CHAPTER – VI

SUMMARY AND CONCLUSIONS

In the preceding chapters, introduction to the problem, review of related literature, development of tools, method of the study and interpretation of the results were discussed. The present chapter has been devoted to the summary and conclusions of the study. For providing the background of the findings a brief description of the purpose, design and procedure along with the conclusions and suggestions for further research have been presented in the following paragraphs.

6.1: INTRODUCTION

Teaching is a process through which teachers and students create a shared environment, including sets of values and beliefs, which in turn colour their view of reality. Education is that mean or tool which helps in achieving pre-determined objectives of teaching. It is the most cogent instrument in the progress of any nation; hence, the quality of education has to be improved for faster all-round development. The purpose of education is to manage students' learning and the value of any technology used in education must, therefore, be measured by its capacity to affect learning. In today’s world of technology, educational technology is aiming at improvement of the theory and practice of education. It enhances the teaching learning process and thus improves the standard of education.

Education plays a vital role in today’s life without which an all round development of child is not possible. Therefore, to provide all round development we need to design suitable instructional strategies which help our students grow emotionally, physically, socially and intellectually. To carry out these multiple responsibilities teachers are required to engage in several professional roles and all these different roles require different teaching strategies.

One of the most famous teaching strategies is model approach to teaching. Teaching models are prescriptive teaching strategies designed to accomplish particular teaching goals (Paul et al., 1980). The most important aim of any model...
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of teaching is to improve the instructional effectiveness in an interactive atmosphere and to improve and shape the curriculum.

Awareness Training Model is a model to create awareness and to increase self understanding of one’s own behaviour and that of others, and also to help students develop alternate patterns for their personal and social development (Schutz, 1985). Awareness Training Model presents a group with a task that involves exploration of an area in a warm emotional way and in the extensive use of discussion where frankness and open expression of affect are encouraged (Lewis & Streidfeld, 1986).

While there has been much attention to physical development, emotional development, personal expression, and other forms of individual development, it is in the interpersonal realm that the Human Potential Movement has found its fullest expression. It is this collective consciousness which spells the cardinal principles of the movement which found its beginning with the thoughts being aired in the discipline of education through Awareness Training Model of teaching. This model is designed to help students realize themselves. The main focus of this model is on preparing the students for personal development. This model also increases the school learning activities. This model is very useful in helping students to understand themselves. The strategies lend to reflection about interpersonal relationships, self image, and presentation of self.

Fulfillment of one’s potential, awareness and basic interpersonal needs are the main assumptions or goals of ATM. **Fulfillment of one’s potential** brings to an individual the feeling that he can cope with his environment; the sense of confidence in himself as a significant, competent, loveable person who is capable of handling situations as they arise, able to use fully his own capacities, and free to express his feelings. One of the main obstacles to fulfillment and joy in interpersonal relations (and in the other areas) is people’s inability to be aware of their own needs and feelings. For this purpose **awareness of self** is required in an individual. One need to become more in touch with his feelings, experience more of his sensations. It is **self awareness skill** which plays an important role here. A person’s self - concept is derived from relations with others. In these relationships
the individual has three basic interpersonal needs: the need for inclusion, control and affection.

**Inclusion** refers to one’s need to be perceived, attended to, and given reasonable attention by others. Part of this need is manifested by one’s need for identity, to know that one is distinct from other persons, to feel justified in one's uniqueness, and at the same time to feel that others identify and empathize with him or her as a fellow being. **Control** is the second basic need: The need for control varies along a continuum from the desire for power, authority and control over others (and therefore over one’s future) to the need to be controlled and have responsibility lifted from oneself. There is no necessary relationship between one’s desire to control and one’s desire to be controlled. One may combine both or tend toward only one. **Affection**, the third basic need refers to close personal feelings between two people, especially love and hate in their various degrees. All of us have a powerful need to feel affection and to express and receive it whenever we are with other people.

With the help of activities of ATM, a teacher can create a suitable classroom environment where students will feel free to express their ideas and emotions. The teacher can also organize the subject matter adequately and will able to stimulate discussions in order to broaden the mental horizons of the students. It strengthens the teacher taught relationship and helps those students who are reticent or not accustomed to their self understanding.

All over the world, the adolescents have emerged as a vital age group calling for special attention. The World Health Organization (WHO) defines them as the young people in the age group of 10-19 years. This age group faces special problems and special needs requiring immediate interventions to address and fulfill the same. Their concerns vary in terms of gender issue, family value system, cultural considerations, socio-economic status, urban and rural orientations. Their vulnerability level goes high due to declining personal values, family values, excessive exposure to mass media, materialism, competition and lack of awareness towards life skills.
WHO (1999) has defined life skills as abilities for adaptive and positive behaviour that enable an individual to deal effectively with the demands and challenges of everyday life. It is the planned, systematic teaching of the specific behaviours needed and desired by the person in order to function in a rational way in the complex situation of life. Life skills differ across cultural and situational settings. However, there are a set of life skills, which are necessary for the promotion of psychosocial well being in children and adolescents. These skills include: decision-making, communication skill, building self-esteem, developing relationships, dealing with conflicts, assertiveness skill, problem-solving, self awareness skill, pressure resistance, critical thinking, social skill and coping with stress and emotions.

