

## CHAPTER 6

### CONCLUSION AND IMPLICATION

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In this chapter, a summary of the research and major conclusions are presented. The first section contains the purpose of the study and brief of research design. The research objectives and findings are reviewed in the second section. Major findings and implications of research for practitioners and academicians are presented in the third section. The main purpose was to study the impact of social learning forms on ESCB in primary school children.

#### **6.1 Brief of the study and research design**

An extensive review of literature for understanding SCT framework and its role in explaining the behaviour of individuals, identification of social learning forms, understanding the theoretical and practical perspectives on the influence of SCT's cognitive and external environment variables' relation to ESCB was carried out. Then, development of selected active and passive interventions (AL and PL interventions) and development of the experimental design for investigating the impact of AL and PL interventions on ESCB and AESCB for primary school children was undertaken.

Data was collected with the help of structured questionnaire (although observations and comments given by respondents for all questionnaires were recorded carefully. Data was collected from both primary and secondary sources for three objectives, i.e., 1) identifying social learning forms affecting ESCB, 2) identifying influence of cognitive and external factors on ESCB and 3) Identifying the impact of social learning forms on AESCB. At all stages, questionnaires were pre-tested for content validity, language & comprehension. Pilot studies were done for determining the reliability of the questionnaire. For the third objective, i.e., identifying the impact of SL forms (AL and PL via interventions) on ESCB, data was collected by observation method in a simulated setup. Pre-test and pilot test were also done for the observation method.

Sample size varied for different objectives, as both population, research design, and statistical techniques varied. For the first objective, there were 50 respondents (primary school teachers from both private and government schools) who participated the survey. For the second objective, 650 primary school students (from private and government school, classes I to V) were

surveyed. For third and fourth objectives students from fourteen randomly selected school (7 private and 7 government schools) comprising a total of 1306 participants.

The next section presents the review of research questions (which lead to objectives) and the corresponding results.

## **6.2. Summarization of research question and results**

### **1) What are the important active and passive forms of social learning affecting environmentally sustainable consumption behaviour in primary school children?**

This research question leads to the objective to identify the important active and passive learning forms of social learning that are perceived to be effective for teaching ESCB. The analysis was based on three stages:

- (1) Review of environmental studies textbooks of class 3, 4 and 5
- (2) Review of research literature that investigated into effectiveness of active and passive learning forms
- (3) Teacher's perception towards effective active and Passive learning tools.

After the analysis of results of stage 1 and 2, 101 active tools and 6 passive tools were identified. These 101 active tools were clubbed on classification given by Bonwell (1991) which leads to 11 active learning categories. Out of these 11-active learning categories, teachers perceived pausing lecture, visual based instruction and demonstration as the most effective tool whereas computer-based learning and problem-solving learning as the least effective tool. Out of 6 passive learning tools' category, lecture, visual media (poster) were perceived by teachers as most effective whereas guest lecture and reading the book as the least effective tools.

### **2) What are the important factors which affect environmentally sustainable consumption behaviour in primary school children?**

This research question leads to 2<sup>nd</sup> objective, which was to identify the factors (from SCT framework) that are affecting environmentally sustainable consumption behaviour among primary school children. Twelve factors were found from the literature. Namely, environmental attitude,

environmental sensitivity, environmental knowledge, environmental value, environmental responsibility, environmental concern, self-efficacy, self-regulation, outcome -expectation, outcome-expectancies, peer influence and parental influence. Data collected in survey questionnaire approach and put through multiple regression showed that 8 out of 12 factors namely parental influence, environmental sensitivity, environmental concern, self-efficacy, environmental value, peer influence, outcome expectation, and self-regulation showed positive and statistically significant relationship at 95% confidence level with ESCB. Other four factors named environmental attitude, environmental responsibility, environmental knowledge, and outcome expectancies showed positive relationship but were nonsignificant at 95% confidence level. SCT framework is a useful one to understand what factors influence ESCB for primary school children.

### **3) Are the active learning forms effective in impacting environmentally sustainable consumption behaviour among primary school children?**

This research question was designed to identify the impact of active learning forms on ESCB among children. Out of eleven active learning forms effectiveness of three most preferred active learning tools by teachers namely, pausing lecture, visual based instruction and demonstration were used. An experimental approach was used, and data were collected for both intervention groups and control groups. It was found that active learning forms were effective and statistically significant for impacting ESCB as compared to control group results. AL interventions were tested to have a positive and statistically significant impact in both private and government school settings.

### **4) Are the passive learning forms effective in impacting environmentally sustainable consumption behaviour among primary school children?**

This research question was designed to identify the impact of passive learning forms on ESCB among children. Out of six passive learning forms effectiveness of three most preferred passive learning tools by teachers namely, lecture, visual based (poster) and reading book were used. Similar experimental set up as mentioned above was used. It was found that passive learning forms were an effective but statistically non-significant method for impacting ESCB among primary school children. PL intervention was found to have positive and statistically significant on ESCB.

