CHAPTER-III

PLAN AND PROCEDURE OF STUDY

3.1 INTRODUCTION

This chapter provides an overview of the research methods used in the research. The strategy and procedure are a part of the research structure or blueprint. The validity and generalizability of any research are determined by a sound and rational plan and procedure. The main goal of this study was to instil leadership skills in secondary school students with the help of a Student Leadership Programme (SLP). The investigator had divided this research into two parts and this chapter has been divided into two segments as Segment - I & Segment - II. Segment I highlighted the various steps taken to develop the Student Leadership Programme (SLP), which involve identification of the necessary leadership skills, selection of instructional inputs, including both theoretical and practical inputs, and outlining of the sessions of the Student Leadership Programme (SLP). Segment II discusses the detail procedure of methodology of research. It goes into detail on the population, the sampling technique, the method of data collection, and the techniques used to analyze the data.

The investigator explains the reason for the research design chosen for this research. The tool used to collect data is also mentioned, as are the procedures to conduct this analysis. The techniques used to interpret the data are also discussed by the investigator.

3.2 Systematization of the Programme

The programme was developed for the secondary students was established on a scheduled and organized system. The programme's content was based on the students' skills at the secondary level that can be learnt by the students. The investigator has taken into consideration the mental level of the secondary level students and the lack of skill development among the students that recognizes the need for the development of the Student Leadership Programme (SLP). The sessions for each skill were arranged by considering the relevancy, logical sequence of the content, terminology, understanding the mental level of the students. Each session consists of theoretical and practical inputs. Case-studies, documentaries, short films, fun-loving games/puzzles, assessment sheets, indoor and outdoor activities, and

reflective/interactive discussions were designed and implemented for each leadership skill. By doing so, the programme was developed with consideration of age norms, students' entry behaviour, and the time constraints of the class hour. The content of the sessions for each leadership skill was prepared with theoretical and practical inputs, and the subtopics and activities were chosen to be simple but tough enough to push students beyond their basic knowledge and understanding of leadership skills.

3.2.1 Segment I

3.2.1.1 Development of Student Leadership Programme (SLP)

Segment I of the study includes different steps for developing the Student Leadership Programme (SLP) developed by the investigator. While preparing the SLP, the investigator has considered the learning level, learning environment, mental level, and age of the students. There were three significant steps: Identification of the leadership skills, Selection of instructional inputs, and Structure of the Student Leadership Programme (SLP). Finally, the format of the leadership programme was developed.

Step No.	Name of the Step
I	Identification of leadership skills
II	Selection of instructional inputs 1. Theory 2. Activities
III	Structure of the Student Leadership Programme (SLP)

3.2.1.1.1 Step I: Identification of leadership skills

As there is no fixed curriculum of leadership skill development in GSEB schools, the investigator developed the Student Leadership Programme (SLP). The investigator had gone through various policies that recommended skill development, studied various leadership theories, reviewed literature, and the relevant leadership skills reflected from various theories were taken. It also reflected an understanding of the importance of leadership skill development in the overall development of an individual. In skill development, age is one of the most critical factors. In this study,

the investigator has selected the sample, i.e., secondary level students. The consideration of age, mental level, and use of leadership skills in the lives of secondary school students were kept in mind by the investigator for choosing the seven skills.

Goal setting and time management skills help the students to think about their future and time-efficiency in their daily real-life experiences. Communication and empathy skills help the students understand the importance of social development and healthy interaction between different people. Team building, conflict management, and problem-solving skills help the students to understand the importance of working together in harmony and if any problem occurs, how to handle it effectively. This problem-handling behaviour is helpful in their daily life experiences also.

Looking into the benefits of leadership skills towards the development of skill for standard IX and the scope of the different skills that can be taught effectively in one academic year, the following skills were taken for the study.

Sr. No.	Name of the skills
1.	Time management skill
2.	Goal setting skill
3.	Communication skill
4.	Empathy skill
5.	Problem-solving skill
6.	Team building skill
7.	Conflict management skill

3.2.1.1.2 Step II: Selection of instructional inputs

For the development of Student Leadership Programme (SLP), the instructional material comprised of theoretical and practical inputs. Below is the synoptic view of the topic selected for the development of leadership skills. Table 3.1 depicts the topics selected for each leadership skill. For any skill development, knowledge is the base on

which a particular skill can be built. The theory consists of meaning, definition, nature, types, and other theoretical inputs of each skill. The charts, diagrams and illustrations were used for better instruction. The audio-visual aids were prepared for the better learning of students. The primary focus was on skill development, so the practical inputs included different exercises like activity-sheets, role play, skit, case-studies, storytelling, various indoor games, outdoor games, videos etc.

TABLE 3.1 Synoptic view of Identified Leadership skills and Topics for Discussion

Sr. No.	Name of skill	Number of Topics	Topics
1.	TIME MANAGEMENT SKILL	1.	Introduction to Time
		2.	Concept of a Time-Saver, Timewaster & Procrastination
		3.	
		4.	Directions of Time Management
		5.	80:20 Rule of Time Management
		6.	Concept of Urgent & Important Task
		7.	Analysis of Task Matrix's
		8.	
		9.	Techniques of Time Management
		10.	Barriers to Time Management Skill
		11.	Strategies for Time Management Skills
		12.	
		13.	Time Management Tips for Students
2.	GOAL SETTING SKILL	1.	Definition of Goal
		2.	
		3.	Kinds of Goal
		4.	
		5.	Direction of Goal Setting
		6.	Concept of Goal Setting Theory
		7.	
		8.	Steps in Goal Setting Technique
		9.	
		10.	Concept of SMART Goals
		11.	Techniques for Setting Effective Goal
		12.	
		13.	Essential Attributes for Achieving the Goal

3.	**COMMUNICATION SKILL**	1.	Meaning And Concept of Communication
		2.	Communication as a Systematic Process
		3.	
		4.	Directions of Communication
		5.	Types of Communication
		6.	Interactions in Communication Skill
		7.	Types of Communication- Verbal
		8.	Types of Communication- Non- Verbal
		9.	Forms of Non-Verbal Communication - I
		10.	Forms of Non-Verbal Communication - II
		11.	Importance of Listening Skill
		12.	
		13.	Barriers to Effective Communication Skill
4.	**EMPATHY SKILL**	1.	Meaning & Components of Empathy
		2.	
		3.	Importance of Empathy- I
		4.	Importance of Empathy-II
		5.	Elements of Empathy- I
		6.	Elements of Empathy-II
		7.	Characteristics of Empathy Skill
		8.	
		9.	Ways to Show Empathy Skill
		10.	
		11.	Barriers to Empathy Skill-I
		12.	
		13.	Barriers to Empathy Skill-II
5.	**PROBLEM-SOLVING SKILL**	1.	Concept of Problem
		2.	
		3.	Problem Solving as a Systematic Process
		4.	
		5.	Importance of Problem Solving
		6.	Problem-Solving as a Skill
		7.	
		8.	Importance of Problem-Solving Skill
		9.	Ways to be a Good Problem Solver
		10.	
		11.	Characteristics of Problem Solver
		12.	Barriers to Problem Solving
		13.	Strategies for Problem-Solving Skill

6.	**TEAM BUILDING SKILL**	1.	Introduction of Team Building
		2.	Team Vs Group
		3.	Team Development & Role of Members
		4.	
		5.	Types of Team
		6.	Stages of Team Development (Tuckmann, 1965)
		7.	
		8.	Team Effectiveness Model-Context
		9.	Model of Team Effectiveness-Composition
		10.	Model of Team Effectiveness-Process
		11.	
		12.	Essentials of Team-Building Skills
		13.	Barriers to Effective Team Building Skill
7.	**CONFLICT MANAGEMENT SKILL**	1.	Meaning and Concept of Conflict Management
		2.	Aspects of Conflict
		3.	Characteristics of Conflict
		4.	Steps of Conflict
		5.	
		6.	Levels of Conflict
		7.	Role Conflict
		8.	
		9.	Concept of Interpersonal Conflict
		10.	Concept of Group Conflict
		11.	Concept of Conflict Management
		12.	Strategies for Conflict Management
		13.	Negotiation Skill for Conflict Management

3.2.1.1.2.1 A Synoptic View of Theory and Activities

A brief description of the theoretical inputs and activities used in the Student Leadership Programme (SLP) to develop leadership skills of students is given below.

