



UNIT – I

# **EDUCATIONAL PSYCHOLOGY AND HUMAN GROWTH AND DEVELOPMENT**



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## **Definition of 'Psychology'**

Psychology is now defined as “a science that systematically studies and attempts to explain observable behaviour and its relationship to unseen ‘mental’ processes (experiences) that go on inside the organism and to external events in the environment”.

## **Historical Development of Psychology and its Emergence as a Separate Discipline**

Till 19<sup>th</sup> century, psychology was studied only as a branch of philosophy. The word psychology comes from the two Greek words, ‘psyche’ (soul) and ‘logus’ (science); so the root meaning of the word psychology is that it is a science of soul. Traditional psychologists attempted to study the location of the soul, its nature and its state after the death of the individual. Then it was defined as a science of mind. Mind functions in three domains viz. Cognitive (thinking), Affective (feeling) and Conative (willing). According to William McDougall, who propounded the ‘Hormic School of Psychology’ (Purposivism), every response of man is due to a purpose or inner motive called ‘instinct’. According to McDougall, it is the instinct that motivates human behaviour. He further believes that an emotion is present in any instinctive activity. Thus instincts and emotions are the bases of human behaviour according to Hormic Psychology.

Titchner, who developed the theory of 'Structuralism' believed that mind is the basis of all human actions. According to him there are three states of mind – cognitive, affective and conative. The mind was regarded as consciousness and the ultimate elements of it are sensation, feelings and images. To introspect means to look within. Psychology thus came to be defined as a science of consciousness.

Behaviour psychologists like J.B.Watson of U.S.A and others defined psychology as a science of behaviour. They tried to define behaviour in terms of stimulus, known as S-R formula. For every stimulus, there is a response. They also deny McDougall's Theory of Instincts. Then came the Viennese physician Sigmund Freud (1856-1939) on the scene with a bang proclaiming the school of psychology called 'Psycho-analysis'. As a pure science, psychology is concerned with systematic study of behaviour and verification through experimentation. We can bring psychology under the category of 'Bio-social science'. The components of behaviour are:

- i) The conscious experiences of which the organism is aware of, like that of being hungry or having pain when injured, etc. And
- ii) The unconscious process: (eg.) without any specific reason we get irritated with some people, become friendly with others etc.

## **Definition of Educational Psychology**

Educational psychology is defined as that branch of psychology which is concerned with psychological researches as applied to any or all aspects of educational processes and practices. It is in relation to problems like learning, teaching and training.



# **Nature of Educational Psychology**

Educational psychology has made tremendous advancement and gradually established itself as an independent study. Most of the educational problems come under its purview. Child education, diagnostic and remedial education, education for the gifted and handicapped, factors affecting learning, principles of evaluation, etc. Bear proof to the claim that educational psychology is a special field of study. The study of classroom climate, techniques of behaviour modification, programmed learning, micro-teaching, software and hardware approaches, computer assisted instruction are all the areas developed by the educational psychologists aimed at improving the interaction between the teacher and the taught.

## **Scope of Educational Psychology Management**

1) Kolesnik mentions the following problems dealt by educational psychologists as forming the scope of educational psychology:

- i) Differences among students
- ii) Motivation
- iii) Methods of instruction
- iv) Evaluation
- v) Classroom management
- vi) Mental health
- vii) Character formation

2) H.C. Lindgren, the basic elements of the content of Educational Psychology are:

- i) The Learner
- ii) The Learning Experiences
- iii) The Learning process
- iv) The Learning situation or environment
- v) The Teacher

3) Garrison et. Al. recognise the following as major divisions of educational psychology

- i) The child and his development
- ii) Learning and educative process
- iii) Evaluating Pupil-Growth Methods of pupil- evaluation, studying the individual child, learning difficulties at school, evaluating the results of instruction, etc.
- iv) Guiding the child Personality integration, adjustment problems of the child, pupil-teacher relations, etc.

## **Differences Between General and Educational Psychology**

The basic difference between General Psychology and Educational Psychology appears to be the matter of focus. General psychology gives a comprehensive view of human behaviour. Educational psychology highlights the behaviour of the learner. Learner, learning processes and learning situations are the three focal areas of educational psychology.

## **Meaning of the term 'Growth'**

The term 'growth' is used purely in the physical sense. It generally refers to increase in size, length, height and weight. Growth is one of the components of the developmental process. In a sense, development in its quantitative aspect is termed as growth.

## **Characteristics of 'Growth'**

- 1) Growth refers to increase caused by becoming larger and heavier.
- 2) It is quantitative, additive, and augmental.
- 3) It is objectively observable and measurable.
- 4) Growth does not continue throughout life, it stops when maturity has been obtained.

## **Meaning of the term 'Development'**

'Development' implies overall changes in shape, form or structure resulting in improved working or functioning. It indicates the changes in the quality or character rather than in quantitative aspects.

