Essentials of Educational Psychology
Essentials of Educational Psychology

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To
my grandchildren
Lavanya, Anvit, Isha and Arnav
for giving a new meaning to my life
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Preface

Educational Psychology is best defined as a science of education or in its most practical sense, it presents the application of the theory and practice of psychology in the field of education. In our school education set-up, it is mainly concerned with equipping the aspiring as well as practising teachers with the necessary knowledge and skills, interests and attitudes helpful in playing their roles as effective teachers. However, such a task is not as simple as otherwise visualized. For playing its role effectively, a course and text in educational psychology must be capable of providing the teachers and other personnel concerned with the development, progress and welfare of the children all the essentials that are helpful to them in understanding their wards in terms of their varying individual differences, particularly related to their abilities and potentialities, growth and development, habits, interests, attitudes and aptitudes, needs and motives and other likewise personality characteristics. Teachers can thus help their students through needed guidance and counseling in the tasks of their proper learning and behaviour modification for achieving maximum balanced development of their personality helpful in enjoying desired physical and mental health and overall adjustment to their self and the environment. As a result, the coverage of the topics related to a particular course in educational psychology is bound to be extensive, wide and enormous to meet the challenge of providing better teacher education.

The present text is designed to meet this challenge. To adjust to the varied requirements of the teacher preparation courses, the subject matter of the text has been organized in forty-five chapters. The flow of the topics follows the traditional organization for most courses of the B.Ed. and B.A. (Education) of the Indian universities. However, in doing so, the important principles of content organization like principle of logical sequence, proceeding from simple to complex, etc. have been well taken care of.

Starting with an introduction to the meaning, nature, scope and methods of psychology and its applied branch, educational psychology, the book throws light on the various aspects of human growth and development, particularly related to the stages of childhood and adolescence. In its subsequent chapters, it focuses on the nature and theories of learning in perfect coordination with a discussion on the learning conditions like factors affecting learning, maturation and training, psychology of individual differences, motivation and attention, interests and aptitudes, concept formation, habits and attitudes, memory and forgetting, transfer of learning, group dynamics and
group behaviour, etc. Thereafter, it discusses the nature, types, theories, determinants and assessment of personality. It has also accorded due importance to the cognitive aspect of human behaviour by introducing topics related to intelligence, creativity, thinking, reasoning and problem solving. The mental health and overall adjustment of the learner have also been taken care of in the text with the inclusion of topics like mental health and hygiene, sex education, adjustment, frustration and conflicts, behavioural problems, along with their needed prevention and treatment. A full chapter has been devoted to the various categories of exceptional children with an objective of providing needed insight into the identification, etiology, treatment and educational provisions for them.

In the next four chapters, the text provides an essential knowledge and skill for the use of statistics in organizing educational data and computing statistics like Mean, Median, Mode and Correlation for its analysis. The text concludes with an important aspect of equipping the readers with the skill of performing various psychological tests for collecting essential information regarding the potential and progress of the children.

The text is adequately illustrated with examples, diagrams and tables for helping the readers in their understanding of the topics discussed. Every chapter of this text begins with its structural composition to provide a glimpse of what the chapter consists of. At the end of each chapter, besides giving a summary for the readily recollection of the subject matter discussed, appropriate references and suggested readings have been provided for the readers’ further reference.

I express my gratitude to the various authors, research workers and educational psychologists, the views and opinions of whom I have freely incorporated in the work. Many of the students also have been a great source of inspiration for me during more than three decades of my association with them. I am also obliged to my wife Dr. (Mrs.) Uma Mangal, who besides being a constant source of inspiration, has helped much in the preparation of the manuscript. Besides, I would like to thank Shri Naresh Kaushik for typing the manuscript. Finally, I wish to thank the Publishers for the efforts taken in bringing this work in such a presentable and useful form.

It is hoped that the book will be read by a host of readers for whom it has been specifically designed and they will be duly benefited by it. Nothing is ever perfect and so any comments or suggestions for improving this work would be greatly appreciated and thankfully acknowledged.

With all good wishes to the readers,

S.K. MANGAL
INTRODUCTION

The subject psychology is nowadays becoming more and more popular. In comparison to other subjects a larger number of students are opting for it at the senior secondary and degree levels. Even in the most prestigious competitive examinations like the IAS and the allied examinations or the Provincial Civil Service examinations, the number of students opting for psychology, for the preliminary and mains is increasing every year. The reason for its popularity lies with its body of knowledge, which is quite interesting, and its wide use and applications in almost all the walks and spheres of life.