TABLE 3.2 Description of the Theoretical Inputs and activities used in the Student Leadership Programme (SLP)

NAME OF SKILL: TIME MANAGEMENT SKILL

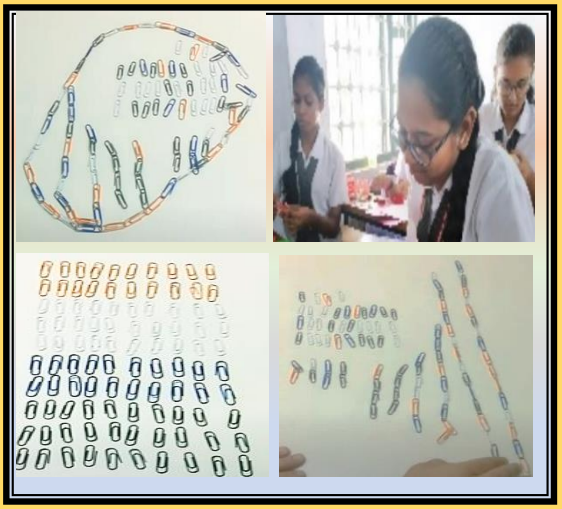
Session No.- 1 ❒ **Time Duration:** 40 Min. ❒ **Topic:** Introduction to Time ❒ **Activity:** Pebble World in A Jar ❒ **Discussion On:** ◆ Introduction ◆ Three secrets to keeping track of time	
Session No.- 2 & 3 ❒ **Time Duration:** 80 Min. ❒ **Topic:** Concept of Time Saver & Waster; Procrastination ❒ **Activity:** Resistance for Procrastination ❒ **Discussion On:** ◆ Concept of time savers & time wasters ◆ Examples of time savers ◆ Examples of time waster	

Session No.- 4

- ❒ **Time Duration:** 40 Min.
- ❒ **Topic:** Directions of Time Management
- ❒ **Activity:** Gap filler as an effective Task Completer
- ❒ **Discussion On:**
  - Types of people concerning time management
  - Effective management of time & work

Session No.- 5

- ❒ **Time Duration:** 40 Min.
- ❒ **Topic:** 80:20 Rule of Time Management
- ❒ **Activity:** Safety pins to make us learn Time Management
- ❒ **Discussion On:**
  - Self-action or one-way time management



Session No.- 6

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Concept of Urgent & Important Task
- ❒ **Activity:** Effective Planning
- ❒ **Discussion on:**
  - Understanding the Difference between Urgent & Important

Session No.- 7 & 8

- ❒ **Time Duration:** 80 min.
- ❒ **Topic:** Analysis of Task Matrixes
- ❒ **Activity:** Time Management via Matrixes
- ❒ **Discussion on:**
  - ◆ Significance of task matrix concerning time management
  - ◆ Quadrant details

Session No.- 9

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Techniques of Time management
- ❒ **Activity:** Complete task on time
- ❒ **Discussion on:**
  - ◆ Different techniques of time management
  - ◆ Rescheduling technique
  - ◆ Quit gate model

Session No.- 10

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Barriers to Time management skill
- ❒ **Activity:** Managing the time via peer solutions
- ❒ **Discussion on:**
  - ◆ Barriers to Time management skill

Session No.- 11 & 12

- **Time Duration:** 80 min.
- **Topic:** Strategies for Time management skill
- **Activity:** Time allotment for each activity
- **Discussion on:**
  - Strategies for Time management skill

Session No.- 13

- **Time Duration:** 40 min.
- **Topic:** Time Management Tips for Students
- **Activity:** Effective tasks with good time management
- **Discussion on:**
  - Time management tips for students

NAME OF SKILL: GOAL SETTING SKILL

Session No.- 1 & 2

- ❒ **Time Duration:** 80 min.
- ❒ **Topic:** Definition of Goal
- ❒ **Activity:** Write-up of goals
- ❒ **Discussion on:**
  - ◆ Definition of goal
  - ◆ Importance of goal

Session No.- 3 & 4

- ❒ **Time Duration:** 80 min.
- ❒ **Topic:** Kinds of goal
- ❒ **Activity:** Listing Goals in Long Term Goal Sheet
- ❒ **Discussion on:**
  - ◆ Short-term goals
  - ◆ Long-term goals

Session No.- 5

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Directions of goal setting
- ❒ **Activity:** Prioritise goals through Goal cards
- ❒ **Discussion on:**
  - ◆ Directions of Goal Setting
  - ◆ Importance of Goal Setting

Session No.- 6 & 7

- **Time Duration:** 80 min.
- **Topic:** Concept of goal setting theory
- **Activity:** Chair matching game
- **Discussion on:**
  - Concept of Goal Setting Theory
  - Principles of effective goal setting

Session No.- 8 & 9

- **Time Duration:** 80 min.
- **Topic:** Steps in goal setting technique
- **Activity:** Setting short and long term goals
- **Discussion on:**
  - Step-1 Setting of the lifetime goals
  - Step-2 Setting of the short/long term goals
  - Step-3 Staying on Course

Session No.- 10

- **Time Duration:** 40 min.
- **Topic:** Concept of SMART goals
- **Activity:** Setting SMART goals
- **Discussion on:**
  - Writing S.M.A.R.T. goals

Session No.- 11 & 12

- **Time Duration:** 80 min.
- **Topic:** Techniques for setting effective goals
- **Activity:** Prepare up-to-date Goal Sheet
- **Discussion on:**
  - Need of techniques for setting effective goals
  - Techniques for setting effective goals

Session No.- 13

- **Time Duration:** 40 min.
- **Topic:** Essential attributes for achieving the goal
- **Activity:** Goal for the future!
- **Discussion on:**
  - Essential attributes for achieving the goal

NAME OF SKILL: COMMUNICATION SKILL

Session No.- 1

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Meaning & concept of communication
- ❒ **Activity:** Chinese Whisper
- ❒ **Discussion on:**
  - ◆ Significance of communication

Session No.- 2 & 3

- ❒ **Time Duration:** 80 min.
- ❒ **Topic:** Communication as a systematic process
- ❒ **Activity 1:** Communication Process
- ❒ **Activity 2:** Role Play Explaining the Communication Process
- ❒ **Discussion on:**
  - ◆ Introduction to communication

Session No.- 4

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Directions of Communication
- ❒ **Activity:** Pass the communication
- ❒ **Discussion on:**
  - ◆ Downstream communication
  - ◆ Upstream communication
  - ◆ Lateral communication

Session No.- 5

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Types of communication
- ❒ **Activity:** Blindfolded Mobility for One-Way/ Two-Way Communication
- ❒ **Discussion on:**
  - Self-action or one-way communication

Session No.- 6

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Interactions in communication skill
- ❒ **Activity:** Effective Communication – A Boon
- ❒ **Discussion on:**
  - Interpersonal communication skill
  - Complex system of Interpersonal communication skill
  - Intrapersonal communication skill

Session No.- 7

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Types of Communication- Verbal
- ❒ **Activity:** Eyewitnesses-distorted communication
- ❒ **Discussion on:**
  - Verbal Communication
  - Oral communication
  - Written communication

Session No.- 8

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Types of Communication- Non-Verbal
- ❒ **Activity:** Define your mood
- ❒ **Discussion on:**
  - ◆ Kinesics
  - ◆ Emblems
  - ◆ Adapters
  - ◆ Illustrators

Session No.- 9

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Forms of non-verbal communication- I
- ❒ **Activity:** Organise via non-verbal clues
- ❒ **Discussion on:**
  - ◆ Eye Contact
  - ◆ Facial expressions
  - ◆ Haptics
  - ◆ Vocalics

Session No.- 10

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Forms of non-verbal communication-II
- ❒ **Activity:** Role-Play (Mime)
- ❒ **Discussion on:**
  - ◆ Proxemics
  - ◆ Territoriality

Session No.- 11 & 12

- **Time Duration:** 80 min.
- **Topic:** Importance of listening skill
- **Activity 1:** Concentrated on listening
- **Activity 2:** Listen to the passage
- **Discussion on:**
  - Importance of Listening Skill

Session No.- 13

- **Time Duration:** 40 min.
- **Topic:** Barriers to effective communication skill
- **Activity:** Barriers to Communication
- **Discussion on:**
  - Barriers to Verbal Communication
  - Barriers to Non- Verbal Communication

NAME OF SKILL: EMPATHY SKILL

Session No.- 1 & 2

- ❒ **Time Duration:** 80 min.
- ❒ **Topic:** Meaning & components of empathy
- ❒ **Activity:** Empathizing in a regular way
- ❒ **Discussion on:**
  - ◆ Significance of empathy
  - ◆ Components of empathy

Session No.- 3

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Importance of Empathy I
- ❒ **Activity:** Empathy in One's Life: The Golden Rule
- ❒ **Discussion on:**
  - ◆ Importance of empathy

Session No.- 4

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Importance of Empathy-II
- ❒ **Activity:** Understanding Your Feelings
- ❒ **Discussion on:**
  - ◆ Take a single feel at one time

Session No.- 5

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Elements of Empathy-I
- ❒ **Activity:** Silent empathy
- ❒ **Discussion on:**
  - ◆ Essential elements of empathy

Session No.- 6

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Elements of empathy-II
- ❒ **Activity:** Effective empathy by understanding the emotions
- ❒ **Discussion on:**
  - ◆ Elements of Empathy

Session No.- 7 & 8

- ❒ **Time Duration:** 80 min.
- ❒ **Topic:** Characteristics of Empathy Skill
- ❒ **Activity 1:** Not to Bully- Not to Hurt Anyone
- ❒ **Activity 2:** Discussing the Fear to Come Out
- ❒ **Discussion on:**
  - ◆ Concept of Empathy skill
  - ◆ Characteristics of Empathy Skill

