CHAPTER III

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(A) The Problem

3.1 Introduction

In the previous chapter an account was given regarding concept, theoretical background and previous studies of the research work done in the areas of self-concept, academic motivation and academic performance of the pupils. It is on the basis of the previous studies that the investigator decided to determine the role of a few psycho - social variables in the academic performance of the pupils of Shillong.

The present chapter deals with the plan and procedure covering the theme of the present study. Accordingly, the aim of the chapter is to define the problem, to describe the scope and its limitations, and to lay down the procedure of the study.

3.2 The Statement of the Problem

The precise statement of the problem is :

A STUDY OF PERCEPTUAL CONSONANCE / DISSONANCE AND PUPILS' MOTIVATION TOWARDS SCHOOL IN RELATION TO PERFORMANCE

3.3 Definition of the Terms

The following are the definitions of the terms of the statement of the problem.

3.3.1 Study

The word 'study' has different cannotations. They are as given below :

According to the Dictionary of Education, the word 'study' means :

i. Application of mind to a problem or subject, and

ii. An investigation of a particular subject.

(Good, 1945, p.307).

According to American Everyday Dictionary the word 'study' means :

i. Application of mind to the acquisition of knowledge

ii. deep thought, and

iii. to examine or investigate carefully.

(Stien, 1953, p.467)

According to Webster New Illustrated Dictionary, it means :

i. To investigate closely, and

ii. to scrutinize or earnestly contemplate.

(Teath, 1960, p.313)

The investigator has tried to synthesise most of the definitions cited to acquire the knowledge of self-concept, perception, motivation towards school and pupils' performance.

3.3.2 Self-concept

The 'self-concept' is what an individual believes about himself, the 'self report' is what an individual says he is. While what an individual says about himself will be affected by his self-concept; How closely self-report approximates the subject's 'real' self-concept will depend, according to Combs et.al., (1963); upon the clarity of the individual's awareness, the availability of adequate symbols of expression, willingness to co-operate, social desirability, the individual's feeling of personal adequacy and his feeling of freedom from threat. Ross Stagner (1961) explained that the 'self-concept' has variously been referred to as the 'self' the 'ego' the 'self-concept' and the 'self-image'. The term 'self' is very much like what the existentialists have called 'being'. Thus, the self is said to be a unique personality with traits like sociability, optimism, depression, construction, need achievement or any other trait measurable by objective or projective tests.

Inspite of this belief, however, psychologists accord a clearly definable place to the idea of the 'self' as a factor in regulating human behaviour. According to this view, the self comes into the picture not only with regard to motivational activity, but also as a regulating factor in perceiving, learning, remembering, judging and planning.

Since the early years of development of psychology as an entity and a science different from philosophy, the self has been explained both in isolation and with relation to other objects, persons and society.

The measure of self-concept is expected to provide insight into an individual's self-concept or self-image in terms of efficacy and thereby of his personal view of his own abilities and weaknesses.

3.3.3 Perception

Perception is the process by which an organism maintains contact with the environment, with events or objects.

One of the most important problem in understanding the process is to learn how the information about the environment is registered and responded to. Traditional perception is distinguished from the mental process of thinking, and memory. Immediate stimulation is required in perception. In this process thinking power plays an important role.

'Perceptual' is an adjective derived from the noun 'perception'. In the present study the perception of the pupils is concerned with regard to self, school, class and teacher. Thinking seems to involve transformation of information and memory seems to involve retrieval of information.

3.3.4 (a) Consonance

The dictionary defines 'consonance' as harmony or agreement among any components, sympathetic vibration, resonance, e.g. when pupils are satisfied with the work programme in school and get the maximum satisfaction / outcome, they agree and are satisfied or have a positive attitude towards their performance.

Fritz Heider (1946, 1958) and Theodore Newcomb (1953,1961) have contributed to the theory of consonance referring to the word as a state of consistency or balance of behaviour. Heider designates the balance and imbalance which are the states of mind reflected in the behaviour.

Thus, balance or consonance depicts harmony and positivity towards an object, an idea or a task, while, dissonance states are characterised by disharmony, dislike and negative attitude towards an object, ideas or a task.

Hamburg and Newcomb (1966) have used the word consonance to imply balance and imbalance as pleasant and un-pleasant states of mind.

(b) <u>Dissonance</u> :

A mingling of discordant sounds, lack of agreement, discord e.g. when pupils disagree with any task or idea, then there is naturally bound to be dissonance.

Festinger (1962, 1967) mentioned that, dissonance results when we take action which is imcompatible with the beliefs we hold about ourselves.

The theories of both consonance and dissonance rest on the assumption that an individual's behaviour is to some extent motivated by a drive or need to maintain consistency, consonance or symmetry among cognitive elements of perceptions. An individual tries to maintain a degree of consistency in his ideas, beliefs, attitudes and behaviour. Thus, the application of these theories suggests that positive and negative ideas, may be studied in terms of the relationship of perception, attitudes and behaviour that results from these states or motives. The ideas of both these theories compliment each other to a large degree.

3.3.5 Motivation

According to the Dictionary of Education the word 'motivation' means :

i. The process of arousing, sustaining and regulating activity, a concept limited to some aspect such as the energetics of behaviour or purposive regulation.

ii. The practical art of applying incentives and arousing interest for the purpose of bringing the pupil to perform in a desired way; the word usually designates the art of choosing study materials of such a sort and presenting them in such a way that they appeal to the pupil's interests and cause him to take up the work at hand willingly and to complete it with sustained enthusiasm; it also designates the use of various devices such as offering of rewards or an appeal to the desire to excel.

(Good, 1973, p.375)

Motivation is an activity by one person designed to stimulate or arouse a state within a second person or group of persons that under appropriate circumstances initiates or regulates activity in relation to goals.

3.3.6 Academic Motivation

To stimulate in children the desire to learn in an academic setting is described as academic motivation.

In Frymier's own words (1970): 'Motivation towards school is assumed to represent an internalized state of being which manifests itself outwardly in particular ways of behaviour'.

The term motivation refers to an inference from observation of organisms behaving in situations. Motivation functions in much the same way as ability. While abilities summarize observations in such a fashion as to denote what an organism wants to do. Motivation is a construct inferred from behavioural observations. Motivation or the lack of it, is often used as commonly as ability, or the lack of it, as an explanation for why pupils do or do not perform in an academic situation.

