

# UNIT 3 - LEARNER & LEARNING PROCESS

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## **PART A - Growth and Development**

### **Concept of Growth and Development**

It is a process that starts with a single cell. It is created by joining together one special cell with another cell, which comes from each parent. Growth refers to the specific body changes and increase in child's size (such as height, weight, body mass index). These size changes can be easily measurable. Whereas, development refers to an increase in complexity (a change from simple to more complex). Basically, it involves a progression along a continuing pathway on which a child acquires more refined knowledge, behaviour and skills.

Human development is a lifelong process of physical, behavioural, cognitive and emotional growth and change. It describes the growth of humans throughout the lifespan, from conception to death. A lot of changes take place at various stages of life; infancy, childhood, adolescence and adulthood. Throughout the stages, each individual develops attitude, values that guide choices, relationships and understanding. The scientific study of human development seeks to understand and explain how and why people change throughout the life. This includes all aspects of human growth and development including physical, emotional, intellectual, social, perceptual and personality development,

Human development is the basic fact of human existence and each person develops uniquely. It occurs in an orderly sequence, involving physical, cognitive and emotional development. Although there are

universally accepted principles of development, they occur with differences in the rate or timing of the changes from one person to another.

Growth and development are often used interchangeably in terminologies, but both are different from each other.

The difference between growth and development is discussed below: Difference Between Growth and Development

Growth	Development
Growth is physical changes in the organism.	Development is overall and progressive changes in the organism.
Growth is cellular.	Development is organisational.
Growth is change in shape, form, structure and size of the body.	Development is structural and functional changes in body.
Growth stops at maturation.	Development continues till death.
Growth is a part of development.	Development includes growth.
Growth is quantitative in nature.	Development is qualitative in nature.

Both growth and development are correlated and dependent on each other.

## Definitions of Growth and Development

**According to Hurlock**, "Growth refers to change in size, in proportion, disappearance of old features and acquisition of new ones".

**According to Crow and Crow**, "Growth refers to structural and physiological changes".

**According to Hurlock**, Development means "a progressive series of changes that occur in an orderly predictable pattern as a result of maturation and experience".

**According to Crow and Crow**, "Development is concerned with growth as well as those changes in behaviour which results from environmental situations".

## Principles of Development

All children develops at different rates and therefore, the notion of individual differences exists. A child can show more rapid changes in some developmental areas than in others. Regardless of the perspective, there are certain principles of development that apply to all the children

- **Development is a Never Ending Process**- The process of development is continuous, as human beings continue to develop, change and to be affected by experience throughout the life. Most of the growth and noticeable changes take place in childhood.
- The rate of development is higher in the first few years than in any period of life. Yet humans of all ages continue to grow, to learn and to change.
- **Rate of Development can be Different, for Different individuals** - Each is a unique package of emotional, mental and physical traits. The time-table of development does not always provide evenly spaced starts can be different for and stops. A child may show growth in one area before another. The rate of development of different individuals.
- **All Growth are Related** Every aspect of human growth influences every other aspect. Despite occasional time lags. physical, emotional and mental growth are related. There is a positive correlation, a direct relationship among physical, emotional, social and mental development. Improvement in physical status improves self-concept and positive self-concept is related to academic achievement. Social development influences the behaviour of individual. So, all the growth are interrelated.
- **Development Proceeds in Stages** There are four stages of development : infancy, childhood, adolescence and adulthood that are common in all humans.
- **Development is Influenced by Both Heredity and Environment** The final outcome of growth and development is a result of the dynamic interplay of genetic potential and environmental factors.
- **Development has Direction** Every individual develops at a different rate, but each one goes through the same stages. The sequences are predictable and the same for all individuals. Babies first crawl, then stand and then walk. Each stage, each task is successfully mastered, makes the next stage and task more complex.

**Some of the major directions of development are listed below**

(i) **Cephalocaudal and Proximodistal** Every human being develops from head to feet (cephalocaudal) and from center of the body towards outer (proximodistal). The head develops first, then the trunk, then arms and legs. Large muscles develop before small ones.

(ii) **Structure Precedes Function** Muscles must be ready to perform specific functions. An individual cannot use his/her body, until the body is capable of being used.

(iii) **General to Specific Development** precedes from general to specific. Young children see only the whole unit until they are mature enough to be able to focus on parts of the whole.

