC. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.650 - .648 =.002) .2% shows the amount of decrease in variance if the model were derived from the population.

In step 5, the next variable that enters the model is ERAS. For Model 5, the multiple correlations between the predictors (EAW, TI, MI, EAC and ERAS) and the criterion (GCB) yielded R value of .815 which shows a relatively high positive correlation. The coefficient of determination (R^2 =

.664) shows that 66% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, TI, MI, EAC and ERAS. The percentage increase of the variance of GCB (R^2 Change = .014) is 1% by the inclusion of ERAS. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.664 - .661 =.003) .3% shows the amount of decrease in variance if the model were derived from the population.

In step 6, the next variable included in the model is PGI. For Model 6, the multiple correlations between the predictors (EAW, TI, MI, EAC, ERAS and PGI) and the criterion (GCB) yielded R value of .818 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .669) shows that 67% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, TI, MI, EAC, ERAS and PGI. The percentage increase of the variance of GCB (R^2 Change = .004) is .4% by the inclusion of PGI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.669 - .665 =.004) .4% shows the amount of decrease in variance if the model were derived from the population.

In step 7 of regression analysis, PI enters the model. For Model 7, the multiple correlations between the predictors (EAW, TI, MI, EAC, ERAS, PGI and PI) and the criterion (GCB) yielded R value of .819 which shows a relatively high positive correlation. The coefficient of determination (R^2 = .671) shows that 67% of the variance of the criterion variable (GCB) has been significantly explained by the predictor variables EAW, TI, MI, EAC, ERAS, PGI and PI. The percentage increase of the variance of GCB (R^2 Change = .003) is .3% by the inclusion of PI. The Adjusted R Square value reflects how well the model can be generalised. The shrinkage value (.671 - .667 =.004) .4% shows the amount of decrease in variance if the model were derived from the population.

The significance of the regression models derived from analysis can be determined from the F values in the ANOVA table. Table 87 presents the ANOVA in regression analysis of aided student sample.

Table 87

Results of ANOVA in Regression of Dimensions of Predictors and Criterion for the Aided Student Sample

Model			Sum of Squares	df	Mean Square	F	Sig.
1	EAW	Regression	10095.927	1	10095.927	411.176	p<.01
		Residual	14020.202	571	24.554		
		Total	24116.129	572			
2	EAW, TI	Regression	13138.004	2	6569.002	341.072	p<.01
		Residual	10978.125	570	19.260		
		Total	24116.129	572			
3	EAW, TI, MI	Regression	14782.473	3	4927.491	300.391	p<.01
		Residual	9333.656	569	16.404		
		Total	24116.129	572			
4	EAW, TI, MI, EAC	Regression	15678.829	4	3919.707	263.875	p<.01
		Residual	8437.300	568	14.854		
		Total	24116.129	572			
5	EAW, TI, MI, EAC, ERAS	Regression	16018.032	5	3203.606	224.305	p<.01
		Residual	8098.098	567	14.282		
		Total	24116.129	572			
6	EAW, TI, MI, EAC, ERAS, PGI	Regression	16124.172	6	2687.362	190.322	p<.01
		Residual	7991.957	566	14.120		
		Total	24116.129	572			
7	EAW, TI, MI, EAC, ERAS, PGI, PI	Regression	16189.398	7	2312.771	164.849	p<.01
		Residual	7926.731	565	14.030		
		Total	24116.129	572			

Criterion Variable: GCB

From Table 87 it is clear that, for Model 1, F (1, 571) = 411.176, **p<.01. The table value of F (1, 571) = 6.69, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level which implies that the contribution of predictor EAW significantly predicts GCB of aided student sample. In Model 2, F (2, 570) = 341.072, **p<.01. The table value of F (2, 570)

= 4.65, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This means that the collective contributions of predictors EAW and TI significantly predict GCB of aided student sample. For Model 3, F (3, 569) = 300.391, **p<.01. The table value of F (3, 569) = 3.82, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This shows that the joint contributions of predictors EAW, TI and MI significantly predict GCB of aided student sample. In the case of Model 4, F (4, 568) = 263.875, **p<.01. The table value of F (4, 568) = 3.36, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This shows that the combined contributions of predictors EAW, TI, MI and EAC significantly predict GCB of aided student sample. For Model 5, F (5, 567) = 224.305, **p<.01. The table value of F (5, 567) = 3.05, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level. This means that the combined contributions of predictors EAW, TI, MI, EAC and ERAS significantly predict GCB of aided student sample. In Model 6, F (6, 566) = 190.322, **p<.01. The table value of F (6, 566) = 2.84, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level which means that the joint contributions of predictors EAW, TI, MI, EAC, ERAS and PGI significantly predict GCB of aided student sample. Lastly, for Model 7, F (7, 565) = 164.849, **p<.01. The table value of F (7, 565) = 2.84, **p<.01. As the F value is greater than the table value of F, the model is significant at .01 level which means that the collective contributions of predictors EAW, TI, MI, EAC, ERAS, PGI and PI significantly predict GCB of aided student sample.

Table 88 shows the regression coefficients related to the individual contribution of dimensions of predictor variables in predicting the criterion variable (Green Consumer Behaviour) of aided student sample.

Table 88

Regression Coefficients of Dimensions of Predictors' Individual Contribution in Predicting the Criterion Variable for the Aided Student Sample

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	33.241	1.640		20.268	.000
	EAW	.563	.028	.647	20.277	.000
2	(Constant)	20.581	1.768		11.643	.000
	EAW	.400	.028	.460	14.392	.000
	TI	.378	.030	.401	12.568	.000
3	(Constant)	13.713	1.770		7.749	.000
	EAW	.290	.028	.333	10.377	.000
	TI	.303	.029	.322	10.553	.000
	MI	.274	.027	.316	10.013	.000
4	(Constant)	8.820	1.798		4.906	.000
	EAW	.318	.027	.366	11.869	.000
	TI	.261	.028	.277	9.351	.000
	MI	.218	.027	.251	8.053	.000
	EAC	.149	.019	.209	7.768	.000
5	(Constant)	7.026	1.801		3.901	.000
	EAW	.264	.029	.303	9.217	.000
	TI	.232	.028	.247	8.321	.000
	MI	.197	.027	.227	7.313	.000
	EAC	.115	.020	.160	5.698	.000
	ERAS	.158	.032	.168	4.873	.000
6	(Constant)	6.652	1.796		3.704	.000
	EAW	.251	.029	.288	8.693	.000
	TI	.211	.029	.224	7.306	.000
	MI	.175	.028	.201	6.264	.000
	EAC	.114	.020	.160	5.707	.000
	ERAS	.150	.032	.159	4.624	.000
	PGI	.073	.027	.088	2.742	.006
7	(Constant)	6.264	1.799		3.481	.001
	EAW	.247	.029	.284	8.590	.000
	TI	.200	.029	.213	6.853	.000
	MI	.165	.028	.190	5.850	.000
	EAC	.109	.020	.153	5.436	.000
	ERAS	.140	.033	.149	4.308	.000
	PGI	.062	.027	.074	2.295	.022
	PI	.059	.027	.067	2.156	.031

Criterion Variable: GCB

From Table 88 it is evident that for Model 1, Beta (ß) value of EAW is .647 which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B value of EAW .563 represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 33.241 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 20.277, p<.01 is a significant predictor of GCB of aided student sample.

Multiple Regression Equation for Model 1

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EAW + εt$

$GCB = 33.241 + .563 EAW$

For Model 2, Beta (ß) values of EAW and TI are .460 and .401 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW and TI are .400 and .378 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 20.581 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 14.392, p<.01 and TI, t = 12.568, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW and TI are significant in predicting the Green Consumer Behaviour of aided student sample.

Multiple Regression Equation for Model 2

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1) and TI (X_2) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 TI + εt$

$GCB = 20.581 + .400 EAW + .378 TI$

For Model 3, Beta (ß) values of EAW, TI and MI are .333, .322 and .316 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI and MI are .290, .303 and .274 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 13.713 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 10.377, $^{**}p<.01$; TI, t = 10.553, $^{**}p<.01$ and MI, t = 10.013, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, TI and MI are significant in predicting the Green Consumer Behaviour of aided student sample.

Multiple Regression Equation for Model 3

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2) and MI (X_3) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + εt$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 TI + ß_3 MI + εt$

$GCB = 13.713 + .290 EAW + .303 TI + .274 MI + εt$

In the case of Model 4, Beta (ß) values of EAW, TI, MI and EAC are .366, .277, .251 and .209 respectively which represents the estimated change

in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI, MI and EAC are .318, .261, .218 and .149 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 8.820 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 11.869, **p<.01; TI, t = 9.351, **p<.01; MI, t = 8.053, **p<.01 and EAC, t = 7.768, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, TI, MI and EAC are significant in predicting the Green Consumer Behaviour of aided student sample.

Multiple Regression Equation for Model 4

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2), MI (X_3) and EAC (X_4) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 TI + ß_3 MI + ß_4 EAC + \varepsilon t$

$GCB = 8.820 + .318 EAW + .261 TI + .218 MI + .149 EAC$

In Model 5, Beta (ß) values of EAW, TI, MI, EAC and ERAS are .303, .247, .227, .160 and .168 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI, MI, EAC and ERAS are .264, .232, .197, .115 and .158 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 7.026 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 9.217, **p<.01; TI, t = 8.321, **p<.01; MI, t = 7.313, **p<.01; EAC, t = 5.698, **p<.01 and ERAS, t = 4.873, **p<.01 are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW,

TI, MI, EAC and ERAS are significant in predicting the Green Consumer Behaviour of aided student sample.

Multiple Regression Equation for Model 5

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2), MI (X_3), EAC (X_4) and ERAS (X_5) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1 EAW + ß_2 TI + ß_3 MI + ß_4 EAC + ß_5 ERAS + \varepsilon t$

GCB = 7.026 + .264 EAW + .232 TI + .197 MI + .115 EAC + .158 ERAS

For Model 6, Beta (ß) values of EAW, TI, MI, EAC, ERAS and PGI are .288, .224, .201, .160, .159 and .088 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI, MI, EAC, ERAS and PGI are .251, .211, .175, .114, .150 and .073 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 6.652 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 8.693, $^{**}p<.01$; TI, t = 7.306, $^{**}p<.01$; MI, t = 6.264, $^{**}p<.01$; EAC, t = 5.707, $^{**}p<.01$; ERAS, t = 4.624, $^{**}p<.01$ and PGI, t = 2.742, $^{**}p<.01$ are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, TI, MI, EAC, ERAS and PGI are significant in predicting the Green Consumer Behaviour of aided student sample.

Multiple Regression Equation for Model 6

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2), MI (X_3), EAC (X_4), ERAS (X_5) and PGI (X_6) of general form $Y=ß_0 + ß_1 X_1 + ß_2 X_2 +.....+ ß_n X_n + \varepsilon t$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ TI + ß_3\ MI + ß_4\ EAC + ß_5\ ERAS + ß_6\ PGI + εt$

GCB = 6.652 + .251 EAW + .211 TI + .175 MI + .114 EAC+ .150 ERAS + .073 PGI

For Model 7, Beta (ß) values of EAW, TI, MI, EAC, ERAS, PGI and PI are .284, .213, .190, .153, .149, .074 and .067 respectively which represents the estimated change in criterion variable with one standard deviation change in predictor variable. The B values of EAW, TI, MI, EAC, ERAS, PGI and PI are .247, .200, .165, .109, .140, .062 and .059 respectively which represents the change in criterion variable associated with a unit change in the predictor variable. The constant (B_0) 6.264 relates to the amount of criterion variable without the contribution of predictor variable. For this model EAW, t = 8.590, $^{**}p<.01$; TI, t = 6.853, $^{**}p<.01$; MI, t = 5.850, $^{**}p<.01$; EAC, t = 5.436, $^{**}p<.01$; ERAS, t = 4.308, $^{**}p<.01$; PGI, t = 2.295, $^{**}p<.01$ and PI, t = 2.156, $^{**}p<.01$ level are significant at .01 level. Hence, it can be inferred that the collective contribution of EAW, TI, MI, EAC, ERAS, PGI and PI are significant in predicting the Green Consumer Behaviour of aided student sample.

Multiple Regression Equation for Model 7

The regression equation for predicting Green Consumer Behaviour (Y) by EAW (X_1), TI (X_2), MI (X_3), EAC (X_4), ERAS (X_5), PGI (X_6) and PI (X_7) of general form $Y=ß_0 + ß_1\ X_1 + ß_2\ X_2 +.....+ ß_n\ X_n + εt$ is given below.

$GCB = ß_0 + ß_1\ EAW + ß_2\ TI + ß_3\ MI + ß_4\ EAC + ß_5\ ERAS + ß_6\ PGI + ß_7\ PI + εt$

GCB = 6.264 + .247 EAW + .200 TI + .165 MI + .109 EAC + .140 ERAS + .062 PGI + .059 PI

Discussion

From the result it is evident that 7 dimensions of predictors have significant relationship in explaining the GCB (R = .819) of the aided student sample. EAW (r = .647, **p<.01) has the highest correlation with GCB followed by ERAS (r = .646, **p<.01) and MI (r = .630, **p<.01). The significant variables enter the model except for EAT (r = .586, **p<.01) and ERAO (r = .112, p>.01). It is to be noted that even though EAT is excluded from the model, it is significantly correlated with GCB reflecting its influence on the Green Consumer Behaviour of the aided student sample. However, owing to the low correlation between ERAO and GCB, this dimension is excluded from the model. A significant model is yielded (EAW, TI, MI, EAC, ERAS, PGI, PI) yielding F (7, 565) = 164.849, **p<.01, and R^2 = .671. This shows that the collective contributions of predictors have accounted for 66% of variance of GCB which is applicable to the aided student sample. The individual contribution of predictors significantly contributing to GCB is equal to 6.264 + .247 EAW + .200 TI + .165 MI + .109 EAC + .140 ERAS + .062 PGI + .059 PI. From this it can be inferred that the awareness about environment is the most influencing factor of GCB for aided student sample. The teacher influence along with media influence also determines the GCB of students. Environmental related past behaviours in the form of EAC also affirms the propensity of green behaviour of young consumers. The belief of responsibility to protect and conserve the environment rests in one self has also steered young consumers' behaviour towards going green. Apart from this, aided students are also seen to have influenced by the peer groups as well as parents in manifesting GCB. The result of analysis reiterates the need for education to develop strategies that are in line with the immediate needs and demands of the society pursuing sustainability.

Conclusion

Data analysis revealed that there exists significant gender difference in Ecoliteracy and Social Influence. Significant gender difference was also evident in the dimensions of predictors like Environmental Awareness, Environmental Attitude, Parental Influence, Teacher Influence and Peer Group Influence. No significant locale and institutional differences were evident for predictors and its dimensions. In the case of Green Consumer Behaviour, significant gender difference was found with females showing predominant Green Consumer Behaviour compared to males. Institutional difference was also significant with students of government institutions showing more predominant Green Consumer Behaviour compared to students of aided institutions. The results of stepwise multiple regression analysis showed that all the predictors like Ecoliteracy, Environmental Responsibility Attribution and Social Influence significantly predicted the Green Consumer Behaviour of undergraduate students for the total sample and subsamples based on gender, locale and type of institution. The relative efficiency of dimensions of predictors in predicting the criterion was also found to be significant except for Environmental Responsibility Attribution to Others for the total sample. In the case of subsamples most of the dimensions significantly predicted the Green Consumer Behaviour of students except for Environmental Responsibility Attribution to Others. In some cases of subsamples, Environmental Attitude was not found to be a significant predictor. However, it is noteworthy that Environmental Attitude had a significant correlation with the Green Consumer Behaviour of around .58 in all cases which depicted its potency of being a significant predictor. The summary, findings and suggestions are given in Chapter 5.

