

CHAPTER – 1

CONCEPTUAL FRAMEWORK

1.0 INTRODUCTION

The subject psychology has been becoming increasingly popular day by day. The number of colleges and the students for the study of this subject is going up every year in almost all the universities in India. It is an acceptable reality that the nature of psychology is quite scientific. Psychology is the scientific study of the activities of the individual in relation to his environment. This can be established with the following reasons.

1. It possesses a body of facts supported through universal laws and principles.
2. It emphasizes the search for truth.
3. It does not believe in hearsay, stereotypes or superstitions.
4. It believes in cause and effect relationships.
5. It helps in predicting future developments.
6. It is able to turn its theory into practice by having an applied aspect.

Let us take a few definitions of psychology.

As per **Wikipedia, the free encyclopedia**, “Psychology is an academic and applied discipline that involves the scientific study of mental functions and behaviors”. This implies that psychology is studied as a discipline and a field of study as well as aims at helping people to solve their problems related to mental and emotional states, relationships, problems related to adjustment in the society, etc. In recent years, many schools and educational campuses have started appointing counselors to help the students and staff to understand and overcome their problems.

According to **William James (1890) and William Wundt (1894)**, “Psychology is the task of describing and explaining the state of consciousness through introspection”. According to this definition, psychology deals with human consciousness. It is a mental state of which most people are not aware. ‘Consciousness’ can refer to

awareness of one's surroundings, about one's own feelings and emotions, sensitivity to the people and surroundings around. Although psychology deals with problems through observable behavior, the solution to problems can take place through introspection because most of these complexities are due to the person's mental and emotional make up.

Since the present research study is about teaching psychology to a group of prospective teachers, it is worth discussing education.

1.01 WHAT IS EDUCATION?

According to **Wikipedia, the free encyclopedia**, "Education in common sense means a form of learning in which the knowledge, skills, and habits of a group of people are transferred from one generation to the next through teaching, training, or research".

This is a traditional meaning of education. The definition above says that education is an act or process of transmission of knowledge, habits, skills etc from one generation to another. A set of experts (called teachers or educators) groom the younger learners in ways of life as expected by the society.

According to **Pestalozzi**, education implies 'natural, harmonious and progressive development of man's innate powers.'

This definition goes beyond mere training of people in terms of predetermined skills and habits and allows development of individual potential. Thus, this definition takes care of individual differences as well as their blossoming in a harmonious way.

To **John Dewey**, education meant 'The development of all those activities in the individual which will enable him to control his environment and fulfill his possibilities.' As per this definition, human beings are educated so that they can control the environment and fulfill their needs. By collecting information about the environment and understanding how it responds in different ways to different situations and human activities, and by developing processes that can monitor the environment, human beings can gain control over their surroundings and lead a comfortable life. Thus, education can be said to be a process of progress and evolution of human beings.

Thus, education is development of one's understanding of oneself and one's surroundings, honing of skills needed to monitor one's development and that of the environment, and ways of solving problems so as to lead a fulfilling life.

1.02 WHAT IS EDUCATIONAL PSYCHOLOGY?

Educational Psychology is the scientific study of human learning. The study of learning processes, both cognitive and affective, allows researchers to understand individual differences in behavior, personality, intellect, and self-concept. It is a branch of psychology that studies children in an educational setting and is concerned with teaching and learning methods, cognitive development, and aptitude assessment. Thus, it is the empirical foundation of education. The following points further point out the scope of educational psychology.

1. It deals with the conditions that promote or retard the development of the learner.
2. It attempts to define, describe and explain the changes that take place in the development of the learner in their various states of development.
3. It is a study of the human mind as it bears up to teaching and learning activities.
4. It investigates the method and teaching of imparting education to the learner.

According to the US English dictionary Educational psychology deals with 'the behavior of human being in educational situations'. This includes study of effect of behavior of individuals at school (students, teachers, administrators, support staff, management, even the community, etc) on one another.

Educational psychology is concerned with "why" and "when" of learning. - **Crow and Crow**

This definition deals with what should be taught at what age and the rationale for the same. This is useful for syllabus designers who need to decide which teaching points need to be included in syllabuses for primary, secondary and higher classes.

"Educational psychology is the systematic study of the educational growth and development of a child" - **Stephen**

This definition is related to the previous definition. That is, study of psychology deals with stages of growth and accordingly it is possible to find out if a particular child is growing and developing at the proper rate, whether his/ her physical and mental growth and development are healthy.

1.03 NATURE OF EDUCATIONAL PSYCHOLOGY

Educational Psychology possesses a well-organized, systematic and universally accepted body of facts supported by the relevant psychological laws and principles. It is constantly in search of the truth, i.e. studying the behavior of the learner in relation to his educational environment. It employs scientific methods and adopts a scientific approach for studying the learner's behavior. Educational Psychology does not accept hearsay and does not take anything for granted. It is the scientific study of human behavior in educational situations. It is one of the many branches of applied psychology. It is concerned with learning situation and the process by which learning can be made more efficient and effective. Educational psychology is not as exact as natural sciences since the human behavior cannot be predicted exactly.

1.04 RELATIONSHIP BETWEEN EDUCATION AND EDUCATIONAL PSYCHOLOGY

Educational Psychology helps the teacher to understand the development of his pupils, the range and limits of their capacities, the processes by which they learn, and their social relationships. It supplies all the information principles and techniques essential for

- Understanding the behavior of the pupils in response to educational environment;
- Desired modification of his behavior to bring an all round development of his personality.

1.05 MEANING OF INDIVIDUAL DIFFERENCES

Individual differences are the variations from one person to another on variables such as self-esteem, rate of cognitive development or degree of agreeableness. These differences may be generally grouped or classified into two broad categories, namely: (1) Physical or physiological differences, and (2) Psychological differences.

While physical or physiological differences among us are related with the differences created on account of the differences or variations in terms of physical or physiological makeup of our bodies, the psychological makeup or conditions generate differences among us in terms of varying intellectual potentialities, interests, attitudes, aptitudes, emotional, social and moral development etc.

1. **Physical differences**: Individuals differ in their height, colour, weight, colour of skin, colour of eyes and hair, size of hands and heads, arms, feet, mouth and nose, length of waistline, structure and functioning of internal organs, facial expression, mannerisms of speech and walk, hair style and other such native or acquired physical characteristics.
2. **Mental differences**: People differ in intellectual abilities and capacities like reasoning and thinking, power of imagination, creative expression, concentration etc.
3. **Differences in motor ability**: There exists a wide difference in motor abilities such as reacting time, speed of action, steadiness, rate of muscular moment, manual dexterity and coordination, resistance to fatigue etc.
4. **Emotional difference**: In some individuals, positive emotions like love, affection and amusement and the like are prominent whereas, while in some others, negative emotions are more powerful.
5. **Difference in interest and aptitude**: Variations occur among the individuals in relation to the specific tastes and interests. In a similar way, people are found to have different aptitudes. Some have mechanical aptitude, while the others have scholastic, musical or artistic aptitudes.
6. **Learning differences**: Individual differences are found in the field of learning also. Some learn more easily and are able to make use of their learning more comfortably than others. For some, one method of learning or memorization is more suitable, while for others, a different method suits.

Psychologists have looked at differences among individuals in terms of their learning styles in many varied ways. The following table sums up some of those views.

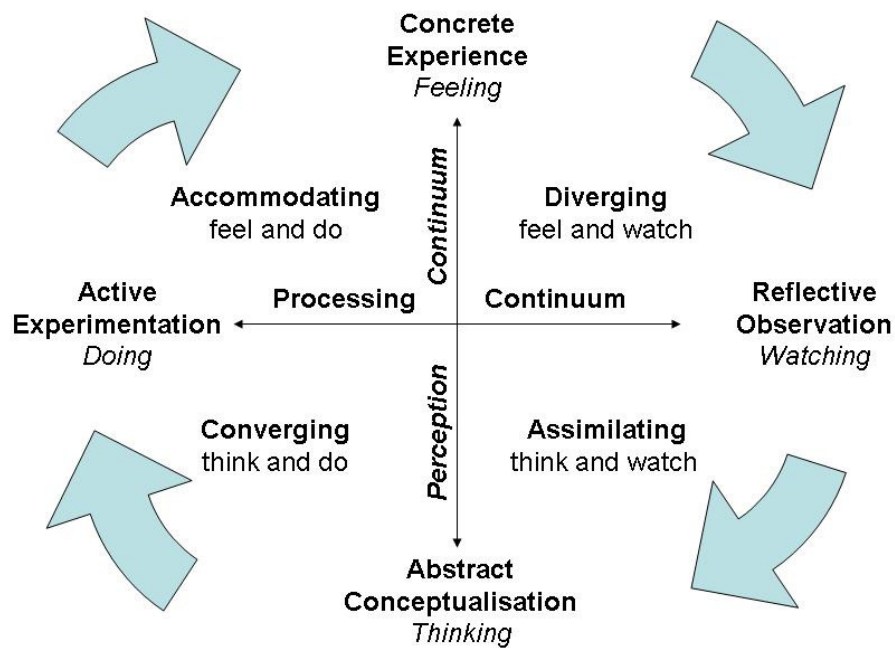


Figure 1: D. Kolb's Model of Learning Styles

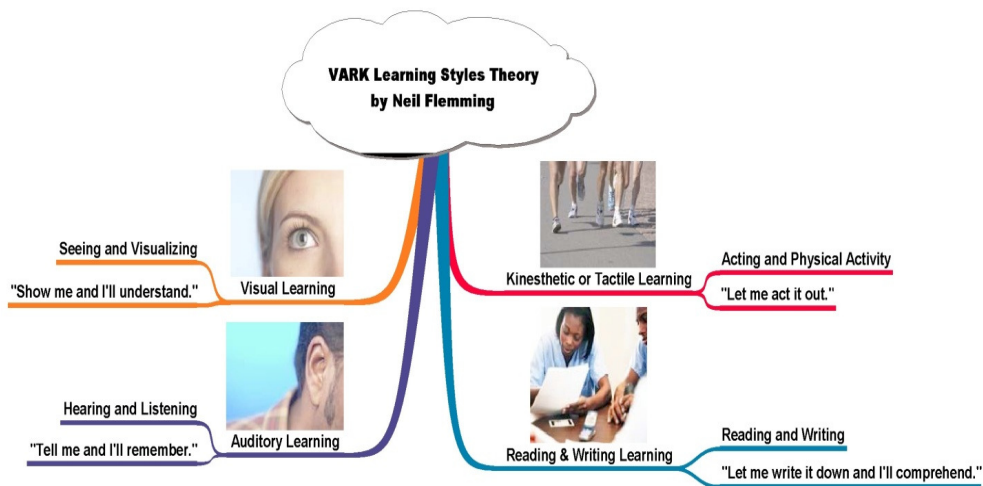


Figure 2: A Comprehensive Model of Learning Styles

Claxton and Murrell	Onion Model of Learning Styles	Factors: Personality, Information processing, social intervention, instructional preferences
D. Kolb	ACRA Model	Active Experimentation, Concrete Experience, Reflective Observation, Abstract Conceptualization
Carl Jung	STFI	Sensing, Thinking, Feeling, Intuiting
Holzman and Klein	Two Factors	Leveller and Sharpener
Witkin	Two styles	Dependent and Independent
Rosenberg	RIAC of learning	Rigid, Indisciplined, Accepting, Creative
Grasha	Six types	Independent, Avoidant, Dependent, Participatory, Competitive, Collaborative
Felder and Silverman	Four Broad Learning styles	Visual/verbal, sensing/intuitive, Active/Reflective, Sequential
Honey and Mumford	Four types	Activist, Reflector, Theorist, Pragmatist
Dr Lauren Bradway	Three main types	Lookers/Visual, Kinesthetic /Tactile, Listeners/Audio

Table 1: Models of Individual Differences mainly in terms of learning styles

1.06 EDUCATIONAL IMPLICATIONS OF THE PSYCHOLOGY OF INDIVIDUAL DIFFERENCES

The notion that individuals differ in various abilities, capacities and personality characteristics necessitates the adoption of individual tendencies in education. It compels the teachers to realize and accept the following facts.