The present study focused on selected life skills viz. Skill of Acquiring Knowledge, Self Awareness Skill, Assertiveness Skill and Social Skill. It aimed to provide non-academic linkage in learning experiences that encourage and integrate life skills. The study also served to enlarge the scope of learning experiences for the students by providing knowledge, information and support and lay the foundation of positive achievement towards life skills.

Personal growth and development is a basic virtue of every individual. It is possible with the help of ethical set of values and sufficient doles of life skills. Values are very important in our lives. Personal values for an individual are a reflection of the highest principle of mind and thought. It plays a vital role in the complete development of an individual. Values are virtues, ideals and qualities on which actions and beliefs are based. Values are guiding principles that shape our world outlook, attitudes and conduct (Reddy, 2001).

One need performance in daily life, when he/she have to communicate something important. Especially, it will be the case on the verge of changing one's value, social status, income, or one's total life. Such conditions are considered as stressful. It is necessary to have stress-overcoming personality trait for effective performance. The psychological hardiness is such trait of human personality (Kosaka, 1996). Psychological hardiness is a commonly used concept in adolescent development to describe the positive capacity of people to cope with
stress and depression. It is a personality trait which consists of commitment, control and challenge. Hardiness is considered as the measure of one's tendency to make relationship to oneself and one's outside world.

Psychologically high hardy people have a sense of personal control over their lives. Their locus of control is internal. They are optimistic and have a strong sense of autonomy and independence and take responsibility for their actions. They see change as a challenge to master and approach change with positive attitudes of confidence and self-determination. They embrace new challenges and continually grow from their new experiences. They are deeply committed to their work and values. They readily take responsibility and work hard to make their dreams come true. They are active, not passive, in pursuing their goals and truly enjoy learning. They spend considerable time on their homework and truly enjoy the process of learning, feeling proud of their accomplishments that are well-earned. On the other hand psychologically low hardy people are fearful of change and react with helplessness and distress. They do not like to deviate from routine and feel insecure in new situations. Although high hardy students, compared with low hardy students, did not appraise positive events as having greater impact, they perceived that negative events had significantly lesser impact. In addition, low hardy students reported using passive and avoidant coping strategies significantly more frequently than high hardy students.

The present study therefore was an attempt to study our reliance on Awareness Training Model (ATM) over Conventional Group Learning (CGL) where students’ personal values and other selected life skills were assessed in relation to their psychological hardiness. The study therefore was stated as follows:

6.2: STATEMENT OF THE PROBLEM

EFFECT OF AWARENESS TRAINING MODEL ON LIFE SKILLS AND PERSONAL VALUES OF SECONDARY SCHOOL CHILDREN IN RELATION TO THEIR PSYCHOLOGICAL HARDINESS
6.3: **DELIMITATIONS OF THE STUDY**

Keeping time and resource constraints in view, the study was delimited to the following:

- The study was conducted only in senior secondary, co-educational and English medium schools of Chandigarh which are affiliated to C.B.S.E.
- The study was conducted on XI class students only.
- The study was conducted in the subject of Economics (Commerce Stream) only.
- Boys and Girls of various socio-economic statuses were included in the sample.
- The study was restricted to the four Life Skills only viz. Acquiring Knowledge, Self-Awareness, Assertiveness and Social Skill.

6.4: **OBJECTIVES OF THE STUDY**

The study was conducted to attain the following objectives:

- To plan, design and validate criterion tests for XI class in the subject of Economics.
- To develop and validate instructional modules based on Awareness Training Model for XI class in the subject of Economics.
- To study the effect of Awareness Training Model on selected Life Skills viz. Skill of Acquiring Knowledge, Self Awareness Skill, Assertiveness Skill and Social Skill.
- To study the effect of Awareness Training Model on Personal Values.
- To study the relationship between Psychological Hardiness and selected Life Skills.
- To study the relationship between Psychological Hardiness and Personal Values.
- To study the interaction effect of Awareness Training Model and Psychological Hardiness on selected Life Skills.
- To study the interaction effect of Awareness Training Model and Psychological Hardiness on Personal Values.
6.5: HYPOTHESES

Following hypotheses were formulated for the present investigation:

**Ho.1:** There will be no significant difference in Skill of Acquiring Knowledge among students of experimental group (ATM) and control group (CGL).

