CHAPTER 1

INTRODUCTION

"The earth, the air, the land and the water are not an inheritance from our fore fathers but on loan from our children. So, we have to hand over to them at least as it was handed over to us"

……. Mahatma Gandhi

1.1. Topic and Motivation of the study

The present study is titled as, **"Understanding the impact of social learning forms on environmentally sustainable consumption behavior among children."** Keywords underlying topic are: environmentally sustainable consumption behaviour (ESCB), social learning forms (Active and Passive methods) and children; while other important & closely related terms are attitude towards environmentally sustainable consumption behaviour (AESCB), Social Cognitive theory and its constructs, namely, environmental attitude, environmental knowledge, environmental value, environmental concern, environmental sensitivity, environmental responsibility, self-efficacy, outcome expectation, outcome expectancies, self-regulation, peer influence and parental influence.

The motivation for underlying this topic for research can be understood in the importance of each of the underlying concepts, relationships between and among them and gap in the literature that prompted this area for study.

The huge prevalence of consumerist culture across the globe – in both developed nations and developing ones, at different intensities, has become a serious problem facing the humanity as such. This problem exists, to my understanding, not only regarding the physical damage done to Earth and it's invaluable resources but is also making a dent via encouraging the persistent human greed. Its incorporation into the basic human lifestyle is also becoming evident all around. This baffles me and has motivated me to undertake a minuscule investigation into the domain of sustainable development.

1.2. Background

1.2.1. *Sustainability and related concepts*

Environmental issues such as deforestation, global warming, ozone depletion, disposal of toxic waste and reduction of resources (to name but a few), have become regular features of everyday life. These are some of the most serious environmental problems that the humankind is facing (Lenzen & Murray, 2001; Walther, Berger & Sykes, 2005; Hanss & Bohm, 2012;

Hessami & Yousefi, 2013). It has been argued that it is necessary to change existing behavioral patterns to achieve a more sustainable future (Steg & Vlek, 2009) and that behavior analysis can play an important role in solving environmental problems (Lehman & Geller, 2004).

"*Our Common Future*" a Brundtland Report, 1987, coined the term **sustainability**. In this report, Sustainable Development is defined as "*development that meets the needs of current generations without compromising the ability of future generations to meet their own needs*," revived the discussion on the role of business in society (WCED, 1987). Later, during Rio de Janeiro 'Earth Summit, 1992' Commission for Sustainable Development, UNESCO recognized that this field is "in its infancy" (Chapter 36 of Agenda 21).

Later, more meaning and definitions have been added: Munier (2005) in his paper states that "*Sustainability is a vision of the future that provides us with a road map and helps us to focus our attention on a set of values and ethical and moral principles by which to guide our actions*." It broadly points to linking social equity, economic growth, and environmental protection. Hanss & Bohm (2012) re-defined sustainability to refer to "*meeting the needs of current generations without limiting the ability of future generations to meet their own needs*."

One of the main causes of problems related to sustainability in general and sustainable development, in particular, is 'over consumption.' Consumption habits of human beings affect the environment both directly and indirectly (Tan & Lau, 2009). Hence any progress towards sustainability will ideally require that every individual should change his/her consumption habits (Phipps et al., 2013). Extending the links to the ground, in turn, leads to the concept of sustainable consumption which is a mode of consumption congruent with sustainability such that consumption with time and monetary expenditure while satisfying basic needs. Sustainable consumption is acknowledged as an important pillar of environmental sustainability (Hanss & Bohm, 2013).

The term sustainable consumption originated at Rio Earth Summit in 1992, and then it became an important policy element in national sustainable development (Jones, Comfort & Hillier, 2009). This was the first time in international environmental discourse that overconsumption in the developed world was implicated as a direct cause of un sustainability. Agenda 21 which was adopted by most of the world's governments at the Rio de Janeiro 'Earth Summit' (UNCED, 1992) also introduced the notion of 'sustainable consumption.' In Chapter 4.3, Agenda 21 it is defined that "*the major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialized countries which is a matter of grave concern, aggravating poverty and imbalances*" The concept of sustainable consumption goes beyond the traditional concept of

consumerism which describes it as *"the effect of gathering and purchasing material possessions to increase happiness and social position"* (Hume, 2010).