1. In any group there are individuals who deviate from the norms of the group. Along with the average, the presence of very superior and extremely dull is equally possible in his class. Thus, the class is full of diversity.
2. Every teacher should try to have the desired knowledge of the abilities, capacities, interests, attitudes, aptitudes and other personality traits of his pupils and in the light of this knowledge should render individual guidance

to children for the maximum utilization of their potentialities. Using the same methods and materials for all the students in a class all the time can be harmful to the development of the students.

3. It is wrong to expect uniformity in gaining proficiency or success in a particular field from a group of students. On account of their subnormal intelligence, previous background, lack of proper interest, aptitude and attitude some students have to lag behind in some or other area of achievement. Therefore, teachers should not compare students in terms of their learning interests, abilities or performance.
4. All students cannot be benefited by one particular method of instruction and a uniform and rigid curriculum. This implies that in order to take care of students with different abilities, the teacher should develop a wide range of teaching techniques.

With this conceptual background, the researcher undertook the following study.

1.1 STATEMENT OF THE PROBLEM

Effectiveness of a set of Tasks in Educational Psychology at the Pre – Service Level

1.2 RATIONALE OF THE STUDY

The current research aims at creating awareness regarding the educational psychology in the minds of young teachers. Knowledge about educational psychology and individual differences is important for pre-service teachers who are going to enter into the profession of teaching that shapes the future citizens of the world. Through this task-based programme, the researcher aims to make an attempt to consciously develop among the pre-service teachers to an understanding of individual differences present in the every classroom, ways of dealing with the diversity and challenges in doing so.

1.3 OBJECTIVES OF THE STUDY

The researcher carried out the research focusing on the following objectives.

1. To study issues related to individual differences

2. To prepare tasks for individual differences
3. To try out the task – based programme
4. To know the degree of effectiveness of the programme
5. To study the feedback of the students

1.4 HYPOTHESES

This research study was conducted with the following null hypotheses in view.

Ho 1. There will be no significant difference between the mean achievement scores of pre – test and post – test of the participants in the control and experimental groups.

Ho 2. There will be no significant difference between the mean achievement scores of pre – test and post – test of the participants.

Ho 3. There will be no significant difference between the mean achievement scores of participants of different pedagogic methods.

Ho 4. There will be no significant difference between the mean scores of female and male participants.

1.5 OPERATIONALISATION OF THE TERMS

1. **Effectiveness:** According to Oxford Dictionary effective means “successful in producing a desired or intended result.”

‘Effectiveness’ for this study implies verifying the extent to which learning takes place through implementation of a programme on individual differences prepared and tried out by the researcher at the pre-service level.

2. **Tasks:** It is an activity-based methodology to help learners use their higher order thinking skills in order to go beyond mere textual meaning of what is presented to them. Research confirms that knowledge is better retained when it is applied and integrated into daily practices. ‘A set of tasks’ was designed and tried out for this study during 7 sessions with pre-service teachers.

3. ***Pre-service teachers:*** Pre-service teachers are students studying in the various teacher education programmes namely B.Ed, PTC and M.Ed.

For the present study, the expression refers to the student-teachers at the B.Ed. programme.

1.6 VARIABLES

Dependent Variable: For the present study, the achievement of pre-service teachers was considered as the dependent variable. That is the scores found from the programme were to be considered as the dependent variable.

Independent Variable: The tasks and activities prepared and tried out by the researcher to teach the topic ‘individual differences’ was the independent variable. Qualifications of the students of Pre-Service level are to be treated as another independent variable.

1.7 RESEARCH QUESTIONS

Research questions provide the researcher with a more detailed look at the context in which the research is being carried out. It guides the researcher in the work, especially keeping focus on micro details. The current research too was guided by some questions.

- What are the sources of individual differences?
- Why are individual differences important?
- How to bring about the best in individual learners?
- How can pre-service teachers be made aware about individual differences they are likely to face in the classrooms?
- What kind of tasks and activities can be designed to help pre-service teachers understand individual differences better?
- What challenges does a teacher face in catering to individual differences in the classroom?
- How does the everyday thinking differ from research?

1.8 DELIMITATION OF THE STUDY

The present study was delimited to a set of tasks to teach one topic in educational psychology, that is, individual differences, to pre – service teachers.

1.9 SCHEME OF CHAPTERISATION

The report of the research study has been presented in the following manner.

Chapter One

Deals with an introductory note of the problem of study, objectives and delimitation of the study, operationalization of the terms, hypotheses and rationale of the study.

Chapter Two

Focuses on review of related literature and learning from the review.

Chapter Three

Discusses the research methodology adopted in the present study. It describes in detail the research design selected for the present study, tools used and procedure adopted for the data collection and data analysis.

Chapter Four

Analyzes and interprets the data based on the calculated scores of pre test and post test. It also includes the observations made by the researcher during the experiment.

Chapter Five

Presents the findings of the study and their implications. It also presents some suggestions for further research.

1.10 CONCLUSION

Educational psychology is the subject which helps to know about the psyche of the individuals. It is related with the all the components of the individual like mind, nature, interest areas, etc. Educational psychology deals with the nature of the humans as well as the thinking of the humans. Through the study of this subject, it is possible to identify the inner abilities of individuals. It is mainly related with the individual differences in human life. It deals with the mentality as well as ability of each individual. Psychology is the subject which deals with the individual efforts and achievements in their personal life. Thus, it forms the centre of all studies regarding human beings and their life. The present chapter essentially tried to prepare a conceptual framework for the research on hand.

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.0 INTRODUCTION

Review of related literature is systematic identification, location, analysis and report of documents containing information related to the research topic. Theoretical and research based reviews provide the researcher valuable guidance and suggestions for conducting the research. They also serve as a solid foundation for the study. A review of related research is a must in research. It helps the researcher in understanding and defining the problem accurately and systematically. This review helps the researcher to proceed in one's study and also helps to prepare the design for the study.

Review of related literature is one of the significant aspects of research. It enables the researcher to get acquainted with the work done earlier in the concerned area. It also helps to explore the needs of research in unknown and unexplored areas. It develops insights into the methodological aspects of the research.

2.1 OBJECTIVES OF THE REVIEW OF RELATED LITERATURE

The following were the objectives of the review of related literature.

- To understand various aspects and scope of the research;
- To study the researches which have been done before the current research;
- To decide proper hypothesis, objectives, methodology of the research;
- To have some proof to show that the researcher knows what type of study is done in the same field;
- To have proper guidelines to implement in one's experiment;
- To have appropriate guidance to complete the present research;
- To provide a vast outlook regarding the subject;
- To avoid repetition of the research done;
- To broaden the researcher's horizon of knowledge;
- To find out the novelty of the present research.

In the present study the researcher has reviewed various books, dissertations, articles, journals, theses and web sites as reference materials. The present chapter presents the review of related literature.

2.2 Research Reviews

Ahluvalia, I. (1985). *Study Factors Affecting Achievement Motivation*, Ph.D. Agra University

The *objectives* of the investigation were (i) to study the effect of sex on achievement motivation, (ii) to study the effect of age, birth- order, academic performance, parents' education, parents' occupation and parents' economic status separately on achievement motivation, (iii) to study the effect of rural- urban upbringing, size of the family, and dependency separately on achievement motivation. The study was conducted on a sample of 200 children of 8 to 12 years of age. The intelligence of the children was controlled. They were given Raven's Progressive Matrices. The children whose score on this test was between the 25th and 75th percentiles were selected for the study.

Akhtar, S. (1970). *Attitude Modifiability as a Function of some Personality Factors*, Ph.D. Psychology, Bhagalpur University.

The main aim of the study was to explore the relationship between some personality factors and attitude modifiability. The random sample of 300 postgraduate students was selected. Age, sex economic status and intelligence were controlled. Eysenck's Personality Inventory, Sinha's M.A. Self-Analysis Form, the California F-Scale, Rehfisch's Scale of Personality Rigidity and Mohsin's Nationalization Scale were employed. The major findings were: 1. There was maximum attitude modifiability in subjects who were low on neuroticism, extraversion and high on manifest anxiety. 2. Attitude modifiability was less in subjects holding extreme prior attitudes than those holding moderate prior attitude.

Bandopadhyay, P. (1982). *Experimental Studies on Aerobic Capacity of Bengali Students of Growing Age*, Ph.D. Physiology, Calcutta University.

The objective of the study was to measure the oxygen transporting system that determined an individual's power. The sample consisted respectively 95 and 60 normal, healthy boys (10 to 19 years of age) and girls (10 to 18 years of age) from two secondary schools and two undergraduate colleges of Calcutta. The major findings were: 1. Height, weight and body surface area increased with age, with adolescent spurts. Girls showed early signs of adolescent growth which made them significantly larger in body dimension than boys at 11-12 years, but from 15-16 years, boys started showing their superiority and by 17-18 years, they have higher body dimensions than girls. 2. At 11-12 years of age, the aerobic capacity values were well matched in both sexes, but in all higher ages, girls had a lower value. When standardized by body weight, girls had 21-26 per cent lower values in the post-puberty age group.

Bhardwaj, K. (1985). *Attitude as Process and Product of the Socio-Psycho-Being of College-going Adolescents*, Ph.D. Education Agra.