(iv) **Concrete to Abstract** Mental growth proceeds from an ability to think only about things that are physically present to an ability to visualise that are not present and to conceptualise and understand them.

(v) **Egocentrism to Perspectivism** A very young child is the center of the universe and sees the events as related to his/her needs. As the child grows and interacts with people, he or she can begin to see things from others point of view and then form the perspective of abstract principle.

(vi) **Outer Control to Inner Control** Young children are dependent on others for physical care as well as for values and principles. As they grow, they develop their own value system and own set of inner control.

**(vii) Absolutism to Relativism** Children see everything as absolute and unchangeable. As they grow, they understand that everything is changeable to meet the specific situation,

**(viii) Spiraling** The same task is mastered at varying degrees of complexity like walk, run, etc, at different stages of development

## Cognitive Processes

The word cognition derives from the Latin Word 'cognosco' means 'to recognize'. Cognitive process refers to the process of thinking involved in obtaining and storing knowledge. It encompasses many aspects of intellectual functions and processes such as attention, formation of knowledge, judgement, evaluation, reasoning, problem solving and decision-making. It is the process by which existing knowledge is used to create new knowledge. It is a demonstration of the central ability humans possess that define us.

Cognitive processes are analyzed from different sciences including sociology, linguistics, neurology, anthropology and philosophy. As for psychology, cognitive psychology is the field in charge of studying cognitive processes. The cognitive psychologists study the various cognitive processes that make up this branch. These processes include attention, the process through which we focus on some stimulus; perception, the process through which we interpret sensory information and memory, the process through which information is stored for later retrieval. Each of these cognitive functions work together to integrate the new knowledge and create an interpretation of the world around us.

The cognitive processes can happen naturally or artificially, consciously or unconsciously, but they usually happen fast. In the 60's, a new psychological perspective emerged that led to the cognitive revolution and the study of cognitive processes. They are now even applied not only to explain disorders but to areas such as marketing and sales. Neuro imaging has been of great help in how we process information and what parts of the brain are related to what cognitive processes.

## Types of Cognitive Processes

There are various types of cognitive processes which are given below

### Basic Cognitive Processes

Basic cognitive processes are classified into three parts such as

**(i) Sensation and Perception** Sensations are the result of different stimuli in our environment. The stimuli first reach our senses and allow us to filter information from the outside world. Once we receive this information, perception takes over and we start interpreting these stimuli.

Human beings continuously use their perception without even noticing it. We are conscious of other people's movements, food flavours, our posture, etc. Our past experiences also play an important part in the interpretation of different stimuli.



Gestalt psychologists were the main researchers in perception.

"The whole is greater than the sum of the parts"-Gestalt They believed that we are active human beings that process reality as a whole composed of different parts. They also explained how different types of perception can happen including illusions,

**(ii) Attention** Attention is the cognitive process that makes it possible to position ourselves towards relevant stimuli and consequently respond to it. In life, we experience many stimuli happening at the same time but we are capable of centering our attention on the stimuli that interest us. For e.g. we give little attention to actions such as walking and chewing but the activities such as speaking and body language requires focus, especially when we are giving a lecture. We have different types of attention including arousal, focused attention, sustained attention, selective attention, alternating attention and divided attention, Through these types of attention we make our life possible,

(iii) Memory Our memory has the answers to the questions we think. It allows too many processes to happen such as to encode the data we receive from the environment, consolidate and retrieve it later. We have different types of memory such as sensory memory, short-term memory, working memory, semantic memory and so on. All these types of memories interact together but they do not all depend on the same brain areas. Memory includes three main processes like encoding, storage, and retrieval. Encoding is the mechanism where information is changed from the moment it reaches us to a form that our brain can store. Storage refers to how long the memory lasts for or duration and how much can be stored at any time (capacity) and what kind of information is held. Finally, retrieval refers to getting information out of storage.

## High or Complex Cognitive Processes

High or complex cognitive processes are divided into three parts such as processes are

**(i) Intelligence** According to Gardner's multiple bits of intelligence, there is not only one intelligence but several different bits of intelligence. Examples of higher cognitive intrapersonal intelligence, linguistic intelligence, logical-mathematical intelligence, and musical intelligence. Emotional intelligence has got people's attention, which is the ability to manage the difficulties we face daily.