## **Characteristics of 'Development'**

1. Development is progressive
2. Development is continuous in all areas of mental activity.
3. The goal of development is to enable the individual to adapt to the environment in which he lives.
4. Development is influenced by maturation and learning.

# Comparison between 'Growth' and 'Development'

GROWTH	DEVELOPMENT
Growth is quantitative i.e. it indicates increase, enlargement and augmentation.	Development is both quantitative and qualitative and it results in improved functioning of the individual.
Growth does not continue throughout the life-span. It stops after maturation is obtained.	Development is continuous in all areas of mental activity; it does not stop after puberty.
Growth is one aspect of development.	Development is complex and many-sided.
Growth is not directional.	Development is progressive and sequential.
Rate of growth is not uniform in all parts of the organism.	Rate of development is also not uniform.
Growth is not affected very much by learning.	Learning and experience affect development to a very great extent.



## **Meaning of Maturation**

Maturation is a natural process. It is the growth which takes place within the individual. The maturational changes are the result of unfolding and ripening of inherited traits and are relatively independent of activity, practice or experience.

## **Relationship between Development and Maturation Growth**

Growth refers to increase in size, length, height and weight of an organism. Growth is quantitative in nature and hence can be objectively observed and measured. Growth is one of the components of the developmental process.

‘Development’ implies overall changes in shape, form or structure, resulting in improved working or functioning of the organism. Development is progressive; series of changes occur in an orderly pattern. As growth in an organism continues, it reaches a maximum limit and stops after that. This maximum level of growth is referred to as ‘Maturation’. Development is a continuous process, lasting throughout the life of the organism; it takes place both before and after maturation.

In short, growth and development go hand in hand; but growth stops after maturation whereas development continues as long as the organism is alive.

# Dimensions of Human Development

- i) **Physical Development:** Anatomical growth and Physiological growth are the two components of Physical Development. The growth in the skeleton, changes in the quality and number of bones, changes in height, weight etc. constitute Anatomical growth. But the changes occurring in the internal organs like heart, lungs, liver, bladder, kidney, intestine, stomach, brain and groups of muscles are referred to by Physiological growth.
- ii) **Intellectual or mental development:** It includes the development of intellectual (also known as cognitive) powers like thinking and reasoning, imagination, concentration, creativity, sensation, perception, memory, association, discrimination and generalisation, etc.
- iii) **Emotional development:** The emotional behaviour is developed to the point of emotional maturity and balance of emotions wherein the child learns to control emotion and express the proper emotion at appropriate situations. Use of language is also resorted to.
- iv) **Moral or character development:** It includes the evolution of moral sense to discriminate the right and wrong and development of character.
- v) **Social development:** Due to social development he is able to get along with others in the society and participate in different social activities. He strives for social maturity.
- vi) **Language Development in Children:** Language development in children appears to be dramatic. It does, of course, depend upon physical maturation, like control of mouth and tongue.

# **Important Phases of Development**

## **1) Prenatal stage** (from conception to birth):

- (a) Germinal Period (First 2 weeks)
- (b) Embryonic Stage (III to VIII week)
- (c) Foetal Stage (IX week to birth)

## **2) Postnatal Stages**

- (a) Infancy- From birth to 2 years
- (b) Childhood- Early childhood (From 3 to 6 years) Later childhood (From 7 to 10 years)
- (c) Pre-Adolescence - (From 11 to 13 years)
- (d) Adolescence- (From 14 to 17 years; in the strict sense, upto the onset of puberty)
- (e) Adulthood- Early Adulthood (From 20 to 40 years)
- (f) Middle-age - (From 40 to 60 years)
- (g) Old-age - (From 60 years onwards)

The above 10 stages put forth by Hurlock, may be telescoped into 4 wider categories:

- Infancy (From birth upto 5 years),
- Childhood (5 to 12 years),
- Adolescence (12 to 18/20) and
- Maturity or Adulthood (after 18/20),

## **Physical Development from Infancy to Adolescence**

The bodily growth is physical development. Physical development is rapid during infancy. A new born infant is about 50 cms in length and 3.5 kg in weight. Proportion of head to body changes from 1/4 to 1/8 and the lengths of arms and legs increase as the infant begins using them more and more. Brain growth is more rapid. The brain has its full complement of cells even before birth and achieves 80% of its adult weight by 4 to 6 years. Another 13% is attained by the age of 8 with complete development at the end of adolescence.

The internal organs such as digestive organs, lungs, etc. Grow rapidly and reach a balance of effective coordinated functioning. Motor activities such as head control, movement of eyes, sitting, standing, and manipulative skills like 'handling of objects with dexterity', are important for personal and educational growth. The child makes contact with the external world only through motor development which is closely related to intellectual, emotional and social development.