This study was designed to determine the role of attitude as process in the shaping of psycho-dynamic contents of personality in terms of needs, perception, anxiety, conflicts, defence mechanism and function of ego and super ego. The sample for the study consisted of 300 adolescents in the age range 16 to 22 years studying in six colleges of Agra. Of them, 150 were high-caste students and 150 were scheduled cast students. In both the groups, half of the students were males and half were females. The main findings of the study were: 1. The attitudes of social change, social distance, social revolution and untouchability act both as process and products only. 2. The attitude of nationalism characteristically belongs to faith-oriented male and scientifically thinking female adolescent. 3. The attitude of social change is characteristically available in high-caste male and scheduled-caste female adolescent. 4. Attitude to untouchability belongs to adolescents of scheduled caste in a characteristic way.

Bhatia, K. (1984). *The Emotional, Personal and Social Problems of Adjustment of Adolescents under Indian Constitution with special reference to Values of Life*, Ph.D. Education.

The aim of the study were (i) to inquire into the social and personal background of the junior and senior college-going students of Greater Bombay, (ii) to study the nature of problems faced by adolescents, of both sexes, in their inter-personal relationships in the college. Random sampling was used for the selection of the sample. To collect the relevant data, the survey method was used. The survey was conducted in twelve prominent arts, science and commerce college in the city of Greater Bombay. The sample consisted of 830 adolescents (340 boys and 490 girls) in the age group of 15 to 20 years. The tools employed in the study were questionnaire and interview schedule, and group discussion. The major findings of the study were: 1. Adolescents were sometimes treated like adults and sometimes like children. 2. The girls were more liable to be treated like children, and were not granted the freedom of thought and behaviour due to an adult. 3. It was found that family atmosphere was more tense and unhappy for girls in the Indian society. 4. In many families parents were more favorably inclined towards boys. 5. Girls were not permitted to stay out late by their parents. 6. A large majority of boys and girls preferred to have friends of the opposite sex. 7. Boys seemed to receive more pocket-money than girls. 8. A large majority expressed the desire to have marriage by choice.

Chatterji, P. (1983). *A Comparative Study of Personality, Intelligence and Achievement Motivation of Students in Different Academic Group*, Ph.D. Education Patna.

The objectives of the study were : (i) to compare the personality, intelligence and achievement-motivation of students studying in different academic groups at the +2 stage, (ii) to find out the academic-group differences among high scores in each of these three variables. A sample of 760 male students studying in four academic groups, arts (N = 190), science (N = 180), commerce (N = 190) and agriculture (N = 200) of class XII, was drawn from nine different recognizes institutions of the Varanasi region by using the purposive incidental sampling method. Academic group differences in personality, intelligence and achievement motive scores were assessed by applying t-test of significance of difference between means. The major findings were: 1. Commerce and agriculture students were obtained significantly higher extraversion scores in comparison to those in the arts and science groups. 2. Students

of the agriculture, arts and science groups attained significantly higher neuroticism scores in comparison with those in the commerce group. 3. Out of the four academic groups, science students were the most intelligent and arts students least. 4. Commerce students were ranked second in intelligence out of the four academic groups and were significantly more intelligent than those in arts on all the factors of intelligence. 5. The agriculture group of ranked third in intelligence and was significantly better than the arts group on all intelligence. 6. Scores on neuroticism in the agriculture and arts groups were significantly higher in science and commerce group. 7. Scores on achievement-motivation of students of science or commerce were significantly higher than those of the other group.

Chauhan, S. (1984). *A Comparative Study of the Achievement Motivation of Scheduled Tribe and Scheduled Caste Students of Himachal Pradesh in Status to Their Intelligence and Socio-Economic Status*, Department of Education, Himachal Pradesh University (UGC financed).

The objectives of the study were: (i) to study the difference in the achievement motivation of scheduled-tribe and scheduled-caste students, (ii) to study the differences in the achievement motivation of boys and girls, (iii) to find out the interactional effect of community (scheduled tribe and scheduled caste) and sex in relation to the achievement-motivation of students. The study was conducted on 600 students (300 scheduled tribe and 300 scheduled caste) studying in grade X. Scheduled-tribe students were selected randomly from the three main tribes, namely, Gaddis, Kinnauras and Lahaulas from three districts of Chamba, Kinnaur and Lahaul-Spiti of Himachal Pradesh. The main findings of the study were: 1, scheduled-tribe and scheduled-caste students did not differ significantly in relation to their achievement-motivation. 2. Boys and girls did not differ significantly in relation to their achievement motivation. Boys in both the communities had slightly higher achievement motivation than the girls. 3. Community and sex did not interact significantly in relation to the achievement-motivation of students. 4. Community and intelligence did not interact significantly in relation to the achievement-motivation of students. 5. Sex and intelligence did not interact significantly in relation to the achievement-motivation of students. 6. The achievement-motivation of students differed significantly at different levels of socio-economic status, high, middle and

- low. 7. Scheduled-caste and scheduled-tribe students did not differ significantly in relation to their achievement motivation at different levels of socio-economic status.
8. Sex and socio-economic status did not interact significantly in relation to the achievement-motivation of students.

Damle, K. (1987). *An Experimental Study of Personality, Intelligent, Distribution of Practice and Motivation as related to Psychomotor Learning and Retention*, Ph.D. Psychology., Bombay University.

The main purpose of the study was to investigate experimentally the relation of personality, intelligence, mode of practice and augmented feedback to the learning and relation of a psychomotor task. The main hypotheses of the study were: (1) Personality is a significant variable in the performance, learning, retention and reminiscence of the psychomotor skills. (2) There are significant differences between the four personality groups in the performance, learning, retention and reminiscence of the psychomotor skill. (3) Intelligence is a significant variable in the performance, learning, retention and reminiscence of the psychomotor skill. (4) Mode of practice is a significant variable in the performance, learning, retention and reminiscence of the psychomotor skill. (5) There are significant interactions among the four variables. The major conclusions of the study were: 1. Personality was not a significant variable in any of the aspects of the psychomotor skill. 2. The results of analysis for the motivation variable also showed no significant contribution of this variable in all aspects of the psychomotor skills. 3. The extraversion, neuroticism, dimensions of personality as measured by EPI did not reveal any differential effect. 4. There was no significant interaction between extraversion and retention interval. Thus, consolidation theory of reminiscence did not get any support in this study. 5. General intelligence significantly contributed in the learning and retention of the psychomotor skill. 6. Superiority of distributed practice (DP) was highly significant in the learning and retention of the psychomotor skill. It included that the mode of practice was a very powerful variable and that DP was an influential learning as well as performance variable.

George, M. (1969). *Personality Pattern of College Students Specializing in Different Fields*, Ph.D. Psychology, Kerala University.

The aim of the study was finding out whether there were significant differences in values, temperament and vocational interests among college students specializing in different fields (science, humanities, engineering, commerce, medicine education, law, agriculture and veterinary science). Nine general education colleges and ten professional colleges were selected to form nine groups of students representing nine subjects, namely science, humanities, engineering, commerce, medicine, education, law, agriculture and veterinary science. Three personality inventories and a vocational interest inventory were developed. The important findings of the study were: 1. The F-ratio for men was significant for all traits except that of temperament. In the case of women, the F-ratio was significant for twelve scales (three of values, two of temperament and all seven vocational interest scales). 2. In values, men were more theoretical, economical and political while women were found social, aesthetic and religious. In temperament, men found more ascendant, sociable and masculine than women. Women in the humanities group had restraint than men. They were also emotionally more stable, objective and friendly. 3. In vocational interests men got higher scores in mechanical and persuasive scales. Men in the humanities and mechanical groups got significantly higher scores on the scientific scale than their women counterparts.

Gujral, Supreet. (1991). *A study of personality and motivational correlates of Type A Behaviour*. Ph.D., Psychology Punjab University.

It is an attempt to study the personality and motivational correlates of Types A behavior pattern in college students.

Objectives are : to explore the personality and motivational correlates of type A behavior pattern in college students and identify the high risk group for developing CHD, to explore the relationship of stress symptoms with A behavior pattern and its correlates in both male and female college students. Methodology, the total sample consisted of 400 college students (200 male and 200 female) drawn from various college in Chandigarh and Punjab State. The age – range of the subjects was 19 to 23 years. The tools used included, Jenkins' Activity Survey, from T of Glass, psysenck Personality Questionnaire, the Manifest Hostifility Scale of Kool, the Revised Philosophies of Human Nature Scale of Wrights man, the Questionnaire measuring

need for approval, and need for power of Misra and Tripathi, and the Stress Symptoms Rating Scale of Hellbrun and Pape. *Major findings* are, The results of correlation analyses for college students as well as CHD patients clearly revealed definite association of certain personality, motivational and stress dimensions with Type A Behavior Pattern (TABP).

Kapil, Renu. (1992). *A psychological study of the nature and sources of emotional tensions of educated girls of Hindu society in Agra region.* Ph.D., Psychology Agra University.

Objectives: (1) To study the various frustrations and consequent emotional tensions of different levels of educated girls from different ESE strata of Hindu society in the Agra region, and (2) to study the nature, intensity (magnitude) and important sources of their emotional tensions. *Methodology:* In the study, 500 educated girls from Agra City were chosen as the sample using a semi-random sampling procedure. The tools used included Researcher Schedule, and Sentences Completion Test of the researcher. *Major Findings:* (1) A significant differences was found in the levels of emotional tension of highly educated and lower educated girls, (2) Upper SES educated girls and lower ESE educated girls differed in the level of emotional tensions. (3) Higher age group and lower age group educated girls also differed in the levels of emotional tensions.

Mishra, S. (1968). *Variations of Intelligence with Occupational Training Course, Age, Sex, and Locality,* Ph.D. Psychology.

The main objective of the study was to verify in Indian conditions Vernon's claim that variation in intelligence measured by certain tests, could be observed under certain conditions with reference to age, sex, locality and occupations. The investigation had two experimental designs. Experimental design No. 1 had a battery of nine ability tests applied on 288 boys and girls of 14-19 years chosen from six classes. Experimental design No. 2 had a battery of 13 ability and attainment tests applied on 306 male post graduates chosen from ten occupational training courses of AMU. For collecting data, and statistical analysis was used as a battery tests and GK tests were the tools of the study. The main findings were: 1. Regarding the significant observation in the six 14 to 19 years age-group, the 16- year group obtained the first

position in the Gottschaldt Test; the 18- year group obtained first position in Vernon's Drawing pattern Test; the 19- year group obtained first position in seven tests, namely Aligarh V.I.T., Vernon's Pattern Reproduction Test, Vernin's non-verbal 'g', Vernon's graded Arithmetic-Mathematics, Raven's Progressive Matrices, Lovell's Concept Formation, Trist Hargreave's Concept Formation Test. 2. Urban children obtained higher average scores in all the nine tests. Regarding the significant observations in the ten occupational groups, the physical science group obtained first position in four tests, the business group obtained first position in T (of the G.K. group); the teaching group obtained first position in C (of the G.K. Test); the library science group obtained first position in the H.T.W. (of the G.K. Test). 4. All the variables, namely, age, sex, locality and training courses, chosen in the investigation, were found to make significant contribution to the growth of intelligence and attainment factors.