Education is not schooling; and though educators are concerned with learning, schooling does not necessarily result in 'Education'. This has been emphasized because pupils who are 'motivated to learn in school' may actually be motivated to get good marks,' to do as they are told', or one of a hundred things that may or may not be related to 'education, but which they have 'learned in school'.

According to Frymier (1970) the basic purpose of schools is to help pupils to learn, to value learning, to want to learn, to value knowledge, to acquire knowledge, to understand knowledge and to behave according to knowledge. Motivation preserves valuing and values are learned behaviours; thus motivation, at least in part, is learned and it can be taught. If the values are the part of total motivation which gives direction to human behaviour, then what causes the organism to strive ?

Motivation manifests itself in many ways. The most apparent is in young people's attitude toward school. Several pupils have strong positive feelings about school, they like their teachers and they like to learn. Attracted towards ideas they seek new experiences and enjoy the chance to work hard and to improve; others, however, do not show these feelings. Some hate school with a passion, dislike teachers and do not like books; they are interested in learning - but not on what the teacher teaches; they feel compelled to go to school - the degree, of course, varies.

3.3.7 Academic and Non-academic Performance

Academic performance is the degree of attainment of pupils after a period of learning exercise and is measured by examinations in different subjects.

The term 'academic performance' is a very broad term which indicates generally the learning outcomes of pupils. These learning outcomes are the changes observed in the behaviour pattern of pupils as a result of learning, that take place in schools through the teaching of school subjects. It also refers to the level of achievement of pupils in the cognitive areas of various school subjects.

According to Webster's Third New International Dictionary (1961), it means :

'the capacity to achieve the desired results'.

In the Oxford English Dictionary (1961) it has two meanings :

i. The accomplishment, execution, carrying out, working out of anything ordered or undertaken, the doing of any action or work.

ii. Something performed or done; an action in emphatic sense, a noble deed and achievement.

Webster's Dictionary (1969) explains: the ability to perform; efficiency, the manner in which a mechanic performs.

Lastly, Prayag Mehta (1969) explains; the word performance includes both the academic and co-curricular performance of an individual.

The present investigation has taken academic performance in two ways; i.e.

i. Marks obtained by the pupils in the last annual examination; (1982) and,

ii. Aggregate grades rated by the class teacher on a five point scale.

Non-academic achievement is again considered to be the pupil's participation in several co-curricular activities in school.

On the basis of the individual's participation the teachers rated the pupil's participation on a five point scale.

3.4 Scope

'Self', is 'I'. 'Self-concept' is 'within' and 'self-perception' is 'outward'. How does one look at the outward environment ? This is dependent upon the perception of each individual. The pupils at the secondary school examination stage have developed their own system of 'likes' and 'dislikes'; positive and negative images and ideas of the 'self' and 'others'. These can be seen, observed, tested and measured through oral discussions, interviews and validated tools. The investigator is keenly interested in this study because in this area of academic motivation a number of researches have been done - measuring the level of motivation related to finding out the relationship with the other variables, like, classroom climate, academic performance, group dynamics etc., but no effort has been undertaken to perceive academic motivation in relation with the pupil's self-concept, performance and pupils' 'self' as perceived by the teachers. Therefore, in this study the investigator's major aim is 'to study the pupils' perceptual consonance/dissonance and pupils motivation towards school in relation to their performance :

3.5 Limitations

The present study has been designed as a survey-cum-case study approach to measure the level of self-concept and to investigate the relationship of psychic variables with academic performance of the pupils. The study further attempts an indepth study of high motivation/high performance, Low motivation / high performance; high motivation / low performance and low motivation / low performance, considering the raw scores of 200 pupils obtained from the data sheets. Therefore, the present study is explanatory in general and a case study in particular.

3.6 Objectives

The proposed objectives of the study are mentioned below :

1. To study the perceptual world of pupils as perceived by the teachers.
2. To study the inter-relationship of the components of the major variables, such as: Self-concept, teacher's perception of pupils, academic motivation, 'Who am I', actual performance of the pupil and academic and non-academic performance of the pupils as perceived by the teacher.
3. To know the pupil's academic and non-academic performance as perceived by the teacher.
4. To find out the pupils' academic motivation towards school i.e., high and low, positive and negative.

5. To study the pupils' academic motivation towards school in relation to their performance.

6. To find out the pupils' perceptual consonance and dissonance with regard to their own self and teachers' perception of the pupils.

7. To know the difference in pupils' perceptual consonance/ dissonance according to the schools.

3.7 Hypotheses

The following are the proposed hypotheses for the study :

1. The pupils are academically motivated towards school to learn well.

2. The pupils' academic motivation towards school will differ according to their own 'self-concept'.

3. The pupils' perceptual consonance/dissonance will differ with regard to their academic performance.

4. The pupils perceptual world and their academic motivation will be related with academic performance.

(B) PROCEDURE

3.8 Introduction

Every research undertaking depends on research tools of one kind or another, for the purpose of data collection. Carefully designed and systematically developed tools of research will yield information which is correct and reliable. Lack of care in selection and standardization of instruments of instruments of measurement will lead to information which is wrong and misleading. The tools used in this investigation for collecting data comprise those developed in foreign countries as well as those standardized in India.

The following procedure has been adopted in the present study. The entire procedure has been divided into the following steps :

3.9 Selection and Development of the Tools

3.9.1 Phase I :

(a) First try-out of the Tool : The tools for the test being ready, it became necessary to find out how much time it would take to administer it. Time is an important factor in administering a test, for no test can yield truthful results if it involves fatigue. One of the most practical ways of finding a suitable time was to administer the test to a small group of pupils and to find out how much time they took to respond to the test. No time limit was imposed on thes subjects. The investigator found that the distribution of time ranged from 40 - 50 minutes which was just enough to administer it. The second important step that the investigator bore in mind was to check the clarity and content of the questionnaire and also to see whether the respondents were able to provide the information which was required in the questionnaire.

The following table shows the details of the sample for administering of the tool.