**Ho.2:** There will be no significant difference in Skill of Acquiring Knowledge of Psychologically High Hardy and Psychologically Low Hardy (PHH/PLH) students.

**Ho.3:** There will be no significant difference in Skill of Acquiring Knowledge among students due to the interaction of instructional modes (ATM/CGL) and psychological hardiness (PHH/PLH).

- **Ho.3 (a):** There will be no significant difference in Skill of Acquiring Knowledge among students of experimental group (ATM) who are Psychologically High Hardy (PHH) or Psychologically Low Hardy (PLH).
- **Ho.3 (b):** There will be no significant difference in Skill of Acquiring Knowledge among students of control group (CGL) who are Psychologically High Hardy (PHH) or Psychologically Low Hardy (PLH).
- **Ho.3 (c):** There will be no significant difference in Skill of Acquiring Knowledge among students of experimental group (ATM) and control group (CGL) who are Psychologically High Hardy (PHH).
- **Ho.3 (d):** There will be no significant difference in Skill of Acquiring Knowledge among students of experimental group (ATM) and control group (CGL) who are Psychologically Low Hardy (PLH).
- **Ho.3 (e):** There will be no significant difference in Skill of Acquiring Knowledge among students of ATM/PHH and CGL/PLH.
- **Ho.3 (f):** There will be no significant difference in Skill of Acquiring Knowledge among students of ATM/PLH and CGL/PHH.

**Ho.4:** There will be no significant difference in Self Awareness Skill among students of experimental group (ATM) and control group (CGL).
**Ho.5:** There will be no significant difference in Self Awareness Skill of Psychologically High Hardy and Psychologically Low Hardy (PHH/PLH) students.

**Ho.6:** There will be no significant difference in Self Awareness Skill among students due to the interaction of instructional modes (ATM/CGL) and psychological hardiness (PHH/PLH).

- **Ho.6 (a):** There will be no significant difference in Self Awareness Skill among students of experimental group (ATM) who are Psychologically High Hardy (PHH) or Psychologically Low Hardy (PLH).
- **Ho.6 (b):** There will be no significant difference in Self Awareness Skill among students of control group (CGL) who are Psychologically High Hardy (PHH) or Psychologically Low Hardy (PLH).
- **Ho.6 (c):** There will be no significant difference in Self Awareness Skill among students of experimental group (ATM) and control group (CGL) who are Psychologically High Hardy (PHH).
- **Ho.6 (d):** There will be no significant difference in Self Awareness Skill among students of experimental group (ATM) and control group (CGL) who are Psychologically Low Hardy (PLH).
- **Ho.6 (e):** There will be no significant difference in Self Awareness Skill among students of ATM/PHH and CGL/PLH.
- **Ho.6 (f):** There will be no significant difference in Self Awareness Skill among students of ATM/PLH and CGL/PHH.

**Ho.7:** There will be no significant difference in Assertiveness Skill among students of experimental group (ATM) and control group (CGL).

**Ho.8:** There will be no significant difference in Assertiveness Skill of Psychologically High Hardy and Psychologically Low Hardy (PHH/PLH) students.

**Ho.9:** There will be no significant difference in Assertiveness Skill among students due to the interaction of instructional modes (ATM/CGL) and psychological hardiness (PHH/PLH).
Summary and Conclusions

- **Ho.9 (a):** There will be no significant difference in Assertiveness Skill among students of experimental group (ATM) who are Psychologically High Hardy (PHH) or Psychologically Low Hardy (PLH).

- **Ho.9 (b):** There will be no significant difference in Assertiveness Skill among students of control group (CGL) who are Psychologically High Hardy (PHH) or Psychologically Low Hardy (PLH).

- **Ho.9 (c):** There will be no significant difference in Assertiveness Skill among students of experimental group (ATM) and control group (CGL) who are Psychologically High Hardy (PHH).

- **Ho.9 (d):** There will be no significant difference in Assertiveness Skill among students of experimental group (ATM) and control group (CGL) who are Psychologically Low Hardy (PLH).

- **Ho.9 (e):** There will be no significant difference in Assertiveness Skill among students of ATM/PHH and CGL/PLH.

- **Ho.9 (f):** There will be no significant difference in Assertiveness Skill among students of ATM/PLH and CGL/PHH.

**Ho.10:** There will be no significant difference in Social Skills among students of experimental group (ATM) and control group (CGL).

**Ho.11:** There will be no significant difference in Social Skills of Psychologically High Hardy and Psychologically Low Hardy (PHH/PLH) students.

**Ho.12:** There will be no significant difference in Social Skills among students due to the interaction of instructional modes (ATM/CGL) and psychological hardiness (PHH/PLH).

### 6.6: TOOLS USED

For the present investigation, the following tools were employed for the collection of data:

- **Tools for Life Skills:** Following tools were used for the selected four life Skills:
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» Test for Skill of Acquiring Knowledge: The Summative Tests were used to evaluate skill of acquiring knowledge (developed and validated by the investigator).