Pandit, I. (1985). *A Study of the Psychological Needs and Self-Concept of Adolescents and their Barriers on Adjustment*, Ph.D. Education Bombay University.

The major objectives of the study were: (i) to study the psychological needs of adolescents, (ii) to study the concept of adolescent, (iii) to study the adjustment of adolescent. The descriptive survey method was used for investigation and a cross-sectional approach was adopted. The method of incidental random sampling was used in the selecting of the sample. The sample consisting of 640 adolescents of which 311 were boys and 329 were girls of the age group of 15 to 18 years studying in five higher secondary schools and eight junior colleges situated in the different municipality wards of Greater Bombay. Data were collected by means of questionnaires, standardized test and inventories. Tools employed in this study were (i) in Edward Personal Preference Schedule by Allen Edwards, (ii) the Personality Word list by Pratibha Deo, (iii) Bell's Adjustment Inventory. The major findings of the study were: 1. The inter-need differences of the adolescents were significant in psychological needs, viz., abasement, endurance, achievement, aggression, order, exhibition, autonomy, deference and heterosexuality except in the case of change, nurturance, affiliation, dominance 2. There were significant differences between the ideal self and perceived self and ideal self and social self of adolescent. 3. The difference between perceived self and social self was not significant. 4. The

adjustment of adolescent in home, health, social, emotional and school areas was significantly different in all cases, except in the case of home and health adjustment. 5. Out of all the five areas of adjustment the school adjustment was most satisfactory, followed by health, home, emotional and social adjustment respectively. 6. The study found that the social and emotional adjustment of adolescent boys was more satisfactory than that of adolescent girls.

Patil, I. (1982). *A Psychological Study of Intellectually Superiors*, Ph.D. Psychology Kerala University.

This investigation was undertaken to study some of the psychological characteristics of intellectually superiors.

The objectives of the study were: (i) to investigate whether the intellectually superior group and the average group differed in their attitudes, creativity, personality and achievement motivation, and (ii) to find out whether factors like academic achievement, height and weight had any influenced on intelligence. The sample of the study consisted of 75 randomly selected intellectually superior and 185 average secondary school students. The sample was selected after an administration of Raven's Progressive Matrices. The instruments used were the Raven's Standard Progressive Matrices, the Maysor Aptitude Test Battery developed by Parashiva Murthy, the EPPS adopted by Sarojini Hosamani. The major findings were: 1. Intellectually superior performed significantly better on all the five aptitude measures (combined as well as boys and girls compared separately). 2. The superior and average groups differed significantly in respect of four needs: order, succorance, dominance and endurance. The superior group showed a higher degree of need for order and endurance whereas average group showed a higher degree of needs for succorance and dominance. 3. The superior group was found to be outstandingly creative ($p=.01$) than the average group. 4. There was no significant difference in the n-Ach of superior and average boys. 5. There was no significant difference in the academic achievement of the superior and average groups. 6. The superior and the average groups did not differ in the significantly on the factors of height and weight.

Poonia, Anu. (1989). *The effect of training on controlled experimentation during adolescence*. Ph.D. Education Mohanlal Sukhadia University.

The objectives of the study were to determine the development, viz. concrete, transitional and formal, using a suitable test among certain groups of adolescent pupils matched on intelligence, age, grade and socio-economic status, (ii) to determine the effect of the training of the three levels of intellectual development, (iii) to determine the relationship between the various personality traits and the three levels of intellectual development, (iv) to determine the personality characteristics of those pupils who are favourably influenced by training, (v) to determine the influence of training, sex-wise, age-wise and grade-wise, (vi) to determine the effect of different modes of presentations of the problem. Methodology: The total sample of 320 students was split into two main sub-groups, viz. the control and the experimental group. Each sub-group had about 160 students. Each sub-group was sub divided into two groups of boys and girls, drawn from Grades VII to X, 20 boys and 20 girls from each group. Major Findings: (1) There was significant difference between the pre-test and post-test scores of the experimental groups for the three levels of intellectual development, and for different grades, age levels, and genders. (2) There was no significant relationship between intelligence and post-test scores of those students who showed a favorable influence of training, grade-wise and age-wise. (3) There was a strong factorial structure underlying personality traits, intelligence and scheme of thought for those students who were favourable influenced by training, the four factors being separation of the variables, scheme of thought, adventurous, intelligence, self sufficient, i.e. preferring own decisions.

Prasad, S. (1983). *A Study of Attitudinal Components and Some Personality Variables*, Ph.D. Psychology Rajasthan University.

The objectives of the study were (i) to verify the distinctly different components of global attitude domains, (ii) to establish the possible amorphous nature of attitude structure, (iii) to account for total variance domain, and (iv) to explore the relative effect of personality differential on attitude components. The sample comprised 577 postgraduate students of three different universities (Rajasthan, Magadh and Patan). Out of 577 subjects, 443 were males and 134 were females. The age range of three students was 19 to 24 years. The following attitude and personality scale were employed in the investigation: The Mohsin Nationalization Scale. It had 60 statements representing three attitude components- cognitive, affective and behavioural, in

almost equal number. The split-half reliability of the scale was 0.94 and concurrent validity 0.43. The results of the study were: 1. Factors analysis of Nationalism Scale Scores of all subjects revealed three factors which were identified as Faith in Nationalism, Dislike for Nationalisation and Virtues for Nationalisation. 2. Factor analysis for Religiosity Scale scores of the total sample revealed eight factors which were identified as: Faith in God, Opposition to Traditional Religious Belief, Belief in Traditional Sin ,Belief in Power of Oneself.

Raina, M. K. and Arunima. (1989). *Occupational difference and A personality*, Indian Educational Review, Vol. 24(1): 126 – 32.

Problem: Coronary prone behavior pattern or type A behavior is characterized by extreme of competitiveness, striving for achievement, aggressiveness, haste, impatience, hyper alertness, explosiveness of speech, etc.

Objective: to study the occupation difference as related to type A personality.

Methodology: The sample comprised 99 subjects from four occupations covering lectures, administrative officers, doctors and research scholars. *Major findings:* research scholars and doctors differed significantly from administrative officers (AOs) and lectures on type 'A' personality Index. Doctors differed from lectures, research scholars and AO's on variable of involved striving.

Sharma, Archana. (1989). *An experimental study of psychomotor performance and reminiscence as determined by personality, intelligence, sex and practice*. Ph.D., Psychology Punjab University.

Objectives: (1) To study psychomotor performance and reminiscence in children in relation to practice (work and rest periods) and sex, and (2) to study the relationship of personality and intelligence with psychomotor performance and reminiscence.

Methodology: Two hundred and seventy subjects, comprising 135 boys and 135 girls, were selected randomly from the school of Chandigarh (within the age range 11-13 years). *Major Findings:* (1) Length of work period emerged as a very significant determinant of psychomotor performance in both pre-test as well as post-test periods.(2) Sex was a significant determinant of psychomotor performance for paired associated for figure task (PAF) with males outperforming females. (3) There were

inter-task correlations of reminiscence scores among all the four tasks. (4) The correlations of post-test performance with the reminiscence scores were also found to be highly significant.

2.3 LEARNING FROM THE REVIEWS

The reviews of a variety of research studies helped the researcher to understand various aspects and scope of her own research. It gave her an idea about the work already done before the current research. Further, it helped her in understanding how to frame hypotheses and objectives; how to go about the experimental study to collect and analyze the data. In this sense, the review has been of great value.

2.4 CONCLUSION

Thus, the chapter on the review of related literature comes to a close. The study of related works by other researchers helped the researcher to place her own study in proper perspective. It made the researcher aware of the different sources of information. The next chapter deals with the research methodology followed in the research on hand.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 INTRODUCTION

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it we study the various steps that are generally adopted by a researcher in studying her research problem along with the logic behind them. It is necessary for the researcher to know not only the research tools and techniques but also the methodology. Researchers need to understand the assumptions underlying various techniques. Further, they need to know the criteria by which they can decide which techniques and procedure will be applicable to certain problems and others will not. All this means that it is necessary for the researcher to design her methodology for her problem as the same may differ from problem to problem. It also comprises of a number of alternative approaches and interrelated and frequently overlapping procedures and practices. Since there are many aspects of research methodology, the line of action has to be chosen from a variety of alternatives. The choice of suitable method can be arrived at through the assessment of objectives and hypotheses and comparison of various alternatives.

The present chapter deals with the research methodology used in the present study. The chapter includes research design, research type, population, sample and tools used for data collection and analysis during the study.

3.1 RESEARCH DESIGN

This is an experimental study. It is a Control Group – Experimental Group Pre-test Post-test Design. Pretest was administered to both the groups. There was an intervention programme with the experimental group after administering the pretest. The programme focused on teaching ‘Individual Differences’, a topic from the syllabus, through activities and tasks. A post-test was administered in both the groups after the intervention programme in the experimental group. Observations regarding

the interaction in the experimental group were noted by the researcher. Results of the two tests (pretest and posttest) were analyzed. Quantitative and qualitative techniques were employed to analyze and interpret the data. After the analysis and interpretation of the data along with statistical data descriptive narration, a report of the findings was prepared which is presented here.

3.2 POPULATION

All the pre-service teachers studying in Colleges of Education at the Sardar Patel University during the year 2014-15 were treated as the population of this study.

3.3 SAMPLE

Pre-service student-teachers of the B.Ed. Advanced programme at the Waymade College of Education, Vallabh Vidyanagar during the academic year 2014-15 were treated as the Experimental Group for the present research study.

Pre-service student teachers of the B.Ed. (English) programme at the H M Patel Institute of English Training & Research, Vallabh Vidyanagar during the academic year 2014-15 were treated as the Control Group for the present research study.

Selection of the sample was done through purposive sampling techniques because the set of tasks were prepared and tried out through English as the medium of instruction.

3.4 TOOLS FOR DATA COLLECTION

Data Collection: Research essentially is about systematic collection of data, their analysis and interpretation. Tools help the researcher to interact with the subjects and get their responses. Since this study aimed at evaluating the effectiveness of a set of tasks the major tools for data collection were the intervention programme and achievement tests.

(1) Achievement Tests

- Pre – Test
- Post – Test

(2) The intervention programme of a set of tasks prepared and tried out by the researcher were another tool the effectiveness of which was to be measured.

3.5 TOOLS FOR DATA ANALYSIS

't' test was employed to analyse the data collected through the intervention programme and achievement tests.

The data thus collected through varied tools were analyzed and interpreted.