Table 1 : Sample for Administering the Tool for the Pre-try out

Sr.No.	School	Boys	Girls	Place	Total No. of Pupils
1.	Navrachana High School	5	-	Baroda	5
2.	Basil High School	4	1	Baroda	5
3.	Sacred Heart Girls' High School	-	15	Shillong	15
	Total	9	16		25

The main objective in administering the tool to the pupils of Baroda and Shillong respectively was to find out how much the geographical aspect of the region would affect the perception of the pupils.

Finally, in Phase I, omissions and ambiguities or inadequacies in framing of the items were discovered. Similarly, some modifications were made according to the difficulty in words, sentences and ambiguities.

(b) Conversion of the Tool : In order to find out the difference of pupils 'real' self and the pupil's self perceived by others, the investigator converted the tool of pupils' self-concept as a Learner Scale (SCAL) into teacher's perception of the pupils in the following way :

Pupils' Self-Concept as Learner Scale	Teacher's Perception of Pupils
1. I am usually eager to go to the class	1. He/She is usually eager to go to the class
2. I never ask teachers to explain the same thing again	2. He/She never asks the teachers to explain the same thing again

3.9.2 Phase II :

(a) Administration of the Tools : Based on the results of the first phase, the second phase was carried out for the actual study. The investigator administered the tests to the main sample of pupils (Shillong) personally. A written permission for the administration of the test was obtained from the office of the Inspector of Schools, East and West Khasi Hills, (Meghalaya). Thereafter, the investigator contacted the headmasters/headmistresses personally. Suitable dates were fixed and schools were covered accordingly. When the investigator visited the respective schools, she was introduced to the pupils as the researcher. The teachers of the respective classes requested the pupils to follow the instructions carefully and to co-operate sincerely with the investigator.

After establishing rapport which is necessary in a test of self-perception, 'who am I', and motivation, the pupils were placed under conditions which were not suggestive of fear, tension or any kind of inhibition. They were asked to feel relaxed and easy so that their motivative impulse was relaxed and so that they would be able to respond with interest as much concentration as possible. To achieve this the following steps were undertaken :

The steps for the administration of the tools :

(a) The investigator requested the teacher to leave her alone after being introduced to the class.

(b) The pupils were given full assurance that the test had nothing to do with their examination results or promotion.

(c) An introductory talk was given to the class indicating the purpose of the test before the test was administered in a very informal and sympathetic atmosphere.

(d) The accommodation for the administration of the test was given special attention. Adequate lighting arrangements were made. Arrangements were also made to avoid distraction of attention wherever it seemed to exist. The test was held in class-rooms with which the subjects were familiar.

(e) The test was held in the same manner in all the schools. All the necessary and possible precautions were taken to ensure similar conditions for each test.

(f) To facilitate full understanding, detailed instructions were given on the cover of the test sheets. Instructions were also given for each test stating the way in which answers were to be recorded. The instructions were made as easy to understand as possible. Besides the written and oral instructions, those pupils who faced any special difficulty were offered necessary explanations so that they could understand the tests fully.

(g) The tools were administered one by one witha a sufficient time gap between two administrations, since all the tools were administered on the same day.

(h) The investigator tried to reassure the pupils of their ability to respond well. They were told that they were unique and special individuals, that this should be reflected in their answers. This served as a source of motivation to the pupils.

(b) Selection of the Sample : The test was administered to the pupils of Shillong (Meghalaya) and it was administered to the pupils studying in different categories of schools. Six schools were chosen for the study.

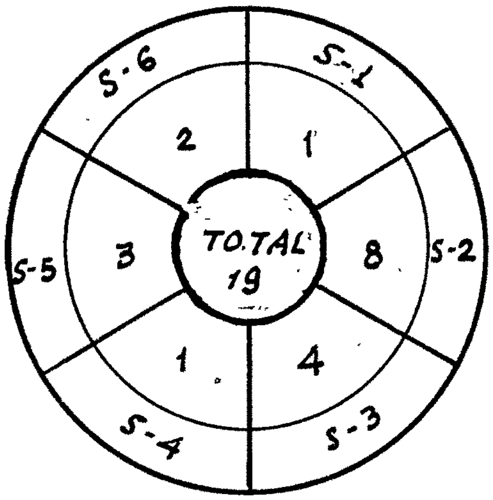
These included :

(a) Two boys' schools

(b) Two girls' schools, and

(c) Two co-educational schools (See Table 2).

The pupils of class X were the representative group and the age ranged from 14 years to 18 years (Refer Diagram 1). The total number of subjects from different schools varied according to population of the school. The sample consisted of 205 pupils of class X of different high schools of Shillong city. As some pupils either did not complete the questionnaires or did it half-heartedly, such cases were dropped out and the final sample consisted of 200 pupils.



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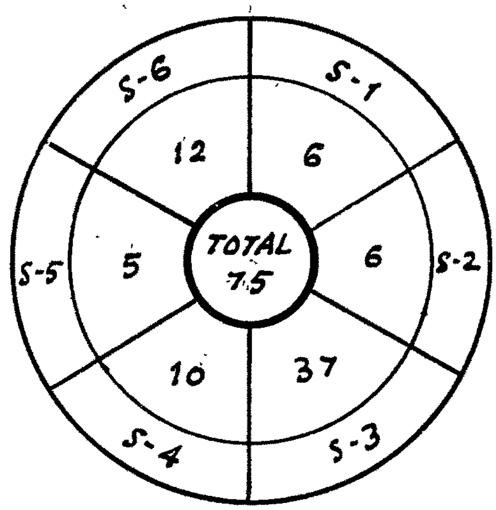

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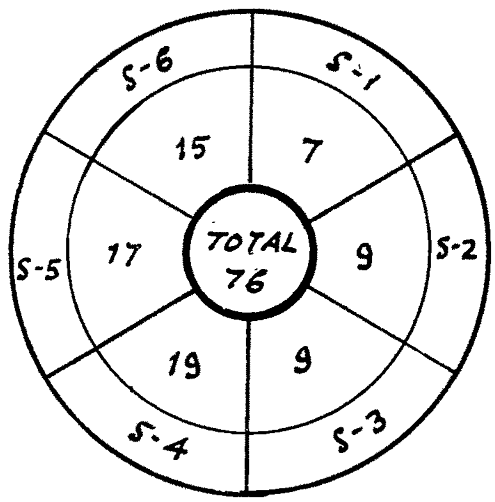