**(ii) Thought our** thoughts have many complexities and heterogeneity. Through our thoughts we are able to do our tasks related to problem-solving, reasoning, decision-making, creative thinking, divergent thinking and many more things.

Our brain creates concepts to simplify these functions like ideas, objects, people or any other kind of elements that come to our mind. Usually, this helps streamline our cognitive processes. Sometimes we take shortcuts to process information faster not taking into account the details that might be important. This can lead to cognitive biases which can lead to cognitive distortions which are extremely negative and irrational thoughts. Thus, it is important that we should stop these types of thoughts and work on them. are capable of body

**(iii) Language** Language is a means of communication Through cognitive processes we produce and comprehend different sounds and words and combine them to understand language and communicate with others. We even use our language to communicate.

Language development is a process which continues throughout our life. The communicative skills of each person vary significantly and can be improved by practice.

## **Cognitive Development**

Cognitive development comprehends the development of intellect, mental capabilities, imagination, thinking, emotion and other mental processes. Functions of the brain (to know, to experience and to make decisions), play an important role in intellectual development. Therefore, intellectual/cognitive development refers to development in the ability to adapt behaviour to environmental conditions as the individual strives to achieve increasingly conscious goals and purposes. It is the creation of thought processes, including remembering, problem solving and decision-making from childhood through adolescence to adulthood.

### **Areas of Intellectual/Cognitive Development**

- Broadly interpreted, intellectual development includes sensory impulse or sensation.
- The interpretation of sensations or perception includes the power to build upon perceptual material, not present to the senses.
- And also the ability to recall the experience with the help of memory
- And lastly, the highest form of mental/intellectual development is reasoning, that helps in formulating generalisations from the experiences and dealing with abstractions.

### **Piaget's Cognitive Development Theory**

Jean Piaget was a Swiss developmental psychologist who studied children in the early 20th century. His theory of intellectual or cognitive development, was published in 1936, which is still in use in some branches of education and psychology

It focuses on children from birth through adolescence & characterises different stages of cognitive development.

#### **Stages of Cognitive Development**

Piaget's stages of cognitive development are age-specific and marked by important characteristics of thought processes. They also include goals children should achieve as they move through a given stage.

The important stages of cognitive development are given below

1. **Sensorimotor Stage (Infancy-birth until 2 years)** In this period, which has six sub-stages, intelligence is demonstrated through motor activity without the use of symbols. Knowledge of the world is limited, but developing, because it is based on physical interactions and experiences. Children acquires object permanence at about seven months of age (memory). Physical

development (mobility) allows the child to begin developing non-intellectual abilities. Some symbolic (language) abilities are developed at the end of this stage.

2. **Pre-Operational Stage (2 years until 6 or 7 years)** In this period, which has two sub-stages, intelligence is demonstrated through the use symbols, language, memory and imagination which are developed, but thinking is done in a non-logical, non-reversible manners. Egocentric thinking predominates.
3. **Concrete Operational Stage (7 to 11 years)** In this stage, which is characterised by seven types of conservations (number, length, liquid, mass, weight, area and volume), intelligence is demonstrated through logical and systematic manipulation of symbols related to concrete objects. In this stage, operational thinking develops (mental actions that are reversible) and egocentric thought diminishes.
4. **Formal Operational Stage (11 or 12 years through adulthood)** At this stage, children develops the ability of abstract reasoning, hypothetical and contrary to fact information. They also begin to understand the concept of proportion, and become capable of thinking about their own thought processes. They also become capable of evaluating the quality and logic of those thoughts.

As we have seen, cognitive development is an important aspect of life, which proceeds through different stages. Thus, it is important for parents and teachers to help their youngsters in their growth period and provide them a positive environment to develop their mental abilities.

#### **Terms Used by Piaget**

There are a variety of terms Piaget used in his theory to explain cognitive development and how it's achieved at different stages.

#### **These are discussed below**

- **Schema** is a term Piaget used to represent the building blocks of knowledge. You may think of schemas as different index cards inside the brain. Each one informs an individual on how to react to new information or situations.

In the same way, when a new baby is born he/she has few practical instincts and reflexes such as sucking, looking, reaching and grasping. Piaget named these abilities or potentials as schemas.

Thus, these various schemas form the basic structure of the human mind. The earlier schemas represent those reflexes and instincts that are biologically inherited. However, as a child grows, with the interaction of physical and social environment, he is able to form different schemas, resulting in changes and modifications in his cognitive structure.