CHAPTER 5

SUMMARY, FINDINGS AND SUGGESTIONS

- Study in Retrospect
- Variables of the Study
- Objectives of the Study
- Hypotheses of the Study
- Methodology
- Major Findings
- Tenability of Hypotheses
- Educational Implications
- Suggestions for Further Research

SUMMARY, FINDINGS AND SUGGESTIONS

This chapter gives an overview of the significant aspects of the research which will include the study in retrospect, summary of the procedures, major findings of the study, tenability of hypotheses, educational implications and suggestions for further research. All this will be discussed under the following heads:

Study in Retrospect

Variables of the Study

Objectives of the Study

Hypotheses of the study

Methodology

Major Findings

Tenability of Hypotheses

Educational Implications

Suggestions for Further Research

Study in Retrospect

The present study was entitled **ECOLITERACY, ENVIRONMENTAL RESPONSIBILITY ATTRIBUTION AND SOCIAL INFLUENCE AS DETERMINANTS OF GREEN CONSUMER BEHAVIOUR OF UNDERGRADUATE STUDENTS.**

Variables of the Study

The variables of the study are listed below.

Predictor Variables

1. Ecoliteracy
2. Environmental Responsibility Attribution
3. Social Influence

Criterion Variable

1. Green Consumer Behaviour

Objectives of the Study

1. To assess the existing level of Ecoliteracy, Environmental Responsibility Attribution, Social Influence and Green Consumer Behaviour for the total sample and the sub samples based on gender, locale and type of institution.

2. To find out whether there exist any significant differences in the mean scores of Ecoliteracy for the sub samples based on gender, locale and type of institution.

3. To find out whether there exist any significant differences in the mean scores of Environmental Responsibility Attribution for the sub samples based on gender, locale and type of institution.

4. To find out whether there exist any significant differences in the mean scores of Social Influence for the sub samples based on gender, locale and type of institution.

5. To find out whether there exist any significant differences in the dimensions of Ecoliteracy (Environmental Awareness, Environmental Attitude and Environmental Action) for the sub samples based on gender, locale and type of institution.

6. To find out whether there exist any significant differences in the dimensions of Environmental Responsibility Attribution (Environmental Responsibility Attribution to Self and Environmental Responsibility Attribution to Others) for the sub samples based on gender, locale and type of institution.

7. To find out whether there exist any significant differences in the dimensions of Social Influence (Parental Influence, Teacher Influence, Peer Group Influence and Media Influence) for the sub samples based on gender, locale and type of institution.

8. To find out whether there exist any significant differences in the mean scores of Green Consumer Behaviour for the sub samples based on gender, locale and type of institution.

9. To find out whether there exist any significant relationship between the predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) for the total sample and the sub samples based on gender, locale and type of institution.

10. To find out whether there exist any significant relationship between the dimensions of predictor variables (Environmental Awareness, Environmental Attitude, Environmental Action, Environmental Responsibility Attribution to Self, Environmental Responsibility Attribution to Others, Parental Influence, Teacher Influence, Peer Group Influence and Media Influence) and the criterion variable (Green Consumer Behaviour) for the total sample and the sub samples based on gender, locale and type of institution.

11. To identify the significant predictors and to estimate the relative efficiency of predictor variables' individual and collective contribution in predicting the criterion variable for the total sample and the sub samples based on gender, locale and type of institution.

12. To identify the significant dimensions of predictors and to estimate the relative efficiency of the dimensions of predictor variables' individual and collective contribution in predicting the criterion variable for the

total sample and sub samples based on gender, locale and type of institution.

Hypotheses of the Study

1. There is no significant difference in the mean scores of Ecoliteracy for the sub samples based on
    a. gender
    b. locale
    c. type of institution
2. There is no significant difference in the mean scores of dimensions of Ecoliteracy for the sub samples based on gender, locale and type of institution.
    2.1 There is no significant difference in the mean scores of Environmental Awareness for the sub samples based on
        a. gender
        b. locale
        c. type of institution
    2.2 There is no significant difference in the mean scores of Environmental Attitude for the sub samples based on
        a. gender
        b. locale
        c. type of institution
    2.3 There is no significant difference in the mean scores of Environmental Action for the sub samples based on
        a. gender
        b. locale
        c. type of institution

3. There is no significant difference in the mean scores of Environmental Responsibility Attribution for the sub samples based on
    a. gender
    b. locale
    c. type of institution
4. There is no significant difference in the mean scores of the dimensions of Environmental Responsibility Attribution for the sub samples based on gender, locale and type of institution.
    4.1 There is no significant difference in the mean scores of Environmental Responsibility Attribution to Self for the sub samples based on
        a. gender
        b. locale
        c. type of institution
    4.2 There is no significant difference in the mean scores of Environmental Responsibility Attribution to Others for the sub samples based on
        a. gender
        b. locale
        c. type of institution
5. There is no significant difference in the mean scores of Social Influence for the sub samples based on
    a. gender
    b. locale
    c. type of institution
6. There is no significant difference in the mean scores of the dimensions of Social Influence for the sub samples based on gender, locale and type of institution.

6.1 There is no significant difference in the mean scores of Parental Influence for the sub samples based on

a. gender
b. locale
c. type of institution

6.2 There is no significant difference in the mean scores of Teacher Influence for the sub samples based on

a. gender
b. locale
c. type of institution

6.3 There is no significant difference in the mean scores of Peer Group Influence for the sub samples based on

a. gender
b. locale
c. type of institution

6.4 There is no significant difference in the mean scores of Media Influence for the sub samples based on

a. gender
b. locale
c. type of institution

7. There is no significant difference in the mean scores of Green Consumer Behaviour for the sub samples based on

a. gender
b. locale
c. type of institution

8. The relative efficiency of predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) is not significant in predicting the criterion variable (Green Consumer Behaviour) for the total sample.

8.1 There is no significant multiple correlations between the predictor variables and the criterion variable for the total sample.

8.2 The criterion variable is not significantly predicted by one or more of the predictor variables for the total sample.

8.3 The relative efficiency of predictor variables' individual and collective contributions is not significant in predicting the criterion variable for the total sample.

8.4 The relative efficiency of significant predictor variables is not different in predicting the criterion variable for the total sample.

9. The relative efficiency of predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) is not significant in predicting the criterion variable (Green Consumer Behaviour) for the sub samples based on gender, locale and type of institution.

9.1 There is no significant multiple correlations between the predictor variables and the criterion variable for the sub samples based on

a. gender
b. locale
c. type of institution

9.2 The criterion variable is not significantly predicted by one or more of the predictor variables for the sub samples based on

a. gender
b. locale
c. type of institution

9.3 The relative efficiency of predictor variables' individual and collective contributions is not significant in predicting the criterion variable for the sub samples based on

a. gender
b. locale
c. type of institution

9.4 The relative efficiency of significant predictor variables is not different in predicting the criterion variable for the sub sample based on

a. gender
b. locale
c. type of institution

10. The relative efficiency of dimensions of predictor variables (EAW, EAT, EAC, ERAS, ERAO, PI, TI, PGI, MI) is not significant in predicting the criterion variable (Green Consumer Behaviour) for the total sample.

10.1 There is no significant multiple correlations between the dimensions of predictor variables and the criterion variable for the total sample.

10.2 The criterion variable is not significantly predicted by one or more of the dimensions of predictor variables for the total sample.

10.3 The relative efficiency of dimensions of predictor variables' individual and collective contributions is not significant in predicting the criterion variable for the total sample.

10.4 The relative efficiency of significant dimensions of predictor variables is not different in predicting the criterion variable for the total sample.

11. The relative efficiency of dimensions of predictor variables (EAW, EAT, EAC, ERAS, ERAO, PI, TI, PGI, MI) is not significant in predicting the criterion variable (Green Consumer Behaviour) for the sub samples based on gender, locale and type of institution.

11.1 There is no significant multiple correlations between the dimensions of predictor variables and the criterion variable for the sub samples based on

a. gender
b. locale
c. type of institution

11.2 The criterion variable is not significantly predicted by one or more of the dimensions of predictor variables for the sub samples based on

a. gender
b. locale
c. type of institution

11.3 The relative efficiency of dimensions of predictor variables' individual and collective contributions is not significant in predicting the criterion variable for the sub samples based on

a. gender
b. locale
c. type of institution

11.4 The relative efficiency of significant dimensions of predictor variables is not different in predicting the criterion variable for the sub sample based on

a. gender
b. locale
c. type of institution

Methodology

Sample

The population for the present study consists of all students attending the Commerce Bachelor Degree Courses of University of Calicut in Kerala. A representative sample of 1000 under graduate students attending B. Com Degree Courses of University of Calicut in Aided and Government colleges situated in Kerala was selected.

The research design is quantitative and descriptive in nature. The present study was conducted by field survey method with stratified random

sampling technique by giving due representation to factors like gender, locale and type of institution.

Tools for Data Collection

The following are the tools used for data collection:

1. Ecoliteracy Inventory (Musthafa & Sajila, 2015)
2. Environmental Responsibility Attribution Scale (Musthafa & Sajila, 2015)
3. Scale of Social Influence on Green Consumer Behaviour (Musthafa & Sajila, 2015)
4. Green Consumer Behaviour Scale (Musthafa & Sajila, 2015)

Statistical Techniques Used for the Study

The present study being quantitative in nature, both descriptive and inferential statistics were used for analysing the data inorder to reach valid generalisable conclusions. The statistical techniques used in the present study are described below.

Descriptive Statistics

Basic descriptive statistics like mean, median, mode, standard deviation, skewness and kurtosis were computed for each independent variable and dependent variable for the total sample and sub samples based on gender, locale and type of institution. The computation of descriptive statistics revealed the nature of distribution of the independent variables and the dependent variable.

Percentage Analysis

Percentage analysis was done to assess the existing levels of Ecoliteracy, Environmental Responsibility Attribution, Social Influence and

Green Consumer Behaviour of students for the total sample and sub samples based on gender, locale and type of institution.

Mean Difference Analysis

Test of significance of differences between means of large independent sample was used to find the differences in the independent variables Ecoliteracy, Environmental Responsibility Attribution and Social Influence and the dependent variable Green Consumer Behaviour of the students based on gender, locale and type of institution.

Stepwise Multiple Regression Analysis

Step-wise Multiple Regression Analysis was conducted to estimate the relative efficiency of the predictor variables and its dimensions in predicting the criterion variable. Regression equations were also developed to predict the criterion variable from the select predictor variables.

Major Findings of the Study

The important findings of the present study are as follows:

1. **Existing level of Ecoliteracy, Environmental Responsibility Attribution, Social Influence and Green Consumer Behaviour for the total sample**

   It was found that majority of students (68%) possess only moderate level of Green Consumer Behaviour. Only 17% of students have high level of Green Consumer Behaviour and 15% of students possess low level of Green Consumer Behaviour. The level of Ecoliteracy of students was such that, 61% of students possess a moderate level of Ecoliteracy. It can also be seen that only 19% students possess high level of Ecoliteracy, while 20% students possess low level of Ecoliteracy. The Environmental Responsibility Attribution level of students showed that, 61% students possess a moderate level, 18% with high level and 21% students possess

low level of Environmental Responsibility Attribution. The level of Social Influence of students reveals that a majority of students (68%) are moderately influenced by social factors. It was also evident that 17% and 15% students possess high and low rate of Social Influence.

2. Existing level of Ecoliteracy of Students for the Sub sample Based on Gender, Locale and Type of Institution

It was found that the percentage of students possessing moderate level of Ecoliteracy was 69% and 62% for male and female students. It was also seen that the percentage of students with high level of Ecoliteracy was meagre constituting to 18% for males and 18 % for females respectively. While, about 13% male and 20% female students showed a low level of Ecoliteracy. 64% students studying in institutions of urban area possessed a moderate level of Ecoliteracy, while it was 62% for students in rural area. Only 18% students in rural area and 18% students in urban area possessed a high level of Ecoliteracy. The percentage of students possessing low level of Ecoliteracy in this category constituted 18% and 20% respectively. 70% students studying in government institutions possessed moderate level of Ecoliteracy, while it was 61% for students studying in aided institutions. Only 17% and 19% students of government and aided institutions possessed a high level of Ecoliteracy. Students possessing low level of Ecoliteracy of government and aided institution constituted 13% and 20% respectively.

3. Existing level of Environmental Responsibility Attribution of Students for the Sub sample Based on Gender, Locale and Type of Institution

It was found that 55% males and 66% females showed only a moderate level of Environmental Responsibility Attribution. Only 25% of males and 19% of females possessed high level of Environmental

Responsibility Attribution. While students who showed low level of Environmental Responsibility Attribution constituted to 20% for males and 15% for females respectively. The moderate level of Environmental Responsibility Attribution level of students studying in institutions located in urban and rural areas were 56% and 67% respectively. Only 20% students in urban area and 14% students in rural area possessed high level of Environmental Responsibility Attribution. While 20% students of urban area and 14% students of rural area showed a low level of Environmental Responsibility Attribution. About 55% students studying in government institutions had a moderate level of Environmental Responsibility Attribution, while it was 66% for students studying in aided institutions. About 26% and 18% students of government and aided colleges possessed high level of Environmental Responsibility Attribution. It was also evident that students possessing low Environmental Responsibility Attribution level were 19% and 16 % respectively for both the categories.

4. Existing level of Social Influence of Students for the Sub sample Based on Gender, Locale and Type of Institution

It was found that the level of Social Influence was moderate for 69% males and 55% females. Only 15% of males and 18% of females were highly influenced by social factors. The percentage of male and female students who were least influenced by social factors constitute to 16% and 27% respectively. About 70% students of institutions in rural area and 67% of students studying in urban area were moderately influenced by social factors. Only 16% students in urban area and 13% in rural area showed high level of Social Influence, while about 17% of students in urban and rural areas possessed low level of Social Influence. It was evident that 69% students of government institutions and 68% studying in aided institutions possessed only a moderate level of Social

Influence. The study also revealed that only 15% of government institution students and 14% of aided institution students possessed high level of Social Influence. It was also clear that students with low level of Social Influence of this category constituted to 16% and 18% for students of government and aided institutions respectively.

5. Existing level of Green Consumer Behaviour of Students for the Sub sample Based on Gender, Locale and Type of Institution

It was found that 72% of male and 61% of female students had a moderate level of Green Consumer Behaviour. About 23% of females and only 12% of males possessed a high level of Green Consumer Behaviour. It was also found that about 16% of males and females possessed low level of Green Consumer Behaviour. Findings of the study also revealed that majority of students in urban area (72%) and rural area (61%) possessed only a moderate level of Green Consumer Behaviour. Only 13% students in urban area and 23% students in rural area showed high level of Green Consumer Behaviour. It was also seen that about 15% students studying in urban area and 16% studying in rural area possessed low level of Green Consumer Behaviour. The findings also showed that 66% students studying in government colleges and 61% students studying in aided colleges possessed only a moderate level of Green Consumer Behaviour. It was evident that only17% students studying in government colleges and 22%students studying in aided colleges possessed high level of Green Consumer Behaviour. The percentage of students having low level of Green Behaviour were equal (17%) for students of government and aided colleges.

6. Gender Differences in Predictor Variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence)

The findings of the study revealed that there was significant difference in Ecoliteracy between male and female students. The critical ratio (t = 6.230, **p<.01) was significant at .01 level. The mean score of female students was found to be higher which showed that female students' Ecoliteracy was higher when compared to their male counterparts. In the case of Environmental Responsibility Attribution, it was found that there was no significant difference between male and female students studying. The critical ratio (t = 0.115, p>.01) was not significant at .01 and .05 levels. Findings related to gender differences in Social Influence showed that there exists significant difference between male and female students. The critical ratio (t = 3.314, **p<.01) was significant at .01 level. The mean score of male students was higher which showed that male students are more influenced by social factors when compared to female students.

7. Locale Differences in Predictor Variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence)

The findings revealed that there was no significant difference in Ecoliteracy between students of institutions in urban and rural areas. The critical ratio (t = 0.828, p>.01) obtained was not significant at .01and .05 levels. There was no significant locale differences found in the case of Environmental Responsibility Attribution of students studying in institutions in urban and rural areas. The critical ratio (t = 1.000, p>.01) was not significant at .01 and .05 levels. Results regarding the locale differences in Social influence showed that there was no significant difference between students studying in institutions situated at urban and

rural areas. The critical ratio (t = 0.574, p>.01) was not significant at .01 and .05 levels.