Session No.- 9 & 10

- ❒ **Time Duration:** 80 min.
- ❒ **Topic:** Ways to show the empathy skill
- ❒ **Activity 1:** Short Documentary Film
- ❒ **Activity 2:** Give a Thought towards Showing Empathy
- ❒ **Discussion on:**
  - ◆ Different ways to show empathy

Session No.- 11 & 12

- ❒ **Time Duration:** 80 min.
- ❒ **Topic:** Barriers to Empathy Skill-I
- ❒ **Activity 1:** Understanding Other's Behaviour
- ❒ **Activity 2:** Empathy Barriers- Documentary Video
- ❒ **Discussion on:**
  - ◆ Barriers to empathy skill

Session No.- 13

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Barriers to empathy skill-II
- ❒ **Activity 1:** Situations cards to analyze the emotions
- ❒ **Activity 2:** Underpinning Negative Emotions- Empathy Barriers
- ❒ **Discussion on:**
  - ◆ Barriers to empathy skill

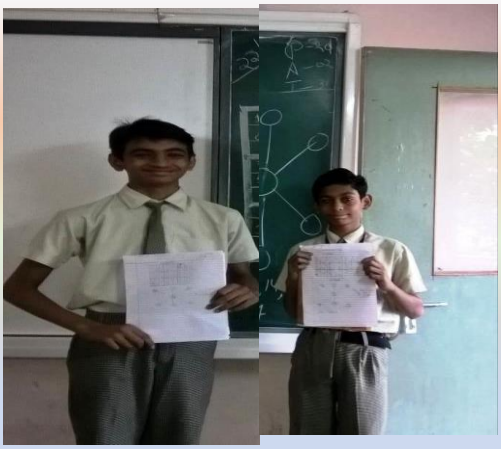
NAME OF SKILL: PROBLEM-SOLVING SKILL

Session No.- 1 & 2

- **Time Duration:** 80 min.
- **Topic:** Concept of problem
- **Activity:** Experiment with a Problem
- **Discussion on:**
  - Concept of problem & problem-solving

Session No.- 3 & 4

- **Time Duration:** 80 min.
- **Topic:** Problem Solving as a systematic process
- **Activity:** Name game solution
- **Discussion on:**
  - Types of problem
  - Classification of problem
  - Introduction to problem solving process



Session No.- 5

- **Time Duration:** 40 min.
- **Topic:** Importance of problem solving
- **Activity:** Pass the problem solving
- **Discussion on:**
  - Definition of problem solving
  - Importance of problem solving

Session No.- 6 & 7

- **Time Duration:** 80 min.
- **Topic:** Problem solving as a skill
- **Activity:** Solution creator
- **Discussion on:**
  - Problem solving as a skill
  - Types of mental skills

Session No.- 8

- **Time Duration:** 40 min.
- **Topic:** Importance of problem-solving skill
- **Activity:** 1 solution= multiple problems
- **Discussion on:**
  - Importance of problem-solving skill

Session No.- 9 & 10

- **Time Duration:** 80 min.
- **Topic:** Way to be a good problem solver
- **Activity:** Solve it with deck
- **Discussion on:**
  - Different ways to be a good problem
  - How to be a successful problem-solver

Session No.- 11

- **Time Duration:** 40 min.
- **Topic:** Characteristics of problem solvers
- **Activity:** Enjoy the problem
- **Discussion on:**
  - Different characteristics of problem solvers

Session No.- 12

- **Time Duration:** 40 min.
- **Topic:** Barriers to Problem Solving
- **Activity:** Problem solving box in action
- **Discussion on:**
  - Different barriers to Problem Solving

Session No.- 13

- **Time Duration:** 40 Min.
- **Topic:** Strategies for Problem-Solving Skill
- **Activity:** Pulling the Pocket
- **Discussion On:**
  - Different Strategies for Problem-Solving Skill

NAME OF SKILL: TEAM BUILDING SKILL

Session No.- 1

- **Time Duration:** 40 min.
- **Topic:** Introduction of Team Building
- **Activity:** Team Builds a Creative Storyline
- **Discussion on:**
  - Concept of Team
  - Concept of Team building

Session No.- 2

- **Time Duration:** 40 min.
- **Topic:** Team vs Group
- **Activity:** Group-a set of chaos
- **Discussion on:**
  - How different is the team from the group?

Session No.- 3 & 4

- **Time Duration:** 80 min.
- **Topic:** Team development & role of members
- **Activity 1:** A team is a need!
- **Activity 2:** Learning good vs bad teamwork
- **Discussion on:**
  - Concept of Team development
  - Addressing the core concern of role

Session No.- 5

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Types of Team
- ❒ **Activity:** Ideas as Building Blocks
- ❒ **Discussion on:**
  - ◆ Types of Team

Session No.- 6 & 7

- ❒ **Time Duration:** 80 min.
- ❒ **Topic:** Stages of Team Development (Tuckman, 1965)
- ❒ **Activity:** Tower of Trust
- ❒ **Discussion on:**
  - ◆ Stages of Team Development (Tuckman, 1965)

Session No.- 8

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Team Effectiveness Model-Context
- ❒ **Activity:** Join the team!
- ❒ **Discussion on:**
  - ◆ Team Effectiveness Model
  - ◆ Model of team effectiveness-context

Session No.- 9

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Model of team effectiveness-composition
- ❒ **Activity:** Commonness as indicator
- ❒ **Discussion on:**
  - ◆ Concept of team composition

Session No.- 10 & 11

- ❒ **Time Duration:** 80 min.
- ❒ **Topic:** Model of team effectiveness-process
- ❒ **Activity:** Dice card arrangement via non-verbal clues
- ❒ **Discussion on:**
  - ◆ Team Process

Session No.- 12

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Essentials for Team building skills
- ❒ **Activity:** Team vs Individual
- ❒ **Discussion on:**
  - ◆ Different essentials for team building skills

Session No.- 13

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Barriers to Effective Team Building skill
- ❒ **Activity:** Identify barriers
- ❒ **Discussion on:**
  - ◆ Different barriers to Effective Team building skill

NAME OF SKILL: CONFLICT MANAGEMENT SKILL

Session No.- 1

- **Time Duration:** 40 min.
- **Topic:** Meaning & Concept of Conflict Management
- **Activity:** Ball tossing=Anger gone
- **Discussion on:**
  - Meaning of Conflict
  - Concept of Conflict Management

Session No.- 2

- **Time Duration:** 40 min.
- **Topic:** Aspects of Conflict
- **Activity:** Human Knot
- **Discussion on:**
  - Positive Aspects of Conflict
  - Negative Aspects of Conflict

Session No.- 3

- **Time Duration:** 40 min.
- **Topic:** Characteristics of Conflict
- **Activity:** Understanding Conflict Management
- **Discussion on:**
  - Different characteristics of Conflict Management

Session No.- 4 & 5

- ❒ **Time Duration:** 80 min.
- ❒ **Topic:** Steps of conflict
- ❒ **Activity:** Connect the Items
- ❒ **Discussion on:**
  - ◆ Different steps of a conflict

Session No.- 6

- ❒ **Time Duration:** 40 min.
- ❒ **Topic:** Levels of Conflict
- ❒ **Activity:** Role-play on Interpersonal Conflict
- ❒ **Discussion on:**
  - ◆ Different levels of conflict
  - ◆ Goal Conflict

Session No.- 7 & 8

- ❒ **Time Duration:** 80 min.
- ❒ **Topic:** Role Conflict
- ❒ **Activity 1:** Role-play on Conflict Scenarios: Looking for Resolutions
- ❒ **Activity 2:** Understanding the consequences of conflict
- ❒ **Discussion on:**
  - ◆ Importance of role conflict
  - ◆ Types of role conflict

Session No.- 9

- **Time Duration:** 80 min.
- **Topic:** Concept of interpersonal conflict
- **Activity:** Ideas for Conflict Resolution
- **Discussion on:**
  - Concept of Interpersonal conflict

Session No.- 10

- **Time Duration:** 40 min.
- **Topic:** Concept of group conflict
- **Activity:** Hitting the ball
- **Discussion on:**
  - Intra-group conflict
  - Inter-group conflict

Session No.- 11

- **Time Duration:** 40 min.
- **Topic:** Concept of conflict management
- **Activity:** Completing the cards
- **Discussion on:**
  - Concept of conflict management
  - Steps in conflict management

Session No.- 12

- **Time Duration:** 40 min.
- **Topic:** Strategies for conflict management
- **Activity:** Interpersonal challenge
- **Discussion on:**
  - Different strategies for conflict management

Session No.- 13

- **Time Duration:** 40 min.
- **Topic:** Negotiating skill for conflict management
- **Activity:** Six-word game
- **Discussion on:**
  - Concept of Negotiating skill
  - Core layers of negotiation