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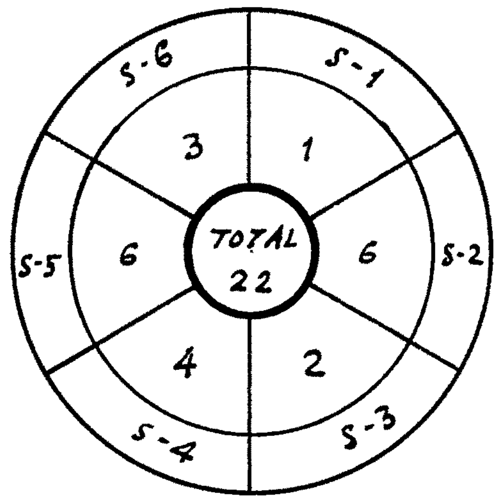

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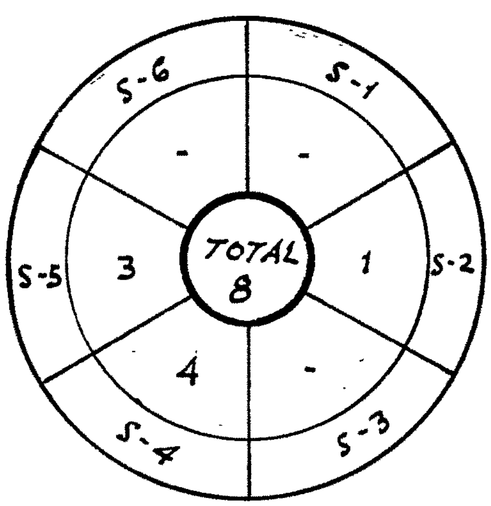

AGE-18

DIAGRAM-I

A DIAGRAMATIC FORM SHOWING SAMPLE SURVEY OF PUPILS IN THE SCHOOLS OF SHILLONG ACCORDING TO AGEWISE

Table 2 : Number of Pupils in Each School

Sr.No.	Name of the Schools	Number of Pupils
1.	L. Presbyterian High School	14
2.	St. Anthony's High School	30
3.	St. Mary's High School	52
4.	Seng Khasi High School	38
5.	Sacred Heart Boys' High School	34
6.	Sacred Heart Girls' High School	32
	Total of Six Schools	N = 200

Table 3 : Frequency Distribution and Percentage of the Sample by Age and Sex

14 - 18 Age Years	Boys	Percentage	Girls	Percentage
14 years	10	5.0	7	3.5
15 years	17	7.5	56	28.0
16 years	35	17.5	45	22.0
17 years	16	8.0	6	3.0
18 years	8	4.0	-	-
Total	86	43.0	114	57.0

The percentage of boys is 43% whereas of girls is 57%.

For tool number five i.e. the academic performance of the pupils, the investigator noted down the marks of the last annual examination. These marks were then converted into percentage and according to the key given on the next page they were converted into grades.

Marks	Grades
70 and above	5
60 to 69	4
50 to 59	3
40 to 49	2
30 to 39	1

After collecting all the necessary information from the pupils, the investigator requested the class teacher of class X to furnish the following types of information.

(a) Academic and non-academic performance of the pupils, and

(b) Teacher's perception of the pupils (containing 50 statements).

The teachers of all the schools co-operated in this matter with the investigator and the tools were returned back to the investigator after three days. There were no difficulties in getting back the tools from the teachers. In fact, their kind co-operation, invaluable help and the prompt action rendered by them motivated the investigator to look forward to more study in the near future

3.9.3 Phase III : Selection of the Sample for Case Studies

Based on the raw scores of 200 pupils of different schools (Shillong) the investigator selected 4 categories of pupils i.e. (four from each group). High motivation / high performance; Low motivation / High performance, High motivation / Low performance and Low motivation / Low performance. Permission was obtained from the office of the Inspector of schools (East and West Khasi Hills) to conduct the case studies on 16 selected pupils. Then the investigator approached the Headmasters/ Headmistresses of different schools from where the case studies were to be conducted. Since the pupils had just completed their high school leaving certificate examination (March 1984), the heads of the schools requested the investigator to give them sometime so that they could contact the selected pupils. After the prescribed time a date was fixed. On the fixed date, the investigator interviewed each pupil of one school at a time.

The interview was conducted in their mother tongue (Khasi) so that the pupils could express themselves better, because at class X level some pupils might not have a good command over English.

All interviews were conducted at the library where pupils were free from external disturbance. During the interview the investigator observed the mannerisms, promptness, fluency and understanding of the pupils. They were asked the relevant questions pertaining to their family background, education, and social life with the view of understanding the psychological make up of their mind, their ambition, the likes and dislikes of their peer group, opinions of concerning teachers, headmasters/mistresses. Thereafter the pupils were asked to answer the questionnaire (as in Appendix 8).

After interviewing the pupils of one school the investigator recorded all the observations based on the oral interview and written questions and translated them into English. When the content analysis of all cases from one school was completed, the investigator proceeded to the next school.

The interview schedule went on successfully as time was not a limiting factor for the interviewer and the pupils were just free from the monotonous routine of regular class work. In fact, they were eager to tell all their feelings about school, peer group, principal likes and dislikes and frank too because, they knew that soon theyw would no more be under the school's jurisdiction.

The sixteen case studies along with the first draft of content analysis of each case was completed within a couple of months i.e. April and May 1984.

3.10 <u>Description of the Tools</u>

The author and nature of the following tools were descfibed.

1. Self-concept as Learner Scale (SCAL)
2. The Self-perception Inquiry Who am I ?
3. Teacher's perception for pupils
4. Junior Index of Motivation Scale (JIM)

3.10.1 Self-Concept as a Learner Scale (SCAL)

(a) Author : The SCAL was developed by Walter Waejen of the University of Maryland (1963). The technique ~~to~~ he employed was to assemble some 400 self-referential statements which were gleaned from many different sub-respect instruments. A factor analysis yielded the four component parts of the SCAL. Each component constitutes a dimension of one's self-concept as a learner. Items within each component are judged in terms of the way an adequate learner would respond. This scale has been modified by the investigator carefully for the study of students' responses in Indian conditions.