8. Institutional Differences in Predictor Variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence)

It was found that there was no significant difference in Ecoliteracy between students of government and aided institutions. The critical ratio (t = 0.378, p>.01) was not significant at .01 and .05 levels. It was also found that there was no significant difference in Environmental Responsibility Attribution between students studying in government and aided institutions. The critical ratio (t = 0.143, p>.01) was not significant at .01 and .05 levels. The findings also showed that there did not exist any significant differences in Social Influence between students studying in government and aided institutions. The critical ratio (t = 1.436, p>.01) obtained was not significant at .01 and .05 levels.

9. Gender Differences in Dimensions of Ecoliteracy (EAW, EAT, EAC)

It was found that there exists significant difference in Environmental Awareness between male and female students. The critical ratio (t = 5.102, **p<.01) was significant at .01 level. The mean score of female students was higher which revealed that the female students had more Environmental Awareness than male students. The findings related to gender differences in Environmental Attitude was significant. The critical ratio (t = 8.695, **p<.01) obtained was significant at .01 level. The mean score of female students was higher which showed that female students possessed a favourable Environmental Attitude towards the environment compared to male students. It was also found that there was no significant difference in Environmental Action between male and female students. The critical ratio (t = 1.744, p>.01) was not significant at .01 and .05 levels.

10. Locale Differences in Dimensions of Ecoliteracy (EAW, EAT, EAC)

It was found that was no significant difference in Environmental Awareness, Environmental Attitude and Environmental Action between students of institutions in urban and rural areas. The critical ratio for Environmental Awareness ($t = 1.385$, $p>.01$), Environmental Attitude ($t = 0.773$, $p>.01$) and Environmental Action ($t = 0.143$, $p>.01$) were not significant at .01 and .05 levels.

11. Institutional Differences in Dimensions of Ecoliteracy (EAW, EAT, EAC)

It was found that there does not exist any significant difference in Environmental Awareness, Environmental Attitude and Environmental Action between students of government and aided institutions. The critical ratio obtained for Environmental Awareness ($t = 1.401$, $p>.01$), Environmental Attitude ($t = 0.199$, $p>.01$) and Environmental Action ($t = 1.718$, $p>.01$) were not significant at .01 and .05 levels.

12. Gender Differences in Dimensions of Environmental Responsibility Attribution (ERAS and ERAO)

It was found that there was no significant difference in Environmental Responsibility Attribution to Self between male and female students. The critical ratio ($t = 0.676$, $p>.01$) obtained was not significant at .01 and .05 levels. Similarly, the result relating to gender differences was not significant in the case of Environmental Responsibility Attribution to Others. The critical ratio ($t = 0.666$, $p>.01$) obtained was not significant at .01and .05 levels.

13. Locale Differences in Dimensions of Environmental Responsibility Attribution (ERAS and ERAO)

No significant difference was found in Environmental

Responsibility Attribution to Self between students of institutions in urban and rural areas. The critical ratio (t = 1.013, p>.01) obtained was not significant at .01 and .05 levels. It was also found that there was no significant difference in Environmental Responsibility Attribution to Others between students of institutions in urban and rural areas. The critical ratio (t = 0.206, p>.01) obtained was not significant at .01 and .05 levels.

14. Institutional Differences in Dimensions of Environmental Responsibility Attribution (ERAS and ERAO)

The findings revealed that there was no significant difference in Environmental Responsibility Attribution to Self between students of government and aided institutions. The critical ratio (t = 0.713, p>.01) obtained was not significant at .01 level and .05 level. Similarly, no significant difference was found in Environmental Responsibility Attribution to Others between students of government and aided institutions. The critical ratio (t = 0.571, p>.01) was not significant at .01 and .05 level.

15. Gender Differences in Dimensions of Social Influence (PI, TI, PGI and MI)

The findings revealed that there was significant difference in Parental Influence between male and female students. The critical ratio (t = 3.863, **p<.01) obtained was significant at .01 level. The mean score of male students was higher which showed that males were more influenced by parents when compared to their female counterparts. Significant difference was found in Teacher Influence between male and female students. The critical ratio (t = 5.621, **p<.01) was significant at .01 level. The mean score of male students was higher which revealed that males

were more influenced by teachers when compared to female students. The result of gender differences in Peer Group Influence was found to be significant. The critical ratio (t = 2.184, *p<.05) obtained was significant at .05 level. The mean score of male students was higher which showed that male students are more influenced by their peers when compared to their female counterparts. It was also found that there was no significant difference in Media Influence between male and female students. This showed that male and female students were equally influenced by media in respect of their Green Consumer Behaviour. The critical ratio (t = 1.287, p>.01) obtained was not significant at .01 and .05 levels.

16. Locale Differences in Dimensions of Social Influence (PI, TI, PGI and MI)

The findings of the study revealed that there was no significant difference in the dimensions of Social Influence like Parental Influence, Teacher influence, Peer Group influence and Media Influence between students studying in institutions located in urban and rural areas. The t values obtained for parental Influence (t = 0 .128, p>.01), Teacher Influence (t = 0.979, p>.01), Peer Group Influence (t = 0.255, p>.01) and Media Influence (t = 0.753, p>.01) was not significant at .01 and .05 levels.

17. Institutional Differences in Dimensions of Social Influence (PI, TI, PGI and MI)

It was found that there was no significant difference in Parental Influence, Teacher Influence, Peer group Influence and Media Influence between students of government and aided institutions. The t values obtained for Parental Influence (t = 1.537, p>.01), Teacher Influence (t =

0.990, p>.01), Peer Group Influence (t = 1.704, p>.01) and Media Influence (t = 1.182, p>.01) were not significant at .01 and .05 levels.

18. Differences in Green Consumer Behaviour based on Gender, Locale and Type of Institution

It was found that there was significant difference in Green Consumer Behaviour between male and female students. The obtained critical ratio (t = 8.196, **p<.01) was significant at .01 level. The mean score of female students was found to be higher which showed that the Green Consumer Behaviour was more predominant in females compared to male students. However no significant difference was found in Green Consumer Behaviour between students of institutions in urban and rural areas. The critical ratio obtained (t = 0.101, p>.01) was not significant at .01 and .05 levels. It was also found that there exists significant difference in Green Consumer Behaviour between students of government and aided institutions. The critical ratio (t = 2.183, *p<.05) was significant at .05 level. The mean score of students of government institutions was found to be higher which showed that Green Consumer Behaviour was more predominant in students of government institution compared to students of aided institution.

19. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Ecoliteracy (EL), Environmental Responsibility Attribution (ERA) and Social Influence (SI) for Total Sample

It was found that there exists significant positive correlation between each of the predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) with the criterion variable (Green Consumer Behaviour) for total sample. This indicates that an

increase in predictor variable will result in a corresponding increase in the criterion variable. Ecoliteracy (.694) was found to have the highest correlation with the criterion variable followed by Social Influence (.687) and Environmental Responsibility Attribution (.521). The correlation indices obtained were significant at .01 level. Three significant models were derived from stepwise multiple regression analysis. In step 1, EL was included and the correlation (R=.694) indicated the presence of significant relationship explaining GCB of the total student sample. Model 1 was significant yielding F (1, 998) = 929.413, $^{**}p<.01$, $R^2 = .482$. This revealed that EL accounted for 48% variation in GCB. Participants' predicted GCB was equal to 20.148 + .737 EL. In step 2, SI was included in the model with 12 % increase of the variance of GCB and the multiple correlation (R=.776) indicated the presence of significant relationship explaining GCB of the total student sample. A significant Model 2 (EL and SI) was derived yielding F (2,997) = 753.536, $^{**}p<.01$, $R^2 = .602$. This revealed that EL and SI collectively accounted for 60% variation in GCB. Participants' GCB was equal to 7.572 + .472 EL + .469 SI. In step 3, ERA was included with .8 % increase of the variance of GCB and the multiple correlation (R=.781) indicated the presence of significant relationship explaining GCB of the total student sample. A significant Model 3 (EL, SI and ERA) was derived yielding F (3,996) = 518.530, $^{**}p<.01$, $R^2 = .610$. This indicated that EL, SI and ERA collectively accounted for 61% variation in GCB. Participants' GCB was equal to 3.974 + .439 EL + .425 SI + .142 ERA.

20. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Dimensions of Predictor Variables EAW, EAT, EAC, ERAS, ERAO, PI, TI, PGI and MI for the Total Sample

It was found that there was significant positive correlation among

most of the dimensions of predictor variables and the criterion variable, except for ERAO for the total sample. It was observed that EAW (.663) had the highest correlation with GCB followed by ERAS (.611) and EAT (.608). All the predictor variables were also fairly correlated with each other except for ERAO. It was also evident that ERAO was having negative correlation (-.215) with ERAS and a nearly zero correlation (.52) with GCB. Majority of correlation indices obtained was found to be significant at .01 level and a few significant at .05 levels. Since ERAO was not significantly correlated with GCB and with other predictors it was excluded. In the stepwise multiple regression analysis, eight significant models were derived.

In step 1, EAW was included and the correlation (R = .663) indicated the presence of significant relationship explaining GCB of the total student sample. A significant Model 1was derived yielding F (1, 998) = 781.635, $^{**}p<.01$, R^2 = .439. From this it was clear that EAW accounted for 44% variation in GCB. Participants' predicted GCB is equal to 32.275 + .567 EAW.

In step 2, EARS was included with 11 % increase of the variance of GCB and the multiple correlation (R=.739) indicated the presence of significant relationship explaining GCB of the total student sample. A significant Model 2 (EAW and ERAS) was derived yielding F (2, 997) = 598.841, $^{**}p<.01$, R^2 = .546. This revealed that EAW and ERAS collectively accounts for 55% variation in GCB. Participants' predicted GCB was equal to 21.213 + .409 EAW + .311 ERAS.

In step 3, MI was included with 5 % increase of the variance of GCB and the multiple correlations (R = .772) indicated that there exists significant strong relationship explaining GCB of the total student sample. A significant Model 3 (EAW, ERAS and MI) was derived yielding F (3,

996) = 491.184, $^{**}p<.01$, $R^2 = .597$. This indicated that EAW, ERAS and MI collectively accounted for 60% variation in GCB. Participants' predicted GCB is equal to 15.428 + .328 EAW + .244 ERAS + .229 MI.

In step 4, EAT was included with 2 % increase of the variance of GCB and the correlation (R=.788) indicated the presence of significant strong relationship explaining GCB of the total student sample. A significant Model 4 (EAW, ERAS, MI and EAT) was derived yielding F (4, 995) = 406.857, $^{**}p<.01$, $R^2 = .621$. This showed that the predictors collectively accounted for 62% variation in GCB. Participants' predicted GCB is equal to 11.675 + .256 EAW + .208 ERAS + .207 MI + .187 EAT.

In step 5, TI was included with 2 % increase of the variance of GCB and the multiple correlation (R=.799) indicated the presence of significant strong relationship explaining GCB of the total student sample. A significant Model 5 (EAW, ERAS, MI, EAT and TI) was derived yielding F (5, 994) = 349.999, $^{**}p<.01$, $R^2 = .638$. It was clear that the predictors collectively accounted for 64% variation in GCB. Participants' predicted GCB was found to be equal to 8.642 + .233 EAW + .177 ERAS + .182 MI + .176 EAT + .145 TI.

In step 6, PGI was included with .7 % increase of the variance of GCB and the multiple correlation (R=.803) indicated the presence of significant very strong relationship explaining GCB of the total student sample. A significant Model 6 (EAW, ERAS, MI, EAT, TI and PGI) was derived yielding F (6, 993) = 300.075, $^{**}p<.01$, $R^2 = .645$. This indicated that predictors collectively accounted for 65% variation in GCB. Participants' predicted GCB is equal to 7.993 + .227 EAW + .166 ERAS + .159 MI + .173 EAT + .118 TI + .083 PGI.

In step 7, EAC was included with .5 % increase of the variance of GCB and the multiple correlation (R=.806) indicated the presence of

significant very strong relationship explaining GCB of the total student sample. A significant Model 7 (EAW, ERAS, MI, EAT, TI, PGI and EAC) was derived yielding F (7, 992) = 262.600, $^{**}p<.01$, R^2 = .649. It was evident that the predictors collectively accounted for 65% variation in GCB. Participants' predicted GCB is equal to 7.052 + .251 EAW + .155 ERAS + .155 MI + .121 EAT + .113 TI + .080 PGI + .067 EAC.

In step 8, PI was included with .2 % increase of the variance of GCB and the multiple correlation (R=.807) indicated the presence of significant very strong relationship explaining GCB of the total student sample. A significant Model 8 (EAW, ERAS, MI, EAT, TI, PGI, EAC and PI) was derived yielding F (8, 991) = 231.529, $^{**}p<.01$, R^2 = .651. From this, it was clear that the predictors collectively accounted for 65% variation in GCB. Participants' predicted GCB is equal to 6.636 + .248 EAW + .152 ERAS + .150 MI + .119 EAT + .101 TI + .072 PGI + .064 EAC + .045 PI.

21. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Ecoliteracy (EL), Environmental Responsibility Attribution (ERA) and Social Influence (SI) for Male Student Sample

It was found that there was significant positive correlation among each of the predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) for male student sample. It was evident that SI yielded the highest correlation (.742) with GCB followed by EL (.666) and ERA (.507). All the correlation indices obtained were significant at .01 level. Three significant models were derived from stepwise multiple regression analysis. In step 1, SI was included and the correlation (R=.742) indicated the presence of significant relationship explaining

GCB of the male student sample. A significant Model 1 (SI) was derived yielding F (1, 438) = 537.341, $^{**}p<.01$, R^2 = .551. This revealed that SI accounted for 55% variation in GCB. Participants' predicted GCB was equal to 14.666 + .783 SI.

In step 2, EL was included with 8 % increase of the variance of GCB and the multiple correlation (R=.793) indicated the presence of significant very strong relationship explaining GCB of the male student sample. A significant Model 2 (SI and EL) was derived yielding F (2,437) = 368.990, $^{**}p<.01$, R^2 = .628. This revealed that SI and EL collectively accounted for 63% variation in GCB. Participants' GCB was equal to 6.756 + .565 SI + .360 EL.

In step 3, ERA was included with 1 % increase of the variance of GCB and the multiple correlation (R=.800) indicated the presence of significant relationship explaining GCB of the male student sample. A significant Model 3 (SI, EL and ERA) was derived yielding F (3,436) = 258.630, $^{**}p<.01$, R^2 = .640. This indicated that SI, EL and ERA collectively accounted for 64% variation in GCB. Participants' GCB was equal to 2.554 + .516 SI + .330 EL + .154 ERA.

22. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Dimensions of Predictor Variables EAW, EAT, EAC, ERAS, ERAO, PI, TI, PGI and MI for Male Student Sample

It was found that there exists significant positive correlation among most of the dimensions of predictor variables and the criterion variable, except for ERAO for male student sample. It was evident that EAW (.660) have the highest correlation with GCB followed by ERAS (.651) and TI (.600). All the predictor variables were also fairly correlated with each

other except for ERAO. It was also clear that ERAO was having a negative correlation (-.343) with ERAS and with GCB (-.057). Majority of correlation indices obtained were significant at .01 level and a few significant at .05 levels. Since ERAO was not significantly correlated with GCB and with other predictors also, it was not considered for regression analysis.

In step 1, EAW was included and the correlation (R=.660) indicated the presence of significant relationship explaining GCB of the male student sample. A significant Model 1 (EAW) was derived yielding F (1, 433) = 337.978, $^{**}p<.01$), with R^2 of .436. It was evident that EAW accounted for 44% variation in GCB. Participants' predicted GCB was equal to 32.149 + .550 EAW.

In step 2, ERAS was included with 15 % increase of the variance of GCB and the multiple correlation (R=.776) indicated the presence of significant strong relationship explaining GCB of the male student sample. A significant Model 2 (EAW and ERAS) was derived yielding F (2, 437) = 312.714, $^{**}p<.01$, R^2 = .589. It was clear that EAW and ERAS collectively accounted for 59% variation in GCB. Participants' predicted GCB was equal to 21.599 + .382 EAW + .308 ERAS.