» Scale for Self Awareness Skill: developed and standardized by Roy, P. (2000). It includes six sub scales related to six life skills of self awareness i.e. Self Image, Self Control, Creativity, Co-operation, Planning and Concentration.


- Tests for Entry Behaviour, Summative and Formative evaluation for the subject of Economics: developed and validated by the investigator.
- Instructional Modules based on Awareness Training Model for the subject of Economics: developed and validated by the investigator.

6.7: SAMPLE

The sample selection for the present investigation was done at two stages with multistage random sampling.

- The School Sample
- The Student Sample

The School Sample

The school sample was drawn from the representative senior secondary schools of Chandigarh. The list of the schools under the administration of the Union Territory of Chandigarh was procured from the Director Public Instructions (Schools) through the District Education Officer. The schools were compared with
regard to following criteria: Schools had almost the same classroom climate, physical facilities, teacher-taught ratio, sex ratio, socio-economic status etc. It was ensured that all the schools were of senior secondary level, co-educational and English medium affiliated to Central Board of Secondary Education (C.B.S.E). A list of such schools was formed and three schools were randomly selected from this list. One of these schools was again randomly allocated to experimental group and remaining two were assigned to control group. Thus, three schools, which fulfilled the criteria, were approached for seeking the permission to conduct the experiment.

The following three schools were drawn for the data collection:
- Government Model Senior Secondary School, Sector 40-B, Chandigarh
- Government Model Senior Secondary School, Sector 23-A, Chandigarh
- Government Model Senior Secondary School, Sector 37-B, Chandigarh

The principals of these schools were approached. All the three Principals welcomed the idea and promised to co-operate very enthusiastically.

➢ The Student Sample

Out of randomly selected three schools, initial sample of 246 students of class XI of Commerce stream were selected randomly. Out of these three schools, one school (selected randomly) was considered for conducting experiment and the remaining two were selected as the control group. Each of the selected three schools had more than one sections of XI Commerce stream students. Hence two sections from Government Model Senior Secondary School, Sector 40-B, Chandigarh and one section each from remaining two schools were randomly chosen as intact groups. In the experimental group, students were imparted instructions through Awareness Training Model (ATM). Control group was taught by their own teachers through Conventional Group Learning (CGL).

The structure of the final student sample comprised of N=214 based on Psychologically High and Low Hardiness where the experimental and control group comprised of N=108 and N=106 respectively.
6.8: DESIGN OF THE STUDY

In the present study, the experimental method was adopted employing Pre-Test - Post-Test design to study the effect of awareness training model on life skills and personal values of secondary school children in relation to their psychological hardiness.

The dependent variables in the present study were life skills and personal values i.e.:

- Life Skills viz.
  - Skill of Acquiring Knowledge
  - Self Awareness Skill
  - Assertiveness Skill
  - Social Skill
- Personal Values

Instructional model was independent treatment variable. It was studied at two levels viz.

- Awareness Training Model (Experimental Group)
- Conventional Group Learning (Control Group)

Psychological Hardiness was classification variable and it was also studied at two levels viz.

- High Hardiness
- Low Hardiness

6.9: PROCEDURE

Procedure of the experiment comprised of two main stages, which were:

- Selecting the sample
- Conducting the experiment

Stage I: Selecting the Sample

The sample was selected at two levels. The School Level and the Student Level. Three schools with 246 students were selected for conducting the experiment. The Process of sample selection has already been discussed under the heading sample.
Stage II: Conducting the Experiment

The experiment was conducted in five phases as stated below:

» Phase-I: Administration of Entry Behaviour Test

» Phase-II: Administration of the Pre-Tests viz. Criterion Test; Life Skills Tests; Personal Values Survey Schedule; and Psychological Hardiness Scale.

» Phase-III: Implementing instructional programme: Implementing the instructional modules based on Awareness Training Model.

» Phase-IV: Administration of the Post-Tests viz. Criterion Test; Life Skills Tests; and Personal Values Survey Schedule

» Phase-V: Scoring, tabulation and analysis of data.

The detail of all phases of experimentation has been discussed below:

Phase-I: Administration of Entry Behaviour Test

Before implementing the modules based on Awareness Training Model (ATM) to the experimental group, all the 246 students (total initial sample) were given an Entry Behaviour Test (EBT). Scores of this test were used to determine whether or not the students had adequate entry behaviour required for the instructional treatment. The investigator provided full cooperation to the students who did not fulfill the condition of entry behaviour, as the subject of the Economics at XI level was new to them. An orientation was provided to all the students by the investigator to bring students at par with respect to their entry behaviour status.

