

CHAPTER – III

METHODOLOGY

3.0.0 Introduction :

This chapter presents the plans and procedures adopted by the investigator in carrying out the present study aiming at the achievement of the specific objectives. The objectives have already been specified in the first chapter. The design of the study and method employed in conducting the present study have been made clear in this chapter.

3.1.0 The Design of the Present Study :

The present study was an intervention study following a pre-test – post-test single group design. It aimed at finding out the impact of the input given to teachers during the orientation programme on transformational mentoring strategy on school effectiveness.

The scope of the study is exploratory and the investigator makes no claim for its generalizability. However, the investigator is tempted to add that as human behaviour cannot be statistically predicted, yet the same investigation given to another sample of teachers many have similar results.

3.2.0 Sample :

The study was carried out in Ursuline English Medium School, Muri, Ranchi. The selection of the school was based on the willingness of the school principal and teachers to adopt the approach of mentoring. The total number of teachers of the school (22) and students of classes VI, VII, VIII

and IX (207) were included in the study during the first phase of data collection. Since the second phase of data collection was done after six months when new academic year was started after the school annual examination, 28 students either failed, left the school or left the questionnaire incomplete. Therefore, 179 students participated in the study. Among 22 teachers, 3 did not participate in the intervention programme as they were on sick leave and 2 were absent from the school. Therefore, in all 17 teachers were included in the study.

3.3.0 Intervention :

As specified under objectives in chapter 1, an intervention programme was prepared and implemented on teachers with a view to enhance school effectiveness. It consisted of aspects such as team building (working together) formulation of vision and mission statements, awareness of personality dimensions and interpersonal communication using TA as a tool and mentoring skills. The intervention period was for 6 days for 5 hours per day – following upto 30 hours of orientation. The whole programme was based on experiential learning model.

3.4.0 Instruments used for Data Collection :

Aiming at the achievement of the objectives of the present study as mentioned above, the investigator used the following instruments with teachers and students. The necessary particulars regarding each instrument are given below :

A. *Instruments used with Teachers :*

1. *Ego State Scale :*

This tool was developed by Pearl Drego who is a clinical teaching and supervising transactional analyst. It has been used in the present study to measure teachers' personality dimensions.

The investigator made some modifications in the scale so as to make it more appropriate for use with teachers and added 10 more statements to add another dimension of personality which was not separately dealt with in the original tool. Adapted Child dimension of personality was split into two sub-dimensions namely Rebellious Child and Compliant Child. Therefore, the present instrument has 77 statements, 11 statements for each of the seven personality dimensions. These dimensions are known as ego states namely Nurturing Parent, Controlling Parent, Photographic Adult, Natural Child, Rebellious Child and Compliant Child. The instrument is rated on a 7-points scale from "Never True" (0) to "Always True" (6). After making each item on the questionnaire, the scores of each dimension are transferred to the score sheet and totaled for each dimension and their percentages were calculated to proceed with data analysis. [Refer in appendix 1(a)].

2. *Style Profile of Interaction Role in Organization – SPIRO-M :*

This instrument was developed by Udai Pareek and helps to learn how individuals interact with one another. It has been used in the present study to measure the style of interaction among members of the staff.

SPIRO-M contains 36 statements for self-rating on a 5-points scale. It is a self-administered tool which has been modified by the investigator to use it for the present study. There is a separate answer sheet used for

scoring. The responses are added for the three items in each row and write the total on the blank space at the end of the row. Operating Effectiveness Quotient (OEQ) indicates the percentages of the potential that is being used effectively in a particular style. The odd rows represent the OK styles namely Supportive, Normative, Confronting and Resilient Style and the even rows represent Not OK styles that are Rescuing, Prescriptive, Task-obsessive, Bohemian, Aggressive and Sulking. They are paired in the OK and Not OK styles (1-8, 3-10, 5-12, 11-6, 9-4 and 7-2) as shown on scoring sheet.