## **Intellectual Development from Infancy to Adolescence**

Intellectual development is also referred to as cognitive development. Intellectual development refers to the gradual growth in what are called cognitive abilities (ability to attend, to perceive, to discover, to recognise, to imagine, to judge, etc). The infant's first intellectual response is to stimuli from the outside world.

Imagination which comes to the forefront by about the age of three, expresses itself through play activities and it also serves as a means of intellectual development.



Language (mother tongue) helps in preserving as well as fostering intellectual growth. Creativity helps in divergent thinking, leading to novel intellectual products and practices. Broadly speaking, cognitive development of children can be fostered by a stimulating home and school environment with a lot of scope for free self activity and opportunities for varied sensory experiences.

## **Social Development from Infancy to Adolescence**

Social development takes place gradually. The early play activities of very young children is solitary play; later on it becomes parallel play (each child in a group playing in its own way). Only by about the age of two, the child shows a desire to cooperate with others in group plays. Thus early childhood is pre-gang stage of social development. Later childhood (8-12) is marked by maximum social adjustment in the changeable and variable social world marking a level of pseudo maturity.

Adolescence is marked by sex consciousness in social relations. Adolescents of the different sexes try to mutually attract each other. But relations between boys and girls are not very well defined during early adolescences resulting in a lot of embarrassment in the behaviour of youth.

## **Emotional Development from Infancy to Adolescence**

The new born infant has a single generalised emotional response of excitement only and out of this gradually evolves increasing differentiated patterns of emotional expression over the course of development.

Social factors, imitation and learning lead to a variety of emotional reactions and expressions and by early childhood most of the common emotions-affection, elation, joy, anger, disgust, jealousy, fear, sympathy, etc. Are clearly discernible. Pre-school children, because of their immaturity and lack of control, tend to express their emotions freely and openly. Primary grade children (between 6 to 9 years) are often alert to the feelings of others; but they often hurt the feelings of other children. They are very sensitive to criticism and need praise and recognition. After the age of 9, conflict between group codes of the peers and the adult rules often cause emotional difficulties.

## **Stages of Moral Development in Children**

Psychologists mention 4 stages in the moral development in children.

- 1) In the first stage, known as 'Prudential Stage' children's behaviour is regulated by means of pleasure and pain. Children learn those behaviours that are rewarded and avoid those which are punished.
- 2) The second stage is the 'Authoritarian Stage' in which children follow the directions of his elders like parents and teachers who have dominating influence over the children.
- 3) The third one is the 'Social stage' in which children's behaviour is governed by the social acceptance or rejection. Children try to behave in conformity with social expectations.
- 4) The highest stage of moral development is the 'Personal Stage' in which an individual's behaviour is influenced by his conviction of high morals and ethics.

## **Jean Piaget's Stages**

Jean Piaget and Laurence Kohlberg have put forward a development theory of morality. Piaget distinguishes between 'moral realism' and 'moral relativism'. Young children are moral realists who interpret moral rules and look at the material side of the actions and their magnitude, ignoring the intentions of the acts. Only by about 11-12 years, do children become capable of moral relativism. They are now capable to decentre and think of several qualities at once. After the age of 12 children behave in a conciliatory and forgiving way.

## **Kohlberg's Stages**

Kohlberg's theory of moral development is based on Piaget's general theory of cognitive development. He lay emphasis on the significance of looking at things from other's point of view (role taking). There are three levels of moral development:

- In level 1, the pre-conventional level, Kohlberg regards it is based on the desire to avoid punishment and gain rewards.
- At level 2, the conventional level, although the child identifies with his parents and conforms to what they regard as right and wrong, it is the motive to conform rather than ethical standards that have been internalized.
- It is only at level 3, the post conventional level, that moral judgement is rational and internalized and that conduct is controlled by an internalized ethical code and is relatively independent of the approval or castigation of others.

## **Period of Adolescence**

The word 'adolescence' comes from the Latin verb 'adolescere' which means 'to grow'. It is in this sense that adolescence represents a period of intensive growth and change, in nearly all aspects of child's physical, mental, social and emotional life. Adolescence begins with the onset of puberty and lasts till the beginning of adulthood (12+ to 18/20).

In the course of a few years the individual undergoes changes both in size and in his internal body chemistry. The changes are so extensive that some people call this as second birth. Stanley Hall called this period as "period of storm and stress", a time when the individual is erratic, unstable and unpredictable.