Phase-II: Administration of the Pre-Tests

The pre-tests viz. criterion test (Summative Test); life skills tests; personal values survey schedule; and psychological hardiness scale were administered to all the students of selected groups. Scoring was done to obtain the information regarding pre-treatment knowledge of the students on the selected content; life skills attainment; preferences on personal values; and level of psychological hardiness. The required time was provided to complete the tests so that a clear and
exact level of students regarding instructional content can be assessed. The investigator himself monitored the process of pre-testing. Scale of psychological hardiness was administered to students in order to identify and classify the psychologically high hardy and low hardy students. The scores arrived at, after scoring against prescribed scoring keys, were used in classifying the students according to their psychological hardiness at the initial step of the descriptive analysis of the data.

Phase III: Implementing Instructional Programme

The experimental group learnt through Awareness Training Model (ATM) and control group was taught through Conventional Group Learning (CGL). Eight instructional modules based on ATM prepared and validated by the investigator (as explained in chapter III) were used for experimental group. So instructional treatment was imparted to 108 students who were further classified for the purpose of descriptive analyses of the data on the basis of their psychological hardiness at the later stage.

The instructional programme based on ATM for Experimental Group was administered according to the following plan:

» Students were motivated for the novel method of instruction.

» As this method of instruction depends upon activity based learning, congenial atmosphere; cordial teacher-taught relationship; healthy rapport and encouragement for utmost participation of students were initiated.

» Initial days of experiment were devoted towards the activities which were very helpful in developing awareness of self and of peer group. Some examples of such activities are Good and New, Group Discussion, Self Introduction etc.

» More emphasis was given for the development of interpersonal relationships in the group activities and to increase one’s capacity for self awareness and self exploration by knowing own weaknesses and strengths.
Summary and Conclusions

» The investigator himself taught the groups through exploratory games followed by open discussion to make them more aware about the learning.

» Incubation period was also given wherever required in the programme, so as to make projects or summaries or to think collectively upon some challenging/recent/current issue of the subject concerned.

» Seating plan was also set according to the requirement of the activity, so as to get maximum utilization of the instruction. Sometimes circular seating plan was recommended for face to face contact in the activities like Fish Bowling, Snow Balling etc.

» The investigator’s role was dynamic. Sometimes he played an active role in the classroom activities; like during lecturing, directing or in some activities also, and sometimes he was totally passive; just watchman of the activities. It all depended upon the requirement of the activities and level of learning.

» Students were encouraged to participate in each and every activity. Group leaders were made for small and large group activities; wherein shift in the choice of leaders in various activities was formed.

» Each lesson’s content was recapitulated and summarized at moderate levels.

» The enrichment material like daily life examples, teaching aids, real things, handouts, prepared sheets etc. were employed throughout the eight modules.

» Daily formative test was administered at the end of lesson. It was very beneficial in knowing the knowledge gained by the students. Students actively participated in the daily formative test as the results were announced by the investigator regularly. These formative tests were very beneficial for the investigator also as these helped him to plan his next day’s strategy according to the level of learning.
Module wise, pre and post criterion summative tests were administered. All the eight modules were followed by post criterion summative tests to know terminal behavior of the students. (See Appendix D-2)

Motivational efforts were made continuously by the investigator especially for those students who were shy in nature and hesitated in participating in the classroom activities. Investigator gave special attention by devoting some extra time or motivating them by praise and recognition or by giving them some rewards at every success.

Spontaneous and planned discussions were used as the means of achieving full clarity of the content. It was helpful in creating the atmosphere which was full of freedom to share views and to be aware of one's own capabilities and interest.

The main focus of this model was to develop insight regarding self awareness and awareness of others in the students through exploratory games/activities; as it was the pre-requisite of gaining real education. The knowledge thus gained by the students was everlasting and permanent. For this purpose, investigator had asked the students to tell one best thing (what they liked most about the activity) and one worst thing (what they liked least about the activity) for each activity they had participated at the end of each activity.

Each module took seven to eight days to complete and conduct of total experiment took seventy four working days.

The time schedule for each module was more or less same. The basic structure of each module was same. However slight modifications were made wherever required. Detailed step by step, day-wise description of all the modules has been given in Appendix D-3.

The instructional programme based on CGL for Control Group was administered according to the following plan:

This group was taught by their Commerce (Economics) teacher in the conventional manner. It generally refers to reading out the chapter by
teacher or some explanations by the teacher, solving exercise and providing notes for certain important questions.

» Objectives and content of all eight modules were provided to the regular Economics teacher by the investigator, so that, there might not be any difference among groups on the amount of content taught to them.

» No daily formative tests were conducted after the completion of every lesson.

» After having completed content, criterion summative test was administered to this group.

Phase IV: Administration of the Post-Tests

After completion of the instructional programme of both the groups; the post-tests i.e. criterion summative test; life skills tests; and personal values survey schedule, were administered to all the students. Time limit for different tests was different and students were informed about that. At the end, students were thanked for their full cooperation.