3.6 VARIABLES

Dependent Variable: For the present study, the achievement of pre-service teachers was considered as the dependent variable. Scores which are found from the programme is considered as another dependent variable.

Independent Variable: The tasks and activities prepared and tried out by the researcher to teach the topic 'individual differences' were independent variable. Qualifications of the students of Pre-Service Level were treated as another independent variable.

3.7 PROCEDURE FOR CONSRUCTION OF TOOLS

The procedure followed for preparing each tool is mentioned below.

Preparation of Tasks

The researcher first reviewed quite many articles and dissertations in order to understand her own work. Literature studied was especially about what is learning, views of psychologists on learning, what are the ways in which people differ, what are the major learning styles, etc. Then, she began to prepare a set of tasks and activities to be the intervention programme in the experimental group.

Preparation of the Pre-test

This was followed by preparation of a pre-test. The researcher brainstormed with her fellow researchers and read course books, magazines related to educational psychology and prepared a set of questions. The test consisted of objective type of questions. The questions were based on the concept and understanding of the topic under study, i.e., Individual Differences.

Preparation of the Post-test

The post-test was prepared after the intervention programme. This test was similar to the pre-test in terms of types of questions.

3.8 PROCEDURE FOR DATA COLLECTION

Stage- 1: During the first stage the researcher read the textbooks, magazines, journals to deepen her own understanding on teaching and learning in general, individual differences, sources and reasons for differences among people, effect of these differences on their learning styles, observing some sessions of senior teacher educators while they were teaching the B.Ed. trainees, etc.

Then she prepared the materials related to the programme which was to be tried out. As part of this, the researcher prepared different tasks related to the topic on hand.

Stage 2: The two separate groups (control and experimental groups) were identified and finalized.

This was followed by construction of an achievement test. This was called the pre-test.

The pre-test was administered on both the groups, i.e. the control and the experimental group.

Stage-3: Then the researcher conducted the experiment from 16th December to 21st December. This intervention programme was offered to the experimental group only.

Stage-4: The researcher prepared and administered the post test on both the groups-control and experimental.

Stage-5: The researcher analyzed the collected data using 't' test and interpreted the results.

Stage-6: The researcher prepared a report on the research work undertaken by her.

3.9 The following table shows session-wise details of the Intervention Programme.

Session No.	Time span	Objectives	Content	TLMS	Session task
1	30 minutes	To assess the student teachers' ability to give the appropriate answers.	Gave a Pre-test paper to individual student teachers. Gave instructions to the student teachers.	Pre – test paper	Student teachers were instructed to answer the questions.
2	1hr	To enable the student teachers to understand the tasks. To enable student teachers to carry out the tasks.	Meaning of tasks Discussion about the visit to the School for the Blind	Student-teachers' views regarding the visit to the school for the blind.	Observation technique was used wherein pre-service teachers discussed themselves.
3	1hr	To enable the student teachers to understand about the Educational Psychology. To enable the student teachers to come out with some definitions of Individual Differences.	Definitions of Individual Differences Types of Individual Differences	Slips of Paper with different components of individual differences	Writing definitions- The pre-service teachers wrote some definitions by themselves.
4	1hr	To enable the student teachers to understand about the types of Individual Differences. To enable student teachers to	Types of Individual Differences. Causes and Characteristics of Individual Differences.	Power point Presentation	Participatory approach was used to teach the types of Individual Differences.

		identify the major types of Individual Differences.			
5	1hr	To enable the student teachers to identify the 6 types of Individual Differences. To enable the student teachers to identify the characteristics of Individual Differences.	Worst test type of Individual Differences. Best test type of Individual Differences.	Power point Presentation	Discussion method was used to teach different types of Individual Differences.
6	1hr	To enable the student teachers to identify the learners' characteristics. To enable the student teachers to identify the types of multiple intelligences.	Learners' characteristics 8 types of multiple intelligences	Power point Presentation	Student teachers identified different types of multiple intelligences.
7	30 minutes	To administer a test	The researcher gave the Post-test to the student teachers.	Post – test paper	Student teachers' knowledge measured by the Post-test

Table 2: Details of the Intervention Programme

The following are some samples of the visuals shown to the pre-service teachers for discussion on learning styles.

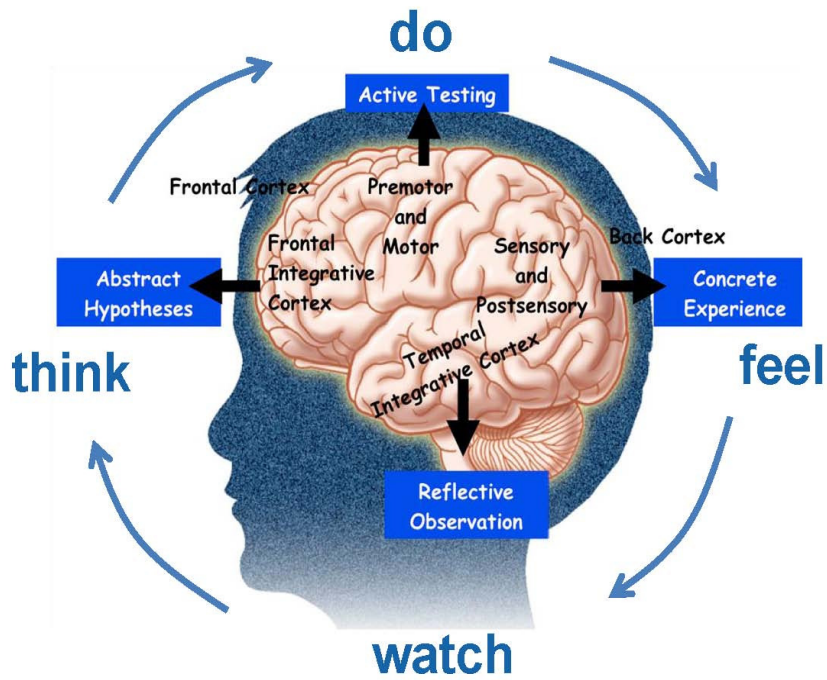


Figure 3: D. Kolb's concept of Learning Style

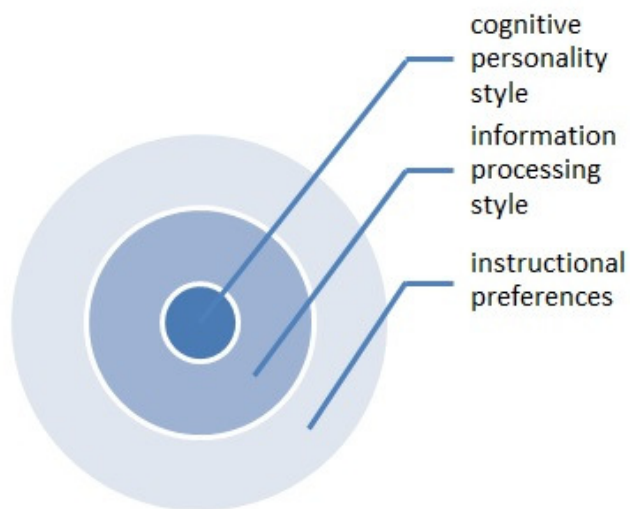


Figure 4: Claxton and Murrell's Onion Model of Learning Styles

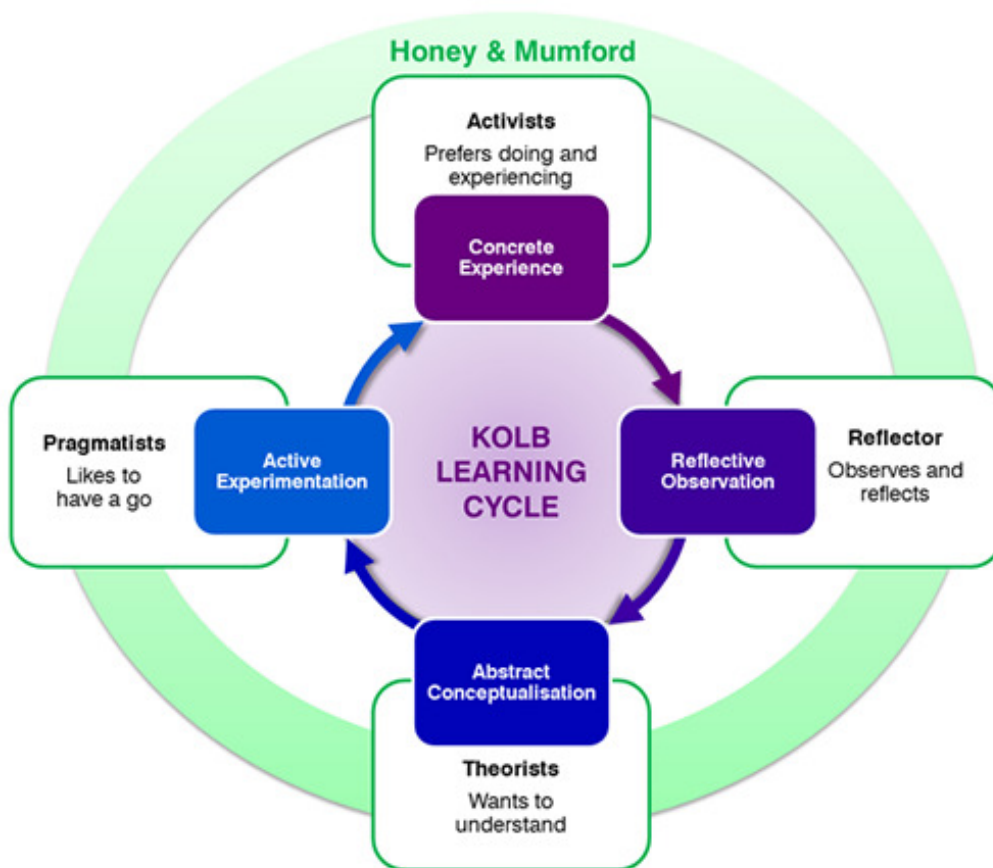


Figure 5: Honey and Mumford's Model of Learning Styles

3.10 THE RESEARCHER'S (TEACHER'S) ROLE DURING THE SESSIONS

The methodology adopted was a mixture of numerous teaching techniques and interaction patterns. For example, there were short talks by the researcher (teacher) where necessary; sometimes there were pair and group activities. Some sessions had video-based tasks. The major role of the researcher (teacher) during these sessions was to observe student – teachers' responses and verify if they had understood the teaching points, whether they were confused and needed more explanation or another activity, whether they were able to apply the knowledge in solving the problem or answer questions, etc.

So, the researcher (teacher) gave clear instructions about the task or point and went around the classroom to see what the pre-service teachers were busy with and whether they needed help.