However, there was a time when there was no such subject as psychology. The ‘study of mind’ was covered under a separate branch of philosophy called Mental Philosophy. Hence psychology is a legitimate child of philosophy. The break away of psychology from philosophy is said to be due to the fact that it gave up sheer speculation in favour of scientific procedure. This drift of psychology from philosophy to science took a long course swaying one way or the other. Such a movement has been responsible for the change in the meaning and definitions of psychology from time to time as can be observed from the following discussion.
DEFINING PSYCHOLOGY

Etymological derivation of the word ‘Psychology’ indicates that it has its origin from two Greek words—psyche and logos. The word ‘logos’ stands for rational discourse of a study. However, the meaning and interpretation of the word “psyche” has been in a state of change from time to time leading to subsequent changes in the ways of defining the term ‘psychology’ as may be evident from the following four stages of its evolution.

- **First Stage.** By taking the meaning of the word ‘psyche’ as soul, psychology was first defined as the “study of soul”. Actually during these days, the subject philosophy almost dominated and influenced the views of the scholars including psychologists. Consequently, a philosophical meaning and interpretation was given to the word ‘psyche’. However, soon such interpretation faced criticism like what is soul? How can it be studied? and so on. The inability to answer such questions led to the search for a new meaning of the word ‘psyche’.

- **Second Stage.** At this stage, the philosopher cum psychologists tried to define psychology as the “study of the mind” by giving a new meaning and interpretation to the word ‘psyche’ in the form of ‘mind’. Although the word ‘mind’ was less vague and mysterious than soul, it faced the same criticism with questions like what is mind? How can it be studied? and so on.

- **Third Stage.** The criticism and unacceptability of the meaning of the word psyche as soul or mind led the psychologists to a new search of its proper meaning. The initiative was taken by famous psychologists like William James (1890), Wilhelm Wundt and Edward Bradford Titchener (1894) who, while interpreting psyche as consciousness, defined psychology as a study of consciousness. According to these psychologists the description and explanation of the states of consciousness is the task of psychology which is usually done by introspection (the process of looking within). In the state of consciousness, we remain aware of the situation, conscious or alive to the task we are doing and the process of thinking and feeling which is growing in our mind.

  This definition too was rejected on the ground that it had a very narrow vision as it did not include the sub-conscious and the unconscious activities of the mind and also due to the most subjective nature of the method of introspection which it had taken into account.

- **Fourth Stage.** This stage in the evolution of the definition of the subject of psychology reflects the advent of the modern era of science and technology. Consequently, in the definition of psychology the word ‘study’ was replaced by ‘science’. The first psychologist who, besides using the word science in place of study, replaced consciousness with total behaviour (conscious as well as unconscious) was the famous William McDougall. In the book *Physiological Psychology* published in 1905, he wrote: “Psychology may be best and most comprehensively defined as the positive Science of the conduct of living creatures.” Later in 1908, in his book *Introduction to Social Psychology*, he added the word ‘behaviour’ to his definition and finally in *An Outline of Psychology*, gave the following meaningful definition:

  “Psychology is a Science which aims to give us better understanding and control of the behaviour of the organism as a whole.” (1949, p. 38)

  In the same period, an American Professor Walter Bowers Pillsbury in his book *Essentials of Psychology* published in 1911 gave the same behavioural definition of the term psychology in these words “Psychology may be most satisfactorily defined as the Science of human behaviour.”
However, later in 1913, J.B. Watson, the father of behaviourism, proposed to elaborate the concept of the term behaviour by including in it both human and animal behaviours and consequently he defined psychology as “The science of behaviour” (taking into account the human as well as animal behaviour).

In the subsequent years of 20th century, the scholars and psychologists tried to similarly define psychology as a science of behaviour.

Let us cite a few important definitions for the purpose of illustration. First definition of this nature may be cited from the famous authors and psychologists, Woodworth and Marquis, who wrote:

“Psychology is the scientific study of the activities of the individual in relation to his environment” (1948, p. 20)

Going further on similar lines, the famous writer on psychology N.L. Munn summarised it in one of his books as under:

“Psychology today concerns itself with the scientific investigation of behaviour.” (1967, p. 4)

Analysis of Definitions
A close analysis of the definitions of the subject psychology given above clearly reveals that starting from their vague and mysterious concepts having philosophical base, the definitions of psychology have now concentrated on the scientific investigation of behaviour. Commenting upon the history of evolution of these definitions, Woodworth (1948) writes, “First psychology lost its soul, then its mind, then it lost its consciousness, it still has behaviour of sort.”