Phase-V: Scoring, Tabulation and Analysis of Data

All the tools were scored according to their prescribed scoring keys and data thus obtained was subjected to statistical analysis.

6.10: STATISTICAL TECHNIQUES

The following statistical techniques were employed to analyse the data obtained in order to test the hypotheses:

- Means, Standard Deviations, Skewness and Kurtosis were used wherever required.
- Graphical presentations: Bar Diagrams, Line Graphs and Frequency Curves were drawn to support statistical data.
- Two-Way Analysis of variance (ANOVA) was employed to study significance of difference among various combination groups. Separate 2x2 ANOVA was used on gain scores of:
  » Skill of Acquiring Knowledge (Achievement)
  » Self Awareness Skill
  » Assertiveness Skill
  » Social Skill
Summary and Conclusions

- Significant F-ratios were followed by T-test wherever required.
- Data pertaining to preferences on Personal Values were analyzed through normalized master ranks worked out on matrix of pooled preferences and calculated through C-Scale values.

6.11: FINDINGS

In the light of the analyses and interpretation of the data, the following conclusions were drawn on the basis of analyses related with selected Life Skills viz. Skill of Acquiring Knowledge, Self-Awareness Skill, Assertiveness Skill and Social Skill; and preferences on Personal Values.

- **Skill of Acquiring Knowledge:** For arriving at major findings related with Skill of Acquiring Knowledge, a 2x2 ANOVA was employed on gain scores of Skill of Acquiring Knowledge and following conclusions were drawn:
  - Students studying through ATM achieved higher gain means on Skill of Acquiring Knowledge than those who were studying in a Conventional Group Learning situation.
  - Psychologically Low Hardy students scored higher levels of gain means than Psychologically High Hardy students for Skill of Acquiring Knowledge.
  - Psychologically Low Hardy students achieved higher gain means than the Psychologically High Hardy students for Skill of Acquiring Knowledge, when studying through ATM instructional mode.
  - CGL failed to yield significant differences in gain mean scores of Psychologically High Hardy (PHH) and Low Hardy (PLH) students for Skill of Acquiring Knowledge.
  - Psychologically High Hardy students scored higher gain means on Skill of Acquiring Knowledge when studying through ATM instructional mode as compared to Psychologically High Hardy students of CGL.
Summary and Conclusions

- Psychologically Low Hardy students scored higher gain means when studying through ATM instructional mode as compared to CGL, for Skill of Acquiring Knowledge.
- For Psychologically High Hardy students of ATM group, gain means were higher for Skill of Acquiring Knowledge as compared to that of CGL group with Psychologically Low Hardy students.
- Psychologically Low Hardy students of ATM group achieved higher gain means for Skill of Acquiring Knowledge than Psychologically High Hardy students of CGL.

- **Self-Awareness Skill:** A separate 2x2 ANOVA was applied on gain scores of Self Awareness Skill and following findings were derived:
  - Students studying through ATM achieved higher gain means on Self Awareness Skill than those who were studying in a Conventional Group Learning situation.
  - Psychologically Low Hardy students scored higher levels of gain mean scores than Psychologically High Hardy students for Self Awareness Skill.
  - Psychologically High Hardy and Low Hardy students achieved equal gain means for Self Awareness Skill, when studying through ATM instructional mode.
  - For Self Awareness Skill, CGL did not yield significant differences in gain mean scores of Psychologically High Hardy (PHH) and Low Hardy (PLH) students.
  - Psychologically High Hardy students achieved higher gain means on Self awareness Skill when studying through ATM instructional mode as compared to CGL.
  - Psychologically Low Hardy students achieved higher gain means when studying through ATM instructional mode as compared to CGL, for Self Awareness Skill.
Summary and Conclusions

- For Psychologically High Hardy students of ATM group, gain means were higher for Self Awareness Skill as compared to that of CGL group with Psychologically Low Hardy students.
- Psychologically Low Hardy students of ATM group achieved higher gain means for Self Awareness Skill than Psychologically High Hardy students of CGL.

**Assertiveness Skill:** A separate 2x2 ANOVA was applied on gain scores of Assertiveness Skill and following findings were drawn:

- Students studying through ATM achieved higher gain means on Assertiveness Skill than those who were studying in a Conventional Group Learning situation.
- Psychologically High Hardy students scored higher levels of gain mean scores than Psychologically Low Hardy students for Assertiveness Skill.
- Psychologically High Hardy and Low Hardy students achieved equal gain means for Assertiveness Skill, when studying through ATM instructional mode.
- CGL did not yield significant differences in gain mean scores of Psychologically High Hardy (PHH) and Low Hardy (PLH) students for Assertiveness Skill.
- Psychologically High Hardy students achieved higher gain means on Assertiveness Skill when studying through ATM instructional mode as compared to their counter parts studying through CGL.
- Psychologically Low Hardy students achieved higher gain means on Skill of Assertiveness when studying through ATM instructional mode as compared to CGL.
- For Psychologically High Hardy students of ATM group, gain means were higher for Assertiveness Skill as compared to that of CGL group with Psychologically Low Hardy students.
Summary and Conclusions

- Psychologically Low Hardy students of ATM group achieved higher gain means for Assertiveness Skill than Psychologically High Hardy students of CGL.