3.11 CHALLENGES FACED BY THE RESEARCHER

During these sessions, the researcher faced quite many difficulties such as feeling a little bit nervous about standing in front of students almost of her age, questions like how to begin the session, at times how to respond to students' queries, etc. It was also a challenge to modify her presentations keeping in view what the students already knew, especially after visiting the School for the Blind in Mogri. Initially, it was really tough to keep the students engaged for the whole hour. The experiment really taught her the need to be well-prepared as a facilitator.

3.12 CONCLUSION

Thus, the experiment was conducted for seven sessions with the experimental group. During this time no such intervention programme was offered to the control group.

The current chapter focused on the design and methodology of the research, tools employed for data collection, construction of tools and description of the programme.

The next chapter provides details of analysis and interpretation of the data.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.0 INTRODUCTION

The present chapter is meant for the analysis and interpretation of the data collected through the intervention programme. Thus, the objectives and the outcomes of the research have been verified and the hypotheses have been tested.

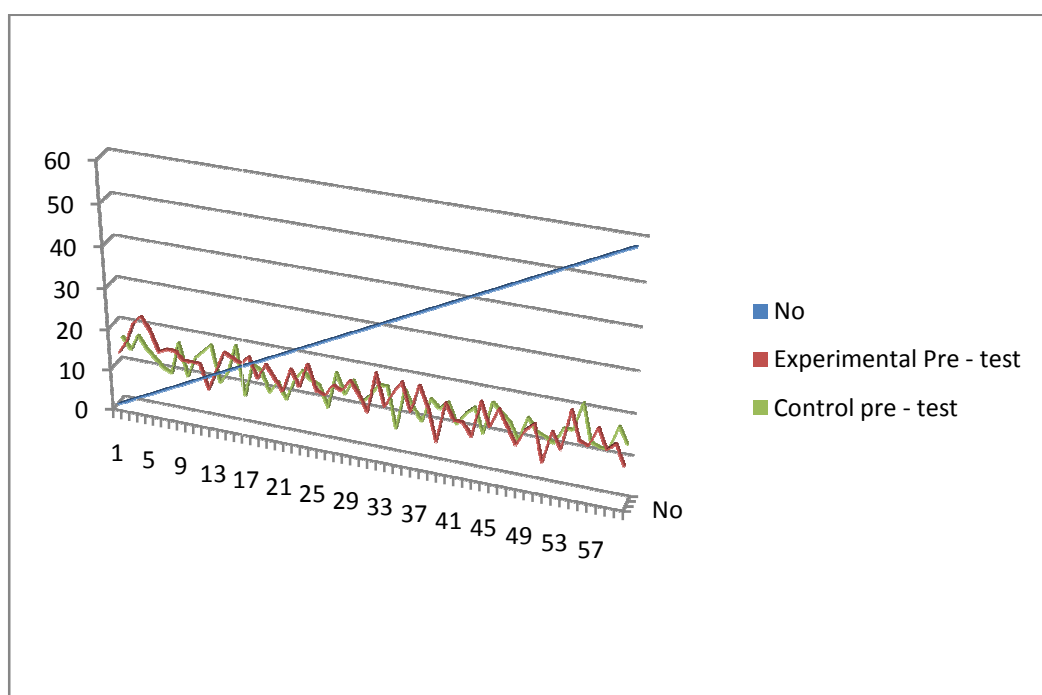
The present chapter deals with the scores of Pre-test and Post-test, tabulation of the data, data analysis and interpretation.

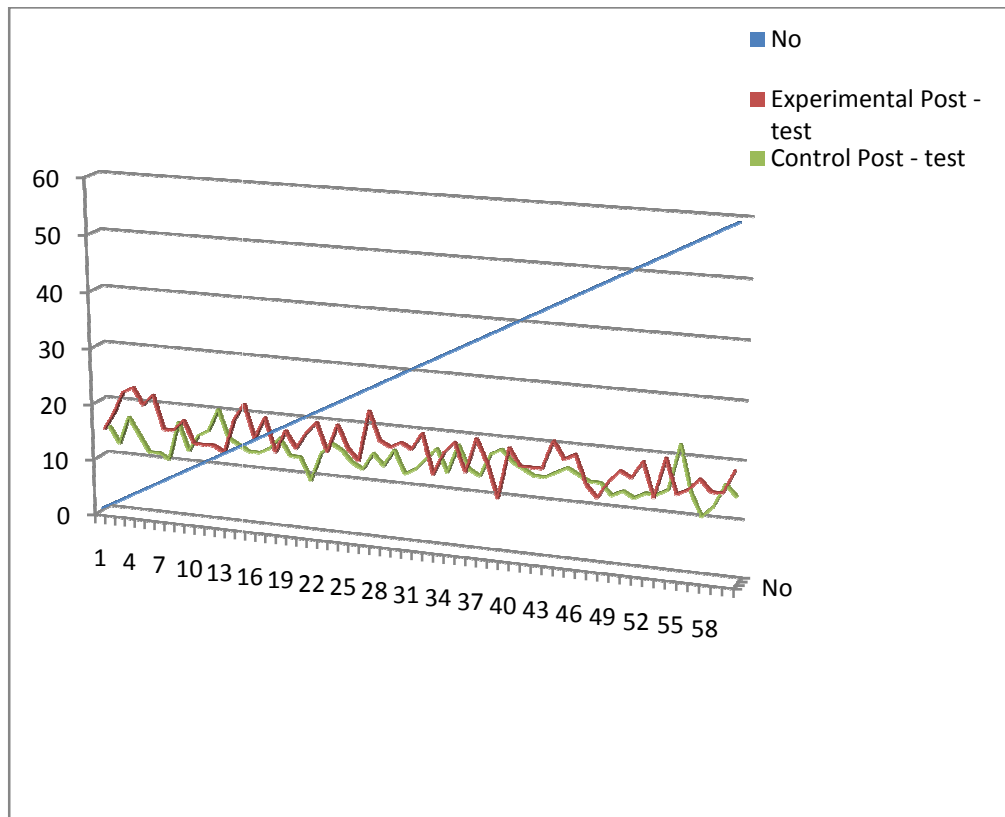
In this study the calculations are based on the scores of Pre-test and Post-test. These scores are analyzed and frequency distribution is prepared on the same. In addition, for every frequency distribution Mean and Standard Deviation are calculated.

4.1 DATA ANALYSIS AND INTERPRETATION

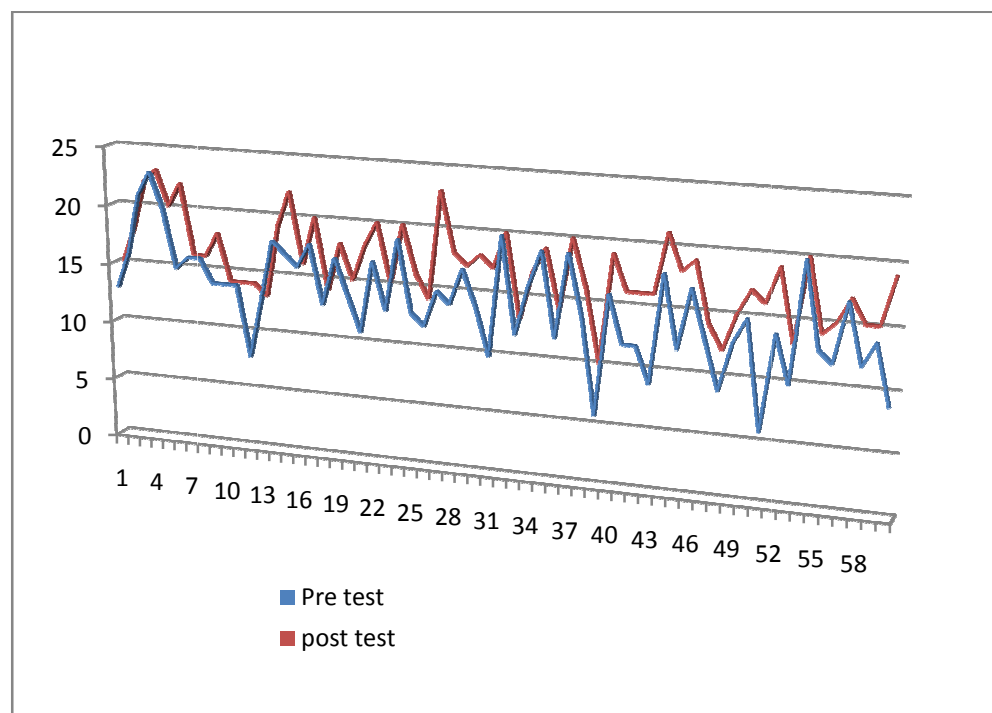
The hypotheses that were put to test were as given below.

Ho 1. There will be no significant difference between the mean achievement scores of pre – test and post – test of the participants in the Control and Experimental groups.