3.2.1.1.3 Step III: Structure of Student Leadership Programme (SLP)

The investigator has developed the Student Leadership Programme (SLP) to inculcate leadership skills in secondary school students of standard IX. The purpose of the programme was to develop skills through the theoretical inputs integrated with activities. Thus, looking into all these, sessions that were appropriate for skill development were taken. Thirteen sessions were conducted for each skill and ninety-one sessions were scheduled for the various topics and sub-topics. The basic format of the session plan is described below:

3.2.1.2 Format of Session Plan

An attempt was made to develop each leadership skill through thirteen sessions through the implementation of the Student Leadership Programme (SLP). Each session included theoretical inputs and practical inputs. Each session follows the format outlined below:

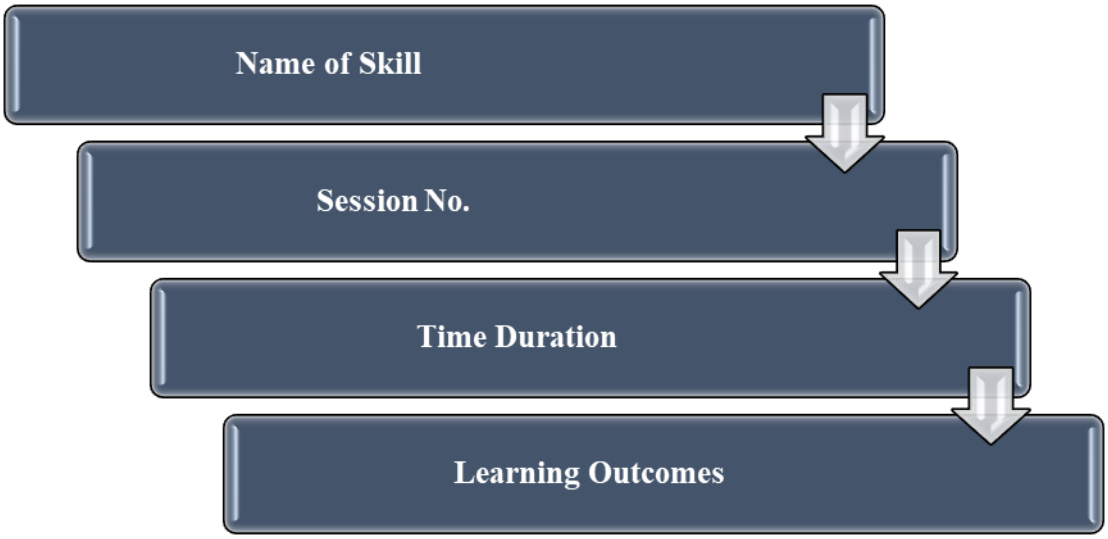
Following the selection of skills, a content analysis was done of the content taken for each skill and instructional objectives for each skill were developed. The SLP was designed for one academic year, therefore a significant effort has been made in the selection of the sub-topics for each skill. Thirteen sessions were planned for each skill to cover various topics such as definitions, principles, models, strategies, aspects, and barriers. Instructional objectives were formulated for each session based on the selected skills.

General objectives

The session begins with general objectives. Under this sub-heading general objectives were formulated for each session. The students are required to achieve the following general objectives by the end of the session. Students attain a broad understanding of the leadership skill addressed in the session through general objectives. The student can comprehend the importance of the skill in an individual's life and society.

Learning Outcomes

Following the general objectives, learning outcomes in behavioural terms were specified. Under this caption, the statements that describe the conceptual knowledge and skills that students should acquire at the end of a particular session and assist students in comprehending why that conceptual knowledge and skills will be beneficial to them. These learning outcomes will be demonstrated by the students inside and outside of class.



After the learning outcomes of the session, the instructional inputs included theoretical aspects for the attainment of conceptual knowledge and the supporting activity inputs for each skill. Different learning experiences were presented to the students for understanding the skills, integrating various activities related to each skill in the classroom, such as predict-observe-explain, discussion session, project work, films, videos, and team activities.

Theory

Under this sub-heading the various leadership skills were explained according to the components of leadership skill, which is necessary for understanding and developing the skill. For every session, the general objectives were formulated. Then, the learning outcomes were stated in specific behavioural terms. It has always been a priority to ensure that the content's vocabulary is appropriate for secondary school students. Case studies, stories, illustrations, and role play were used to understand and retain the conceptual inputs in an interesting manner.

Each session had theoretical content that covered a topic and subtopics for each skill. Each session lasted for 40 minutes with around 10-15 minutes devoted to discussing theoretical inputs. Multimedia power point presentations were used for instruction to increase class participation. Inductive, deductive, and indo-deductive approaches were used following the topic's requirements. The pedagogy used was the discussion method. Each session laid priority on the discussion with the students. The goal of the interactive/discussion session was to discuss the specific aspect that is the meaning, characteristics, barriers, for the development of the specific leadership skill.

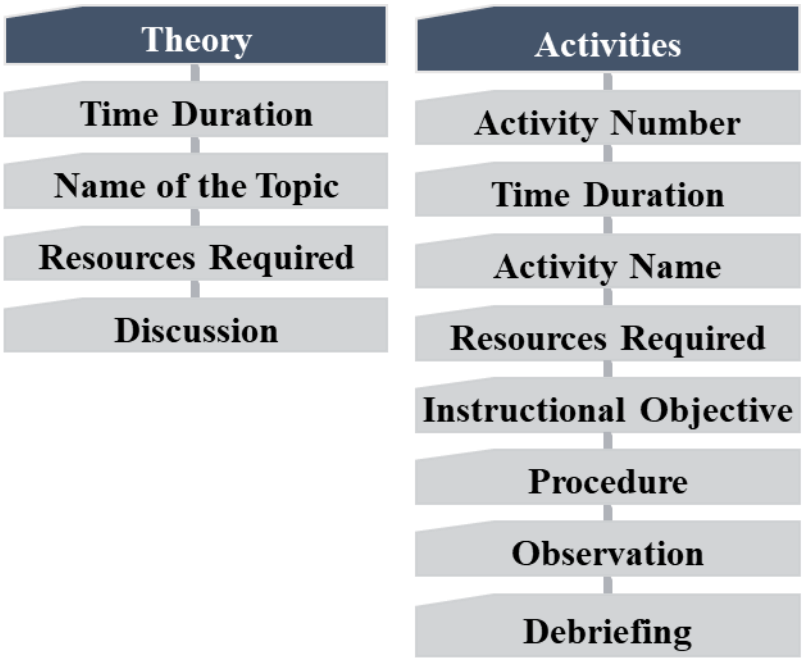
In each session, the topics were discussed keeping in mind the time duration, and resources required. The concepts were explained with the help of life examples and discussions with the students. Students were encouraged to investigate each fundamental component of leadership skills through the use of life examples. They learnt concepts about numerous dimensions of leadership skills during the discussion. The investigator assisted students in exploring the content for better understanding of leadership skills. The thought-provoking discussions were well structured to encourage students to think, make connections related to their own lives and environment, and get a better understanding of leadership skills. They attained knowledge of the concept, characteristics, and other facets of leadership skills. The pedagogy used for instruction was the discussion, assignment, and problem-solving method.

Activities

To ensure the comprehension of the conceptual knowledge of leadership skills practice was equally vital; therefore, different activities were selected and designed to inculcate leadership skills. Short and simple activities were conducted to allow the students to implement what they had learnt and strengthen their understanding of leadership skills. The activities were meticulously chosen, keeping in mind the learning potential of the students, the practicability and applicability of the activity, and the fun aspect of the activity.

Around 10-15 minutes were devoted to discussing the theory part, the remaining 20-25 minutes were utilized for the various activities. Different types of learning experiences in each activity were provided to prevent monotony. The activities included developing activity sheets, case-studies, assignments, outdoor and indoor

sports, self-reporting, video documentary, role play, flashcards, and other individual and group activities. The details for each activity included the activity number, activity name, the purpose, time duration, resources needed, number of members required, and instructional objective were outlined in detail. The activity's detailed procedure was presented stating how the activity can be conducted. The investigator observed the learners as they performed the activity. The students who needed help were assisted. Each activity ended with a discussion/debriefing, in which the investigator and students had a detailed discussion on the learning experiences of the activity performed. The students were encouraged to explore the element of leadership skills with the help of the activity performed. The discussion also included the interpretation and understanding of the activity to comprehend the practical part of skill development. During the discussion, students learnt about the various aspects of leadership skills. Reflective questions were asked in the debriefing of the skill, which led to a better understand leadership skills. The questions were well formulated to compel students to think, connect it to their own lives and surroundings. It was done to encourage participation and emphasize on the importance of the skill addressed in the session. It encouraged students to consider different ways of developing leadership skills.



3.2.2 Segment II

3.2.2.1 Research Methodology

The current study used an experimental research design. The experimental analysis offers a tool for addressing the query that is both rigorous and logical.