(b) Nature : There are fifty agree / disagree items. Although the SCAL was initially designed for use in the eight grade; it has been used successfully from the fifth grade through the high school stage. This particular instrument is in rather wide use in different school systems. It has also been used in a number of doctoral dissertations and other researches. The questionnaire is timed by the investigator and it will probably take about 10 minutes for the pupils to complete the items.

3.10.2 Self-Perception Inquiry

'Who am I ?' Test : The 'Who am I ?' was used as a projective test, with the specific purpose of measuring the self-concept of the pupils in terms of orientation towards activity and efficacy.

Most measures of the self-concept in current use in India, are of verbal adjective list type where results have consistently shown that the social acceptability bias is very strong (Deo, 1964). Also the verbal scale used generally tends to probe more social masculine - femine role adjectives rather than the action orientation or personality resource awareness of an individual. Pareek and Rao (1975) have stressed the importance of the use of a projective technique such as the 'Who am I ?' in getting a meaningful measure or idea of the individual's self-concept. The scoring of the 'Who am I? ' test is based on Pizer's system of scoring indicated in Pizer's sense of Efficacy scale (McClelland and Winter, 1969). Sarabhai (1976) used this test and modified Pizer's scoring system and she found that the system consists of a series of categories which try to measure the strength and character of an individual's goal-oriented behaviours as manifested by him in any projective type of written material. The scoring system is so designed that an individual who manifests greater drive and independence, and a greater sense of purpose derives a higher score than one who shows purposefulness or vagueness and ambiguity about ambitions and goals or doubts about personal capabilities.

(b) <u>The New System</u> : Having decided to adopt Pizer's scheme of scoring the 'Who am I ?' test. Sarabhai used the scale for initial scoring of a pilot sub-sample. It was found that there were certain limitations in the break up of categories in this measure that made it somewhat inadequate for children in our culture.

A scrutiny of scoring patterns of the children's sub-sample highlighted several major problems :

1. The test was preceded by a set of written instructions, giving guidelines to the student in respect of what to write. The instructions explicitly mentioned the words 'goals and problems'. In keeping with the guidelines all the students mentioned both goals and problems. The mere mention of a goal therefore, ceases to signify higher efficacy in greater foresight and future directedness.

2. Pizer's criteria for distinguishing between an Activity goal and an Essence Goal were based on the usage of English language, being determined by the use of the verb 'to do' or 'to be' respectively. The scoring pattern of children in the sub-sample showed that over 95% of all respondents used the 'to be' and therefore got scored for 'Essence Goal'; Goals nearly 'always got mentioned in the form: 'I want <u>to be</u> a doctor' rather 'I want to do medicine'.

3. Of all students scoring Piger's 'Compliance' category, two distinct sub-groups emerged, one in which compliance was scorable because of a high identification with the

family and parental values; and the other, in which it was scorable because of a commitment to larger socèital goals such as service to the nation, or to the humanity. These two groups seemed to be committed to two very different objectives, further, their commitments seemed to have been made after thorough comparison between self-values and social needs.

4. Only one of the initial sample scored mentioned a statement that could be scored for problem - solving as defined by Pizer. Most other similar statements seemed to fall more appropriately into the category of initiative.
5. A fair number of the initiative sample got a score of zero on sense of efficacy as a result of their 'Who am I's not containing any identifiable category. Another large group, however, also ended upto zero; inspite of having scored several categories, this problem arose because of the +1 protocol that Pizer followed the final score then allowed no way of differentiating between those students who scored a number of categories and were considered to have a greater degree of 'Self-definition', from those who scored no categories. It was felt that this protocol could lead to very misleading results.

In looking at the overall adequacy of Pizer's system, Sarabhai decided that another system should be developed, based on Pizer's general format and categories, deleting those felt to be somewhat ambiguous and adding new ones where required. Thus, the new scoring system was developed through a combination of sample empirical searching for differences, application of a priori ideas of what 'self' - definition' was and then modifying these a - priori ideas in the light of the actual differences that emerged from the WAIS of the sub-sample (Who am I Scale).

3.10.3 Teacher Perception for Pupils

The investigator converted Self-Concept as Learner Scale into Teacher Perception for Pupil as mentioned in Phase I.

3.10.4 Junior Index of Motivation (JIM)Scale

(a) Author : This tool was developed by Frymier. There is a Student Questionnaire in the Junior Index of Motivation (JIM) Scale for assessing pupils' motivation towards school. It has been carefully developed from a study of pupils' responses to the particular items. Desai adopted the scale for Indian pupils.

(b) Nature : There are 80 agree - disagree items. The questionnaire is timed, it will probably take about 30 minutes for all students to complete the items. (The JIM Scale is given in Appendix 6). The items which are marked with an asterisk are scored and the others are filler items

3.11 Scoring Key of the Tools

3.11.1 Self-concept as Learner Scale (SCAL)

All the items are scored. Items within each of the four components are judged in terms of the way an adequate learner would respond. These components are listed below (next page) as well as the number for the items which are relevant to each.

1. Motivation (Items 1 to 13).
2. Task Orientation (Items 14 to 26).
3. Problem Solving (Items 27 to 39).
4. Class Membership (Items 40 to 50).

Secondly, each section is divided into positive and negative statements which are listed below in the appropriate sections.

Thirdly, the investigator has to score each item according to the following scale :

1. Motivation : There are thirteen positive - negative items in this component, for example : This component includes items 1 to 13.

Positive Items : 1, 3, 6, 7, 10, 12, 13 = 7 X 5 = 35

Negative Items : 2, 4, 5, 8, 9, 11 = 6 X 5 = 30

Total Items = 13

Maximum total score = 65

Minimum total score = 13

Thus, the total scores range from 13 to 65. The scale has been constructed in the following way :

Responses	Completely True	Mostly True	Partly True Partly False	Mostly False	Completely False
Positive	5	4	3	2	1
Negative	1	2	3	4	5

2. Task Orientation : There are thirteen positive - negative items for this component having items 14 to 26.

The items are arranged as follows :

Positive Items	:	15, 16, 17, 20, 22 = 5 X 5 = 25
Negative Items	:	14, 18, 19, 21, 23, 24,
		25, 26 = 8 X 5 = 40
Total	:	13 Items

Maximum total score = 65

Minimum total score = 13

The number of items are equal to those in component I. Therefore, the scale used for this too is the same as above. Thus, the scores are also ranged from 13 to 65.