UNEP defines it as *"the use of services and related products that respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle so as not to jeopardize the needs of future generation"* (Jones, Comfort & Hillier, 2009). It implies 'consuming more efficiently, consuming more responsibly or quite simply consuming less.' It is initiated by a decision-making process that *"takes the consumer's social responsibility into account in addition to individual's needs and wants"* (Vermeir & Verbeke, 2006, 2008). A concrete definition of sustainable consumption is cited by Birtwistle & Moore (2007): *"A consumption that supports the ability of current and future generations to meet their material and other needs, without causing irreversible damage to the environment or loss of functions in natural systems."*

Other researchers (Moisander, 2007; Newholm & Shaw, 2007) have considered consumption as sustainable where consumers have considerations about the environmental consequences of the purchase, use, and disposal of their product and services. Therefore, sustainable consumption is also described as a form of responsible consumer behavior where consumer *"takes into account the public consequences of his/her private consumption and attempts to use his/her purchasing power to bring about social change"* (Moisander, 2007). Phipps et al. (2013) to have defined sustainable consumption as *"consumption that simultaneously optimizes the environmental, social and economic consequences of the acquisition, use, and disposition in order to meet the needs of both current and future generations.*"

People, communities, and others around the world are becoming aware that our current way of living in the short run and in the long run is unsustainable. After two decades of talk about sustainability and sustainable   development appears easier to identify what is unsustainable than to identify what is sustainable. It is now clear that there is need to break a deeply entrenched, unsustainable pattern which requires a new kind of thinking inspired and informed by powerful learning processes that simultaneously lead to individual and collaborative action and transformation. Such transitions require a more systematic and reflexive way of thinking and acting with the realization that our world is one of continuous change and ever-present uncertainty.

Now, when substantial work in the area of sustainability and sustainable development, both in theory and practice, have come about, it has become clear that there is no single outlook

on what sustainability or sustainable development means. It is also clear that there is not one process alone that will confidently realize its achievement. In dealing with conflicts about how to organize, consume and produce in responsible ways, learning has been identified a central construct.

1.2.2. *Social learning and sustainable consumption*

The learning environment is not a vacuum, but rather in rich social contexts with innumerable points, interests, beliefs (Wals, 2007). This takes one of the concept of "social learning" which is not just natural-occurring phenomenon but also as a way of organizing learning and communities of learners. Social learning tends to refer to learning that takes place when divergent interests, norms, values of reality meet in an environment that is conducive to learning. Social learning by Keen, Brown & Dyball (2005) in their book is defined as *"...the collective action and reflection that occurs among different individuals and groups as they work to improve the management of human and environmental interrelations."*

Learning is associated with the following characteristics: 1) it is a process that influences the way people think, feel and act; 2) people learn through experiences throughout their entire life; 3) learning happens consciously and subconsciously. It can be a powerful tool as through facilitated social learning values, knowledge, and action competence can develop in accord to increase an individual's or group's possibilities to participate effectively in the resolution of emerging personal and societal issues (Loeber, Mierlo, Grin & Leeuwis, 2009). In the same essence, Tilbury (2007) mentioned that learning is a crucial key to a more sustainable future. This inspired to make "learning" and specifically "social learning" as one of the cornerstones of this work.

The three key concepts that underpin the notion of social learning for sustainability are (Tilbury,2007):

--- the need to *challenge the mental models* which have driven communities to unsustainable development. This involves questioning and reflecting upon our actions and developing a much deeper understanding of our social dispositions so that we can re-think and re-design our activities

--- the need for *new learning approaches* which help to explore sustainability and build skills that enable change such as mentoring, facilitation, participative

--- the need for utilizing pluralism and diversity in joint explorations of more sustainable futures.

It helps learner in identifying relationships which can embed change and encourage education process. This, in turn, questions the thinking and assumptions behind the actions rather than judging the actions. It also helps people to focus on why certain decisions are being taken and what the real alternatives are available to them (Tilbury, 2007).

Social learning theory integrated with the tenets of environmental sustainable development provides educators a theoretical and pedagogical platform from which to approach consumer education for sustainability gets empowered. They can assume that learners are able to 1) vicariously learn by watching others, 2) draw encouragement and future commitment from other's successes, 3) be taught to critically observe the unsustainable market place actions of government, consumers, 4) be taught to challenge these practices leading to increased inner and external transformative change (McGregor, 2009) .

Social learning theory with environmental sustainable development helps to explain and influence the complex behavior of consumption because it embraces the notion that observations and attendant's thoughts can regulate actions (Bandura, 1986). Using social learning theory and environmental sustainable development as a framework for curricula enables consumer educators to "work to improve their student's emotional states and to examine critically their self-beliefs and habits of thinking (personal factors), enhance their academic skills and self-regulatory practices (behaviour), and alter the school and classroom structures that may work to undermine learner success (environmental factor) (Pajares, 2002).