It was a Quasi-experimental design. The Pretest-Posttest Non- Equivalent-Control Group Design was followed in this research. Best and Kahn (1996) describe, "this design is often used in classroom experiments when experimental and control groups are such naturally assembled groups as intact classes, which may be similar." The design of the study is depicted in diagramme form as follows:

Pre-test Post-test Groups	
Experimental Group	O1 X O2
Control Group	O3 C O4
O1 & O3 = Pre-test	O2 & O4 = Post-test
X = Treatment	C = No Treatment

3.2.2.2 Population

All the students of standard IX of secondary schools of Gujarat affiliated to Gujarat Secondary Education Board (GSEB) of the year 2017-18 constituted as the population of the present study.

3.2.2.3 Sample

The convenient sampling technique was used to select the sample for the present study. Two schools of Vadodara city were selected for the study. The first school was Crystal School used as the control group, and the second school, Shree Ambe Vidyalaya, was used as the experimental group. All the students of (one section) standard IX of both the schools were considered as the sample. There were 58 students in the control group and 62 students in the experimental group. Raven's Standard Progressive Matrices (SPM) test was administered to both the control and experimental group. One-to-one matching was done considering the equivalent scores obtained by students of both groups in Raven's Standard Progressive Matrices (SPM) test. It was arranged over five sets. The mean score of the control and experimental group was found to be 40.52 and 40.78, respectively. Therefore, the groups were

matched. After one-to-one matching, the sample consisted of 30 students in the experimental group and 30 students in the control group. Raven's Standard Progressive Matrices (SPM) test has been administered to the Experimental and Control group to match the groups.

Sr. No.	Group	Number of students	Mean
1	Control	30	40.52
2	Experimental	30	40.78

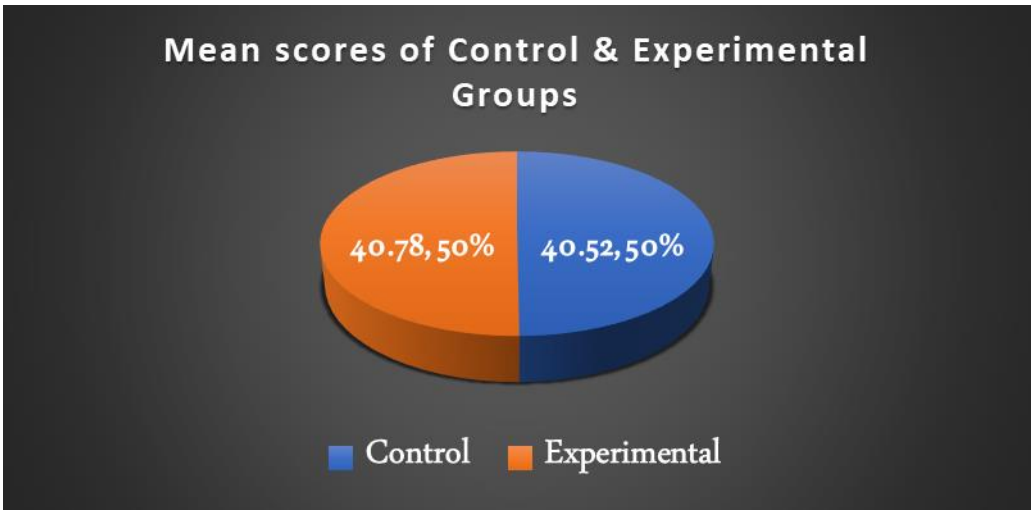


FIGURE 3.1 Mean scores of Control and Experimental Group

3.2.2.4 Tools and techniques for Data collection

The investigator developed the following tools for the research.

1. **Raven's Progressive Matrices** (often abbreviated as RPM): This tool was developed by John C. Raven in 1936. Each set of Raven Matrices test questions becomes increasingly difficult for the child. It was created to assess both intellectual development and logical reasoning. With its assistance, the researcher can determine the IQ of adults aged 14 to 65, independent of nationality, religion, or other distinctions. The objective is to create a pattern that connects all the figures together, specifying the desired figure among the suggested possibilities and in the answer gap. As the Raven Test becomes more challenging, greater cognitive power is required to encode and evaluate the questions.

Numerous patterns are provided in the form of a patterns are presented in the form of a "6×6, 4×4, 3×3, or 2×2 matrix," which is how the test gets its name. The Matrices

are provided in three distinct formats to accommodate respondents of varying abilities:

Sr. No.	Formats	Used for
1.	Raven's Standard Progressive Matrices	General population
2.	Raven's Coloured Progressive Matrices	Children and elderly people
3.	Raven's Advanced Progressive Matrices	Top 20% of the population

After observing the characteristic of all Raven's matrices, the investigator preferred Standard Progressive Matrices for this study.

Raven's Standard Progressive Matrices (SPM) test was the original matrices, which was first published in 1938. It is a test that is intended to assess abstract reasoning and is viewed as a non-verbal proxy for fluid intelligence. It consists of 60 multiple-choice questions arranged in ascending order of difficulty. Orluwene & Emekene, (2017) described that "this format is intended to assess the test taker's capacity to reason, specifically the educative ('meaning-making') component of Spearman's g. (g is often referred to as general intelligence)." The respondent is asked to identify the missing element that completes a pattern in each test item. The matrices are a collection of 60 items organized into five 12-item groups (A, B, C, D, & E), where each item includes a figure that is missing one of its pieces. Each object is displayed in black ink against a white background. It takes 60 minutes (approximate) to administer this test.

Internal Consistency Reliability of the Raven's Standard Progressive Matrices (SPM) test

This standardised tool has a reliability coefficient of 0.96. Although various studies had been identified that substantiated the reliability of Standard Progressive Matrices (SPM).

- In NCS Pearson (2007) report, in a standardized sample of 793 individuals, the internal consistency reliability estimate for the Standard Progressive Matrices (SPM) total raw score was 0.88. This reliability estimate suggests that the SPM's total raw score has a high degree of internal consistency dependability when used to interpret a reliability coefficient.

- According to a recent study Al-Bokaia and Al-Subaihib, (2021), SPM scores demonstrated reliability in terms of: a) internal consistency - 0.92; b) split halves - 0.81; c) test-retest - 0.69, which demonstrated significant correlation; and correlation between each item individually and the total score of the tests - 0.69, which demonstrated significant correlation for 59 items.

Validity of the Raven's Standard Progressive Matrices (SPM) test

Various research confirming the validity of Standard Progressive Matrices were identified by the investigator (SPM).

- According to Abdel-Khalek's (1988) research, among 452 Egyptian university students, SPM scores correlated 0.60 with the spatial orientation test of an Arabic version of Thurstone's Primary Mental Abilities battery (PMA Space), 46 with the PMA Inductive Reasoning test, and 31 with the PMA Verbal test.
- O'Leary, Rusch, and Guastello (1991) identified a correlation between SPM scores and Full-Scale IQ scores on the Wechsler Adult Intelligence Scale of between.74 and 84 among 288 students of various age groups.
- In a validation study of assessment centers, (cited in Ree & Carreta, 2002) Chan revealed that "scores on the Raven's Progressive Matrices related to participants' judgments of their 'initiative for any task."
- According to another group of research (Gonzalez, Thomas, & Vanyukov, 2005), there is a favourable correlation between Raven's SPM scores and performance on decision-making tasks.
- Watson & Glaser (2006) found that the updated SPM scores correlate 43 with thinking and reasoning in a subset of 129 individuals from the standardization sample of the Watson-Glaser Short Form Manual.
- According to the NCS Pearson (2007) report, "scores on the current SPM were 97 percent consistent with scores on the previous SPM in a standardization sample of 793 individuals."
- The SPM Manual (Raven, 2003) provides additional evidence that the SPM accurately predicts an individual's ability to attain and retain tasks requiring high levels of general mental ability.
- Al-Bokaia and Al-Subaihib, (2021) researched on 414 students aged fifteen to seventeen years old from a variety of secondary schools in Amman. The section on validity demonstrates the following findings: a) Items with adequate difficulty and

discrimination indexes; b) a significant correlation with the School and College Ability Test (SCAT); c) a significant difference between the highest and lowest 15% of scores when selected from the distribution's extremes; and Confirmatory factor analysis (CFA), which ensured the theoretical building for the items according to Spearman's theory of intelligence.

Marking scheme

The Raven's Standard Progressive Matrices (SPM) test had a total of 60 marks for all 60 questions, with a total of five sets (A-E) containing a total of 12 questions in each set. The students' scores (out of 60) were compared to the interpretation table, and then the percentile rank for each student in the control and experimental groups was assigned. After allocating the percentile rank, a total of 30 students from the control and experimental groups were chosen (for one-to-one group matching).

2. **Leadership Conceptual Knowledge Test:** This tool was used to collect data for objective 3. A Leadership conceptual knowledge test was constructed to test the students' conceptual knowledge of the seven leadership skills. The leadership skills taken included Time Management Skill, Goal Setting Skill, Communication Skill, Empathy Skill, Problem-solving Skill, Team Building Skill, and Conflict Management Skill. The leadership skill conceptual knowledge test had a total of 28 questions.