3. Problem Solving : This component is the same as the two above components. The items included are from 27 to 39, the number of positive - negative items are as follows :

Positive items	:	28, 30, 33, 36, 37, 38, 39 = 7 X 5 = 35
Negative items	:	27, 29, 31, 32, 34, 35 = 6 X 5 = 30
Total	:	13 items

Maximum total score : 65

Minimum total score : 13

Score ranged from 13 to 65.

4. <u>Class Membership</u> : There are eleven positive - negative items for this component, including items from 40 to 50. The number of items are as follows :

Positive items : 40, 41, 42, 43, 44, 45, 46 = 7 X 5 = 35

Negative items : 47, 48, 49, 50 = 4 X 5 = 20

Total = 11 items

Maximum total score = 55

Minimum total score = 11

Thus, the scores range from 11 to 55.

All the positive items of the four components are given the same weightage as the number which the pupils put in the blanks for those items. For example, if the pupil answers item Nos. 1 with a 5 a weight of '5' would be assigned to that item in the scoring procedure. If pupil answers item No.1 with a '1' his score for that item would be given a weight of '1'. For negative statements, this procedure would be reversed.

Therefore, for the positive items in all the four components the maximum score would be 130 and the minimum score would be 26. And for the negative items the scores would be 120 and 24 respectively.

3.11.2 (a) <u>Pizer's Scoring System (Old system)</u>

1. <u>Goal : Being versus Doing</u> : <u>Activity</u> : Activity goal is scored if the goal is described in terms of action or doing (Scored +1).

Example : I want to act in films.

Essence Goal : Essence goal is scored if the goal is described in terms of attaining a sense of being (Scored -1).

Example : I want to be an actress.

2. Locus of Resources :

Internal : Internal resources are scored when a person describes himself as capable, competent and able to control a situation by innate abilities (Scored +1).

Example : I am certain that I will be successful.

External : External resources are scored when the outcome is described as being dependent on the resources of others (Scored -1).

Example : I can't do well in the examination because nobody helps one.

Lack : Lack of resources is scored when a person explicitly states that he lacks specific capabilities relevant to the situation (Scored -1).

Example : I couldn't take part because I did not have enough money.

3. Global Stage :

Global stage is scored if the individual defines himself in ambiguity, vague, metaphysical terms as with the use of the words - World, Universe, Life etc. (Scored -1).

Example : I am a tiny drop in the ocean of life.

4. Initiative versus Compliance :

Initiative : Initiative is scorable when the individual takes pro-active action, starts the ball rolling or is the originator of action (Scored +1).

Example : I have started going to the community sciences.

Compliance : Compliance is scored when the action is re-active and the problem is defined for the individual by the others. (Scored -1).

Example : I listen to everything my parents tell me to do.

5. Problem - Solving versus Problem Avoidance :

Problem - Solving : Problem-solving is scored if there is an attempt on the part of the individual to clarify or specify logical sequential connections within a sentence, by the use of ques like; if, so that, since, etc. (Scored +1).

Example : As I find concentration difficult at home, I now study in the school library.

Problem - Avoidance : Problem - Avoidance is scorable if the individual becomes depressed or apathetic when faced by a problem, gives up or gives in, suffers, wants to escape or describes himself as a 'gentle Jesus types' possessing 'conflict - avoidance' personal qualities, gentle, non-critical, loving, good natured (Scored -1).

Example : I am friendly and never like to criticize people.

3.11.2 (b) <u>The New - Scoring System for Self - Definition</u>

The new system differed from Pizer's in the following ways :

1. The Activity and Essence Goal categories were merged, and changed into 'goal oriented activity'.

An explicit goal had been asked for the guidelines preceding the 'Who am I' ; the mere statement of goals, in whatever form, no longer differentiated the 'active' from the 'passive' students. It was felt that what would differentiate these people was the extent of elaboration in relation to the goal statement.

2. The orientation for scoring lack of resources was maintained but the category was renamed 'Awareness of Block-Personal'. It was felt that those students who showed an awareness of the resource function within themselves by identifying a specific lack, were considered to have a better conception of efficacy than those who were unable to do so. This, therefore, was a strength, in as much as it meant greater awareness of personal abilities and an accurate and non-self-deluding picture of

personal limitations.

3. The compliance - sub-category was broken up into two (a) Parental Dependence and (b) Soceital Commitment.

4. 'Problem-solving' sub-category was omitted as it did not seem relevant, or capable of furthering the efficacy in a young sample.

5. The scoring protocol was changed completely. The categories presumed to be more 'positive' in the relevant sense, if present, were given a score of +2, if absent, they were scored 0. The rest of the categories, those with a 'negative' quality, were scored 0, if present, and +1, if absent. The scores thus ranged between 0, and 14.

The criteria and sub-categories of the new definition measure are given :

1. Goal - Oriented Activity :

Goal Oriented Activity is scored when the goal is not only stated but is followed by any activity indicated (Whether overt or covert) on the part of the subjects, as a means to achieve the goal.

Score : If present +2, if absent 0.

Example : (a) I want to become a doctor so I study pretty hard at science and biology (Scored.)

(b) I want to become a teacher and I am struggling pretty hard with my studies. (Scored);

(c) I want to become a sports minister (not scored).

2. Locus of Resources :

(a) Internal : Scored if the individual is described as able and competent, and/or if the achievement of the goal is felt to be dependent on his own activities or capabilities.

Score : If present +2, if absent 0.

Example : Though I have not been able to achieve first rank as yet, I am sure, I will do so in my next examination. (Scored) (ii) I want to study at IIT, Kanpur and if I work hard and get a distinction in S.S.C.E., I will get there. (Scored). (iii) I want to become a doctor but I don't know whether I will be able to, (not scored).

(b) External : Scored if the outcome of an action depends on others even if personal strengths are elsewhere enumerated.

Score : If present, 0; if absent +1.

Example : I can't do well at studies because my brother disturbs me all the time. (Scored). (ii) I fail in algebra everytime because my father has not learnt new mathematics and cannot guide me. (Scored). (iii) I try hard but I just can't make it.(not scored).