In step 3, PGI was included with 5 % increase of the variance of GCB and the multiple correlation (R=.802) indicated the presence of significant very strong relationship explaining GCB of the male student sample. A significant Model 3 (EAW, ERAS and PGI) was derived yielding F (3, 436) = 261.263, $^{**}p<.01$, R^2 = .643. It was evident that that EAW, ERAS and PGI collectively accounted for 64% variation in GCB. Participants' predicted GCB was equal to 15.849 + .340 EAW + .252 ERAS + .192 PGI.

In step 4, MI was included with 3 % increase of the variance of GCB and the multiple correlation (R=.819) indicated the presence of significant very strong relationship explaining GCB of the male student sample. A significant Model 4 (EAW, ERAS, PGI and MI) was derived yielding F (4, 435) = 221.045, $^{**}p<.01$, $R^2 = .670$. From this it was clear that EAW, ERAS, PGI and MI collectively accounted for 67% variation in GCB. Participants' predicted GCB was equal to 12.638 + .291 EAW + .226 ERAS + .151 PGI + .159 MI.

In step 5, PI was included with 2 % increase of the variance of GCB and the multiple correlation (R=.829) indicated the presence of significant relationship explaining GCB of the male student sample. A significant Model 5 (EAW, ERAS, PGI, MI and PI) was derived yielding F (5, 434) = 191.427, $^{**}p<.01$, $R^2 = .688$. The results indicated that EAW, ERAS, PGI, MI and PI collectively accounted for 69% variation in GCB. Participants' predicted GCB was equal to 10.144 + .260 EAW + .218 ERAS + .124 PGI + .146 MI + .119 PI.

In step 6, TI was included with 1 % increase of the variance of GCB and the multiple correlation (R=.836) indicated the presence of significant very strong relationship explaining GCB of the male student sample. A significant Model 6 (EAW, ERAS, PGI, MI, PI and TI) was derived yielding F (6, 433) = 167.523, $^{**}p<.01$, $R^2 = .699$. From the result it was seen that EAW, ERAS, PGI, MI, PI and TI collectively accounted for 70% variation in GCB. Participants' predicted GCB was equal to 8.112 + .235 EAW + .204 ERAS + .102 PGI + .136 MI + .098 PI + .124 TI.

In step 7, EAC was included with .4 % increase of the variance of GCB and the multiple correlation (R=.839) indicated the presence of significant very strong relationship explaining GCB of the male student sample. A significant Model 7 (EAW, ERAS, PGI, MI, PI, TI and EAC)

was derived yielding F (7, 432) = 146.231, $^{**}p<.01$, $R^2 = .703$. It was clear that EAW, ERAS, PGI, MI, PI, TI and EAC collectively accounted for 70% variation in GCB. Participants' predicted GCB was equal to 6.634 + .228 EAW + .197 ERAS + .095 PGI + .136 MI + .093 PI + .118 TI + .056 EAC.

23. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Ecoliteracy (EL), Environmental Responsibility Attribution (ERA) and Social Influence (SI) of Female Student Sample

It was found that there was significant positive correlation among the predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) for the female student sample. It was evident that SI was having the highest correlation (.740) with GCB followed by EL (.692) and ERA (.571). All the correlation indices obtained were significant at .01 level. Three significant models were derived as a result of stepwise multiple regression analysis. In step 1, the first variable included in the model was SI and the correlation (R=.740) indicated the presence of significant strong relationship explaining GCB of the female student sample. A significant Model 1 was derived yielding F (1, 558) = 675.643, $^{**}p<.01$, $R^2 = .548$. This revealed that SI accounted for 55% variation in GCB. Participants' predicted GCB was equal to 17.783 + .802 SI.

In step 2, EL was included with 8 % increase of the variance of GCB and the multiple correlation (R=.792) indicated the presence of significant strong relationship explaining GCB of the female student sample. A significant Model 2 (SI and EL) was derived yielding F (2,557) = 469.545, $^{**}p<.01$, $R^2 = .628$. This revealed that SI and EL collectively

accounted for 63% variation in GCB. Participants' GCB was equal to 9.307 + .545 SI + .389 EL.

In step 3, ERA was included with .7 % increase of the variance of GCB and the multiple correlation (R=.797) indicated the presence of significant very strong relationship explaining GCB of the female student sample. A significant Model 3 (SI, EL and ERA) was derived yielding F (3,556) = 322.019, $^{**}p<.01$, R^2 = .635. This showed that SI, EL and ERA collectively accounted for 64% variation in GCB. Participants' GCB was equal to 5.865 + .502 SI + .349 EL + .146 ERA.

24. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Dimensions of Predictor Variables EAW, EAT, EAC, ERAS, ERAO, PI, TI, PGI and MI for the Female Student Sample

It was found that there exists significant positive correlation among most of the dimensions of predictor variables and the criterion variable, except for ERAO for the female student sample. It was observed that EAW (.645) yielded the highest correlation with GCB followed by ERAS (.636) and MI (.625). All the predictor variables were also fairly correlated with each other except for ERAO. It was also clear that ERAO (.171) had the lowest correlation with GCB. Majority of correlation indices obtained were significant at .01 level and a few significant at .05 levels. All the significant variables were entered for regression analysis.

The result of stepwise multiple regression analysis yielded seven significant models. In step 1, EAW was included and the correlation (R=.645) indicated the presence of significant relationship explaining GCB of the female student sample. A significant Model 1 (EAW) was derived yielding F (1, 558) = 396.645, $^{**}p<.01$, R^2 = .415. This showed

that EAW accounted for 42% variation in GCB. Participants' predicted GCB was equal to 34.490 + .544 EAW.

In step 2, TI was included with 13 % increase of the variance of GCB and the multiple correlation (R=.736) indicated the presence of significant strong relationship explaining GCB of the female student sample. A significant Model 2 (EAW and TI) was derived yielding F (2, 557) = 329.189, $^{**}p<.01$, R^2 = .542. From the result it was evident that EAW and TI collectively accounted for 54% variation in GCB. Participants' predicted GCB was equal to 21.994 + .390 EAW + .367 TI.

In step 3, EAC was included with 7 % increase of the variance of GCB and the multiple correlation (R=.779) indicated the presence of significant strong relationship explaining GCB of the female student sample. A significant Model 3 (EAW, TI and EAC) was derived yielding F (3, 556) = 286.477, $^{**}p<.01$, R^2 = .607. The result showed that EAW, TI and EAC collectively accounted for 61% variation in GCB. Participants' predicted GCB was equal to 13.843 + .399 EAW + .299 TI + .185 EAC.

In step 4, MI was included with 4 % increase of the variance of GCB and the multiple correlation (R=.802) indicated the presence of significant very strong relationship explaining GCB of the female student sample. A significant Model 4 (EAW, TI, EAC and MI) was derived yielding F (4, 555) = 250.483, $^{**}p<.01$, R^2 = .644. It was found that EAW, TI, EAC and MI collectively accounted for 64% variation in GCB. Participants' predicted GCB was equal to 10.401 + .315 EAW + .257 TI + .146 EAC + .205 MI.

In step 5, ERAS was included with 1% increase of the variance of GCB and the multiple correlation (R=.809) indicated the presence of significant very strong relationship explaining GCB of the female student

sample. A significant Model 5 (EAW, TI, EAC, MI and ERAS) was derived yielding F (5, 554) = 209.887, $^{**}p<.01$, with R^2 of .654. This indicated that EAW, TI, EAC, MI and ERAS collectively accounted for 65% variation in GCB. Participants' predicted GCB was equal to 8.736 + .268 EAW + .235 TI + .116 EAC + .183 MI + .140 ERAS.

In step 6, PGI was included with .5 % increase of the variance of GCB and the multiple correlation (R=.812) indicated the presence of significant very strong relationship explaining GCB of the female student sample. A significant Model 6 (EAW, TI, EAC, MI, ERAS and PGI) was derived yielding F (6, 553) = 178.852, $^{**}p<.01$, R^2 = .660. It was evident that EAW, TI, EAC, MI, ERAS and PGI collectively accounted for 66% variation in GCB. Participants' predicted GCB was equal to 8.331 + .254 EAW + .212 TI + .116 EAC + .159 MI + .131 ERAS + .078 PGI.

In step 7, PI was included with .4% increase of the variance of GCB and the multiple correlation (R=.815) indicated the presence of significant very strong relationship explaining GCB of the female student sample. A significant Model 7 (EAW, TI, EAC, MI, ERAS, PGI and PI) was derived yielding F (7, 552) = 155.468, $^{**}p<.01$, R^2 = .663. It was found that EAW, TI, EAC, MI, ERAS, PGI and PI collectively accounted for 66% variation in GCB. Participants' predicted GCB was equal to 7.929 + .250 EAW + .201 TI + .111 EAC + .148 MI + .119 ERAS + .066 PGI + .065 PI.

25. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Ecoliteracy (EL), Responsibility Attribution (ERA) and Social Influence (SI) of the Urban Student Sample

It was found that there was significant positive correlation among the predictor variables (Ecoliteracy, Responsibility Attribution and Social

Influence) and the criterion variable (Green Consumer Behaviour) for urban student sample. It was evident that SI had the highest correlation index (.727) with GCB followed by EL (.673) and ERA (.500). All the correlation indices obtained are significant at .01 level. The stepwise regression analysis yielded three significant models.

In step 1, SI was included and the correlation (R=.727) indicated the presence of significant strong relationship explaining GCB of the urban student sample. Model 1 was significant yielding F (1, 477) = 534.899, $^{**}p<.01$, R^2 = .529. This revealed that SI accounts for 53% variation in GCB. Participants' predicted GCB was equal to 16.499 + .756 SI.

In step 2, EL was included with 9 % increase of the variance of GCB and the multiple correlations (R=.786) indicated the presence of significant strong relationship explaining GCB of the urban student sample. Model 2 (SI and EL) was significant yielding F (2, 476) = 384.792, $^{**}p<.01$, R^2 = .618. This revealed that SI and EL collectively accounted for 62% variation in GCB. Participants' GCB is equal to 7.822 + .526 SI + .385 EL.

In step 3, ERA was included with 1% increase of the variance of GCB and the multiple correlation (R=.792) indicated the presence of significant strong relationship explaining GCB of the urban student sample. Model 3 (SI, EL and ERA) was significant yielding F (3, 475) = 267.189, $^{**}p<.01$, R^2 = .628. The results revealed that SI, EL and ERA collectively accounted for 63% variation in GCB. Participants' GCB was equal to 3.980 + .480 SI + .358 EL + .141 ERA.

26. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Dimensions of Predictor Variables EAW, EAT, EAC, ERAS, ERAO, PI, TI, PGI and MI of the Urban Student Sample

From the stepwise multiple regression analysis it was found that there exists significant positive correlation among most of the dimensions of predictor variables and the criterion variable, except for ERAO for the urban student sample. It was observed that EAW (.664) had the highest correlation with GCB followed by ERAS (.649) and TI (.597). All the predictor variables were also fairly correlated with each other except for ERAO. It was also found that ERAO was having the lowest and a negative correlation (-.059) with GCB. Majority of correlation indices obtained were significant at .01 level and a few significant at .05 levels. All the significant variables were entered for regression analysis.

Seven significant models were derived as a result of stepwise multiple regression analysis. In step 1, EAW was included and the multiple correlation (R=.664) indicated the presence of significant relationship explaining GCB of the urban student sample. Model 1 (EAW) derived was significant yielding F (1, 477) = 376.801, $^{**}p<.01$, $R^2 = .441$. It was evident that EAW accounts for 44% variation in GCB. Participants' predicted GCB was equal to 31.927 + .556 EAW.

In step 2, ERAS was included with 15 % increase of the variance of GCB and the multiple correlation (R=.768) indicated the presence of significant strong relationship explaining GCB of the urban student sample. Model 2 (EAW and ERAS) derived was significant yielding F (2, 476) = 342.870, $^{**}p<.01$, $R^2 = .590$. It was clear that EAW and ERAS collectively accounted for 59% variation in GCB. Participants' predicted GCB was equal to 21.419 + .388 EAW + .307 ERAS.

In step 3, MI was included with 5% increase of the variance of GCB and the multiple correlation (R=.800) indicated the presence of significant very strong relationship explaining GCB of the urban student sample. Model 3 (EAW, ERAS and MI) derived was significant yielding F (3, 475) = 280.652, $^{**}p<.01$, $R^2 = .639$. This showed that EAW, ERAS and MI collectively accounted for 64% variation in GCB. Participants' predicted GCB was equal to 15.757 + .314 EAW + .257 ERAS + .204 MI.

In step 4, TI was included with 3 % increase of the variance of GCB and the multiple correlation (R=.815) indicated the presence of significant very strong relationship explaining GCB of the urban student sample. Model 4 (EAW, ERAS, MI and TI) derived was significant yielding F (4, 474) = 235.172, $^{**}p<.01$, $R^2 = .665$. The results showed that EAW, ERAS, MI and TI collectively accounted for 67% variation in GCB. Participants' predicted GCB was equal to 11.606 + .265 EAW + .223 ERAS + .175 MI + .179 TI.

In step 5, PGI was included with 1% increase of the variance of GCB and the multiple correlation (R=.823) indicated the presence of significant very strong relationship explaining GCB of the urban student sample. Model 5 (EAW, ERAS, MI, TI and PGI) derived was significant yielding F (5, 473) = 199.231, $^{**}p<.01$, $R^2 = .678$. This indicated that EAW, ERAS, MI, TI and PGI collectively accounted for 68% variation in GCB. Participants' predicted GCB was equal to 10.569 + .264 EAW + .208 ERAS + .144 MI + .142 TI + .103 PGI.

In step 6, EAC was included with .7% increase of the variance of GCB and the multiple correlation (R=.828) indicated the presence of significant very strong relationship explaining GCB of the urban student sample. Model 6 (EAW, ERAS, MI, TI, PGI and EAC) derived was significant F (6, 472) = 171.466, $^{**}p<.01$, $R^2 = .685$. This showed that

EAW, ERAS, MI, TI, PGI and EAC collectively accounted for 69% variation in GCB. Participants' predicted GCB was equal to 8.468 + .256 EAW + .197 ERAS + .145 MI + .131 TI + .094 PGI + .073 EAC.

In step 7, PI was included with .6% increase of the variance of GCB and the multiple correlation (R=.832) indicated the presence of significant very strong relationship explaining GCB of the urban student sample. Model 7 (EAW, ERAS, MI, TI, PGI, EAC and PI) derived was significant yielding F (7, 471) = 150.836, $^{**}p<.01$, $R^2 = .692$. This showed that EAW, ERAS, MI, TI, PGI, EAC and PI collectively accounted for 69% variation in GCB. Participants' predicted GCB was equal to 7.600 + .244 EAW + .194 ERAS + .139 MI + .112 TI + .083 PGI + .067 EAC + .072 PI.

27. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Ecoliteracy (EL), Responsibility Attribution (ERA) and Social Influence (SI) of the Rural Student Sample

It was found that there was significant positive correlation among the predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) for rural student sample. It was evident that SI was having the highest correlation (.759) with GCB followed by EL (.689) and ERA (.570). All the correlation indices obtained were significant at .01 level.

The regression analysis yielded three significant models. In step 1, SI was included and the correlation (R=.759) indicated the presence of significant strong relationship explaining GCB of the rural student sample. Model 1 was significant yielding F (1, 519) = 705.343, $^{**}p<.01$, $R^2 = .576$.

This revealed that SI accounted for 58% variation in GCB. Participants' predicted GCB was equal to 15.362 + .845 SI.

In step 2, EL was included with 7% increase of the variance of GCB and the multiple correlation (R=.801) indicated the presence of significant very strong relationship explaining GCB of the rural student sample. Model 2 (SI and EL) derived was significant yielding F (2, 518) = 462.049, $^{**}p<.01$, R^2 = .641. This revealed that SI and EL collectively accounted for 64% variation in GCB. Participants' GCB was equal to 8.035 + .600 SI + .358 EL.