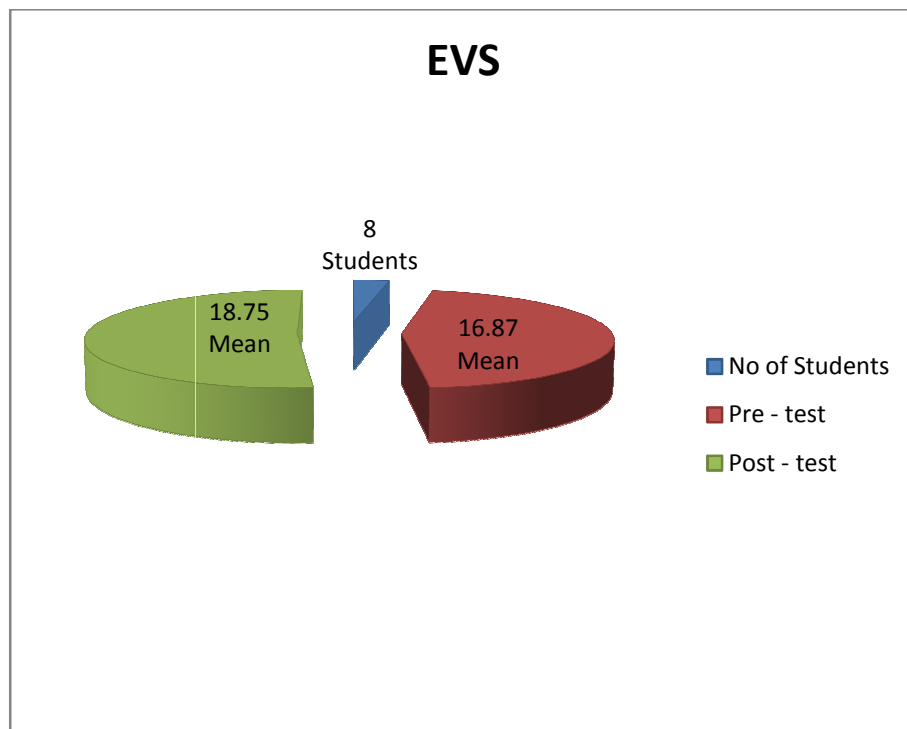
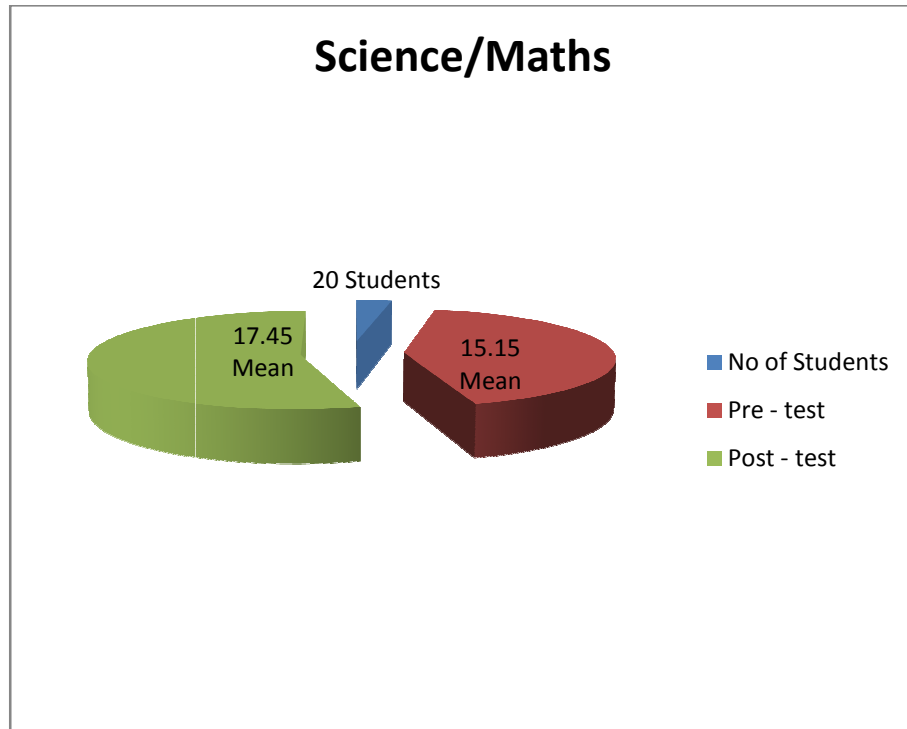




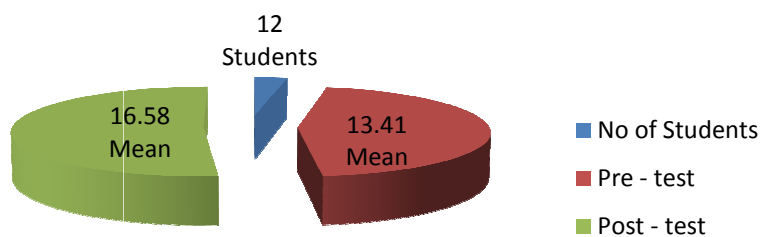
Ho 2. There will be no significant difference between the mean achievement scores of pre – test and post – test of the participants.



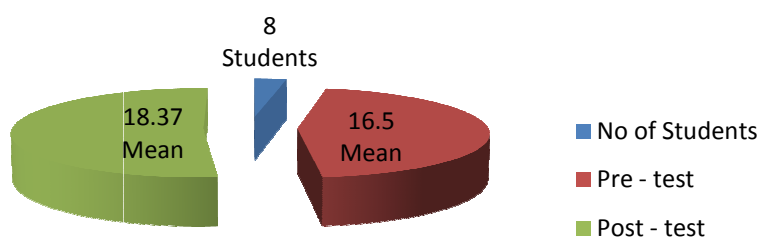
Ho 3. There will be no significant difference between the mean achievement scores of participants of different methods.

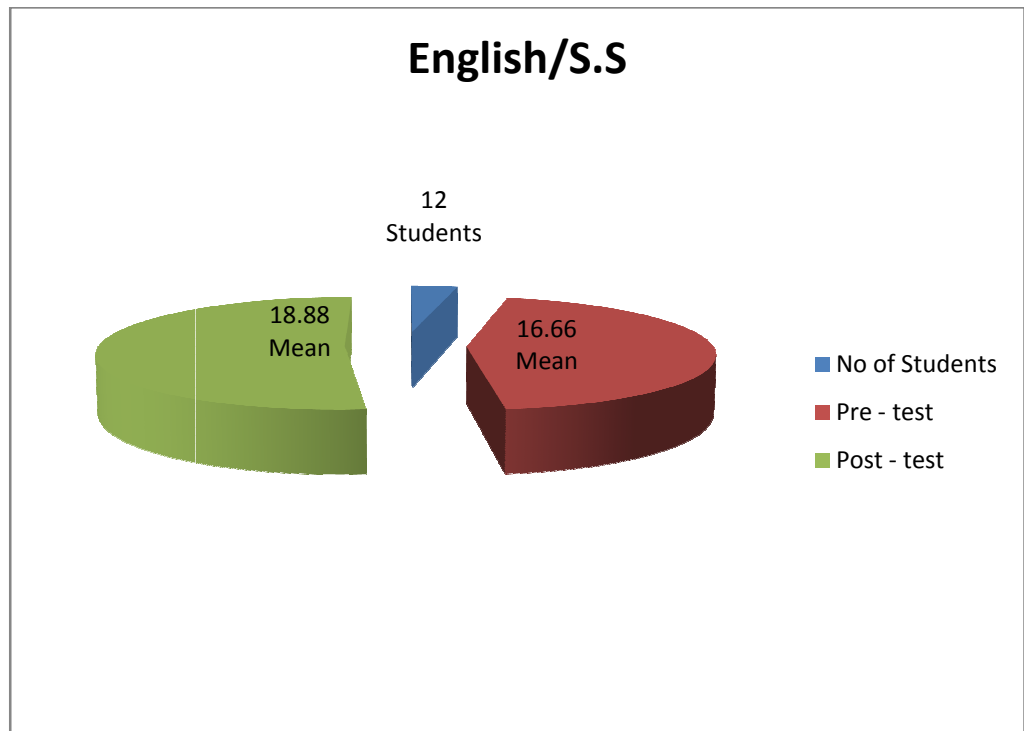


Commerce/Accountancy

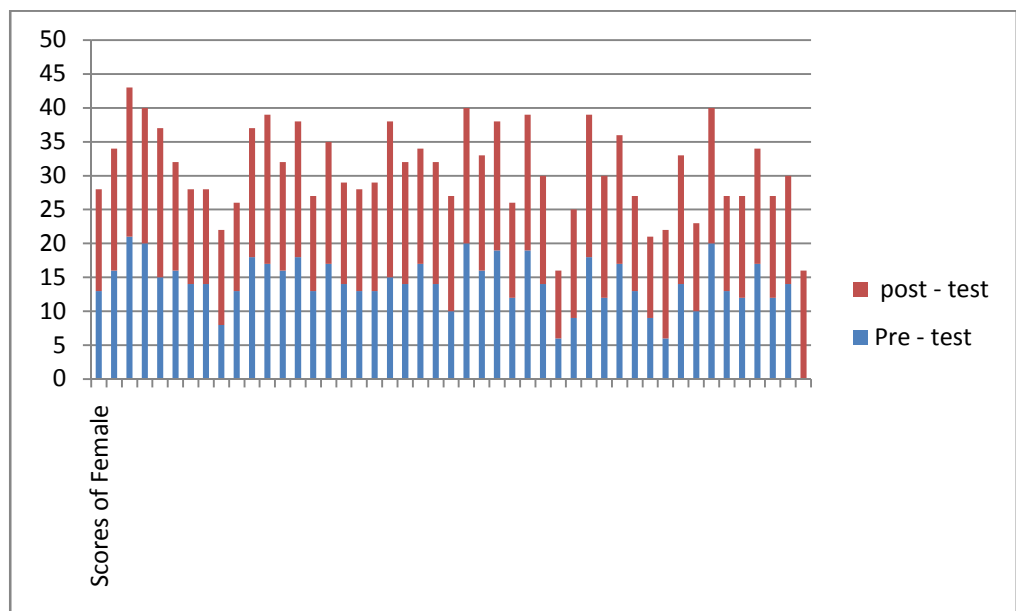


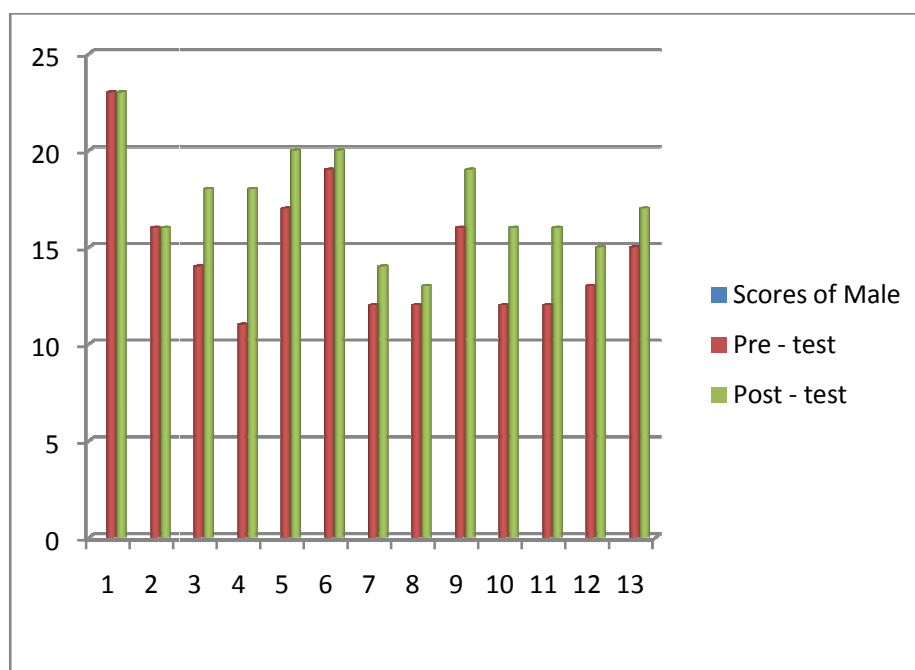
Commerce/Economics





Ho 4. There will be no significant difference between the mean scores of female and male participants of Experimental Group.





The collected data were analyzed quantitatively using 't' test.