- **Assimilation** is using an existing schema and applying it to a new situation or object. Accommodation is changing approaches when an existing schema does not work in a particular situation.
- **Equilibration** is the driving force that moves all development forward. He asserted that the process of assimilation or accommodation helps the organism to adjust or maintain a harmonious relationship between himself and his environment. This adjustment mechanism was called equilibration by Piaget.

# Personality

The term "personality" is often used in our day-to-day discussion. For a Layman, personality is often understood in terms of physical or external appearance of the individual. People generally go by the impression created by the other person. The ability to talk, interact with others pleasantly in addition to being good looking, would make others say that the person has a charming personality. This notion of personality is based on superficial impressions, which may not be correct. Scientifically, this is not the true concept of personality.

Psychologists do not consider personality in terms of social attractiveness. It is because of two reasons, firstly, it limits the number and types of behaviour considered important in the study of personality. And secondly, such a notion carries the absurd implication that some people, who have unique abilities are devoid of having personalities.

The literal meaning of the term "personality" is derived from the Latin word 'persona'. 'Persona' originally denotes the theatrical mask, first used in Greek drama and adopted about a 100 years before Christ by Roman players. It was the mask used by actors in Roman theatres for changing their facial make up. After putting on the mask, the audience expected the person to perform a role in a particular manner.

In psychological terms, personality refers to Our characteristics, ways of responding to individuals and situations. People can describe the way in which they respond to a particular situation. There are certain words or traits associated with the personality. These words are used to describe personality. Words like shy, quiet, sensitive, warm, concerned are used to refer to the different components of personality. In this sense, personality refers to unique and relatively stable qualities that characterise an individual's behaviour across different situations over a period of time.

## Definitions of Personality

There are a lot of definitions of personality. Each and every definition suggests a different approach towards personality. Some of the definitions given by renowned psychologists are given below

According to **Allport**, "Personality is the dynamic organisation within the individual of those psychological systems that determine his unique adjustment to his environment".

According to **Morton Prince**, "Personality is the sum total of all the biological innate disposition, impulses, tendencies, appetites and instincts of the individual and the acquired dispositions and tendencies".

According to **Kemph**, "Personality is the integration of those systems of habits that represents one's individual characteristic adjustment to his environment".

Personality characterises individuals as they appear in maximum circumstances. Consistency in behaviour, thought, emotion of an individual across situations and time periods characterise a person's personality.

e.g., an honest person will remain honest in all the situations. However, there can be some variation in the behaviour according to the change in the environment.

Therefore, in brief, the personality can be defined by the following features

- It comprises both physical and psychological components.
- Every individual possesses a unique set of behaviour. Therefore, its expression in terms of behaviour is different for different individuals.
- It is dynamic in nature. Change can occur due to the internal or external situations.
- It is adaptive to situations.
- It is greatly influenced by social interactions.

Character and temperament are important part of the personality. Character refers to value judgement. These are made about a person's moral values or ethical behaviour. Temperament refers to the inborn enduring characteristics such as adaptability, irritability, etc.

## **Factors Affecting Personality Development**

Right from the time, the term personality development into existence, it has become the topic of interest for the personality psychologists. Psychologists have tried to identify the factors, which directly or indirectly influence the growth and development of the individual.

Care personality.

Factors influencing development of personality can be classified into the following categories:

### **Biological Factors -**

- It includes Bodybuilding Physical attractiveness
- Homeostasis Physical defects Health conditions

### **Psychological Factors -**

- It includes Intellectual determinants Emotional determinants Self-disclosure Aspiration and achievements

### **Environmental Factors -**

- It includes Social acceptance Social deprivation Educational factors Family determinants Ordinal position Size of family

## **Theories of Personality**

There are various theories of personality which are discussed below

### **Freudian Psychoanalytic Theory of Personality**

Sigmund Freud (1856-1939) is considered to be the 'Father of Psychiatry'. He gave Psychoanalytic Theory of Personality. According to him, human personality is complex and has more than a single component. The aim of Psychoanalytic theory is to release repressed emotions and experiences, i.e. make the unconscious, conscious Psychoanalytic is commonly used to treat depression and anxiety disorders.