3. Awareness of Block Personal :

This category is scored if the person explicitly states that he does not possess the capabilities required to tackle the situation at hand.

Score : If present, +2., if absent, 0.

Examples : I can't wear nice clothes because we are not rich. (scored). (ii) I hate drawing class and always fail, I just can't draw. (Scored).

4. Global Stage :

This category is scored if the person talks of himself in vague, undefined, unfocussed stages or thinks of himself as one of a meta-physical or universal system.

Score : If present, 0 ; if absent, +1.

Examples : (i) I am a tiny spot in the universe (scored). (ii) I am a mere drop in this ocean of humanity (scored).

5. Initiative :

This category is scored if the task or problem is defined in personal terms; and / or if the goal-oriented activity is initiated by the person himself.

Score : If present, +2 ; if absent, 0.

Examples : (i) I am not very good at science subjects so I go to the community science centre to improve (scored). (ii) I have been getting bad marks at school because no one allows me to study at home. So now I have decided to study in the library after school hours (scored).

Note : There are no particular words that automatically get scored for this category, the flavour of the statement has to be felt. The statement that is being scored for initiative cannot be the same for which GOA has been scored, unless followed by another 'initiating' phrase.

6. Parental Dependence :

This category is scored if the subject's values are defined by parents, family or rather authority figures, if his work and task are consigned to him or determined for him, if the person's statements and beliefs are supported by an elaboration of family backing.

Note : Long detailed accounts of family in the WAIS are scorable under PD, as are statements in the 'one should' tone.

Score : If present, 0; if absent +1.

Examples : (i) I am 13 years old and come from a family of five, I have 2 younger sisters - my father is an Engineer. He has studied . . . . (scored). (ii) I want to become successful so that I can look after my family and make them happy. (scored). (iii) My main duty in life, is to serve my parents (scored).

7. Societal Commitment :

This category is scored if the subject's main aim or ultimate goal in life is to serve the country, bring social reforms and so on, but only when these goals seem self-defined, i.e. there is no specific mention of these being goals and values that have been instilled in him through his family.

Score : If present, +2; if absent, 0.

(i) My main aim in life is to bring light to the suffering millions. (Scored). (ii) I wish to spread knowledge throughout the nation so that my brothers can do better in their lives. (scored). (iii) It is my duty to make my family happy and be a good son of India. (Not scored).

Note : It is assumed that if duty towards family and nation, are combined in one statement, the values are parentally rather than personally defined.

8. Problem Avoidance :

This category is scored if the person gives in or thinks of himself as wanting to give in, gets depressed and remains so without doing anything about it, or if he describes himself in 'conflict avoidance', terms such as gentle, co-operative, helpful, good natured etc.

Score : If present, 0; if absent, +1.

Examples : (i) This career will not cause anyone to hate me or have any grudge against me. This is my preference. (scored). (ii) I am friendly with everybody and never criticize people. (scored). (iii) My problem is that I have no really good friends. So I get very depressed and lonely. (Scored).

Sr.No.	Categories		Scoring If present	Scoring If absent
1.	Goal Oriented Activity	GOA	+2	0
2a.	Internal Resources	IR	+2	0
b.	External Resources	ER	0	+1
3.	Awareness of Block Personal	ABP	+2	0
4.	Global Stage	GS	0	+1
5.	Initiative	I	+2	0
6.	Parental Dependence	PD	0	+1
7.	Societal Commitment	SC	+2	0
8.	Problem Avoidance	PA	0	+1

Maximum Possible Score = 14

Minimum Possible Score = 0

3.11.3 Teacher's Perception Scale

In order to find out the difference between the pupils 'real' self and pupils self perceived by others, the investigator converted the statement into teacher's perception for the pupils in this way :

	Pupils	Teacher's
Statement 1 :	I am usually eager to come to the school.	1. He/she is usually eager to come to the school.
Statement 2 :	I give up easily in school work	2. He/she gives up easily in school work

All the four components as well as the 50 items contained in the tool remain unchanged. Therefore, the scoring procedure, as well as the weightage of the items is the same as that for the self-concept as the Learner Scale. (SCAL).

3.11.4 Junior Index of Motivation (JIM)

Components and Style of Testing and Scoring

JIM Scale contains six major factors :

1.	Belongingness	-	Alienation
2.	Positive	-	Negative School Attitude
3.	Personal Control	-	Fatalism
4.	Optimism	-	Pessimism
5.	Flexibility	-	Dogmatism
6.	Idealism	-	Pragmatism

The initial areas of concern are :

1. Attitude towards school.
2. Value of Education
3. Feeling for other people
4. Concern for material things.
5. Sense of personal determination
6. Attitude towards self.

The operational assumptions which relate to the nature of the instrument and the items which compose the instrument are given below :

i. Items were phrased in such a way that they would be at least partially projective in nature.

ii. Many items were also phrased with a value hierarchy readily apparent. The technique was designed to require the respondent to make a choice between two alternatives. For instance, one such item is 'Being right is more important than being kind'. It was hoped that such phraseology would bring out value sentiment to an observable surface.

iii. The responses to a particular item in a particular way did not indicate a prior direction of pupils' motivation or its degree.

Scoring Key for Total JIM Scale :

1. The investigator tried to score the JIM Scale of the pupils in the sample according to the scoring key of Frymier as follows :

Firstly, prepare a key. Note that only 50 items are scored.

Secondly, score each item according to the following scale :

+1 agree

+2 strongly agree

-1 disagree

-2 strongly disagree

Lastly, add each pupils' score for these 50 items algebriacally. Then, REVERSE the sign (if it is +27, say, change to -27. If it is -16, then change it to +16), and then add this raw score value to +100 algebriacally. This score is the pupils' converted motivation scale. Higher scores indicate higher motivational level. Lower scores indicate low motivation level. The scores range from 0 to 200.