In step 3, ERA was included with .6% increase of the variance of GCB and the multiple correlation (R=.804) indicated the presence of significant very strong relationship explaining GCB of the rural student sample. Model 3 (SI, EL and ERA) derived was significant yielding F (3, 517) = 315.113, $^{**}p<.01$, R^2 = .646. This showed that SI, EL and ERA collectively accounted for 65% variation in GCB. Participants' GCB was equal to 4.913 + .559 SI + .323 EL + .132 ERA.

28. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Dimensions of Predictor Variables EAW, EAT, EAC, ERAS, ERAO, PI, TI, PGI and MI of the Rural Student Sample

It was found that there exists significant positive correlation among most of the dimensions of predictor variables and the criterion variable, except for ERAO for the rural student sample. It was observed that EAW (.664) had the highest correlation with GCB followed by MI (.649) and ERAS (.597). All the predictor variables were also fairly correlated with each other except for ERAO. It was also observed that ERAO was having the lowest correlation (.183) with GCB. Majority of correlation indices

obtained were significant at .01 level. All the significant variables were entered for regression analysis.

The regression analysis produced seven significant models. In step 1, EAW was included and the correlation (R=.644) indicated the presence of significant relationship explaining GCB of the rural student sample. Model 1 (EAW) was significant yielding F (1, 519) = 367.537, $^{**}p<.01$, R^2 = .415. This revealed that EAW accounted for 42% variation in GCB. Participants' predicted GCB was equal to 34.652 + .543 EAW.

In step 2, TI was included with 14% increase of the variance of GCB and the multiple correlation (R=.742) indicated the presence of significant strong relationship explaining GCB of the rural student sample. Model 2 (EAW and TI) was significant yielding F (2, 518) = 317.762, $^{**}p<.01$, R^2 = .551. This showed that EAW and TI collectively accounted for 55% variation in GCB. Participants' predicted GCB was equal to 21.166 + .387 EAW + .386 TI.

In step 3, MI was included with 7% increase of the variance of GCB and the multiple correlation (R=.785) indicated the presence of significant strong relationship explaining GCB of the rural student sample. Model 3 (EAW, TI and MI) was significant yielding F (3, 517) = 277.413, $^{**}p<.01$, R^2 = .617. This showed that EAW, TI and MI collectively accounted for 62% variation in GCB. Participants' predicted GCB was equal to 14.492 + .278 EAW + .313 TI + .268 MI.

In step 4, EAC was included with 3% increase of the variance of GCB and the multiple correlation (R=.805) indicated the presence of significant very strong relationship explaining GCB of the rural student sample. Model 4 (EAW, TI, MI and EAC) derived was significant yielding F (4, 516) = 237.334, $^{**}p<.01$, R^2 = .648. This showed that EAW, TI, MI

and EAC collectively accounted for 65% variation in GCB. Participants' predicted GCB was equal to 10.055 + .309 EAW + .278 TI + .211 MI + .133 EAC.

In step 5, PI was included with 1% increase of the variance of GCB and the multiple correlation (R=.812) indicated the presence of significant very strong relationship explaining GCB of the rural student sample. Model 5 (EAW, TI, MI, EAC and PI) derived was significant yielding F (5, 515) = 199.439, $^{**}p<.01$, $R^2 = .659$. This revealed that EAW, TI, MI, EAC and PI collectively accounted for 66% variation in GCB. Participants' predicted GCB was equal to 8.855 + .290 EAW + .249 TI + .183 MI + .119 EAC+ .114 PI.

In step 6, ERAS was included with .8% increase of the variance of GCB and the multiple correlation (R=.817) indicated the presence of significant very strong relationship explaining GCB of the rural student sample. Model 6 (EAW, TI, MI, EAC, PI and ERAS) derived was significant yielding F (6, 514) = 171.974, $^{**}p<.01$, $R^2 = .667$. This showed that EAW, TI, MI, EAC, PI and ERAS collectively accounted for 67% variation in GCB. Participants' predicted GCB was equal to 7.342 + .250 EAW + .235 TI + .168 MI + .096 EAC+ .100 PI + .123 ERAS.

In step 7, PGI was included with .6% increase of the variance of GCB and the multiple correlation (R=.821) indicated the presence of significant very strong relationship explaining GCB of the rural student sample. Model 7 (EAW, TI, MI, EAC, PI, ERAS and PGI) derived was significant yielding F (7, 513) = 151.136, $^{**}p<.01$, $R^2 = .673$. This showed that EAW, TI, MI, EAC, PI, ERAS and PGI collectively accounted for 67% variation in GCB. Participants' predicted GCB was equal to 6.871 + .235 EAW + .216 TI + .149 MI + .095 EAC + .084 PI + .116 ERAS + .085 PGI.

29. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Ecoliteracy (EL), Responsibility Attribution (ERA) and Social Influence (SI) for the Government Student Sample

It was found that there was significant positive correlation among the predictor variables (Ecoliteracy, Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) for government student sample. It was evident that SI was having the highest correlation (.730) with GCB followed by EL (.659) and ERA (.522). All the correlation indices obtained were significant at .01 level.

In stepwise multiple regression analysis three significant models were derived. In step 1, SI was included and the correlation (R=.730) indicated the presence of significant relationship explaining GCB of the government student sample. Model 1 was significant yielding F (1, 425) = 485.311, $^{**}p<.01$, R^2 = .533. This showed that SI accounted for 53% variation in GCB. Participants' predicted GCB was equal to 16.255 + .758 SI.

In step 2, EL was included with 8% increase of the variance of GCB and the multiple correlation (R=.783) indicated the presence of significant strong relationship explaining GCB of the government student sample. Model 2 (SI and EL) was significant yielding F (2, 424) = 335.915, $^{**}p<.01$, R^2 = .613. This revealed that SI and EL collectively accounted for 61% variation in GCB. Participants' GCB was equal to 8.232 + .543 SI + .359 EL.

In step 3, ERA was included with 2% increase of the variance of GCB and the multiple correlation (R=.793) indicated the presence of significant strong relationship explaining GCB of the government student

sample. Model 3 (SI, EL and ERA) derived was significant yielding F (3, 423) = 238.954, $^{**}p<.01$), R^2 = .629. This showed that SI, EL and ERA collectively accounted for 63% variation in GCB. Participants' GCB was equal to 3.745 + .488 SI + .324 EL + .171 ERA.

30. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Dimensions of Predictor Variables EAW, EAT, EAC, ERAS, ERAO, PI, TI, PGI and MI for the Government Student Sample

A significant positive correlation was found among most of the dimensions of predictor variables and the criterion variable, except for ERAO for the government student sample. It was observed that EAW (.661) yielded the highest correlation with GCB followed by ERAS (.643) and MI (.587). All the predictor variables were also fairly correlated with each other except for ERAO. It was also evident that ERAO possessed the lowest correlation with a negative index (-.021) with GCB. Majority of correlation indices obtained were significant at .01 level and a few at .05 level. All the significant variables were entered for regression analysis.

Seven significant models were derived from regression analysis. In step 1, EAW was included and the correlation (R=.661) indicated the presence of significant relationship explaining GCB of the government student sample. Model 1 (EAW) derived was significant yielding F (1, 425) = 329.926, $^{**}p<.01$), R^2 = .437. This showed that EAW accounted for 44% variation in GCB. Participants' predicted GCB was equal to 33.089 + .536 EAW.

In step 2, ERAS was included with 15% increase of the variance of GCB and the multiple correlation (R=.764) indicated the presence of significant strong relationship explaining GCB of the government student

sample. Model 2 (EAW and ERAS) derived was significant yielding F (2, 424) = 298.086, $^{**}p<.01$, R^2 = .584. This showed that EAW and ERAS collectively accounted for 58% variation in GCB. Participants' predicted GCB was equal to 22.619 + .377 EAW + .298 ERAS.

In step 3, PGI was included with 5% increase of the variance of GCB and the multiple correlation (R=.798) indicated the presence of significant strong relationship explaining GCB of the government student sample. Model 3 (EAW, ERAS and PGI) derived was significant yielding F (3, 423) = 246.637, $^{**}p<.01$, R^2 = .636. This showed that EAW, ERAS and PGI collectively accounted for 64% variation in GCB. Participants' predicted GCB was equal to 17.068 + .338 EAW + .245 ERAS + .182 PGI.

In step 4, MI was included with 2% increase of the variance of GCB and the multiple correlation (R=.813) indicated the presence of significant very strong relationship explaining GCB of the government student sample. Model 4 (EAW, ERAS, PGI and MI) derived was significant yielding F (4, 422) = 205.413, $^{**}p<.01$, R^2 = .661. This showed that EAW, ERAS, PGI and MI collectively accounted for 66% variation in GCB. Participants' predicted GCB was equal to 14.108 + .292 EAW + .219 ERAS + .146 PGI + .148 MI.

In step 5, PI was included with 2 % increase of the variance of GCB and the multiple correlation (R=.776) indicated the presence of significant strong relationship explaining GCB of the government student sample. Model 5 (EAW, ERAS, PGI, MI and PI) derived was significant yielding F (5, 421) = 176.777, $^{**}p<.01$, R^2 = .677. This showed that EAW, ERAS, PGI, MI and PI collectively accounted for 68% variation in GCB. Participants' predicted GCB was equal to 11.707 + .263 EAW + .212 ERAS + .121 PGI + .136 MI + .112 PI.

In step 6, TI was included with 1% increase of the variance of GCB and the multiple correlation (R=.829) indicated the presence of significant very strong relationship explaining GCB of the government student sample. Model 6 (EAW, ERAS, PGI, MI, PI and TI) derived was significant yielding F (6, 420) = 153.957, $^{**}p<.01$, with R^2 of .687. This showed that EAW, ERAS, PGI, MI, PI and TI collectively accounted for 69% variation in GCB. Participants' predicted GCB was equal to 9.660 + .239 EAW + .200 ERAS + .101 PGI + .126 MI+ .093 PI + .116 TI.

In step 7, EAT was included with .4% increase of the variance of GCB and the multiple correlation (R=.831) indicated the presence of significant very strong relationship explaining GCB of the government student sample. Model 7 (EAW, ERAS, PGI, MI, PI, TI and EAT) derived was significant yielding F (7, 419) = 134.018, $^{**}p<.01$, R^2 = .691. This showed that EAW, ERAS, PGI, MI, PI, TI and EAT collectively accounted for 69% variation in GCB. Participants' predicted GCB is equal to 8.327 + .211 EAW + .193 ERAS + .098 PGI + .123 MI + .087 PI + .106 TI + .078 EAT.

31. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Ecoliteracy (EL), Responsibility Attribution (ERA) and Social Influence (SI) for the Aided Student Sample

It was found that there exists significant positive correlation among the predictor variables (Ecoliteracy, Responsibility Attribution and Social Influence) and the criterion variable (Green Consumer Behaviour) for aided student sample. It was evident that SI was having the highest correlation (.743) with GCB followed by EL (.698) and ERA (.553). All the correlation indices obtained were significant at .01 level.

The regression analysis derived three significant models. In step 1, SI was included and the correlation (R=.743) indicated the presence of significant strong relationship explaining GCB of the aided student sample. Model 1 was significant yielding F (1, 571) = 705.201, $^{**}p<.01$, $R^2 = .553$. This revealed that SI accounted for 55% variation in GCB. Participants' predicted GCB was equal to 16.220 + .826 SI.

In step 2, EL was included with 8% increase of the variance of GCB and the multiple correlation (R=.795) indicated the presence of significant strong relationship explaining GCB of the aided student sample. Model 2 (SI and EL) derived was significant F (2, 570) = 491.095, $^{**}p<.01$, $R^2 = .633$. This revealed that SI and EL collectively accounted for 63% variation in GCB. Participants' GCB was equal to 7.754 + .557 SI + .400 EL.

In step 3, ERA was included with .5% increase of the variance of GCB and the multiple correlation (R=.798) indicated the presence of significant strong relationship explaining GCB of the aided student sample. Model 3 (SI, EL and ERA) was significant yielding F (3, 569) = 333.427, $^{**}p<.01$, $R^2 = .637$. This showed that SI, EL and ERA collectively accounted for 64% variation in GCB. Participants' GCB is equal to 4.766 + .522 SI + .369 EL + .121 ERA.

32. Stepwise Multiple Regression Analysis to Predict Green Consumer Behaviour (GCB) based on Dimensions of Predictor Variables EAW, EAT, EAC, ERAS, ERAO, PI, TI, PGI and MI for the Aided Student Sample

It was found that there exists significant positive correlation among most of the dimensions of predictor variables and the criterion variable, except for ERAO for the aided student sample. It was observed that EAW

(.647) has the highest correlation with GCB followed by ERAS (.646) and MI (.630). All the predictor variables are also fairly correlated with each other except for ERAO. It can also be observed that ERAO is having the lowest correlation index (.112) with GCB. Majority of correlation indices obtained were significant at .01 level and a few at .05 level. All the significant variables were entered for regression analysis.

Seven significant models were derived by regression analysis. In step 1, EWA was included and the correlation (R=.647) indicated the presence of significant relationship explaining GCB of the aided student sample. Model 1 (EAW) derived was significant yielding F (1, 571) = 411.176, $^{**}p<.01$, $R^2 = .419$. This revealed that EAW accounts for 42% variation in GCB. Participants' predicted GCB is equal to 33.241 + .563 EAW.

In step 2, TI was included with 3% increase of the variance of GCB and the multiple correlation (R=.738) indicated the presence of significant relationship explaining GCB of the aided student sample. Model 2 (EAW and TI) derived was significant yielding F (2, 570) = 341.072, $^{**}p<.01$, $R^2 = .545$. This showed that EAW and TI collectively accounted for 55% variation in GCB. Participants' predicted GCB was equal to 20.581 + .400 EAW + .378 TI.

In step 3, MI was included with 7% increase of the variance of GCB and the multiple correlation (R=.783) indicated the presence of significant strong relationship explaining GCB of the aided student sample. Model 3 (EAW, TI and MI) was significant yielding F (3, 569) = 300.391, $^{**}p<.01$, $R^2 = .613$. This showed that EAW, TI and MI collectively accounted for 61% variation in GCB. Participants' predicted GCB was equal to 13.713 + .290 EAW + .303 TI + .274 MI.

In step 4, EAC was included with 4% increase of the variance of GCB and the multiple correlation (R=.776) indicated the presence of significant strong relationship explaining GCB of the aided student sample. Model 4 (EAW, TI, MI and EAC) derived was significant yielding F (4, 568) = 263.875, $^{**}p<.01$, $R^2 = .650$. This showed that EAW, TI, MI and EAC collectively accounted for 65% variation in GCB. Participants' predicted GCB was equal to 8.820 + .318 EAW + .261 TI + .218 MI + .149 EAC.

In step 5, ERAS was included with 1% increase of the variance of GCB and the multiple correlation (R=.815) indicated the presence of significant very strong relationship explaining GCB of the aided student sample. Model 5 (EAW, TI, MI, EAC and ERAS) derived was significant yielding F (5, 567) = 224.305, $^{**}p<.01$, $R^2 = .664$. This showed that EAW, TI, MI, EAC and ERAS collectively accounted for 66% variation in GCB. Participants' predicted GCB was equal to 7.026 + .264 EAW + .232 TI + .197 MI + .115 EAC + .158 ERAS.

In step 6, PGI was included with .4% increase of the variance of GCB and the multiple correlation (R=.818) indicated the presence of significant very strong relationship explaining GCB of the aided student sample. Model 6 (EAW, TI, MI, EAC, ERAS and PGI) derived was significant yielding F (6, 566) = 190.322, $^{**}p<.01$, $R^2 = .669$. This revealed that EAW, TI, MI, EAC, ERAS and PGI collectively accounted for 67% variation in GCB. Participants' predicted GCB was equal to 6.652 + .251 EAW + .211 TI + .175 MI + .114 EAC+ .150 ERAS + .073 PGI.