Social learning forms

Social learning can be differentiated between two forms: active and passive learning. Glasser (2009) defined active learning, in which students by acting on objects and interacting with other people, ideas and events, construct new understanding. Johnson, Johnson & Smith (2006) stated active learning as *"learning that is conceived of as something a learner does, not something that is done to a learner"*. Passive learning, by individuals or collectives, rests on the prior learning of others. It does not require inputs in the form of communication or interaction from other living beings whereas it supports different levels of engagement and inquiry (Jones & Jones, 2008). Active learning research has focused on attitudinal reactions rather than cognitive outcomes (Michel, Cater & Varela, 2009). It can be processed and implemented for real, dynamic and vibrant learning whereas passive learning is *"used to acquire ideas and information that is available for recall"* (Glasser, 2009). This study will help to grasp the attention of the authorities to recommend types of active and passive learning for the institutions for enhancing ESCB among children.

Environmental education (EE) has been considered an important component of education the world over since the Stockholm conference. It is envisaged that environmental education will provide *"the much-needed foundation for a new international order which will guarantee the conservation and improvement of the environment"* (NCERT, 1981).

Environment related studies are being increasingly emphasized and promoted in schools' formal education system throughout the world. India is one of the very few countries in the world where a commitment to environmental protection and improvement is enshrined in the Constitution. Environmental Education has been a major thrust of both the Ministry of Environment and Forests (MoEF) and the Ministry of Human Resource Development (MHRD) of the Government of India. Environmental education is an essential part of every pupil's learning and identifies five components to be addressed as part of its objectives- awareness, knowledge, attitude, skill, and participation (Carter & Simmons, 2010).

Environmental education has now been established as an era of education that cannot be left out from the school curriculum. Environmental studies as a subject were introduced from the class I onwards, so that right from the childhood, the right attitude towards environment will be nurtured in the young mind. Environmental education attempts to teach students "how to think" and not" what to think." For environmental education programs to be effective in an educational sense, they must also be congruent with the way people learn. Piaget's theory (1959) implies that instructional methods and content need to be consistent with how students develop cognitively, as children cannot "learn" if they cannot understand what they are being asked to learn.

Environmental education can be said to be meaningful only if it brings about certain pro-environmental behavior or environmental responsible behavior (Disinger, 1997; Bones, 1994). Therefore, environmental education cannot be complete without 'action' i.e environmental education is not just about 'knowing' but it will be complete only with 'doing' which includes taking right choices (or at least making a call for action and following up with as much activity as possible to drive sustainable practices in behavior). However, both scopes of topics and research in the area of environmental education are few in India: former is limited by topics which though desirable talk chiefly about the green environment and it's protection and miss quite a bit on "sustainable or green consumption practices" while later is evident from few researchers who have studied primary school children in Indian context (Larijani & Yeshodhara 2008; Shobeiri, 2007).

It is also true that the pedagogy, use of practices, interventions, and treatments which have been proven through scientifically based research, to be effective in improving outcomes

for individuals have not been implemented enough. Studies like the present one, hope to push this agenda with schools authorities, policy makers and academicians in general.

