

## 12. EDUCATIONAL PSYCHOLOGY

### Introduction

Educational psychology is the systematic study of development of individual within the educational setting. Human behaviour can be understood, predicted, and directed towards desired goals by applying the principles of educational psychology. Educational psychology studies the individual through the life stages as he acquires new knowledge. As educational psychology is concerned with educational process from birth to death of an individual. Its scope is very wide concerned in the areas of the learner's developmental characteristics, individual differences, intelligence, personality and mental health.

Increasing use of psychology is noticed in various spheres of life and extension education is no exception to it. In extension education, the development workers deal with rural people to teach the rural people about innovations to be adopted in their farm, home and village. In as much as the extension worker is involved in educating rural people most of the concepts discussed in this chapter are applicable to extension educational psychology. The only difference between them is that the learners are children in the subject of educational psychology and the learners are rural adults in extension educational psychology.

The main aim of extension education is utilising the research findings in solving the problems of rural people and they must attain desirable changes in the values and attitudes. Bringing this change is one of the major concerns of extension educational psychology. Thus, the main job of the extension worker is to teach the rural people. The learning experience is given in the areas in which rural people are interested. Thus, one could see the importance of educational psychology in extension education.

To understand the educational psychology and social psychology the knowledge on psychology is essential. Therefore, the derivation, definition and other details of psychology are discussed in this chapter.

### Derivation of the term

The term psychology was derived from Greek; '*psyche*' meaning is soul or Atman '*logus*' means Science. Hence about 2500 years back it was referred to a '*science of soul*'. In olden days, it was believed that soul was responsible for various activities of man such as thinking, imagining, reasoning etc.

In the Middle Ages psychology became a '*science of mind*'. Then after sometime, it became the '*science of conscience*'. This definition was criticised from '*abnormal psychology*' which brought the study of unconscious part of the mind. Then in 20<sup>th</sup> century psychology

assumed scientific look and it became the '*science of mental behaviour*'. By observing one's behaviour we can have a knowledge of one's conscious and unconscious minds.

### **Definition of psychology**

- a) Psychology is the science of human and animal behaviour.
- b) Psychology is the positive science of human experience and behaviour.
- c) Psychology is a field of study which seeks scientific methods to describe, understand, predict and control the behaviour of living organisms. Literally psychology means the science of mind.

### **Meaning of psychology**

An individual's behaviour consists not only of his observable act but also all his reactions to inner states and to environmental factors of influence. The human organism is extremely complex. The environmental factors that can affect the organism include all the persons.

Any person's interaction with his environment represents many different kinds of experiences that vary in intensity and values to him and to others. Psychology is concerned with discovering the ways in which individuals and groups at different age levels, tends to respond to environmental stimuli. To the present, some tentative psychological principles have been evolved. The data obtained from scientifically conducted studies of human behaviour, is concluded that people tend to react similarly in certain situations and under certain conditions.

Although human behaviour seems to follow certain general trends, individuals tend to respond differently to different elements in specific situations. Psychologists are interested in the *Why* as well as *what* of both similarities and differences among human reactions. Various schools of thoughts have arisen. Most of the pertinent assumptions are:

- a) human behaviour is functional and dynamic.
- b) at every stage of development, an individual's reactions are influenced by effect of his experiences with people, things, situations and environmental conditions upon his desire to satisfy felt needs, wants and urges.
- c) a person's reactions usually represent the functioning of a total integrated pattern of behaviour.

### **Educational Psychology**

It deals with the behaviour of human beings in educational situations. This means that it is concerned with the study of human behaviour or the human personality, its growth, development and guidance under the social process of education.

It is a branch of general psychology which deals with various aspects of psychological factors affecting education, teaching and learning processes. It describes and explains the learning experiences of an individual from birth through old age. Its subject matter is concerned with the conditions that affect learning.

Educational psychology can be regarded as an applied science in that it seeks to explain learning according to scientifically determined principles and facts concerning human behaviour. In the light of available data, educational psychologists attempt to discover.

- i. the extent to which the factors of heredity and environment contribute to learning.
- ii. the nature of the learning process.
- iii. the educational significances of individual differences in rate and limit of learning.
- iv. the inner change that occur during learning.
- v. the relation of teaching procedures to leaning outcomes.
- vi. the most effective techniques for evaluating progress in learning.
- vii. the relative effect upon an individual of formal learning as compared with incidental or informal learning experiences.
- viii. to value the scientific attitude towards education and
- ix. the psychological impact upon learners attitude of sociological conditions.

***Scope and its importance in agricultural extension***

1. Educational psychology studies the limitations and qualities of individuals -physical capacity, intelligence, aptitude, interests, etc. which plays a major role in one's learning.
2. Its helps in improving teaching and learning. This branch helps in formulating training programmes for improving the skill of teachers and methods for organizing good learning situations.
3. It helps to have better education through evolution of syllabi for different level of education, preparation of different text books, development of examination patterns, etc.
4. Psychology attempts to discover the source of knowledge, belief, and customs and to trace the development of thinking and reasoning so as to find the kind of environmental simulation that produces certain type of activity.
5. It will help extension workers to find causes of prejudices, the habit of sticking to old practices and ways of doing things, the doubts and lack of confidence and factors affecting motivation.
6. It also helps them to know the emotions and feelings of farmers, how villagers or

farmers learn new practices and what type of approaches are adopted and teaching aids are used.