In step 7, PI was included with .3% increase of the variance of GCB and the multiple correlation (R=.819) indicated the presence of significant very strong relationship explaining GCB of the aided student

sample. Model 7 (EAW, TI, MI, EAC, ERAS, PGI and PI) was significant yielding F (7, 565) = 164.849, $^{**}p<.01$, $R^2 = .671$. This revealed that EAW, TI, MI, EAC, ERAS, PGI and PI collectively accounted for 67% variation in GCB. Participants' predicted GCB was equal to 6.264 + .247 EAW + .200 TI + .165 MI + .109 EAC + .140 ERAS + .062 PGI + .059 PI.

Summary of Findings of the Study

1. Majority of students (68%) possessed only moderate level of GCB. Only 17% of students had high level of GCB and 15% of students had low level of GCB.

2. The level of Ecoliteracy of students is such that, 61% of students possessed a moderate level of Ecoliteracy. It was also found that only 19% students possessed high level of Ecoliteracy, while 20% students possessed low level of Ecoliteracy.

3. The Environmental Responsibility Attribution level of students was such that, 61% students possessed a moderate level, 18% high level and 21% students possessed low level of Environmental Responsibility Attribution.

4. The level of Social Influence of students revealed that a majority of students (68%) were moderately influenced by social factors. It was also seen that 17% and 15% students possessed high and low rates of Social Influence.

5. There was significant difference in the variables EL and SI between male and female students while no gender difference was found in the case of ERA.

6. There was no locale and type of institutional difference in the variables EL, ERA and SI.

7. In the case of gender difference in the dimensions of Ecoliteracy, there was a significant difference in EAW and EAT, while no significant difference was found in EAC.

8. No significant locale or institutional difference were found in the dimensions of Ecoliteracy (EAW, EAT and EAC).

9. No significant difference was found in the dimensions of Environmental Responsibility Attribution (ERAS and ERAO) for the subsamples.

10. In the case of dimensions of Social Influence, significant gender difference was found in PI, TI and PGI, while no gender difference found in MI.

11. No significant locale and institutional difference were found in the dimensions of Social Influence (PI, TI, PGI and MI).

12. A significant gender difference and institutional difference was found in GCB, while no locale difference was found among the students.

13. Significant correlation was found between the predictors and criterion variable for the total sample. A significant regression equation $F(3,996) = 518.530$, $^{**}p<.01$, $R^2 = .610$. This showed that EL, SI and ERA collectively accounted for 61% variation in GCB of total students. Participants' GCB was equal to 3.974 + .439 EL + .425 SI + .142 ERA.

14. Significant positive correlation was found between the dimensions of predictors and the criterion variable, except for ERAO for total sample. A significant regression equation $F(8, 991) = 231.529$, $^{**}p<.01$, $R^2 = .651$. This showed that EAW, ERAS, MI, EAT, TI, PGI, EAC and PI

collectively accounted for 65% variation in GCB of total students. Participants' predicted GCB was equal to 6.636 + .248 EAW + .152 ERAS + .150 MI + .119 EAT + .101 TI + .072 PGI + .064 EAC + .045 PI.

15. Significant correlation was found between the predictors and criterion variable for male student sample. A significant regression equation F (3,436) = 258.630, $^{**}p<.01$), R^2 = .640. This showed that SI, EL and ERA collectively accounted for 64% variation in GCB of males. Participants' GCB was equal to 2.554 + .516 SI + .330 EL + .154 ERA.

16. Significant positive correlation was found between the dimensions of predictors and the criterion variable, except for ERAO for male student sample. A significant regression equation F (7, 432) = 146.231, $^{**}p<.01$, R^2 = .703. This showed that EAW, ERAS, PGI, MI, PI, TI and EAC collectively accounted for 70% variation in GCB of males. Participants' predicted GCB was equal to 6.634 + .228 EAW + .197 ERAS + .095 PGI + .136 MI + .093 PI + .118 TI + .056 EAC.

17. Significant correlation was found between the predictors and criterion variable for female student sample. A significant regression equation F (3,556) = 322.019, $^{**}p<.01$, R^2 = .635 was derived. This showed that SI, EL and ERA collectively accounted for 64% variation in GCB of females. Participants' GCB was equal to 5.865 + .502 SI + .349 EL + .146 ERA.

18. Significant positive correlation was found between the dimensions of predictors and the criterion variable, except for ERAO for the female student sample. A significant regression equation F (7, 552) = 155.468, $p<.01$, R^2 = .663 was derived. This showed that EAW, TI, EAC, MI, ERAS, PGI and PI collectively accounted for 66% variation in GCB of

females. Participants' predicted GCB was equal to 7.929 + .250 EAW + .201 TI + .111 EAC + .148 MI + .119 ERAS + .066 PGI + .065 PI.

19. Significant correlation was found between the predictors and criterion variable for urban student sample. A significant regression equation F (3, 475) = 267.189, $^{**}p<.01$, R^2 = .628 was derived. This showed that SI, EL and ERA collectively accounted for 63% variation in GCB of students of institutions in urban area. Participants' GCB was equal to 3.980 + .480 SI + .358 EL + .141 ERA.

20. Significant positive correlation between the dimensions of predictors and the criterion variable, except for ERAO for the urban student sample. A significant regression equation F (7, 471) = 150.836, $^{**}p<.01$, R^2 = .692 was derived. This showed that EAW, ERAS, MI, TI, PGI, EAC and PI collectively accounted for 69% variation in GCB of students studying in institutions of urban area. Participants' predicted GCB was equal to 7.600 + .244 EAW + .194 ERAS + .139 MI + .112 TI + .083 PGI + .067 EAC + .072 PI.

21. Significant correlation was found between the predictors and criterion variable for rural student sample. A significant regression equation F (3, 517) = 315.113, $^{**}p<.01$), R^2 = .646 was derived. This showed that SI, EL and ERA collectively accounted for 65% variation in GCB of students of institutions in rural area. Participants' GCB was equal to 4.913 + .559 SI + .323 EL + .132 ERA.

22. Significant positive correlation between the dimensions of predictors and the criterion variable, except for ERAO for the rural student sample. A significant regression equation F (7, 513) = 151.136, $^{**}p<.01$, R^2 = .673 was yielded. This showed that EAW, TI, MI, EAC, PI, ERAS and PGI collectively accounts for 67% variation in GCB of students in

rural area. Participants' predicted GCB was equal to 6.871 + .235 EAW + .216 TI + .149 MI + .095 EAC + .084 PI + .116 ERAS + .085 PGI.

23. Significant correlation was found between the predictors and criterion variable for government student sample. A significant regression equation (F (3, 423) = 238.954, $^{**}p<.01$), with R^2 of .629 was yielded. This showed that SI, EL and ERA collectively accounted for 63% variation in GCB of students in government institutions. Participants' GCB was equal to 3.745 + .488 SI + .324 EL + .171 ERA.

24. Significant positive correlation between the dimensions of predictors and the criterion variable, except for ERAO for the government student sample. A significant regression equation F (7, 419) = 134.018, $^{**}p<.01$, R^2 = .691 was yielded. This showed that EAW, ERAS, PGI, MI, PI, TI and EAT collectively accounted for 69% variation in GCB of students. Participants' predicted GCB was equal to 8.327 + .211 EAW + .193 ERAS + .098 PGI + .123 MI + .087 PI + .106 TI + .078 EAT.

25. Significant correlation was found among the predictors and criterion variable for aided student sample. A significant regression equation F (3, 569) = 333.427, $^{**}p<.01$, R^2 = .637 was yielded. This showed that SI, EL and ERA collectively accounted for 64% variation in GCB of students studying in aided institutions. Participants' GCB was equal to 4.766 + .522 SI + .369 EL + .121 ERA.

26. Significant positive correlation between the dimensions of predictors and the criterion variable, except for ERAO for the aided student sample. A significant regression equation F (7, 565) = 164.849, $^{**}p<.01$, R^2 = .671 was derived. This showed that EAW, TI, MI, EAC, ERAS, PGI and PI collectively accounted for 67% variation in GCB of students of aided institutions. Participants' predicted GCB was equal to 6.264 +

.247 EAW + .200 TI + .165 MI + .109 EAC + .140 ERAS + .062 PGI + .059 PI.

Tenability of Hypotheses

The tenability of hypotheses stated for the present study was examined based on the findings of the study. The details regarding tenability of hypotheses are presented in this section.

1. There is no significant difference in the mean scores of Ecoliteracy for the sub samples based on

    a. gender
    b. locale
    c. type of institution

The findings of the study revealed that there exists significant difference in the mean scores of Ecoliteracy between the male and the female students. However, no significant difference in the mean scores of Ecoliteracy was found between the students in institutions of urban and rural areas and between the students studying in government and aided institutions.

Hence Hypothesis 1(a) is accepted and Hypotheses 1(b) & 1(c) are rejected.

2. There is no significant difference in the mean scores of dimensions of Ecoliteracy for the sub samples based on gender, locale and type of institution.

2.1 There is no significant difference in the mean scores of Environmental Awareness for the sub samples based on

a. gender

b. locale

c. type of institution

2.2 There is no significant difference in the mean scores of Environmental Attitude for the sub samples based on

a. gender

b. locale

c. type of institution

2.3 There is no significant difference in the mean scores of Environmental Action for the sub samples based on

a. gender

b. locale

c. type of institution

The findings of the study showed that significant gender difference exists in the mean scores of Environmental Awareness among students. However no significant difference in mean scores was found between students studying in institutions located in urban and rural areas and the students studying in government and aided institutions.

Hence Hypothesis 2.1(a) is rejected and Hypotheses 2.1(b) & 2.1(c) are accepted

The findings regarding differences in the mean scores of Environmental Attitude revealed that there exists significant difference in the mean scores between male and female students. However, there was no significant difference in mean scores between students studying in institutions of urban and rural areas and the students studying in government and aided institutions.

Hence Hypothesis 2.2(a) is rejected and Hypotheses 2.2(b) & 2.2(c) are accepted.

From the findings of the study it was also clear that there exists no significant difference in the mean scores of Environmental Action between male and female students, between students studying in urban and rural areas and between students studying in government and aided institutions.

Hence Hypotheses 2.3(a), 2.3(b) & 2.3(c) are accepted

3. There is no significant difference in the mean scores of Environmental Responsibility Attribution for the sub samples based on

    a. gender
    b. locale
    c. type of institution

The findings of the study revealed that no significant difference exists in the mean scores of Environmental Responsibility Attribution between male and female students, between the students in institutions of urban and rural areas and between the students studying in government and aided institutions.

Hence the Hypotheses 3(a), 3(b) & 3(c) are accepted.

4. There is no significant difference in the mean scores of the dimensions of Environmental Responsibility Attribution for the sub samples based on gender, locale and type of institution.

4.1 There is no significant difference in the mean scores of Environmental Responsibility Attribution to Self for the sub samples based on

    a. gender
    b. locale

c. type of institution

4.2 There is no significant difference in the mean scores of Environmental Responsibility Attribution to Others for the sub samples based on

a. gender
b. locale
c. type of institution

The findings of the study showed that there was no significant difference in the mean scores of Environmental Responsibility Attribution to Self between male and female students, between students from urban and rural areas and between students studying in government and aided institutions.

Hence the Hypotheses 4.1(a), 4.1(b) & 4.1(c) are accepted.

The findings also revealed that no significant differences was found in the mean scores of Environmental Responsibility Attribution to Others between male and female, students in urban and rural areas and between students of government and aided colleges. Hence, this hypothesis is fully substantiated.

Hence the Hypotheses 4.2(a), 4.2(b) & 4.2(c) are accepted.

5. There is no significant difference in the mean scores of Social Influence for the sub samples based on

a. gender
b. locale
c. type of institution

From the study it was found that there exists significant difference in the mean scores of Social influence between male and female students.

However, there was no significant difference between students of urban and rural areas and between students studying in government and aided institutions. Therefore this hypothesis is partially substantiated.

Hence Hypothesis 5(a) is rejected and Hypotheses 5(b) & 5(c) are accepted

6. There is no significant difference in the mean scores of the dimensions of Social Influence for the sub samples based on gender, locale and type of institution.

   6.1 There is no significant difference in the mean scores of Parental Influence for the sub samples based on

      a. gender
      b. locale
      c. type of institution

   6.2 There is no significant difference in the mean scores of Teacher Influence for the sub samples based on

      a. gender
      b. locale
      c. type of institution

   6.3 There is no significant difference in the mean scores of Peer Group Influence for the sub samples based on

      a. gender
      b. locale
      c. type of institution.

   6.4 There is no significant difference in the mean scores of Media Influence for the sub samples based on

a. gender
b. locale
c. type of institution.

From the findings of the study it was clear that there exists significant gender difference in the mean scores of Parental Influence. However, there was no significant difference between students of urban and rural areas and between students of government and aided institutions.

Hence Hypothesis 6.1(a) is rejected and Hypotheses 6.1(b) & 6.1(c) are accepted

Significant gender difference was found in the mean scores of Teacher Influence. However no significant difference was found between students of urban and rural areas and between students studying in government and aided institutions.

Hence Hypothesis 6.2(a) is rejected and Hypotheses 6.2(b) & 6.2(c) are accepted

The findings also revealed significant gender difference in the mean scores of Peer Group Influence. While no significant difference was found between students of urban and rural areas and between students of government and aided institutions.

Hence Hypothesis 6.3(a) is rejected and Hypotheses 6.2(b) & 6.2(c) are accepted

The findings of the study did not reveal any significant differences in the mean scores of Media Influence between male and female, between students of urban and rural institutions and between students of

government and aided institutions. Therefore this hypothesis is partially substantiated.

Hence Hypotheses 6.4(a), 6.4(b), 6.4(c) & 6.4(d) are accepted

7. There is no significant difference in the mean scores of Green Consumer Behaviour for the sub samples based on

    a. gender
    b. locale and
    c. type of institution.

From the findings of the present study it was clear that there exists significant gender difference and institutional difference in the mean scores of Green Consumer Behaviour between students. While no significant difference was evident between students of urban and rural areas. Hence, this hypothesis is partially substantiated.

Hence Hypotheses 7(a) & 7(c) are rejected and Hypotheses 7(b) is accepted

8. The relative efficiency of predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) is not significant in predicting the criterion variable (Green Consumer Behaviour) for the total sample.

8.1 There is no significant multiple correlations between the predictor variables and the criterion variable for the total sample.

8.2 The criterion variable is not significantly predicted by one or more of the predictor variables for the total sample.

8.3 The relative efficiency of predictor variables' individual and collective contributions is not significant in predicting the criterion variable for the total sample.

8.4 The relative efficiency of significant predictor variables is not different in predicting the criterion variable for the total sample.

The findings of the study revealed that the multiple correlations between the predictor variables and the criterion variable were all found to be significant. The criterion variable could be significantly predicted by the predictors Ecoliteracy, Social Influence and Environmental Responsibility Attribution and that the relative efficiency of all the predictors was different for the total sample. The relative efficiency of the predictor variables' individual and collective contributions was significant and different for the total sample.

Hence Hypotheses 8.1, 8.2, 8.3 & 8.4 are rejected.

9. The relative efficiency of predictor variables (Ecoliteracy, Environmental Responsibility Attribution and Social Influence) is not significant in predicting the criterion variable (Green Consumer Behaviour) for the sub samples based on gender, locale and type of institution.

9.1 There is no significant multiple correlations between the predictor variables and the criterion variable for the sub samples based on

a. gender
b. locale
c. type of institution.

9.2 The criterion variable is not significantly predicted by one or more of the predictor variables for the sub samples based on

a. gender
b. locale
c. type of institution.

9.3 The relative efficiency of predictor variables' individual and collective contributions is not significant in predicting the criterion variable for the sub samples based on

a. gender
b. locale
c. type of institution

9.4 The relative efficiency of significant predictor variables is not different in predicting the criterion variable for the sub sample based on

a. gender
b. locale
c. type of institution

The multiple correlations between the predictors and criterion variable were significant based on gender, locale and type of institution. It was also found that the criterion variable Green Consumer behaviour was predicted by all the predictors Ecoliteracy, Environmental Responsibility Attribution and Social influence.