   The **Leadership conceptual knowledge test** consisted of two parts, part I and part II. The first part i.e., part I consisted of 12 questions, whereas the second part i.e., part II consisted of 16 questions. There were four main questions asked on each leadership skill. Each main question comprised of four internal questions. The first question included questions that needed to be answered in one sentence or one word. The second question comprised of questions that needed to be answered in two or three lines. The third question consisted of multiple-choice questions; however, the fourth question had true or false questions. The questions were asked on the conceptual knowledge taught in the classroom during the implementation of the programme. In the first part i.e., part I, question numbers 01-04 were on conceptual knowledge of communication skill. Question numbers 05-08 was on conceptual knowledge of conflict management skill and question numbers 09-12 were on conceptual knowledge of empathy skill.

   In the second part i.e., part II of the question paper, Questions 01-04 were on the conceptual knowledge of goal setting skills. Question numbers 05-08 were on the

conceptual knowledge of problem-solving skill, and question numbers 09-12 were on the conceptual knowledge of team-building skill, whereas question numbers13-16 were on the conceptual knowledge of time management skill. The post-test was conducted in two days. For the first part i.e., part I of the test, 40 minutes was allotted, whereas, for the second part i.e., part II of the test 01 hour was allotted. The total time allocated was, in total, 01 hour 40 minutes for the post-test.

Marking scheme

The leadership conceptual knowledge test had a total of 140 marks for all seven leadership skills. A maximum score of 20 was assigned for the four questions in each leadership skill. In the first question, there were 04 internal questions where the students needed to answer in one sentence or one word for which a score of 04 was assigned. In the second question, there were 04 internal questions where the students needed to answer in two or three lines, for which a score of 08 was assigned. In the third question, there were 04 multiple choice questions where the students need to select the correct alternative for which a score of 04 was assigned, and finally, in the fourth question, the students need to choose whether the statement is true or false for which a score of 04 was assigned.

Validity of the Leadership Conceptual Knowledge Test

The leadership conceptual knowledge test was shown to the five experts in Education and Social work from the Faculty of Education and Psychology (Department of Education & Educational Administration) and Faculty of Social Work to validate its content and appropriateness. The tool was considered appropriate by the experts. The experts critically examined the tool and gave comments and suggestions. The suggestions were incorporated in the tool. The list of experts who validated the tool leadership conceptual knowledge test is attached in Appendix III. The validated tool is attached in the Appendix IX.

Reliability of the Leadership Conceptual Knowledge Test

The Leadership Conceptual knowledge test was administered on 179 students of standard IX other than the experimental and control group. This Leadership Conceptual knowledge test was administered in January during the academic year 2017-18. Pearson Correlation test-retest was done, and Cronbach's alpha coefficient was used to find the tool's reliability. Cronbach's alpha coefficient was used to find out the reliability of the tool. This model allows determining internal consistency (Cronbach, 1951). It gives the reliability of the domain/content of the scale. The

Leadership conceptual knowledge test had a reliability coefficient of 0.663 when tested for test-retest reliability, and 0.679 was the Cronbach Alpha score. As a result, the tool's reliability was good, indicating that all items were consistent. The scale was found to be reliable and practical as a result. Cronbach's Alpha scores for each leadership skill were calculated separately, showing inter-item consistency for each leadership skill. The reliability scores for leadership skills, ranging from modest to major, are shown in the table below.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items (skills)
.663	.679	7

Item-Total Statistics

Name of Leadership Skill	Cronbach's Alpha if Item Deleted	Name of Leadership Skill	Cronbach's Alpha if Item Deleted
Time Management Skill	.612	Problem-solving Skill	.620
Goal Setting Skill	.625	Team- building Skill	.598
Communication Skill	.610	Conflict Management Skill	.669
Empathy Skill	.656		

FIGURE 3.2 Value of Cronbach Alpha in terms of Conceptual Knowledge of all Seven Leadership Skills

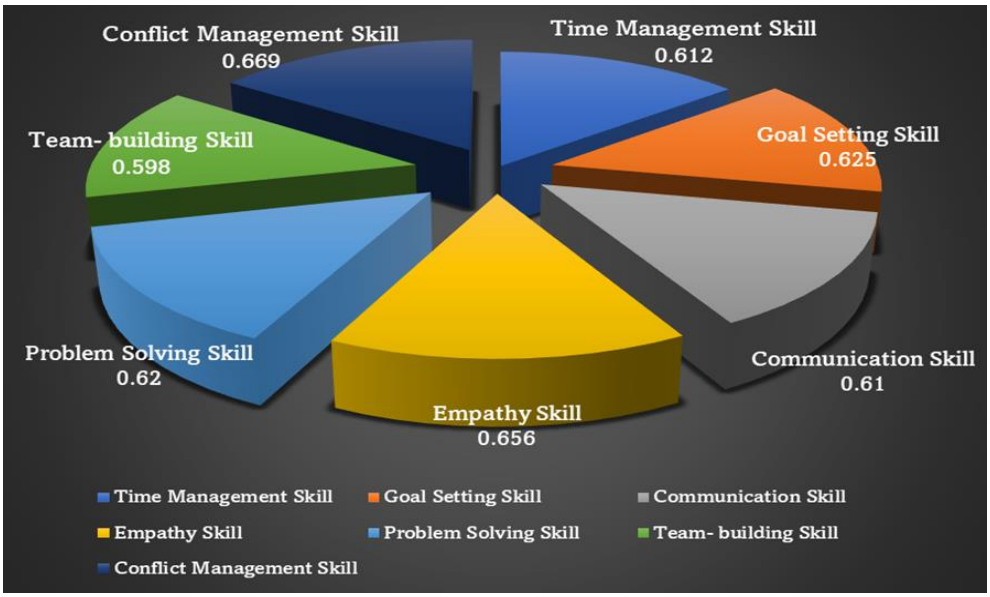


Table: 3.3 Question Numbers and Leadership Skills in Leadership Conceptual Knowledge Test

Part I

Question Number	Question Pattern	Number of Internal Questions	Marks Allotted	Leadership skill
Q-1	Answer the questions in one sentence or one word.	04	04	Communication skill
Q-2	Answer the following questions in two or three lines.	04	08	
Q-3	Choose the correct alternative.	04	04	
Q-4	State whether the following statements are true or false.	04	04	
Q-5	Answer the questions in one sentence or one word.	04	04	Conflict Management Skill
Q-6	Answer the following questions in two or three lines.	04	08	
Q-7	Choose the correct alternative.	04	04	
Q-8	State whether the following statements are true or false.	04	04	
Q-9	Answer the questions in one sentence or one word.	04	04	Empathy Skill
Q-10	Answer the following questions in two or three lines.	04	08	
Q-11	Choose the correct alternative.	04	04	
Q-12	State whether the following statements are true or false.	04	04	

Part II

Question Number	Question Pattern	Number of Internal Questions	Marks Allotted	Leadership skill
Q-1	Answer the questions in one sentence or one word.	04	04	Goal Setting Skill
Q-2	Answer the following questions in two or three lines	04	08	
Q-3	Choose the correct alternative.	04	04	
Q-4	State whether the following statements are true or false.	04	04	
Q-5	Answer the questions in one sentence or one word.	04	04	Problem-solving Skill
Q-6	Answer the following questions in two or three lines.	04	08	
Q-7	Choose the correct alternative.	04	04	
Q-8	State whether the following statements are true or false.	04	04	
Q-9	Answer the questions in one sentence or one word.	04	04	Team Building Skill
Q-10	Answer the following questions in two or three lines.	04	08	
Q-11	Choose the correct alternative.	04	04	
Q-12	State whether the following statements are true or false.	04	04	
Q-13	Answer the questions in one sentence or one word.	04	04	Time Management Skill
Q-14	Answer the following questions in two or three lines.	04	08	
Q-15	Choose the correct alternative.	04	04	
Q-16	State whether the following statements are true or false.	04	04	

3. **Intended Leadership Behavioural Scale:** This tool was used to collect data for objective 3. The investigator constructed an intended leadership behavioural scale to test students' intended leadership behaviour about the seven leadership skills taken in the study. It was a situational scale. This scale had items pertaining to the seven leadership skills: Time Management Skill, Goal Setting Skill, Communication Skill, Empathy Skill, Problem-solving Skill, Team Building Skill, and Conflict Management Skill. There were 56 items in the Intended Leadership Behavioural Scale. There were eight items for each leadership skill. These items focused on the different components and characteristics of the selected leadership skill. Each item had one situation pertaining to different leadership situations, and each situation had 5 given alternatives. The alternatives of each item ranged from strongly positive polarity, positive polarity, neutral polarity, negative polarity, and strongly negative polarity. The scores ranged from 1 to 5. 1 for the least appropriate alternative chosen and 5 for the most appropriate alternative chosen by the respondent. The situations were not in the order mentioned above; they were jumbled up to avoid pattern errors. The students had to tick mark (√) in one appropriate alternative out of the five alternatives. The intended leadership behavioural scale had a total of 56 questions. The scale comprised of two parts (Part I & Part II). The first part (Part I) comprised of 24 items, whereas the second part (Part II) comprised of 32 items. There were 08 situations on each leadership skill. In the first part (Part I), Item Numbers 01-08 were on the intended leadership behaviour of communication skill. Item Numbers09-16 was on the intended behaviour of conflict management skill, whereas Item Numbers 17-24 were on empathy skill.