Hence, as per the latest definition, psychology is a science of behaviour, or a scientific study of the behavioural activities and experiences. Here the main emphasis is on the term ‘behaviour’ whose scientific study or investigation is clearly aimed through the theoretical and practical activities to be organised under psychology.

However, the issues which remain unanswered, even at this stage may be put as under:

1. What should be clearly inferred from the term ‘behaviour’ whose study we aim at in psychology?
2. We aim to organise a scientific investigation of behaviour through psychology. It implies that psychology is a science quite capable of organising a proper scientific investigation or study of the behaviour. Is it true, therefore, that psychology is a science? If yes, then what kind of science is it?

Let us try to discuss and look for some answers to these issues.

Behaviour: Meaning and Nature
The latest concept of the term behaviour has a very wide and comprehensive meaning revealed as under:

(a) “Any manifestation of life is activity,” says Woodworth (1948) and behaviour is a collective name for all these activities. Therefore, the term ‘behaviour’ includes not only motor (conative) activities like walking, swimming, dancing and so on but also activities like thinking, reasoning, imagining (cognitive activities) and feeling happy, sad, angry (affective activities) etc.

(b) It concerns all the segments of human mind — conscious, sub-conscious and unconscious, and, therefore, covers not only the overt behaviour but also inner experiences and mental processes i.e., covert behaviour.
(c) In psychology, we study the behaviour of all living organisms. Therefore, it includes the behaviour of human beings as well as that of birds, insects, plants and animals, of normals as well as of abnormals and of children as well as of adults, etc.

In this way, the term behaviour is too comprehensive to cover all the life activities and experiences of all the living organisms.

**NATURE OF PSYCHOLOGY**

**Whether to Consider Psychology a Science or Not?**

After a long discussion among the scholars and psychologists on the acceptance of psychology as a science and its nature as scientific, the verdict has been in favour giving it the status of science. The observation and concluding remarks of the famous authority N.L. Munn may be cited as a solid evidence for this purpose. He writes—“*Psychology is a science and a properly trained psychologist is a scientist, or at least a practitioner who uses scientific methods and information resulting from scientific investigation.*” (1967, p. 4)

Besides such assertions and observations of the various authorities, we can put the following arguments to justify its status as a science

- Like sciences, it has an organised and systematic body of knowledge, facts, principles and theories which are subject to change on the discovery of new facts and emergence of new principles and theories.
- Like sciences, it believes in the cause and effect relationship. It declares that every behaviour has its roots, the factor of its causes and development.
- Like sciences, it emphasizes the search for truth. It studies facts of behaviour and describes the laws governing them.
- It adopts the method of systematic inquiry and scientific approach as used by sciences.
- Like other sciences, psychology too has its pure and applied aspects.

With all such evidences, it can be safely concluded that it is an accepted reality that psychology is a science.

**Psychology as a Science**

Science can be divided into two broad categories—Normative and Positive. The question arises as to which category should psychology be included in. Psychology studies facts and describes ‘what is’. It does not concern with ‘ought to be’ as emphasized by Normative Sciences like Ethics, Logic and Philosophy etc. Therefore, it is quite proper to describe it as a positive science.

**What Kind of Positive Science is Psychology?**

(i) It is not as perfect a science as physics, chemistry or mathematics. It is a behavioural science which deals with the behaviour of an organism.

(ii) This behaviour is quite dynamic and unpredictable. We are not consistent in our behaviour. On the other hand, physical reactions which are studied by the natural sciences are always predictable. This makes the study in natural sciences more exact, accurate and objective. Psychology has not yet attained the status of these sciences although it is trying hard to be more objective, exact and accurate. Therefore, it is better to name it as a developing positive science.
In the end, we can conclude that psychology although termed as positive science, is not yet much developed as the natural sciences and therefore can be defined as:

*Psychology is a developing positive science which enables us to study the behaviour of a living organism in relation to his environment.*

**SCOPE OF PSYCHOLOGY**

What do we mean by the scope of a subject? The scope of a subject can usually be discussed under the following two heads:

1. The limits of its operations and applications.
2. The branches, topics and the subject matter with which it deals.

The field of operations and applications of the subject of psychology is too vast. It studies, describes and explains the behaviour of the living organisms. Here the terms ‘behaviour’ and ‘living organism’ carry quite comprehensive and wide meanings. Behaviour includes all types of life activities and experiences of a living organism—whether conative, cognitive or affective; implicit or explicit; conscious, unconscious or subconscious. Moreover, the term living organism is to be applied to all the living creatures created by the Almighty irrespective of their species, caste, colour, age, sex, mental or physical state. Thus normals, abnormals, children, adolescents, youth, adults, old, criminals, patients, workers, officials, students, teachers, parents, consumers and producers belonging to different stock, spheres and walks of human life are all studied under psychology. Moreover, as a subject psychology does not limit itself to the study of human behaviour only but also tries to study the behaviour of animals, insects, birds and even plant life.

In this way, where there is some life and there are living organisms, psychology may be needed for the study of the activities and experiences of these organisms. We know that the living organisms as well as their life activities are countless and consequently, no limit can be imposed on the fields of the operation and applications of the subject psychology either. Hence, it is quite appropriate to conclude that the scope of psychology can neither be adjudged as narrow nor be confined within boundaries. It has width and depth of an ocean. However, for the sake of convenience, as well as for proper specialized study and application, it can be divided into a number of branches and fields as discussed below:

**Fields or Branches of Psychology**

**GENERAL PSYCHOLOGY**

It is relatively a large area or field of psychology which deals with the fundamental rules, principles and theories of the subject in relation to the study of the behaviour of normal adult human beings.

**ABNORMAL PSYCHOLOGY**

It is that branch or field of psychology which describes and explains the behaviour of abnormal people in relation to their own environment. The causes, symptoms and syndromes, description and treatment of the abnormalities of behaviour form the subject matter of this branch.

**CLINICAL PSYCHOLOGY**

Clinical psychology comes at the forefront after the work and operations of the knowledge and activities connected with abnormal psychology have been done. The knowledge about abnormality of behaviour and the underlying causes, symptoms etc. provide necessary framework to the subject
matter and skills required for the study of clinical psychology. The abnormality and maladaptation of the behaviour leads to mental illness and diseases. A proper diagnosis of such illness and diseases is then the work of clinical psychology. It analyses the causes of such maladaptation and mental illness and then suggests ways and means for the proper treatment and rehabilitation of the patient. The experts, who provide such treatment to the patients attending the clinic or hospital, are known as clinical psychologists.

**PHYSIOLOGICAL PSYCHOLOGY**

This branch of psychology describes and explains the biological and psychological basis of behaviour. The study of the internal environment and psychological structure of the body, particularly brain, nervous system and functioning of the glands in relation to the conative, cognitive and affective behaviour of the human being form part of the subject matter of this branch.

**SOCIAL PSYCHOLOGY**

This branch of psychology studies the human behaviour in relation to his social environment. One's behaviour as a member of the group, the process of communication and inter-personal relationship, group dynamics and social relationship etc., are studied under this branch.

**INDUSTRIAL PSYCHOLOGY**

It is that branch of psychology which studies the human behaviour in relation to the situations and environment prevalent in the industrial world. It aims at bringing improvement in the working output of the human resources for the purpose of raising quality production. Consumer psychology, selection, training and placement of human capital, establishing harmonious relationship between the employee and the employer, strengthening morale of the workers and other employees etc., form the subject matter of this branch.

**CRIME PSYCHOLOGY**

This branch of psychology studies the behaviour of the criminals in relation to their situations and causes through behaviour analysis techniques and adopts behaviour modification devices for their proper reforms and rehabilitation.

**EXPERIMENTAL PSYCHOLOGY**

This branch of psychology describes and explains the ways and means of carrying out psychological experiments following scientific methods in controlled or laboratory situations for the study of mental processes and behaviour. It picks up animals, birds and human beings as subjects for these experiments.

**CHILD PSYCHOLOGY**

This branch of psychology deals with the study of the behaviour and the process of growth and development of children from birth to the beginning of the period of adolescence.

**ADOLESCENT PSYCHOLOGY**

In this branch of psychology, we study the process of growth and development during adolescence, and the personality characteristics, behavioural and adjustment problems faced by adolescents. It helps the elders to understand the adolescents in their proper perspectives and in helping them in their proper adjustment as well personal and social welfare.
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