Hence Hypotheses 9.1.a, 9.1.b & 9.1.c are rejected.

The criterion variable could be significantly predicted by Ecoliteracy, environmental Responsibility Attribution and Social Influence based on gender, locale and type of institution.

Hence Hypotheses 9.2.a, 9.2.b & 9.2.c are rejected.

From the study it was found that the relative efficiency of predictor variables' individual and collective contributions was significant in predicting

the criterion variable for the subsamples based on gender, locale and type of institution.

Hence Hypotheses 9.3.a, 9.3.b & 9.3.c are rejected.

The relative efficiency of each of the predictor variable was different in predicting the criterion variable for the sub samples based on gender, locale and type of institution.

Hence Hypotheses 9.4.a, 9.4.b & 9.4.c are rejected.

10. The relative efficiency of dimensions of predictor variables (EAW, EAT, EAC, ERAS, ERAO, PI, TI, PGI, MI) is not significant in predicting the criterion variable (Green Consumer Behaviour) for the total sample.

    10.1 There is no significant multiple correlations between the dimensions of predictor variables and the criterion variable for the total sample.

    10.2 The criterion variable is not significantly predicted by one or more of the dimensions of predictor variables for the total sample.

    10.3 The relative efficiency of dimensions of predictor variables' individual and collective contributions is not significant in predicting the criterion variable for the total sample.

    10.4 The relative efficiency of significant dimensions of predictor variables is not different in predicting the criterion variable for the total sample.

The findings reveal that the multiple correlations between the dimensions of predictors and the criterion variable were significant for the total sample. The criterion variable was significantly predicted by EAW, ERAS, MI, EAT, TI, PGI, EAC and PI with exception to ERAO. It was also evident that the relative efficiency of dimensions of the predictor variables' individual and collective contributions was significant in predicting the criterion variable for the total sample. The relative efficiency of the

dimensions of predictors in predicting the criterion was different for the total sample.

Hence Hypotheses 10.1, 10.2, 10.3 & 10.4 are rejected.

11. The relative efficiency of dimensions of predictor variables (EAW, EAT, EAC, ERAS, ERAO, PI, TI, PGI, MI) is not significant in predicting the criterion variable (Green Consumer Behaviour) for the sub samples based on gender, locale and type of institution.

    11.1 There is no significant multiple correlations between the dimensions of predictor variables and the criterion variable for the sub samples based on

        a. gender
        b. locale
        c. type of institution.

    11.2 The criterion variable is not significantly predicted by one or more of the dimensions of predictor variables for the sub samples based on

        a. gender
        b. locale
        c. type of institution.

    11.3 The relative efficiency of dimensions of predictor variables' individual and collective contributions is not significant in predicting the criterion variable for the sub samples based on

        a. gender
        b. locale
        c. type of institution.

11.4 The relative efficiency of significant dimensions of predictor variables is not different in predicting the criterion variable for the sub sample based on

a. gender
b. locale
c. type of institution.

The multiple correlations between the predictor variables and the criterion variable were significant for the sub samples based on gender, locale and type of institution.

Hence Hypotheses 11.1.a, 11.1.b & 11.1.c are rejected.

The criterion variable could be predicted by EAW, ERAS, PGI, MI, PI, TI and EAC with exclusion to ERAO and EAT for the male student sample. In the case of female student sample, criterion variable could be predicted by EWA, TI, EAC, MI, ERAS, PGI and PI with exclusion to ERAO and EAT. In the case of urban student sample, the criterion could be predicted by EAW, ERAS, MI, TI, PGI, EAC and PI with exclusion to ERAO and EAT. For rural student sample, criterion could be predicted by EAW, TI, MI, EAC, PI, ERAS and PGI with exception to ERAO and EAT. For government student sample, criterion variable could be predicted by EAW, ERAS, PGI, MI, PI, TI and EAT with exception to ERAO and EAC. And finally, in the case of aided student sample, criterion variable could be predicted by EAW, TI, MI, EAC, ERAS, PGI and PI with exclusion to ERAO and EAT.

Hence Hypotheses 11.2.a, 11.2.b & 11.2.c are rejected.

The findings of the study revealed that the relative efficiency of dimensions of predictor variables' individual and collective contributions was

significant in predicting the criterion variable for the sub samples based on gender, locale and type of institution.

Hence Hypotheses 11.3.a, 11.3.b & 11.3.c are rejected.

The relative efficiency of significant dimensions of predictor was different in predicting the criterion variable for the sub samples based on gender, locale and type of institution.

Hence Hypotheses 11.4.a, 11.4.b & 11.4.c are rejected.

Educational Implications

1. Ecoliteracy was found to be a significant predictor of Green Consumer Behaviour of undergraduate students. Hence education for promoting Ecoliteracy must be imparted at the Higher Education level without any disciplinary boundaries. The contents of Higher Education must be enriched by infusing environment content suggestably transacted in an interdisciplinary and transdisciplinary mode.

2. The dimensions of Ecoliteracy constituting Environmental Awareness, Environmental Attitude and Environmental Action were also significant predictors of Green Consumer Behaviour of students. Therefore, it is imperative to raise the knowledge of students pertaining to the facts and principles related to environment for nurturing Green Consumer Behaviour. Education for Ecoliteracy must aim to develop ecoliterates adorned with formidable environmental dispositions and skills for inducing action oriented behaviours along with an affinity towards the environment. Moreover, raising awareness is a prerequisite for developing favourable attitude towards environment. Apart from this, developing the right attitude is a pre-requisite for initiation of action oriented behaviours. Hence importance should be given to active

learning process by engaging learners in an environmental milieu. This would enable in developing a kinship with nature with an emotional connectedness reflective of a sense of belonging. So, the curriculum planners, policy makers, educators etc must take utmost care in infusing the environmental content along with the most appropriate strategies for developing Ecoliteracy competencies in the HE curriculum. The educators can adopt innovative teaching and learning strategies like experiential learning, socratic method, place based learning, project methods, inquiry learning and the like so as to explore and ponder the nature. In India environmental education is an integral part of curriculum from primary to higher education level. Mere ritual treatment will not bring the expected outcome. There should be a revisit to the curricular transaction of the environment component especially at the Higher Education level.

3. Environmental Responsibility Attribution was found to be a significant predictor of Green Consumer Behaviour of undergraduate students. Therefore developing a sense of responsibility towards environment is vital in education.

4. The dimension of Environmental Responsibility Attribution like Environmental Responsibility Attribution to Self was a significant predictor of GCB. Developing the responsibility attribution to self is very closely related to internal locus of control of students. Focus of teaching should be essentially on developing and nurturing the right exercise of self-control among students. Behavioural management strategies at HE level has to be incorporated at variegated levels of activities so as to develop better self-control, self-motivation and influence. This should in turn induce learners to be more curious and inquisitive in gathering information and honing the essential skills for

environmentally conscious behaviours through education. While the Environmental Responsibility Attribution to Others (ERAO), though not a significant predictor has yielded useful information regarding its influence on the Green Consumer Behaviour of students. It was found that Environmental Responsibility Attribution to Others had a significant negative correlation to GCB characterising its position to be a potent predictor. This implies that if the level of ERAO is decreased among students, Green Consumer Behaviour of students can be increased. To foster this, students should be convinced about the connection between their own efforts and attainment of objectives leading to success. Hence, encouraging a sense of responsibility in everyday life towards the environment and wellbeing of fellow citizens is also to be enhanced through education. Teachers must make students realise and recognise the potential benefits of efforts towards protecting the environment for sustainable living. Motivate students to induce positive changes in oneself as well as in others for a coherent effort towards building a sustainable community through adopting green choices of consumption. All this demands constant encouragement and praise for nurturing environmentally responsible green consumers. The effort for this is to be done in an integrated manner right from the primary school level along with focussing on good manners of life.

5. Social influence was observed to be the most significant predictor of Green Consumer Behaviour. Hence educators, policymakers, administrators and other stake holders of HE should realise the influence they could possibly exert on the students in inducing environmentally conscious behaviours. Green initiatives and lifestyles at individual as well as at institutional levels should be adopted in all aspects of HE system for being role models in order to motivate students to appreciate and inculcate green values and culture.

6. The dimensions of Social Influence like Parental Influence, Teacher Influence, Peer Group Influence and Media Influence were found to be significant predictors of Green Consumer Behaviour. Hence teachers at HE level have crucial role in fostering Green Consumer Behaviour of students. Imbibing green values and cultures by teachers in one's own life can inspire students to follow the paths of sustainable living. Parents being the prime motivational force have a skilful role in nurturing attitudes, values, beliefs and behaviour towards developing ecofriendly and environmentally conscious consumption habits among children right from the early stages of life. Peer Group Influence is extremely dominant among the youth. Hence, it becomes the responsibility of every individual to induce one as well as others to develop positive attitude and behaviours related to sustainable consumption. This would further get transferred from a specific to a larger diasporas of the community. The influence of media on today's young generation is prodigious. Hence educational efforts should enable students to realise the positive and negative impact of media in life. Students should be made vigilant and scrupulous while scrutinising the credibility of information disseminated through media. In this era of digital boom, students should be provided with guidelines and strategies for conducting best navigation through the huge ocean of data available in varied forms that can be easily ported, accessed and interacted.

7. The findings of the study revealed that the level of Ecoliteracy was only moderate for majority of students. Ample opportunities need to be provided with potential for developing Ecoliteracy competencies and values among students. Teachers need to adopt the strategies and methods of infusing environmental contents in all aspects of learning and compulsorily relate these enriched learning to life of learners. The teaching and learning strategies adopted should go beyond the

classrooms by actively engaging learners in the vast realms of nature. This can be done through innovative strategies of learning that provides enriched learning experiences through natural provenance of nature.

8. The Environmental Responsibility Attribution level was also found to be average for majority of students. Education should aim for building more environmentally responsible citizens. Students of HE must be engaged in environmental activities in which they get opportunities to assume environmental responsibility and put in their direct effort towards successful attainment of the environmental goals. Adequate opportunities for behaviour management should be provided for attaining self control and develop a sense of self motivation to take up initiative of environmental actions and behaviours. These educational experiences must induce in young learners to attribute the environmental responsibilities to oneself first rather than to others for developing green consumers with higher degrees of Environmental Responsibility Attribution. The different clubs especially nature club is having a critical role in this aspect.

9. Though Social Influence was found to be a significant predictor, majority of students possessed only a moderate level of SI on GCB. This implies that more efforts from the part of teachers, parents, peer groups and media need to be incorporated by these forces towards fostering GCB. Inculcation of attitudes, values, beliefs, habits and cultures is essential at institutional as well as familial level. Value oriented education enables in developing the right values that in turn develops other environmental dispositions that are crucial for nurturing Green Consumer Behaviour among the students. Students should also be trained to use and access the media information through making credibility assessments.

10. Educational activities should extend from institutions to communities and further to societies at large. HE should foster sustainable practices through green pedagogies and greening the curriculum. The benefits of this must reach the larger society through the concerted efforts of students, faculties and communities for building a society adorned with habits of sustainable living.

11. Teacher educators and teacher education institution having a crucial role in promoting GCB and the other variable that affect the GCB. Preparation of resource materials and transaction of the message in an effective manner should be the prime concern both at pre service and in-service level.

Conclusion

There is a growing environmental consciousness amongst people around the world. The importance of caring for the environment is being acknowledged across the globe today. With behaviours and decisions, consumers have a substantial impact on the environment. It is very imperative to boost the morale of younger consumers to adopt a positive attitude towards the purchase of ecofriendly products. However, achieving lasting behavioural change still remains one of the biggest challenges of sustainability. The roles of personal and social variables play a crucial role in moulding the environment friendly behaviours of students.

The findings of the study are in line with findings of previous researches done in the related areas of Green Consumer Behaviour, Ecoliteracy, Environmental responsibility Attribution and Social Influence. In the present study students possessed an average level of Ecoliteracy, Environmental responsibility Attribution and Social Influence and Green Consumer Behaviour. Inspite of the measures taken in the educational arena

to improve environmental education, the results of the study point out the need for more concerted efforts in order to enhance the learning of students related to environment and Green Consumer Behaviour. Such an education must rightly develop a strong sense of responsibility among students towards environment. The study also sheds light on the need to exert more positive influence from the part of teachers, parents, peer groups and media for promoting Green Consumer Behaviour among undergraduate students.

The findings of the study regarding gender differences in Ecoliteracy is at par with the findings of Yadav and Pathak (2013) in which females possessed high level of Environmental Awareness compared to males. Gender difference in Ecoliteracy was evident in the present study with females scoring high in terms of Environmental Attitude. This is at par with the findings of the research done by Stevenson et al. (2013) who found that females out performed in environmental affective domain of Attitude. However, Mostafa (2007) observed that men scored high in Environmental Attitude and Concern compared to females. Gender differences of the present study revealed that females showed more prominent Green Consumer Behaviour compared to males. The findings are in line with the findings of Anvar and Venter (2014) who found that gender differences exist in Green Consumer behaviour. Zelenzny and Bailey (2006) observed that the gender difference occurs due to the differences in the socialisation of males and females. According to Williams and Best (1990b), females possessed the personality traits like concern, compassion and emotions. The findings of the present study also show that females have more favourable attitudes towards environment and more predominant Green Consumer behaviour.

The present study shows that Ecoliteracy, Environmental responsibility Attribution and Social Influence significantly predicted the Green Consumer behaviour of undergraduate students. The findings are congruent to the

findings of the previous researches. Hai and Mai (2013) observed that educated individuals are more aware and develop positive attitude towards Green Consumer behaviour. McBride (2011) also observed that Ecoliteracy created cohesiveness between the formal and informal education systems. Bruyere (2008) found that Ecoliteracy created favourable attitude towards environmental behaviours which in turn induce environmental consciousness and consumers. Coyle (2005) also observed Ecoliteracy as significantly correlated with Green Consumer Behaviour.

The findings of the present study regarding Environmental responsibility Attribution are also at par with previous research works. Sachitra et al. (2017) observed that Perceived Environmental Responsibility significantly related to Green Consumer Behaviour. Fielding and Head (2012) found that attributing more responsibility to community or self positively related to Green Consumer Behaviour, while attributing more responsibility towards government resulted in negative Environmental Actions. The essentiality of individual Environmental Responsibility for sustainable practices and ecological citizenship was also emphasised by Middlemiss (2010). Eden (1993) opined that issues of Environmental Responsibility are not yet discussed on a wider scale in the field of Education.

The findings regarding Social Influence on Green Consumer behaviour showed that Social Influence is the most significant predictor of Green Consumer behaviour among undergraduate students. The findings of previous researches exploring the effect of Social Influence on Green Consumer Behaviour showed that Social Influence had a greater significant effect on consumers while taking decisions and making choices of green consumption (Daghar and Itani, 2012; Anvar and Venter, 2014 and Sachitra et al., 2017).

There is a heightened need for inculcating such behaviours in the day to day decision making process of consumers, specifically, the youth who constitute a major part of consumer population. In Education for Sustainable Development (ESD), educational institutions need to increase their efforts to educate students for a sustainable future. Hence, Consumer Education with an obvious orientation towards an environmental paradigm would indicate a positive inclination to adopt more sustainable lifestyles for a sustainable future. This should be the vital concern of all the stake holders of education.

Suggestions for Further Research

The present study provides insights in to the psycho-social aspects of Green Consumer Behaviour of undergraduate students. For getting a wider spectrum of knowledge pertaining to Green Consumer Behaviour Research, more areas need to be explored. This area of research has immense possibilities for conducting further studies. A few suggestions for further research activities are presented below:

1. The present study may be undertaken for comparing the determinants of Green Consumer Behaviour of students across Science, Humanities and Arts Discipline.

2. A study may be conducted by including more predictor variables like self identity, environmental ethics, motivation, values and beliefs for an indepth understanding of the personal factors influencing Green Consumer Behaviour of undergraduate students.

3. A research may be conducted by including more socio-economic variables like family members, opinion leaders, reference groups, socio-economic status and cultural factors determining Green Consumer Behaviour of students.