To find the operating Effectiveness Quotient (OEQ) the OK score in the row and Not OK score in the column of the OEQ Matrix is located. [Refer in appendix 1(b)]. The number at the intersection of the two is the OEQ score.

3. OCTAPACE Profile :

The OCTAPACE Profile is a 40-item instrument, which gives the profiles of organization's ethos in eight values, namely:

- O – Openness : Spontaneous expression of feelings and thoughts, and sharing of these without defensiveness.
- C – Confrontation : Facing and not shying away from problem, deeper analysis of inter-personal problems, taking up challenges.
- T – Trust : Maintaining confidentiality shared by the other person and not misusing it, a sense of assurance that others will help when needed and will honour mutual obligations and commitments.

- A – Authenticity : Congruence between what one feels, says and does, owning one’s actions and mistakes, unreserved sharing of feelings.
- P – Proaction : Initiative, pre-planning and preventive action, calculating pay-offs before taking action.
- A – Autonomy : Using and giving freedom to plan and act in one’s own sphere respecting and encouraging individual and role autonomy.
- C – Collaboration : Giving help to and asking from others, team spirit, working together (individual and group) to solve problems.
- E – Experimenting : Using and encouraging innovative approaches to solve problems, using feedback for improving, taking a fresh look at things, encouraging creativity.

The investigator has made some modifications on the tool by bringing minor changes in words in order to use it for the present study.

The instrument contains two parts. In part one (items 1 to 24) three statements of each of the eight values are stated, and their responses are rated on a 4-point scale. Part 2 contains 16 items on beliefs, two each for eight values and here again the responses are rated on 4-point scale. These items widely help to identify how far the beliefs are shared by the teachers of the intervention school.

For scoring the items marked with asterisk are first reversed for their values that is 4 becomes 1, 3 becomes 2, 2 becomes 3 and 1 becomes 4. The rows then are added. The eight rows represent the eight aspects (OCTAPACE) in the same order.

Leadership Behaviour Description Questionnaire – LBDQ :

LBDQ was constructed by Hamphill and later on it was adapted by Halpin and Winner (1952) which has been used in the present study. It consists of 30 items. There are two dimensions : “Initiating” structure and “Consideration”. There are 15 items for each dimension, each being scored on a scale ranking from ‘Always’ = 4 to ‘Never’ = 0. The theoretical range of the scores on each variable is from 0 to 60. Leaders securing high scores on both dimensions are considered to be the most effective and the effective leadership enhances the school effectiveness. The principal’s leadership behaviour in this study is derived from teachers’ perception of their principal as measured by LBDQ. The behaviour pattern of a leader can be one of the following:

1. High Initiating Structure and High Consideration (HH)
2. Low Initiating Structure and High Consideration (LH)
3. Low Initiating Structure and Low Consideration (LL)
4. High Initiating Structure and Low Consideration (HL)

Figure : 3.1 depicts the LBDQ behaviour pattern on a quadrant

		Consideration			
		Low		High	
(High)	Initiating Structure	HL (4)		HH (1)	(High)
(Low)		LL (3)		LH (2)	(Low)
		Consideration			
		Low		High	

1. The leaders plotted in quadrant 1 are highly effective.
2. The leaders in quadrant 2 are not very effective. They may ooze with the milk of human kindness but their behaviour is accompanied by minimum of initiating structure.
3. The leaders in quadrant 3 are the most ineffective. Their behaviour is generally accompanied by group chaos. Neither the goal achievement, nor the group maintenance is possible in the organization led by them.
4. The leaders in quadrant 4 always aim at getting the job done by hook or crook and they forget that they are dealing with human beings and not with machines. Subordinates dislike them behind their back. So these leaders are also not effective.

B. Instruments used on students :

1. Junior Index of Motivation Scale – JIM :

This tool is a questionnaire for assessing students' motivation towards school. It was developed by Jack Frymier (1970). This tool has 80 items but among 80 items only 50 which are marked with asterisk are to be scored. The statements are indicated by either agreement or disagreement according to the scale Totally Agree = +2, Generally Agree = +1, Generally Disagree = -1 and Totally Disagree = -2.