## **Special Characteristics of Adolescents**

- i) Rapid perplexing physical changes: Rapid physical changes in physical appearance, development of internal organs, functioning of sex organs etc. take place during adolescence.
- ii) Heightened Self-consciousness: Adolescents are highly anxious about the physical changes that take place in them and try to present themselves most attractive in all possible ways.
- iii) Intensification of sex-urge: Sex consciousness becomes too intense at this time.
- iv) Craving for Independence: He is typically a person who needs security, guidance and support from parents like a child and at the same time he has independent views of his own; wishes to have economic self-dependence and autonomy in his functioning.
- v) Peer group relationship Peer group relationship plays a substantial role in the life of an adolescent.



## **Problems of Adolescents**

- 1) Identity Crisis: Though an adolescent needs security, guidance and economic support from his parents, still he tries to establish to others that he has independent views, maturity of opinion and relies on self-support like adult.
- 2) Generation Gap: In today's changed world, there is a large gap between the view points of the elders and youngsters of this generation.
- 3) Negative and Non-Conformist Attitude: In their attempt to assert their individuality, adolescents, oppose all the elders, particularly those who control them.
- 4) Domination of Sexual Urge: The foremost problem in adolescence is the excitement created due to the domination of sexual urge, which leads to distraction and wastage of energy of the youths.
- 5) Emotional Swings: Adolescents are highly restless, emotionally perturbed and moody; without any proper reason, at one time they appear to be elated and joyous and the next moment highly depressed.

## **Helping the Adolescents to Overcome their Problems**

- i) To have the proper knowledge of adolescent's psychology: They should be treated sympathetically and helped to solve their problems by offering proper guidance. They should be helped in resolving their conflicts and overcoming frustrations.
- ii) Providing suitable environment for proper growth: Adolescents must be provided with balanced diet; they must be given knowledge of health and personal hygiene, cleanliness, various diseases and their prevention etc. to keep them fit and agile.

iii) Proper dealing with adolescents :

- a) Parents and teachers should recognize the importance of the peer group on modifying adolescents' behaviour.
- b) Elders should not attempt to thrust their views and decisions on the adolescents; instead they should try to convince them by their rational arguments.

iv) To take care of the special interests of the adolescents: According to their interests and aptitudes they should be provided with learning experiences and opportunities for participation in co-curricular activities.

## **Developmental Tasks**

Developmental task is "a task which arises at a period in the life of an individual, successful achievement of which leads to his happiness and success with later tasks, while failure leads to unhappiness and difficulty with later tasks".

## **Uses of the Knowledge of Developmental Tasks**

- i) Developmental tasks are of value to the individual in enabling him to know what is expected of him by society at a particular age.
- ii) Parents who are aware of such developmental tasks may teach them to their children so that the children may not experience failure and unhappiness later.
- iii) The developmental tasks show the individual what lies ahead and what he will be expected to do when he reaches the next stage of development and this will eliminate much of the difficulty and emotional stress.

## **Harms due to Insistence of Developmental Tasks**

- i) Inappropriate expectations: Showing disappointment when a particular behaviour pattern does not show itself in a child at the normally expected time may result in feelings of inferiority and consequent further retardation in the child.
- ii) Among the developmental tasks, omitting a few earlier one's and attempting to develop the next higher tasks in children may prove to be injurious for the proper development of the child.
- iii) When an individual passes from one developmental stage to the next higher one, his unique experiences and the resulting frustration may sometimes prove to be harmful.

## **Developmental Tasks for the Various Stages of Development**

(A) Developmental tasks of infancy and early childhood:

- Learning to walk, to take solid food, to talk, to control the elimination of body wastes.
- Learning sex differences and sexual modesty.
- Achieving physiological stability.

(B) Later childhood:

- Learning physical skills necessary for ordinary games.
- Building wholesome attitudes towards oneself as a growing organism.
- Learning to get along with age-mates.
- Learning appropriate sex roles.

© Adolescence:

- Accepting one's physique and accepting a masculine or feminine role.
- Establishing new relations with age-mates of both sexes.
- Gaining emotional independence from parents and other adults.

(D) Adulthood:

- Selecting the life partner.
- Entering into the family life.
- Begetting children and rearing them up.

E) Middle Age:

- Shouldering the family and social responsibilities.
- Acquiring economic stability in life.
- Providing guidance to one's own adolescent children.

F) Senescence (old age):

- Accepting decrease in one's own capabilities and efficiency.
- Withstanding the loss of one's life partner.
- Developing positive attitude towards leisure time and relaxation.



## **Education and Developmental Tasks**

The primary aim of education is to provide experiences and training to children so as to equip them with necessary basic skills and knowledge, due to their age, thereby enabling them to lead a successful life. This gigantic task is undertaken at different stages of education viz. elementary, secondary, higher secondary and higher education levels.

The knowledge of developmental tasks enable the lead players in education viz. parents and teachers to understand the complexities involved in the teaching learning process and develop that of an all-round personality in the child. This make them realise the importance of children participating in sports and games, physical exercises and various co- curricular activities as well as the need for cultivating personal health and hygiene.

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Thank You