- **Social Skill:** Following conclusions were drawn by employing a separate 2x2 ANOVA on gain scores of Social Skill:
  - Students studying through ATM achieved higher gain means on Social Skills than those who were studying in a Conventional Group Learning situation.
  - Psychologically High Hardy and Low Hardy students scored equal levels of gain mean scores for Social Skills.
  - The Instructional Modes and Psychological Hardiness operated independent of each other with regard to scores for Social Skills.

- **Preferences on Personal Values:** For arriving at major findings related with preferences on Personal Values, data was analyzed through preferential normalized master ranks which were calculated through C-Scale values and following conclusions were drawn:
  - **For Psychologically High Hardy students of experimental group:**
    - Value *Freedom* (among top five ranks at pre-test stage) did not seem to be sensitive to experimental treatment and retained its preference rank at post-test stage. Similarly value *Endurance* (bottom five at pre-test stage) remained at the same rank after treatment.
    - Value *Devotion to Duty* was among top five preferred values at pre-test stage and dropped to bottom five values after treatment.
    - *Leadership, Self Control, Honesty and Concern for others* seemed to be sensitive to experimental treatment and appeared among top five after shift from bottom five preference ranks.

  - **For Psychologically Low Hardy students of experimental group:**
    - *Quest for Knowledge* (among bottom five at pre-test stage) seemed to be insensitive to experimental treatment as remained at the same rank at post-test stage.
Summary and Conclusions

• Value **Punctuality** was among top five preferred values and dropped to bottom five values at post-test stage.

• **Self Control and Freedom** seemed to be sensitive to experimental treatment and appeared among top five after shift from bottom five preference ranks.

❖ **Overview of the Values:**

• An overview of these values suggests that a high fluctuation in the preference ranks of personal values for experimental group was observed because of treatment given to them. In control group marginal change in the preferences of values was seen. It may be due to chance factor, environmental factors or time gap. It confirms the superiority of Awareness Training Model towards personal values of secondary school children.

• **For Psychologically High Hardy Students of experimental group: (PHH/ATM):**

  ✓ The values which seemed to be sensitive to experimental treatment were: (initially at bottom five ranks and attained top five ranks after the treatment):
    - Leadership
    - Concern for others
    - Honesty
    - Self Control

  ✓ The value which appeared to be sensitive to experimental treatment was: (initially at top five ranks and attained bottom five ranks after the treatment):
    - Devotion to Duty

  ✓ The values which were found to be insensitive to experimental treatment: (remained at same preference rank at post-test stage):
    - Freedom
    - Endurance
Summary and Conclusions

• For Psychologically Low Hardy Students of experimental group: (PLH/ATM):
  ✔ The values which appeared to be sensitive to experimental treatment were: (initially at bottom five ranks and attained top five ranks after the treatment):
    • Self Control
    • Freedom
  ✔ The value which seemed to be sensitive to experimental treatment was: (initially at top five ranks and attained bottom five ranks after the treatment):
    • Punctuality
  ✔ The value which was found to be insensitive to experimental treatment (remained at same preference rank at post-test stage):
    • Quest for Knowledge

6.12: EDUCATIONAL IMPLICATIONS OF THE RESULTS

The innovations in educational technology, especially in the field of models of teaching, are proving their worth in gaining desired outcomes in fulfilling the objectives and goals of education thereby being highly supportive in attaining ultimate aims of education. In this age of heightened competition in an increasingly closed world it is essential that our school subjects introduce all such skills which are needed for the social survival of an intellectually and educationally developed individual. Awareness Training Model in this direction can be of eminent help as it not only is compatible for development of life skills but walks hand in hand with enhancement in academic achievement too. In the field of personal values also, Awareness Training Model (ATM) seems to be triggering off the activity of a hornet’s nest.

Skill of Acquiring Knowledge is the important skill needed for the contemporary knowledge society and it gets significantly enhanced through the application of ATM thereby proving its metal as a utilitarian tool in the current educational setup. Along with this, other three life skills measured i.e. Self
Awareness Skill, Assertiveness Skill and Social Skill also exhibited significant hike thereby establishing that ATM will go a long way in having comprehensive development of secondary school children.