2. Scoring Key for the JIM's Component :

There are six components, namely :

1. Belongingness - Alienation
2. Positive - Negative School Attitude
3. Personal Control - Fatalism
4. Optimism - Pessimism
5. Flexibility - Dogmatism
6. Idealism - Pragmatism

The item for each component is given in the following pages :

1. <u>Belongingness - Alienation</u> : There are twelve items in this component :

1. Life seems to be one big struggle after another.
2. The present is all too often full of unhappiness.
3. Many youngsters often want to run away from home.
4. Many young people feel grouchy.
5. The world is a pretty lonesome place to live in.
6. Some students have tos study more than others.
7. Not many people in the world are really kind.
8. Young people should be free to follow their own desires.
9. School is not all that its cracked up to be.
10. Most people just don't give a darn for others.
11. It does not really help much to study about people from other lands.
12. Being a liar is better than being a gossiper.

-24		-12		0		+12		+24
	4		3		2		1	

The scores range from -24 to +24.

2. <u>Positive - Negative School Attitude</u> : There are twelve items for the Positive - Negative School Attitude component of JIM scale. The items are as follows :

1. Teachers know more and do less than most other people.
2. Asking questions usually gets you into trouble.
3. School is not all that it's cracked up to be.
4. Most teachers like to drive students if they have the chance.
5. Not many people in the world are really kind.
6. Some teachers seem to enjoy making students suffer.
7. Most people just don't give a 'darn' for others.
8. Looking good is just as important as being good.
9. We are never really as happy as we think we are.
10. Most people would like school better if teachers did not give grades.
11. All those who fail have worked in vain.
12. Our whole trouble is that we won't let God help us.

The scale for this component is the same as that for the first component and the scores also range from -24 to +24.

3. <u>Personal Control - Fatalism</u> : The following eleven items are of the Personal Control Fatalism component.

1. Social progress can only be achieved by returning to our glorious past.
2. All those who fail have worked in vain.
3. Life is mostly sorrow with just a little joy.
4. Not many people in the world are really kind.
5. Successful people are those who make the most money.
6. It is better to forget than to forgive.
7. Quick thinking is always better than being polite.
8. Most young people do not want to go to school.
9. There is nothing new under the sun.
10. Hope is really not better than worry.
11. Asking questions usually gets you into trouble.

The scale for this component has been constructed in this way.

4	3	2	1	
-22	-11	0	+11	+22

In this way 1 is for very high scores, 2 is for high scores, 3 for low scores and 4 is for very low scores.

The scores range from -22 to+22.

4. Optimism - Pessimism : The following are the six items of this component :

1. Some new ideas are interesting, but most of them are not.
2. Most young people do not want to go to school.
3. Most people just don't give a 'darn' for others.
4. The best way to achieve security is for the government to guarantee jobs.
5. Many new ideas are not worth the paper they are printed on.
6. Famous people usually have a lot of money.

For this component, the scale has been prepared in this way.

4	3	2	1	
-12	-6	0	+6	+12

The scores range from -12 to +12.

5. Flexibility - Dogmatism : For this component there are nine items, which are given below :

1. Everything that people do is either right or wrong.
2. Experience may be a good teacher, but schools are better.
3. People who are quick thinkers usually jump to conclusions.
4. Pupils who try should get good grades, even if they make mistakes.

5. The best way to achieve security is for the government to guarantee good jobs.
6. We are never really as happy as we think we are.
7. School is more fun when teachers let students do things they want to.
8. Looking good is just as important as being good.
9. Most people cannot learn from the experience of others.

The scale has been made for this component in this way :

	4	3	2	1
+18	-9	0	+9	+18

The scores range from -18 to +18.

6. Idealism - Pragmatism : This component also has nine items which are given below :

1. It is very foolish to advocate government's support for education.
2. The dreamer is a danger to society.
3. It does not really help much to study about people from other lands.
4. The best people refuse to depend on other persons.
5. Familiarity breeds contempt, so one should never be too friendly.
6. Most people would like school better if teachers did not give grades.
7. Teachers know more and do less than most other people.
8. Some new ideas are interesting but most of them are not.
9. People who are insulted generally deserve to be.

The scale used for this component is the same as the scale of the fifth component.

The scores also range from -18 to +18.

Note : That before using these scales for pupils' score for each component, REVERSE the sign and then score according to these scales.

3.11.5 Academic and Non-academic Performance

The teacher rated the pupils on a five point scale but for the real academic performance of the pupils, the investigator converted the marks of the pupils into percentage as mantioned on Phase II (b).

3.12 Data Analysis

The data will be analysed to find the answers to the following questions :

1. What is the mean scores of the components of self-concept, teacher perception for pupils academic motivation and performance ?
2. What is the standard deviations of the components of self-concept, teacher perception for pupils, academic motivation and performance ?
3. What is the correlation of each variable with other ?

The following calculations will be done with the help of the computer, mean score, standard deviation, correlation, regression etc.

Phase I : (a) Means and SDs of the components of the variables under study are compared with each other.

(b) Correlation of different components of the variables were found out.

Phase II : (a) Correlation matrix of psychic independent variables.

(b) Correlation matrix of psychic dependent variables.

(c) Regression estimate of Independent versus dependent variables.

Phase III : Difference between mean, SDs and SE mean among the variables (School-wise).

3.13 Scheme of the Chapters

After deciding the aims of the study, the investigator planned the scheme of chapters as follows :

Chapter I : The Rationale of the Study :

This chapter describes the aim of the present study focussing on the significance of self-concept, academic motivation and pupil's performance. The chapter also pin-points the significance and the 'why' aspects of the study.

Chapter II : Conceptual Frame Work and Review of Related Researches :

The chapter describes the basic concept and theoretical frame-work of self-concept, consonance / dissonance, academic motivation, academic performance and non-academic performance. The psychological dimensions are discussed and arranged in order, so that the study can be understood in its vitality and depth.

It also describes the review of the previous researches done in India and foreign countries on the three main variables considered for the present study.

Chapter III : Plan and Procedure :

The chapter describes the procedure adopted for the present study i.e. definition of the terms used, objectives, scope and limitations, sample, tools of the study, system of data collection, system of data analysis and scheme of chapterization.

Chapter IV : Analysis and Interpretation of the Data :

The data is analysed according to the aim of the study. The means and SDs are given, the inter-correlations and classroom profiles are described.

Chapter V : Case Studies :

In this chapter content analysis of the Case Studies is given.

Chapter VI : Review, Findings and Suggestions :

The chapter deals with a brief review, major findings and suggestions.