**5). Are the active learning forms effective in impacting attitude towards environmentally sustainable consumption behavior (AESCB) among primary school children?**

Investigations using experiment approach (same framework as used for ESCB impact investigation) was used. Results revealed that active learning forms were effective (positive impact) and statistically significant on AESCB.

**6). Are the passive learning forms effective in impacting attitude towards environmentally sustainable consumption behaviour (AESCB) among primary school children?**

This research leads to study the impact of passive learning forms on AESCB among children. Investigations using experiment approach (same framework as used for ESCB impact investigation) was used. Results showed that passive learning forms had a positive and statistically significant impact on AESCB.

**7) To what extent do attitude towards environmentally sustainable consumption behaviour influence environmentally sustainable consumption behaviour among primary school children?**

The above-mentioned research question was determined to identify the much-investigated relationship between attitude and behaviour in the specific context of AESCB and ESCB. Correlation analysis results revealed that the relationship between the AESCB and ESCB was less before the intervention, but after the intervention, the relationship between AESCB and ESCB increased. The relationship between ESCB and AESCB as indicated by the value of correlation was higher and statistically significant at 95% level of confidence when active learning tools. When PL tools were used as an intervention, the correlation score was lower and significant.

Therefore, to close the gap that previous researchers had paid little attention to, this study developed a robust and well-designed analytical framework to investigate the relationship of SCT framework variables with and impact of SL interventions on ESCB of primary school children.

### 6.3. Implication of the study

#### ○ **For teachers:**

1. Teachers can enhance participation of children in ESCB by using SL tools, especially, active learning tools which have been found to effectively enhance children's learning about sustainable consumption issues.
2. This study will help academician to design relevant & effective interventions for teaching environmental issues mainly focusing on sustainable consumption to primary school children.
3. While teachers too perceive AL tools as more effective than PL tools, they prefer to use more PL methods as it helps in covering a large amount of course within less time and less preparation. They can take heed from this study's findings and can be more careful about selecting appropriate tool to suit learning outcomes and situational constraints.
4. In all "parental influence" plays an important role in influencing the ESCB. This observation is in accordance with the social cognitive theory. Thus it indicates that if teachers make some systematic effort to involve parents to participate in helping to enhance ESCB, it could increase the readiness of children to participate in ESCB.
5. As it is found that tools are effective in impacting ESCB, therefore teachers should use either active or passive tools for teaching ESCB. Also it is desirable to use passive learning tools because as there is less need of expertise and also it requires low investment.

#### ○ **For Marketers:**

1. This study will help marketers to design the intervention focusing on all the three stages of sustainable consumption behaviour, i.e., purchase, use, and dispose-off in their communication to parents and children to enhance their participation in sustainable development and the brand's image associated with such an act.
2. The study will help marketers to focus on most important factors (as captured by a comprehensive framework as SCT) that could cause a change in children's behaviour while designing campaign for encouraging sustainable consumption behaviours.
3. Campaigns designed for children & focused on specific issues of sustainable consumption can prove to be effective for both changing related attitude and behaviour and can thus help in bringing target audience closer to the brand.

4. Campaign designed for children by marketers should focus on the implication of post-purchase behaviour by linking it how the post-purchase behaviour cause harm to our precious earth.
  5. Marketers could design campaign for children focusing any or all the three stages of sustainable consumption, i.e., purchase, use, and dispose-off as children are involved at all stages in some way or to some extent (this could, however, depend on the product and few other factors).
- **For Policymakers:**
1. Education's ultimate aim lies in helping to modify behaviour. However, a careful scanning of the Environmental Studies textbooks of class 3, 4 and 5, showed that the course content did not include enough environment-related text. The course content focussed more on moral issues such as "Saying without speaking," or practical skills like – "What is cooking." The course content especially lacked environmentally sustainable consumption behaviour issues. Given that primary school children are close to experiencing, understanding and enacting when it comes to ESCB as shown by the results of this study, it is expected that policymakers will be benefitted by incorporating ESCB and related content in their textbooks.
  2. The environmental educational campaign should focus more on specific issues related to consumption rather than focusing on general environmental problems as children seem to be understanding and be interested in learning about them.
  3. Having content in textbooks which can enhance the participation of parents via a focus on everyday consumption issues can enhance the overall impact of school lead teaching and learn on ESCB outcomes of children.
  4. If policymakers provide support and encourage school authorities to adopt active learning tools for ESCB, they need to provide infrastructure and enough resources as active tool preparation, and implementation can be resource intensive (especially looking at the situation in India from this study). In such case they can ask schools to encourage "ECO-CLUBS" in school campus and make students compulsory to be part of that club.
  5. Specifically, they should provide training to principals and teachers about using active tools for the course materials and make provision for allowing preparation time.