   In the second part (Part II) of the scale, Item Number01-08 was on intended leadership behaviour of goal setting skill. Item numbers09-16 were on intended leadership behaviour of problem-solving skill. Item numbers17-24 were on the intended leadership behaviour of team-building skill, and item numbers 25-32 were on the intended leadership behaviour of time management. The post-test was conducted in two days. For the first part (Part I) of the Scale, 40 minutes were allotted, whereas, for the second part (Part II) Scale, 01 hour was allotted. The time allotted for completing this scale was, in total,01 hour 40 minutes for the post-test.

Marking Scheme

The total marks for the Intended Leadership Behavioural Scale were 280.The marking scheme was based on the scale product technique by giving scores to each response category in the Likert Fashion. The situations related to each leadership skill showing different polarities were given scores ranging from 1 -5. The strongly positive polarity response was given a score of 5, the positive polarity response was given a score of 4, the neutral polarity was given a score of 3, the negative polarity response was given a score of 2, and the strongly negative polarity response was given a score of 1.

Validity of the Intended Leadership Behavioural Scale

The intended leadership behavioural scale was shown to the five experts in Education and Social work from the Faculty of Education and Psychology i.e., Department of Education, Department of Educational Administration, and Department of Social Work, in The Maharaja Sayajirao University of Baroda, Vadodara, to validate its content and appropriateness. It was approved based on its quality and linguistic appropriateness. The experts offered advice on how to improve a few situations as well as the alternatives. The investigator dutifully applied the expert's recommendations. The intended leadership behavioural scale had 63 items, and the meaning interpretation scale had 56 items after validation. According to the Scale, the order of the situations was jumbled up. Appendix III contains a collection of experts that validated the tool's intended leadership behavioural scale. The validated intended leadership behavioural scale is attached in Appendix X.

Reliability of the Intended Leadership Behavioural Scale

The Intended Leadership Behavioural Scale was administered on 179 students of standard IX other than the experimental and control group. This Intended Leadership Behavioural scale was administered in January during the academic year 2017-18. Pearson Correlation test-retest was done, and Cronbach's alpha coefficient was used to find the reliability of the tool. The Intended Leadership Behavioural Scale had a reliability coefficient of 0.832 when tested for test-retest reliability, and 0.836 was the Cronbach Alpha score. As a result, the tool's reliability was good, indicating that all items were consistent. The scale was found to be reliable and practical as a result. Cronbach's Alpha scores for each leadership skill were calculated separately, showing inter-item consistency for each leadership skill. The reliability scores for leadership skills, ranging from modest to major, are shown in the table below.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items (Skills)
.832	.836	7

Item-Total Statistics

Name of Leadership Skill	Cronbach's Alpha if Item Deleted	Name of Leadership Skill	Cronbach's Alpha if Item Deleted
Communication Skill	.801	Problem-solving Skill	.815
Conflict Management Skill	.813	Team- building Skill	.804
Empathy Skill	.807	Time Management Skill	.794
Goal Setting Skill	.827		

FIGURE 3.3 Value of Cronbach Alpha in terms of Intended Leadership Behaviour of all Seven Leadership Skills

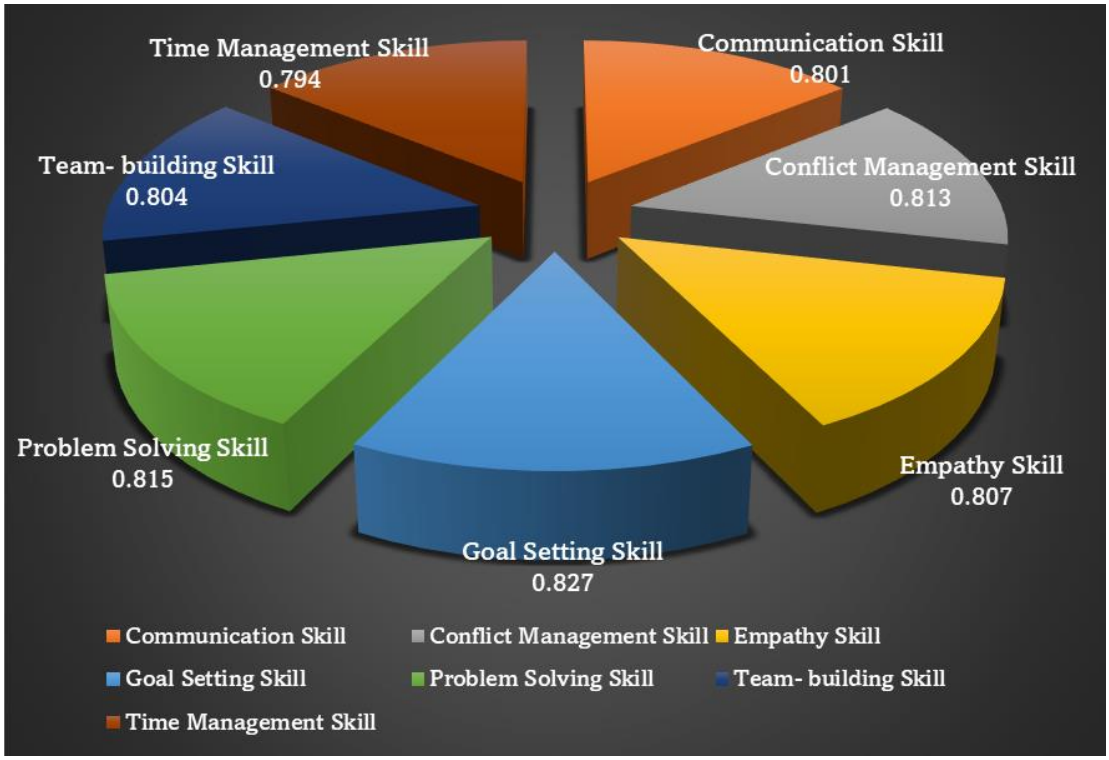


TABLE 3.4: List of Leadership Skills and their Respective Item Numbers in Intended Leadership Behavioural Scale

PART-I

Sr. No.	Item Number	Number of Items allotted	Leadership skill
1	01-08	08	Communication skill
2	09-16	08	Conflict Management Skill
3	17-24	08	Empathy Skill

PART-II

Sr. No.	Item Number	Number of Items allotted	Leadership skill
1	01-08	08	Goal Setting Skill
2	09-16	08	Problem-solving Skill
3	17-24	08	Team Building Skill
4	25-32	08	Time Management Skill

4. **Observation:** This technique was used to collect data for objective 3. The investigator chose this method to observe all the students 'behaviours related to different leadership skills. The observation would focus on the students' actual behaviour during school hours, such as during lunch, free classes, and other activities. In a diary, the investigator recorded their behaviours and any observable event relevant to leadership skills.

5. **Reaction Scale:** This tool was used to collect data for objective 4. The investigator prepared a 5-point reaction scale for the students of the experimental group. The reaction scale aimed to take the reaction of the students towards the Student Leadership Programme (SLP). It was prepared to know the reaction of students towards the Student Leadership Programme (SLP). The reaction scale had 20 items. These items were related to the components like the usefulness of the activities, effectiveness of the activities, relevance of the activities, practicability of the activities, content included in the session, the methodology used during the sessions, the relevance of real-life situations, examples used during the sessions, class