### ***Social Psychology***

Social psychology, as discussed earlier, attempts to determine the character of social behaviour. Social behaviour involves one of the four following basic reactions.

- i. When one individual meets another individual there is reaction. Each individual affects the other individual with whom he comes into contact is in turn affected by them.
- ii. Individual may be reacted to group (e.g.) extension worker meeting a group of farmers.
- iii. As a counterpart of the above situation there will be reaction of group individuals to a single individual (e.g.) group meeting its leader.
- iv. There is reaction of one group of individuals to another group of individuals.
- v. Social psychology studies the characteristics of all these four forms of social behaviour. It must, however, be borne in mind that social psychology studies the individual and not the group itself. Social psychology studies the individual in relation to his fellow-men.

### **Scope of social psychology**

The world is set by many ills which may be ascribed to difficulties in interpersonal relationships. Caste, prejudice, industrial unrest, crime, and delinquency are some of the major social problems. It is the task of social psychology to help to understand how these problems arise and how they can be controlled and predicted.

Another very important development in social psychology is it concerns the problem of the formation, change and measurement of social attitudes. The investigations have helped us to understand the way in which a person perceives his group and other groups. They also help us to understand how prejudices arise and why they resist the call of idealism on one hand and the realities on the other. We will also study the methods adopted to study public opinion in the recent years. Public opinion research has advanced considerably.

In brief we shall have to study such fundamental process as how the individual perceives his social environment, how he learns his social behaviour and how he achieves his social goals.

### **Meaning of Social Psychology**

From the above description it can be realized that this discipline is one the border land between the two branches of knowledge - sociology and psychology.

Some look this branch as knowledge itself or a special science. Some look upon it as a discipline that engaged itself in the study of those problems of social life which are not adequately studied by either sociology or psychology. It is asserted that it fills the gap between the two sciences and the analogy is put forward that social psychology is to sociology and psychology what bio-chemistry is to biology and chemistry.

### **Definition of Social Psychology**

Social Psychology is therefore, defined as the branch of knowledge which studies the relationships arising out of the interaction of individuals with each other in social situations. In brief, it deals with thinking, feeling, and acting of an individual in society.

**Intelligence** is an umbrella term describing a property of the mind comprehending related abilities, such as the capacities for abstract thought, reasoning, planning, problem solving, speech, and learning.

*Intelligence* derives from the Latin verb *intelligere* (“to understand”, “to choose between”); per that rationale, “understanding” (intelligence) is different from being “smart” (capable of adapting to the environment). Scientists have proposed two major “consensus” definitions of intelligence:

(i) from *Mainstream Science on Intelligence* (1994), a report by fifty-two researchers:

A very general mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience. It is not merely book learning, a narrow academic skill, or test-taking smarts. Rather, it reflects a broader and deeper capability for comprehending our surroundings — “catching on”, “making sense” of things, or “figuring out” what to do.

(ii) from *Intelligence: Knowns and Unknowns* (1995), a report published by the Board of Scientific Affairs of the American Psychological Association:

Individuals differ from one another in their ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, [and] to overcome obstacles by taking thought. Although these individual differences can be substantial, they are never entirely consistent: a given person’s intellectual performance will vary on different occasions, in different domains, as judged by different criteria. Concepts of “intelligence” are attempts to clarify and organize this complex set of phenomena. Although considerable clarity has been achieved in some areas, no such conceptualization has yet answered all the important questions, and none commands universal assent. Indeed, when two dozen prominent theorists were recently asked to define intelligence, they gave two dozen, somewhat different, definitions.

Moreover, besides the foregoing organisational definitions, these psychology and learning researchers also have defined intelligence as:

<b>Researcher</b>	<b>Quotation</b>
Alfred Binet	Judgment, otherwise called “good sense”, “practical sense”, “initiative”, the faculty of adapting one’s self to circumstances . . . auto-critique.
David Wechsler	The aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment.
Cyril Burt	Innate general cognitive ability
Howard Gardner	To my mind, a human intellectual competence must entail a set of skills of problem solving — enabling the individual to resolve genuine problems or difficulties that he or she encounters and, when appropriate, to create an effective product — and must also entail the potential for finding or creating problems — and thereby laying the groundwork for the acquisition of new knowledge.
Linda Gottfredson	The ability to deal with cognitive complexity.
Sternberg & Salter	Goal-directed adaptive behavior.
Reuven Feuerstein	The theory of Structural Cognitive Modifiability describes intelligence as “the unique propensity of human beings to change or modify the structure of their cognitive functioning to adapt to the changing demands of a life situation.”

**Practical application** — Furthermore, in clinical and therapeutic practice, such theoretic and academic definitions of intelligence might not apply to patients with borderline intellectual and adaptive functioning, whose treatments require comprehensive analysis of every diagnostic, testing, educational placement, and psychosocial factor.