1.3. Research problem

Review of literature showed a gap in the formalization of a comprehensive relationship between the social cognitive framework and ESCB in general and especially in children. Similarly, there is need to identify the impact of active and passive forms of social learning on ESCB and AESCB. Very few researchers have studied how ESCB behavior is changed through the modification in attitude (Milfont & Duckitt, 2004; Collado, Staats & Corraliza, 2013; Kil, Holland & Stein 2014). More studies have addressed influence or impact on ESCB in varying populations, with few concentrating on children of primary school age. Thus there exists a gap in the understanding of the relationship between AESCB and ESCB in the chosen population. Considering all the above-mentioned perspectives, it is desirable to explore the relationships between identified constructs. Accordingly, schema given in figure 1 has been derived from the comprehensive literature review where the key constructs and key relationship of the current study as well as related constructs and relationship were looked at to clarify the context in which this study is undertaken.
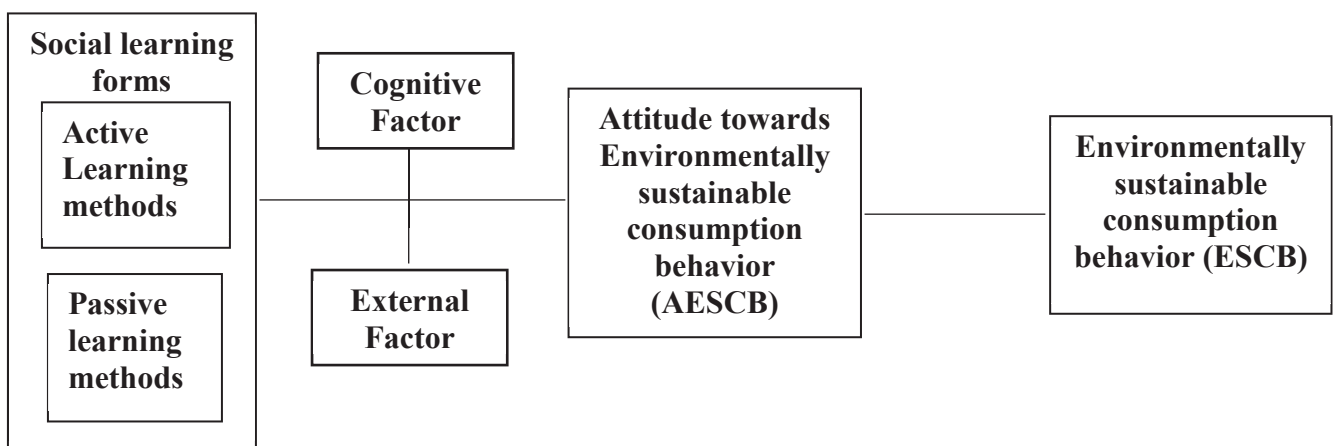

Figure 1: A schematic diagram depicting the impact of social learning forms on ESCB and AESCB.

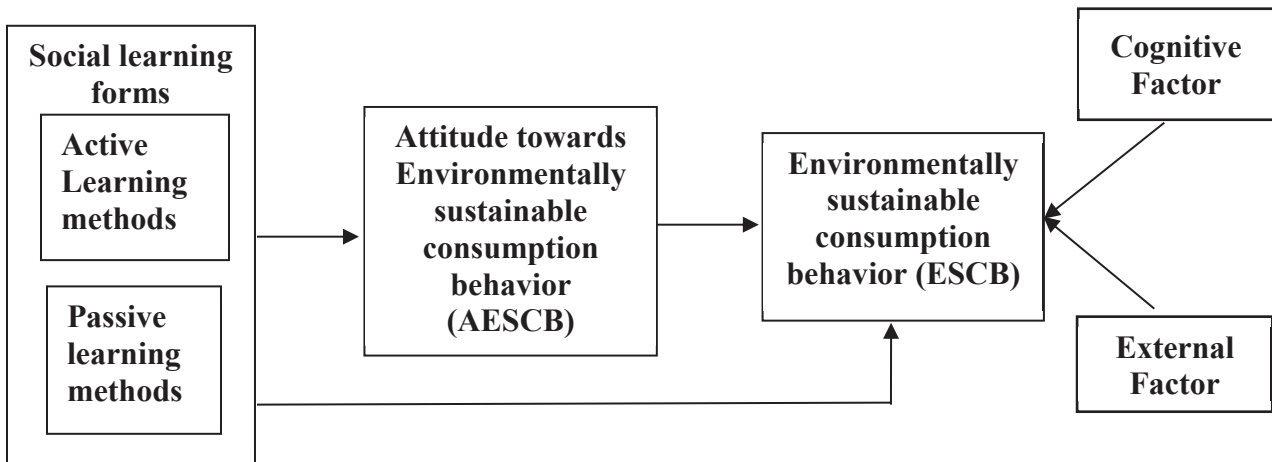The specific relationship and objectives that constitute the scope of the study are given in the figure 2

Figure 2: A schematic diagram depicting the scope of the study.

1.4. Objective of the study

1. To identify active and passive forms of social learning affecting environmentally sustainable consumption behavior.

2. To determine the influence of cognitive factors and external factors on environmentally sustainable consumption behavior.

3. To assess the impact of active and passive forms of social learning on environmentally sustainable consumption behavior.

4. To assess the impact of active and passive forms of social learning on attitude towards environmentally sustainable consumption behavior.

5. To determine the relationship between 'attitude towards environmentally sustainable consumption behavior' and 'environmentally sustainable consumption behavior.'

1.5. Scope of the study

The proposed study attempts to understand the impact of social learning forms on ESCB and on AESCB. The population is urban primary school children for understanding there ESCB. The rationale is provided below.