Each student's scores for these 50 items are added algebraically. Then sign of the total value is reversed, (e.g. If the total is +30, it is changed into -30). After this, the row score value is added to +100 algebraically. This score is the student's converted motivation score. High scores indicate higher motivational level and low scores indicate low motivational level.

Frymier's studies tend to substantiate the notion that high motivated and low motivated youngsters are basically different. They think differently, feel differently and behave differently.

2. Self-Esteem Scale :

This tool was developed by Rosenberg in 1965 to measure the self acceptance aspect of self esteem in high school students. It is a short scale of ten statements, compressed into six scales. The answers of the items are one on four point scale, that is Strongly Agree, Agree, Disagree and Strongly Disagree. But Agreement and Disagreement are the only two scales on which the scoring is done, following Guttman scaling. The

maximum score is 6 representing high self esteem and zero is the lowest score, representing low self esteem. This tool has been used in the present study to measure the self acceptance aspect of self esteem of students in the sample.

C. Students' Performance in School Examinations :

In the ultimate analysis, the academic performance of students is an important criterion to determine the school effectiveness. Therefore, the percentages of marks obtained in the examinations before and after intervention were taken to determine the impact of the programme on students.

D. *Participant Observation* :

Participant observation is another important tool for data collection in the present investigation. It helped the investigator to acquire more authentic information due to close and continuous interaction with the physical entity and human elements of the school so as to understand the need for mentoring. Continuous observation in a participative manner was done for one month before the intervention, another one month after intervention. The investigator came to this school time to time so as to monitor them in mentoring practice according to their action plan designed by them at the end of the intervention programme. The school assembly, staff meeting, classroom teaching learning, co-curricular activities. Hostel activities as well as the working conditions of the principal and teachers were closely observed.

E. *Unstructured Interviews :*

This technique was used before and after the intervention programme on teachers and students. Before the intervention, it helped the investigator to investigate the internal realities of the school and classrooms. The unstructured interviews were used on:

- a) **Teachers :** To ascertain the effect of the intervention if there is any in the area of :
 - The principal's leadership
 - School environment
 - Personal benefits from the intervention programme
- b) **Students:** To identify their attitude towards their teachers.
- c) **Parents:** The representative sample of 27 (15%) parents of students were randomly interviewed to know if they noticed any difference in their children either in their personal behaviour or academic performance.

Besides, these teachers were asked to maintain a journal to write their personal learning about students from mentoring process as well as the progress seen in those students they have been mentoring.

F. *Semi-Structured Interview Schedule On :*

Teachers : To identify the personal and professional as well as organizational benefits noticed by them from co-mentoring.

Students : To identify personal benefits from teacher–student mentoring relationship and peer mentoring.

3.5.0 Data Collection and its Procedure :

The data collection was carried out in two phases and the same tools and techniques were used in pre and post-intervention programme. The gap between the 2 phases of data collection was 6 months.

Prior to the intervention programme for teachers the investigator participated in all the activities of the school and had personal observation during and outside the school hours, interacting and making rapport with them for one month. During this period, the specific points that were observed by the investigator were relationship between teacher and taught, teachers communication style, the classroom environment created by the teacher, his/her way of motivating and understanding attitude, giving importance to the individual student and not the content alone. Besides this the unstructured interviews of teachers and students were undertaken to identify the needs and concerns of the school, their attitude towards the school and the activities in the school. Prior to the conduct of intervention programme for teachers the investigator employed pre-testing of teachers and students separately. Thereafter the intervention was developed keeping in mind the observed data (working in collaboration, having a common purpose, interaction styles and interpersonal relationship and classroom environment, problems faced by students both cognitive and affective domain). The themes of intervention were on developing different skills like working together, formulating vision and mission statements, developing awareness of their communication style, interaction and motivating behaviours using TA as a tool and mentoring skills.