The analyzed data have been presented in Table 4.1. 1

TABLE 4.1.1 Analysis of Pre-test and Post-test Mean, SD and 't' value

❖ **Data analysis of Control Group between Pre-test & Post-test**

	No. of Students	Mean	SD	SEm	r	df	t – value & Significant level
Pre - test	60	12.9	4.57	0.59	0.65	118	2.25
Post - test	60	14.02	2.64	0.34			& 0.01

Interpretation

The computed 't' value 2.25 is less than that of the table 't' values of 2.63 at 0.01 level of 118 degree of freedom.

Therefore, the Null Hypothesis that there is no significant difference between the mean achievement scores of pre-test & post-test of **control group is not rejected.**

It means there is that there is no significant difference between the mean achievement scores of pre-test and post-test of control group.

❖ **Data analysis of the Experimental Group between Pre-test & Post-test**

	No. of Students	Mean	SD	SEm	r	df	t-value & Significant level
Pre – test	60	14.36	3.44	0.44	0.80	118	4.8
Post – test	60	17	2.84	0.12			& 0.01

Interpretation

The computed 't' value 4.8 is greater than that of the table 't' value of 2.63 at 0.01 levels of 118 degree of freedom.

Therefore, the Null hypothesis that there is significant difference between the mean achievement scores pre-test & post-test of experimental group **is rejected**.

It means there is significant difference between the mean achievement scores of pre-test & post-test of experimental group.

❖ **Data analysis of comparison of pre-test between experimental and control groups**

Group	No. of Students	Mean	SD	SEm	r	df	t-value & Significant level
Experiment	60	14.36	3.44	0.44	0.80	118	1.94
Control	60	12.9	4.57	0.59	0.65		& 0.01

Interpretation

The computed 't' value 1.94 is greater than the table 't' value 1.69 at 0.01 level for 118 degree of freedom.

Therefore, the Null hypothesis is rejected.

It means, there is significant difference in mean achievement score of control group and Experimental group students, in favour of the Control group.

❖ **Data analysis of comparison of post-test between experimental and control groups**

Group	No. of Students	Mean	SD	SEm	r	df	t-value & Significant level
Experimental	60	17	2.84	0.36	0.80	118	1.94
Control	60	14.02	2.64	0.34	0.65		& 0.01

Interpretation

The computed 't' value 1.94 is greater than the table 't' value 1.69 at 0.01 level for 118 degree of freedom.

Therefore, the Null hypothesis is rejected.

It means, there is a significant difference in mean achievement scores of control group and experimental group students, in favour of Experimental group.

4.2 CONCLUSION

Thus, from the above data analysis development of a task based programme in Educational Psychology for pre – service teachers has been found effectively as evident through the significant difference between the mean achievement scores of pre-test and post-test.

The next chapter provides in a nut shell the whole research study, implications of the study and suggestions for further research.

CHAPTER 5

FINDINGS, IMPLICATIONS AND CONCLUSION

5.0 INTRODUCTION

As it is said all work that begins has to end. Similarly, this research also came to an end. It was a study on development of a task-based programme in one theme, namely 'Individual Differences' in Educational Psychology for pre-service teachers with the intention of providing ways and developing skills and awareness among pre-service teachers about Educational Psychology. The current chapter presents a bird's eye view of the entire research study.

The chapter includes the major findings of the research and implications thereof. A few areas of study have been suggested for further research. The chapter ends with a note on personal benefits of this study as experienced by the researcher.

5.1 STATEMENT OF THE PROBLEM

Effectiveness of a set of Tasks in Educational Psychology at the Pre – Service Level

5.2 SIGNIFICANCE OF THE STUDY

The study was an attempt to develop awareness and skills among pre-service teachers towards psychology and implications of teaching psychology through group discussion, brainstorming and activities. Lack of awareness about the individual differences among students in the class can lead to many problems of management on the part of the teacher. Further, if the teacher is not aware of what the different students in the class are interested in, are good at, have aptitude for, what is their background, etc even hard work by the teacher may not bring satisfactory result. The current research aimed at creating awareness regarding educational psychology in the minds of young teachers. Knowledge about educational psychology and individual differences is important for pre-service teachers who are going to shape the future citizens of the world. Through this task-based programme, the researcher aimed to make an attempt to consciously train the pre-service teachers to know about individual differences. Moreover, the researcher observed that the pre-service teachers were eager to learn about individual differences. So it was worth undertaking the study.

5.3 OBJECTIVES OF THE STUDY

The research was carried out focusing on the following objectives.

1. To study issues related to individual differences
2. To prepare tasks for individual differences
3. To try out the task – based programme
4. To know the degree of effectiveness of the programme
5. To study the feedback of the students

With a view to fulfilling the objectives, the researcher studied the literature related to the theme on hand, prepared tasks and activities and tried them out as an intervention programme, analysed the data collected through the intervention programme and interpreted them.

5.4 HYPOTHESES

This research study was conducted with the following null hypotheses in view.

Ho 1. There will be no significant difference between the mean achievement scores of pre – test and post – test of the participants in the control and experimental groups.

Ho 2. There will be no significant difference between the mean achievement scores of pre – test and post – test of the participants.

Ho 3. There will be no significant difference between the mean achievement scores of participants of different pedagogic methods.

Ho 4. There will be no significant difference between the mean scores of female and male participants.

5.5 DELIMITATIONS OF THE STUDY

The present study was delimited to a set of tasks to teach one topic in educational psychology, that is, individual differences, to pre – service teachers, that is the B.Ed. trainees.

5.6 RESEARCH QUESTIONS

During the research study, the following questions guided the researcher in her work.

- What are the sources of individual differences?
- Why are individual differences important?
- How to bring about the best in individual learners?
- How can pre-service teachers be made aware about individual differences they are likely to face in the classrooms?
- What kind of tasks and activities can be designed to help pre-service teachers understand individual differences better?
- What challenges does a teacher face in catering to individual differences in the classroom?
- How does the everyday thinking differ from research?

5.7 RESEARCH DESIGN AND PROCEDURE

This was an experimental study with a control group – experimental group pre-test post-test design. The pretest was administered to both the groups. There was an intervention programme in the experimental group after administering the pretest. The programme focused on teaching individual differences through activities and tasks. A post-test was administered in both the groups after the intervention programme in the experimental group. Observations regarding the interaction in the experimental group were noted by the researcher. Results of the two tests (pretest and posttest) were analyzed. Quantitative techniques were employed to analyze and interpret the data. After the analysis and interpretation of the data, a report of the findings was prepared.

5.8 POPULATION AND SAMPLE

All the pre-service teachers studying in Colleges of Education at Sardar Patel University during the year 2014-15 were treated as the population of this study.

Pre-service teachers of the B.Ed. Advanced programme at the Waymade College of Education, Vallabh Vidyanagar during the academic year 2014-15 were treated as the Experimental Group for the present research study.

Pre-service teachers of the B.Ed. (English) programme at the H M Patel Institute of English Training & Research, Vallabh Vidyanagar during the year 2014-15 were treated as the Control Group.

Selection of the sample was through purposive sampling techniques because the set of tasks were going to be prepared and tried out through English as the medium of instruction.

5.9 TOOLS USED

Two Achievement Tests were prepared and administered during the study:

(3) Pre – Test

(4) Post – Test

The intervention programme prepared and tried out by the researcher was the major tool for data collection.

5.10 FINDINGS

Broadly speaking, the following have been the findings of the study.

- It was found that all the sessions helped pre-service teachers to understand the concept of individual differences and related issues, such as multiple intelligence and tests for students with varied learning styles.
- Activities such as definition writing, brainstorming, pair and group activities, visuals, etc helped pre-service teachers in understanding the concepts.
- Further, pre-service teachers have imbibed them as well that they are interested in carrying out the activities in their career too.
- The exposure to the programme helped pre-service teachers in generating creative ideas with regard to concept of individual differences.
- Active participation of the pre-service teachers reflected that they had understood the concepts thoroughly discussed during the sessions.
- The researcher is of the view that in the way pre-service teachers felt free to discuss matters with the researcher; they would provide similar opportunities to their own students at schools.
- Looking at the average scores from all the respondents, majority of the respondents have presented their learning from the session of the programme in their pre-test and post-test scores.
- Almost all the pre-service teachers expressed that the activities given by the researcher were useful in developing skills in preparing tasks to teach different topics.

- The pre-service teachers enjoyed working with the activities and tasks, especially visuals and the one on building a definition of 'Individual Differences'.
- Finally, all the pre-service teachers had actively prepared activities and games for the children in the School for the Blind. They also had conducted these activities on their visit to the School for the Blind in Mogri. According to all of them real experience was the best way to understand individual differences and to deal with them.

5.11. EDUCATIONAL IMPLICATIONS OF THE STUDY

5.11.1 TEACHER EDUCATORS

Activity and task-based classroom interaction goes beyond mere telling and talking by the teacher educator. Tasks demand active involvement of participants. This leads to learning on the part of the pre-service teachers. They also feel interested because their views are taken into account. So, teacher educators should try to prepare tasks and activities to teach as many themes and topics as possible. Further, during the study, the researcher observed during the class that sometimes pre-service teachers have difficulties to give the answers of the questions. So teachers should provide more examples from different contexts and with different techniques.

5.11.2 PRE-SERVICE TEACHERS

Just as the pre-service teachers enjoyed being actively involved in classroom interaction, they should also prepare such activities and situations while teaching school children that they feel involved and interested in learning. After all learning is an active process and those who learn are the ones who 'do' something, that is, thinking, reflecting, brainstorming, writing, reading, discussing, problem solving, etc.

5.11.3 MATERIALS PRODUCERS

Everybody who teaches in a school or college may not be able to prepare useful activities and tasks. They may not have sufficient exposure to do the same. Hence, expert materials producers need to make such tasks and activities available to teachers at all levels. There is a shortage of such materials. Teachers at all levels would find them very useful. This also is likely to modify their teaching style.

5.12 SUGGESTIONS FOR FURTHER STUDY

After completing the research study, the researcher feels that quite many other topics can be explored by researchers for study. The following are some suggested topics for further research.

- Effectiveness of a set of tasks to teach other themes/ topics in Educational Psychology
- Effectiveness of a set of tasks to teach themes/ topics from other subjects in teacher education
- Comparative study of task-based teaching and traditional ‘telling and talking’ method
- Preparation and try out of tasks and activities at different levels (primary, secondary, college)
- Preparation and try out of ICT –based tasks to teach various subjects at different levels
- Effect of teacher personality on task-based/ activity based classroom
- Study of the level of individual care of students with different abilities through task-based teaching
- Study of taking care of multiple intelligence in the classroom through task-based classroom interaction

5.13. CONCLUSION

Thus, the research study is over and the report about the entire study has come to an end. The chapter presented a summary of the whole study briefly mentioning the major features of the study. The research has been a very useful educative experience for this researcher. It has opened new ways of thinking which made her aware of the possibilities of development in future. It has been a great opportunity to not only experiment with something new but also taking some risks of finding solutions to problems.

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