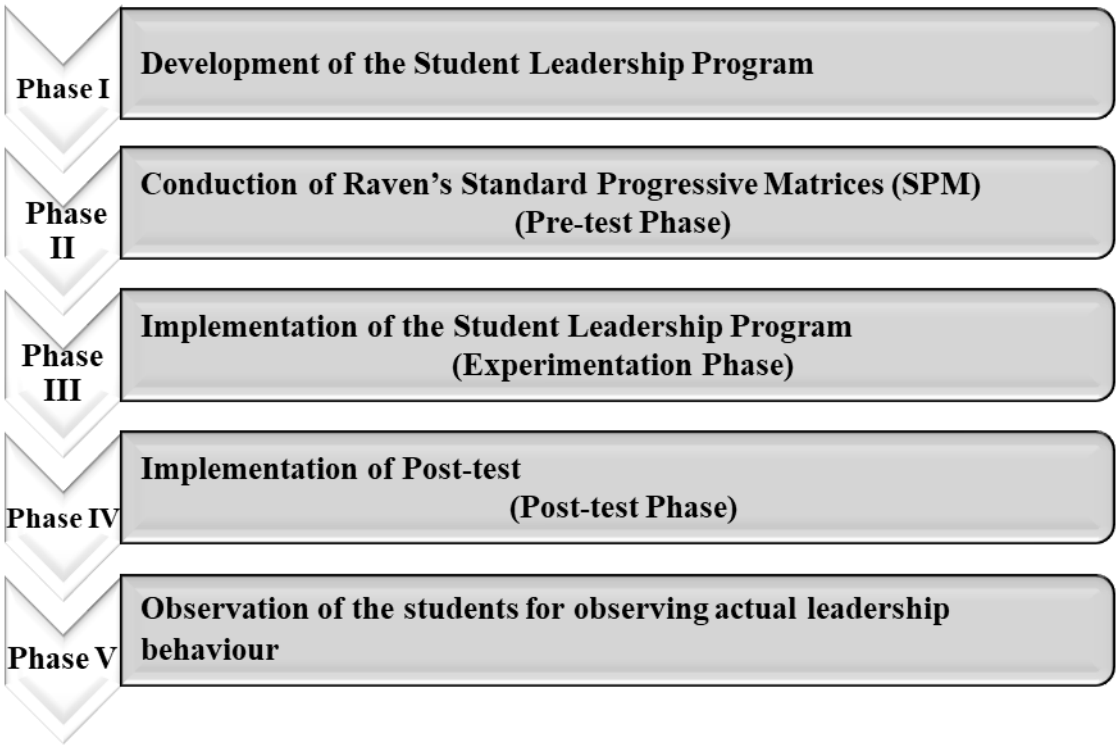
participation, understanding of leadership skills, skill practice, explanation of various sub-topics in different sessions, classroom management, time management, learning experiences, and overall conduction of Student Leadership Programme (SLP).

Marking Scheme

The scale consisted of five alternatives for each sentence. Strongly agree, agree, undecided, disagree, and strongly disagree were the five options. Strongly agree (5), agree (4), undecided (3), disagree (2), and strongly disagree (2) were the results (1). For each item, the students were required to tick (√) one alternative.

3.2.2.5 Procedure for Data Collection:

Data collection was done in five different phases. The data was collected using above mentioned four tools during the academic session from June 2017 to March 2018. The investigator personally collected the data during this academic session.



Phase I: Development of the Student Leadership Programme (SLP)

The Student Leadership Programme (SLP) was developed according to the various steps of the programme development. The investigator selected the topics for teaching each skill. The activities pertaining to that skill were prepared by the student. While

doing this, the investigator had taken in consideration the mental level of the standard IX students.

Phase II: Conduction of Raven's Standard Progressive Matrices (SPM) test (Pre-test Phase)

Phase II was conducted in June 2017, at the beginning of the academic session. The Raven's Standard Progressive Matrices (SPM) test is a standardized tool. The prior permission was taken from the principals of the two schools selected to administer the intelligence test. In this phase, Raven's Standard Progressive Matrices (SPM) test were administered on both the control and the experimental group in the starting week of the new academic session. The time allotted for the test was 01 hour as prescribed in the standardized tool. The booklet was given to the students and the OMR sheet (to mark their answers. All the control and experimental group students had completed the Raven's Standard Progressive Matrices (SPM) test in the stipulated time.

Phase III: Implementation of the Student Leadership Programme (SLP) (Experimentation Phase)

With the help of different sessions for each skill, different sub-topics of each skill and various activities pertaining to each session for skill development were discussed by the investigator. There was a total of 202 working days during the taken academic year. There were two terms during the academic session following the annual system. Three periods per week were allotted to the Student Leadership Programme (SLP); each period was of 40 minutes. There was a total of thirteen sessions for each skill.

In some cases, two periods of 40 minutes were also taken together, especially for role play and skit. Different methodologies and approaches were used for practising the skills by giving stress to the discussion method and Inductor-Deductive approach for understanding the concept. The sessions included the specific topics that were important to understand the theoretical part of that skill. For each concept, an activity was planned, which was joyful and fun. The investigator took the sessions, and various activities were conducted in the classroom, auditorium, and even on the field.

During phase III, the experiment was conducted. The experimental group consisted of students who were exposed to the theoretical knowledge and various activities related to the Time Management Skill, Goal Setting Skill, Communication Skill, Problem-solving Skill, Empathy Skill, Team Building Skill, and Conflict Management Skill.

All these skills were a part of the leadership programme developed by the investigator. Discussion, and demonstration methods were used by the investigator by giving different examples from personal and professional experiences, social backgrounds, recent happenings, and virtual conditions to create an interactive session with the students on skill development.

The investigator helped the students to understand the importance of skill development through discussion methods. The conceptual knowledge of seven leadership skills was used in discussion to help the students understand the skill and the importance of these skills in professional and personal life experiences. Various case studies, stories, and examples were discussed focusing on how the taken skills could make the students more proficient and could be used in their daily life. The session was made interactive by asking their views, reflections on their situations, The probing technique was used to get their responses'. Initially, it was observed that a few students were not able to express themselves, and so they were encouraged to write on piece of paper and read it out. After teamwork or group discussion, the students were made to sit quietly for two minutes to get their rhythm back. They were allowed to express their thoughts naturally and spontaneously and care was taken that others do not make fun of the student. Students were assigned easy to complex tasks to complete during the programme, which helped them comprehend the indicated talent more holistically. Activities such as documentary films, case studies, discussions, assignments, scheduled sheets, checklists, and different games sessions were implemented to make the students understand the conceptual and practical dimensions/inputs of leadership skill development. During the academic session, the control group was not exposed to any such leadership programme, and their teaching-learning process and other activities was carried out without any planned intervention. The students were not forced to attend these classes during their examination time so as not to affect the performance of their school subjects. Other school activities were conducted as usual how-ever, they were given added exposure through this programme.

Phase IV: Implementation of Post-test (Post-test Phase)

Phase IV was conducted in April 2018. The post-tests were administered to both the control and the experimental group.

The Leadership Conceptual Knowledge Test was administered to both the control and experimental group at the end of the second semester (April) of the academic year 2017-18 to test the conceptual knowledge of seven leadership skills. The time allotted for the test was 01 hour and 30 minutes. The test was conducted in two days. On the first day, 4 skills were taken whereas, on the second day, the remaining 3 skills were taken. The Intended Leadership Skill Behavioural Scale was administered to both the control and experimental groups at the end of the second semester (April) of the academic year 2017-18 to test the intended leadership behaviour towards seven leadership skills. The time allotted for the test was 01 hour and 30 minutes. The test was conducted in two days. On the first day, four skills were tested, whereas the remaining three skills were taken on the second day. All students from both the experimental and control group took a total of 03 hours to finish the post-tests.

The reaction scale was administered to the experimental group to test students' reactions towards the effectiveness of the Student Leadership Programme (SLP). The reaction scale was administered to the experimental group on the second day of the third week of April 2018. The time allotted for this scale was 30 minutes, and the students finished the test within the stipulated time. The data collected from the post-tests included the leadership skill conceptual knowledge test, intended leadership skill behaviour scale, and reaction scale, which were collected.

Phase V: Observation of the students for observing actual leadership behaviour

The investigator did the observation of the students of the experimental group. These observations were during sessions and the school hours and were noted down in the diary. The post-test data, which included the intended leadership behavioural scale, leadership conceptual knowledge test, and reaction scale, were collected.

3.2.2.6 Procedure of Data Analysis:

The data gathered during the various phases was examined. The data was objectively analysed, and the results are as follows:

Data Analysis related to objective 1: "To develop the Student Leadership Programme (SLP) for development of leadership skills namely Time Management Skill, Goal Setting Skill, Communication Skill, Empathy Skill, Problem-solving Skill, Team Building Skill, and Conflict Management Skill."

There were no statistics used for this objective.

Data Analysis related to objective 2: "To implement the Student Leadership Programme (SLP) for development of leadership skills namely Time Management Skill, Goal Setting Skill, Communication Skill, Empathy Skill, Problem-solving Skill, Team Building Skill, and Conflict Management Skill."

There were no statistics used for this objective.

Data Analysis related to objective 3: "To study the effectiveness of the Student Leadership Programme (SLP) for development of leadership skills namely Time Management Skill, Goal Setting Skill, Communication Skill, Empathy Skill, Problem-solving Skill, Team Building Skill, and Conflict Management Skill."

Conceptual knowledge of leadership skills intended leadership behaviour and actual leadership skills demonstrated, and all leadership skills as a whole were taken separately for analysis. The conceptual knowledge of each skill and all skills as a whole and intended leadership behaviour towards each skill and all skills as a whole were analyzed quantitatively using the Mann-Whitney U-Test. The data related to actual leadership behaviour was analyzed qualitatively

Data Analysis related to objective 4: "To study the reaction of students towards Student Leadership Programme (SLP)." A reaction scale was used for collecting the data. Frequency, Intensity Index, and Average Intensity Index were calculated.

The following chapter discusses data analysis, which has been conducted objective-wise.

VISUAL REPRESENTATION