4. A longitudinal study may be conducted to gain insights on how Green Consumer Behaviour evolves in an individual from early childhood to adolescence and further to adulthood.

5. An educational institutional management study may be conducted to comprehend the green practices adopted through environment management systems in educational institutions.

6. Research may be conducted to understand Green Consumer Behaviour based on the frameworks of Theories of Green Consumer behaviour among college students.

7. A study may be conducted to develop a better understanding of Green Consumer Behaviour through the lens of Consumer Decision Behavioural Models.

8. Researches may be conducted to gauge the knowledge and awareness of students relating to consumer environmental claims and ecolabels.

9. A content analysis of curriculum at school and higher education level along with the assessment and evaluation techniques adopted for environmental content may be taken up.

10. Researchers can develop instructional packages for fostering Green Consumer Awareness and Green Consumer Behaviour of students at specific levels of education.

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APPENDICES

APPENDIX I
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ECOLITERACY INVENTORY

Dr. M. N. Mohamedunni Alias Musthafa	**Sajila K. M.**
Assistant Professor	Research Scholar
Department of Education	Department of Education
University of Calicut	University of Calicut

Instructions

- This inventory is for assessing Ecoliteracy of students.
- Identity of the respondent and the information provided will be strictly kept as confidential, and will be used for the research purpose only.
- There are 60 questions. Each question has 3 options: Agree, Uncertain and Disagree from which the respondent can choose one response.
- Mark your response by putting a tick mark (✓) in the column provided for each question in the Respose Sheet.
- It is compulsory to answer all the questions.
- You are required to return the tool along with the response sheet.

1 Living organisms exists by interacting with its natural environment.

2 All organisms exist independent of each other.

3 Ecosystem is composed of living and non-living components.

4 Non degradable materials can be decomposed by living organisms.

5 Materials that are non degradable pollute the environment causing danger to life.

6 Food chain is the sequence of organisms through which the energy flows.

7 Sustainable development focuses exclusively on environmental sustainability.

8 Modernisation involving the replacement of natural forests by concrete jungles is severely affecting the physical environment.

9 Extensive developmental activities cause global warming resulting in the increase of earth's temperature.

10 Acid rain causes extensive destruction of forests, fisheries and other materials.

11 The problem of overpopulation is causing danger to life.

12 The destruction and modification of natural habitats are the cause of disappearance of many species at alarming rates.

13 Deforestation for industrialisation and housing cannot be avoided in development.

14 The increasing use of chemical fertilizers to control pests is essential to improve the yield for meeting the demands.

15 Intensive cultivation, deforestation and mining result in degradation of natural environment causing threat to life.

16 It is better to drain sewage, waste resulting from industrial, agricultural and house hold activities in to rivers and sea to keep the environment clean.

17 Aquatic life is less affected by environmental pollution.

18 The emissions from automobiles, industries and kitchen pollute air causing harm to life existence.

19 Hunting of animals for trade of skins has resulted in depletion of populations of lions, elephants and tigers.

20 Natural resources can be used extensively since it is a gift of nature that comes in plenty.

21 Controlling human intervention with nature can reduce ecological damage.

22 Green technologies and lifestyles help to reduce environmental problems.

23 The preservation and conservation of forests and other natural resources helps in absorbing pollutants in the atmosphere.

24 Hazardous waste should be properly managed to minimise its harmful effects to the community.

25 Reusing or recycling of wastes helps to minimise the volume of waste to be disposed.

26 An increase in agricultural productivity can only be attained only by using chemical fertilizers.

27 Strict laws and regulations are needed for ensuring environmental protection.

28 Controlling the population growth enables to solve problems of exploitation of resources.

29 Engaging in ecofriendly activities will help to save the environment for future generations.

30 There is very little an average citizen can do to stop the environmental problems.

31 It is essential to promote green lifestyles for sustainable growth and development.

32 More environmental protection activities are needed in the country.

33 Environmental protection activities are waste of time and money in developing and under developed countries.

34 Converting agriculture land into industrial /residential area is essential to meet the requirements of modern society.

35 Ecological well being is impossible if we destroy forests and wildlife.

36 It is very important to raise environmental concern among the citizens.

37 It is unwise to spend large amount of money on promoting environmental protection by a country like India.

38 It is necessary to understand the environmental impact of one's actions while making decisions.

39 There is nothing wrong about using natural resources on a large scale because it is automatically replaced by nature itself.

40 Society has the responsibility to conserve and preserve the nature.

41 Spending time in nature gives a pleasant feeling.

42 It is not good to let the soils remain unused.

43 Pollution of environment is really a matter of concern.

44 Irresponsible actions of industries causing pollution and destruction of natural environment cannot be tolerated.

45 There are other serious problems existing in our country which are more important than environmental problems.

46 I donate money for environment related activities.

47 I attend rally or a demonstration based on environmental issue.

48 I learn about the environmental issues for raising my knowledge related to it.

49 I learn about how the existing environmental problems can be solved.

50 I use home appliances in an energy efficient manner.

51 I buy eco friendly products for environmental benefits.

52 I believe donating money for environmental activities as worthless.

53 I plant trees for spreading greenery because I love nature.

54 I take part in clean up campaigns for keeping the environment clean.

55 I take care that I do not litter when I travel or visit places.

56 I advice my friends and members of family when I see them throwing waste and polluting the environment.

57 I don’t cut down trees and plants to make space for other things.

58 I share my knowledge about environmental protections with my family and friends.

59 I bury plastic wastes as they are nondegradable.

60 I use natural resources consciously for conservation it.

APPENDIX II

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ECOLITERACY INVENTORY RESPONSE SHEET

[**Ratings**: Agree, Uncertain and Disagree.]

Name: Male/Female Class:
Name of the Institution:

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APPENDIX II
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ENVIRONMENTAL RESPONSIBILITY ATTRIBUTION SCALE

Dr. M. N. Mohamedunni Alias Musthafa
Assistant Professor
Department of Education
University of Calicut

Sajila K. M.
Research Scholar
Department of Education
University of Calicut

Instructions

- This rating scale is prepared for assessing the Attribution of Environmental Responsibility students in relation to Environmental Protection.
- Identity of the respondent and the information provided will be strictly kept as confidential, and will be used for the research purpose only.
- There are 30 questions. Each question carries 5 ratings: Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree.
- Mark your response by putting a tick mark (✓) against the column provided for each question in the Response Sheet.
- It is compulsory to answer all the questions.
- You are required to return the tool along with the response sheet.

1 I believe that it is my responsibility also to protect the environment for the well being of humanity.

2 I think that an individual should be held responsible for causing damage to environment when reasonable ecofriendly alternative existed.

3 I believe that the efforts of environmental conservation should begin at individual level.

4 I think most of the environmental problems arise due to the lack of individual initiatives in environmentally responsible actions.

5 It is my responsibility also to use natural resources effectively so as to conserve them for future generations.

6 I believe that my environment friendly actions will also have an impact on the quality of environment.

7 I consider it as my responsibility too to follow the environmental laws and regulations.

8 I have a feeling that environmental protection is the sole responsibility of the government.

9 I believe that lack of intricate environmentally responsible action at individual level is the reason for environmental degradation.

10 Environmental activism should begin at individual level.

11 I have a feeling that my efforts to protect the environment will successfully lead to have a control on my environmental actions.

12 My careless environmental behaviours can impact the quality of living of others.

13 I consider individual action as a powerful weapon of environmental activism.

14 Environmental and resource conservation should be a major concern for the government only.

15 An individual must not be held responsible for environmental problems since the actions of a single person are so marginal.

16 I believe that an individual's ecofriendly behaviour solely depends upon the economic status of the family.

17 I believe that the environmental mismanagement of larger groups should be penalised while individual actions must be spared.

18 It is only through governmental rules, regulations and laws that quality of life in the society can be maintained.

19 The environmental issues can be solved only through political interventions.

20 The efforts of non-governmental organisations (NGO) and similar groups motivate me rather than individual efforts in inducing better environmentally oriented collective actions.

21 Environmental protection is possible only if the government impose penalties and punishments enforced through environmental laws and regulations.

22 It is the sole task of the government to solve any issues related to environmental protection.

23 An individual's choice to act in an environmentally responsible manner solely depends upon the societal settings.

24 I believe that the environmental adversity caused by an individual's action is so negligible that it should be ignored.

25 I take environmental responsibilities to escape punishments imposed on violation of laws.

APPENDIX IV

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ENVIRONMENTAL RESPONSIBILITY ATTRIBUTION SCALE

RESPONSE SHEET

[**Ratings**: Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree.]

Name:	Male/Female	Class:
Name of the Institution:		

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APPENDIX V

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF SOCIAL INFLUENCE ON GREEN CONSUMER BEHAVIOUR

Dr. M. N. Mohamedunni Alias Musthafa	**Sajila K. M.**
Assistant Professor	Research Scholar
Department of Education	Department of Education
University of Calicut	University of Calicut

Instructions

- This is a rating scale prepared for assessing Social Influence on Green Consumer Behaviour among the students.
- The identity of the respondent and the information provided will be strictly kept as confidential, and will be used for the purpose of research only.
- There are 60 questions. Each question carries 5 ratings: Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree.
- Mark your response by putting a tick mark (✓) in the column provided for each question in the Response Sheet.
- It is compulsory to answer all the questions.
- You are required to return the tool.

1 I learn about the environment from my parents.

2 My parents discuss the environmental issues affecting quality of life.

3 Parents tell me about the benefits of adopting green lifestyles.

4 Parents induce me to buy products that do not cause any damage to the environment.

5 Parents buy green products which also motivate me to buy the same.

6 I have greater trust when parents guide me in my decisions as a consumer.

7 I learn about environmental conservation from parents.

8 I discuss the environmental benefits of various products/ services with parents.

9 I learn about green products and services from parents.

10 I learn about the ways for tackling the environmental issues from parents.

11 I share information regarding environmental products with parents.

12 Parents influence me to watch TV programmes on environment.

13 Education at home is appealing to me in inducing green behaviour.

14 Parents influence me to take part in various environmental protection campaigns held at educational institutions.

15 Parents influence me to take part in various environmental protection campaigns held at community level.

16 I learn about the benefits of being eco friendly from teachers.

17 Teachers' discussion on environmental issues has a greater impact on my life.

18 I learn about the benefits of green lifestyles from teachers.

19 The use of ecofriendly products by teachers motivates me too to buy it.

20 Teachers convince me to buy green products which cause minimum detrimental impact on the environment.

21 I have greater trust when teachers guide me in my decisions as a consumer.

22 I learn about environmental conservation from my teachers.

23 I discuss with teachers about the environmental benefits of various products/ services.

24 I learn about eco friendly products and services from teachers.

25 I learn about environmental issues from teachers.

26 I share information regarding environmental products with teachers.

27 Teachers influence me to watch TV programmes on environment.

28 Education from schools/ colleges induces my green behaviour.

29 Teachers influence me to take part in various environmental protection campaigns held at educational institutions.

30 Teachers influence me to take part in environmental protection campaigns held at community level.

31 I learn about the benefits of going green from friends.

32 I discuss about the environmental issues with friends.

33 Friends tell me about the benefits of green lifestyles.

34 Friends ask me to buy green products which cause minimum environmental damage.

35 I am motivated to use green products when my friends use them.

36 I have greater trust when friends help me in taking decisions as a consumer.

37 I learn about environmental conservation from my friends.

38 I discuss with friends about the environmental benefits of various products/ services.

39 I learn about green products from friends.

40 I learn about environmental issues from friends.

41 I share information regarding environmental products with friends.

42 Friends influence me to watch TV programmes that are devoted to environmental topics.

43 Education through peer discussion is appealing to me in inducing green behaviour.

44 Friends influence me to take part in various environmental protection campaigns held at educational institutions.

45 Friends influence me to take part in various environmental protection campaigns held at community level.

46 I learn about the benefits of green behaviours from media.

47 I know about the various environmental issues through TV programmes/ news papers/ radio/ internet/ other media.

48 I know about green lifestyles from media.

49 The advertisements that come in media influence my green purchase.

50 When I see a large number of people switching to green lifestyles in media, it motivates me to go green.

51 I have greater trust when I see advertisements of my favourite celebrities in going green campaigns in media.

52 I learn about environmental conservation from media.

53 I discuss about the environmental benefits of various products/ services through media.

54 I learn about environmental products from various media.

55 I share information regarding environmental products with media.

56 I watch TV programmes that are devoted to environmental topics.

57 Education through media is appealing to me in inducing green behaviour.

58 I pay attention to environmental messages in advertisements.

59 I listen to radio programs that are related to environment.

60 I am influenced by the media to take part in the environmental campaigns in educational institutions.

APPENDIX VI
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF SOCIAL INFLUENCE ON GREEN CONSUMER BEHAVIOUR RESPONSE SHEET

[**Ratings**: Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree.]

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Name of the Institution:

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APPENDIX VII
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

GREEN CONSUMER BEHAVIOUR SCALE

Dr. M. N. Mohamedunni Alias Musthafa	**Sajila K. M.**
Assistant Professor	Research Scholar
Department of Education	Department of Education
University of Calicut	University of Calicut

Instructions

- This rating scale is prepared for assessing Green Consumer Behaviour of students.
- Identity of the respondent and the information provided will be strictly kept as confidential, and will be used for the research purpose only.
- There are 45 questions. Each question carries 5 ratings: Always, Frequently, Sometimes, Rarely and Never .
- Mark your response by putting a tick mark (✓) in the column provided for each question in the Response Sheet.
- It is compulsory to answer all the questions.
- You are required to return the tool.

1 I search for products that are eco friendly.
2 I look for companies those offer green products.
3 I look for cosmetic products that are not tested on animals.
4 I search for products that are reusable.
5 I look for products that are eco labelled.
6 I search for products that contain less pollutant.
7 I look for the ingredients label to make sure whether it contains any harmful substances that damage the environment.
8 I search for products that degrade through a natural process.
9 I read the labels to check whether the contents of products are safe for the environment.
10 I go through the information provided on the product by manufacturers.
11 I consider buying green products.
12 I consider myself as environmentally responsible.
13 I do not prefer to buy those products that cause damage to the environment.

14 Companies must clearly mention the risks inherent in products and the instructions for its safe use.
15 Companies must give information about their environmental efforts taken in order to minimise environmental damage.
16 Before purchase I check that the product and its package are designed to be recycled.
17 I trust the quality of green products.
18 I am ready to buy eco friendly products even if I have to pay more money.
19 I consider buying green products as they are healthier.
20 I choose to buy products that are eco friendly.
21 I buy green products even if they are expensive.
22 I buy products made using materials available locally.
23 I buy products with less packaging.
24 I buy products as minimal as possible.
25 I buy cosmetic items that are not tested on animals.
26 I purchase products that are labelled as ‘ozone friendly’ or ‘CFC free’.
27 I purchase products that can be recycled.
28 I buy products that are available in packages that can be refilled.
29 I use water carefully so that it is not wasted.
30 I reduce the use of plastic bags.
31 I take my own bags when I go for shopping.
32 I travel in public transportation for environmental reasons
33 I use home appliances in the most energy efficient manner.
34 I turn off home electronics when not in use.
35 I use lights/ fans/ AC as little as possible.
36 I reduce the house hold waste as much as possible.
37 I discard materials after use according to my convenience.
38 I am more concerned about using products than in disposing it after use.
39 I keep the degradable and non degradable materials separately while disposing.
40 I don’t throw away waste materials at the places I visit.
41 I dispose things according to the instructions provided on the product by the manufacturers.
42 I use the bins provided in public places for disposing wastes.
43 I take recyclable materials to units for recycling.
44 I reuse materials that are reusable.
45 I use containers that can be refilled.

APPENDIX VIII
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

GREEN CONSUMER BEHAVIOUR SCALE RESPONSE SHEET

[**Ratings**: Always (A), Frequently (F), Sometimes (S), Rarely (R) and Never (N)]

Name: Male/Female Class:
Name of the Institution:

SL NO.	A	F	S	R	N
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APPENDIX IX

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