In urban areas sustainable development and sustainability are of greater concern because of rising population, increasing disposable income, change in consumption pattern and modern lifestyles that use too many resources (Cohen, 2006; Naess, 2001). The share of urban population in India increased from 17.97 percent in 1961 to 31.16 percent in 2011 (Tripathi,

2013). Urban areas import vast quantities of food, water, and energy and export emissions and waste (Alberti, 1996). These have a large negative impact on the environment.

Primary school children (7 to 10 years of age) are considered for this study because early childhood is believed to be a receptive period for the development of the personality of the child and develop their basic values, attitudes, skills, behaviors, and habits (Keenan & Evans, 2009). According to Basile (2000), children start to recognize and develop attitudes towards the environment starting from early childhood because of cognitive, social-emotional and physical development (Samuelsson & Kaga, 2008). It is also reported in the literature that if children do not develop positive attitudes towards environmental issues in the early years of life, it is possible that they may not develop such attitudes later (Basile, 2000; Tilbury, 1994; Wilson, 1993) and once the negative environmental attitude is formed in early years of childhood it becomes difficult to alter (Davis, 2009; Domka, 2004; Siraj-Blatchford, 2009; Wilson, 1993). Also, as now a day's children have probably had more marketplace experience as they go for shopping with their parents, chooses what to buy in categories like: cereal, candy, toys or comic books etc or at least influence these and other purchases (Shoham, 2005; Ramzy, Ogden, Ogden & Zakaria 2012; Kumar, 2013) and thus develop a consumption behaviour at an early stage. Thus, it appears that socializing the child into the role of a knowledgeable and efficient consumer is of great importance and must begin at the earliest possible time (Ali, Batra, Ravichandran, Mustafa & Rehman, 2012). For this reason, it is important to support the development of sustainable consumption behavior among primary school children

1.6. Outline of the thesis

Chapter 1: Introduction

To investigate the impact of social learning forms on ESCB and on AESCB, we adopted few major stages. First, we carried out an extensive examination of scholarly articles on social learning forms, active learning and passive learning forms, AESCB and ESCB. This literature review was explored systematically to construct hypothesis statements to address the objectives. 11 active and 6 passive learning categories of tools were identified. The second stage comprised of identifying social cognitive factors responsible for influencing AESCB and impacting ESCB. The third stage of the research consisted of designing the active and passive interventions and experimentally testing the impact & influence & of interventions on ESCB and AESCB respectively. A brief overview of coverage of other chapter is provided below.

Chapter 2: Literature Review

An in-depth reporting on ESCB, social learning forms is provided, where active learning methods were compared with passive learning methods. Social cognitive factors responsible for ESCB namely environmental attitude, environmental sensitivity, environmental knowledge, environmental responsibility, environmental value, environmental concern, self-efficacy, self-regulation, outcome expectation, outcome expectancies, peer influence and parental influence are studied from the literature. Later part of this Chapter discusses the several intervention studies based research literature and from text books that were expected to impact ESCB and AESCB. Each subpart was concluded with research gaps(s) and the hypothesis.

Chapter 3: Methodology

It outlines the methodology for the whole process of the work being carried out, i.e., for all the objectives separately. The scope & approach of the study, sample size, statistical techniques, scales and measures used are given in detail and supported by literature on research methods. This chapter also describes how the interventions were designed.

Chapter 4: Results and Analysis

Results and analysis are provided objective by objective and acceptance/rejection of hypotheses are confirmed. For each statistical method and test used, the logical support and consequent interpretation of results are provided. Findings for each sub-section are discussed simultaneously.

Chapter 5: Discussion

A thorough discussion of the results for each objective is provided. All significant, as well as non-significant results and findings, are discussed in the light of research literature, the state of schools and social realities (wherever applicable), the qualitative observations and inputs from field studies and discussion with experts.

Chapter 6: Conclusion and Implication

This chapter focuses on 2 major blocks: conclusions of the study and implications. The 1st sub-section, mentions the research questions that were mentioned in literature review chapter and for each question, findings are mentioned. The second sub-section provides implication of the study findings for 3 stakeholders, namely, academicians, marketers and school authorities & policy makers.

Chapter 7: Limitation and Future Scope of Study

This chapter concludes the thesis by stating limitations and future research scope.

A diagrammatic representation of the chapter schema reflecting the stages and steps in the research process of each chapter is also given at the beginning of the individual chapter.