Another significant revelation of the study was that ATM works equally well to procure significant enhancement among high hardy and low hardy students in the field of three life skills viz. Skill of Acquiring Knowledge, Self Awareness Skill and Assertiveness Skill. In the area of Social Skill, no significant difference was found implying that in order to modify Social Skill, simple ATM will not gain desired results; something more needs to be done for the enhancement of this skill. The parallel format of interaction between control group and experimental group on Social Skill slightly going in favour of ATM group can be taken as weak indicator of the possibility that through extensive use of this model, the degree of Social Skill may be enhanced. Another possibility can also be that it takes longer period of time to bring about change in Social Skill than the rest of three life skills.

Significant enhancement in the Skill of Acquiring Knowledge of the low hardy group within the experimental group (ATM) established yet another important fact that in the educational setup the use of this model is going to work wonders for the students with low hardiness which is the dream of any knowledge worker.

The teachers engaged in the classroom need to be made aware of ATM so that the classroom outcome in the shape of comprehensive development of the students can be attained. The curriculum framers of teacher educators both pre-service and in-service need to be introduce this model in their respective syllabi.

The model can be of immense use if implemented in the present day Indian school system under the new scheme of Continuous Comprehensive Evaluation (CCE) which aims to enhance life skills among students. This is the new age mantra for not only in Indian educational setup but throughout the globe also. The results of the present investigation are therefore of great importance for curricular planners. The teaching learning transactions can thus be transformed for various life skills.
In the area of personal values, a similar type of trend was observed for psychologically high hardy and low hardy students of experimental group. There was total topsy-turvy as far as the gain or loss of values was concerned. Leadership, concern for others, honesty, freedom and self control appeared to be the most affected values with the application of ATM. These values shifted from bottom preferences to top preference ranks after the instructional treatment. Values which seemed to be least affected from the instructional treatment were kindness, cleanliness, punctuality and devotion to duty. Rest all other values remained in average slot. Therefore the model can be safely recommended for the acquisition of values and to be put in practice for cultivation and shift of values among students thus proving to be potent tool in the hands of educators. Requisite training can be provided to teachers for this purpose. The results may therefore be of great use for teacher educators who can utilize model approach as per requirements of the content and learning outcomes especially for life skills training.

On the other hand, the control group did not show any significant upward and downward movement among the preferred values prevailing among high and low hardy students, which confirms that conventional teaching fails to touch value education in our routine educational situations.

Teaching and learning can at once be transformed into a fun-filled meaningful activity by following engrossing ATM activities. The model can prove instrumental in attaining our micro as well as macro teaching objectives. The implications are simple and plain writing on the wall that if system has to change then methods of teaching need to undergone a sea change and ATM is a safe heaven in that area. The kind of activities designed through awareness training model may also help in co-operative ventures for teachers-parents co-operation so that total integrated and co-operative approach can be utilized for affecting learning outcomes on other domains of behaviour.
6.13: SUGGESTIONS FOR FURTHER STUDY

On the basis of experiences and findings of the present study, the following suggestions are made for the further research in this area:

- The effect of other models belonging to personal family of models can be explored by implementing them in the classroom situations and comparative studies may be taken up.
- Similar studies can be designed for subject streams other than Commerce and can be tried at different levels of education, for example similar studies may be designed for core subjects and also at elementary, secondary and higher education level.
- The other psychological areas like personality patterns, creativity, constructivism, stress levels etc. can also be taken.
- Various other life skills like Positivism, Self-Esteem, Empathy, Time Management, Decision-Making skill etc. may be studied through similar experimental studies at different levels of education i.e. primary, secondary, higher etc.
- All levels of students can be involved for further strengthening the research evidences generated by this study.
- Effectiveness of Awareness Training Model may be researched further at larger scale for large number of learners of different age groups and grade levels.
- Further investigations are also suggested in terms of urban-rural background and socio-economic status for their effectiveness for development of social skills and nurturance of other communication skills.
- Further studies may be conducted to study the effect of other models and the need for good support materials. The implications of the research in these areas of effectiveness of various instructional designs/models and development of good support materials will not only influence the formulation of more awareness models but also the appropriate methodology built upon these strategies.
• A breakthrough can be achieved in the field of value education because Awareness Training Model has cognitive, conative and affective domains in its purview. Similar studies may be designed which have inbuilt components of inculcation/modification of values so that value education becomes an integrated segment of teaching learning transactions.

• For greater validity of results and for arriving at conclusive generalizations, the study may be replicated on larger population.

• School administrators, guidance and counseling workers, teachers and students can take cues from the results of the study for the advantage of the learners and society as a whole.

• Further studies may be planned and conducted around effective variables like study habits, self-concept, self-confidence, levels of aspiration, other personality traits and motivational levels.

• Comparative and cross cultural studies may be taken up to validate results of the present study and derive generalizations.