He described the personality as composed of three elements of mind. These three elements of personality are known as the id, the ego, and the superego which work together to create complex human behaviours. This theory is also known as **Freud's Structural Theory of Personality** which places great emphasis on the role of unconscious psychological conflicts in shaping behaviour and personality. He also described different stages of development.

### **Stages of Development**

Freud emphasised five stages of psychosexual development believing that most human suffering is determined during childhood development. As a child passes through these stages unresolved conflicts between physical drives and social expectation may arise.

These stages are given below

**Oral Stage (0 to 1.5 years of age)** In this stage, the main focus is pleasure seeking through the infant's mouth. Oral stimulation is crucial during this stage. If the infant's needs are not met during this time frame, he or she will be fixated in the oral stage. This fixation can lead to adult habits such as thumb-sucking, over-eating, and nail-biting.

**Anal Stage (1.5 to 3 years of age)** At this stage, the infant's pleasure seeking centres are located in the bowels and bladder. This stage is primarily related to developing healthy toilet training habits. Fixation in this stage may lead to anal-retention or anal-expulsion. Anal retention includes being overly neat, precise and orderly. While being anal expulsive involves being disorganised, messy, and destructive.

**Phallic Stage (3 to 5 years of age)** At this stage, development of healthy substitutes for the sexual attraction for boys and girls have toward a parent of the opposite gender.

**Latency Stage (5 to 12 years of age)** At this stage, children do not have any pleasure seeking region in the body, instead all sexual feelings are repressed. During this stage, children are able to develop social skills and find comfort through peer and family interaction.

**Genital Stage (12 to adulthood)** All tasks from the previous four stages are integrated into the mind allowing for the onset of healthy sexual feeling and behaviours.

### **Freud's Structure of the Human Mind**

In his theory, he stated three levels of human mind which filter the experiences of human beings during the given stages. From these structures and the inherent conflicts, a person's personality gets shaped. According to him, while there is interdependence among the three levels i.e. id, ego and superego, each level also serves a purpose in personality development.

These levels are described below

**Id** The id, the most primitive of the three structures and is present from birth. It is concerned with instant gratification of basic physical needs and urges. It is a childish, selfish, pleasure-oriented part of the personality with no ability to delay gratification. It operates entirely unconsciously outside of conscious thought. For example, if your id walked past a stranger eating ice cream, it would most likely take the ice cream for itself. It doesn't know, or care, that it is rude to take something belonging to someone else; it would care only that you wanted the ice-cream.

**Ego** Ego is responsible for creating balance between pleasure and pain. It is less primitive than the id and is partly conscious and partly unconscious. Freud considered this to be the 'self' and its job is to balance the demands of the id and superego in the practical context of reality. The ego functions in conscious, and unconscious mind. The ego operates based on the reality principle which strives to satisfy the id's desires in realistic and socially appropriate ways.

**Superego** This develops around four or five which is a conscious level and is concerned with social rules and morals. Freud believed that the superego is what allows the mind to control its impulses that are looked down upon morally. At this level, society and parental guidance is weighed against personal pleasure and gain as directed by one's id. At this level, children learn what their culture considers right and wrong. This level acts to perfect and civilise our behaviour. The superego is present in the conscious and unconscious mind.

Thus, in many cases the id's impulses can be satisfied through a process of delayed gratification, the ego will eventually allow the behaviour, but only in an appropriate time and place.

## **Carl Rogers Humanistic Theory of Personality**

Carl Rogers (1902-1987) was a humanistic psychologist. He is well known for his personality theory that emphasised the importance of the self-actualising tendency in shaping human personalities.

He greatly contributed to our understanding of the self and personality. According to him, humans are an active, creative, experiencing being that lives in the present and subjectively responds to current perceptions and relationships. He is credited to coin the term actualising tendency, which refers to a person's basic instinct to succeed at his or her highest possible capacity. His theory of personality development is based on person-centered counseling and scientific theory research. This theory highlights free will and the great reservoir of human potential for goodness.

### **Personality Development and the Self-Concept**

Rogers based his theories of personality development on humanistic psychology and theories of subjective experience. According to him, everyone exists in a constantly changing world of experiences that they are at the centre of. He believed that a person reacts to changes in their phenomenal field, which includes external objects, people, internal thoughts and emotions.

### **The Phenomenal Field**

Carl Rogers described the phenomenal field as a person's subjective reality. Motivations and environment of a person act on his phenomenal field.

Roger stated that all behaviour is motivated by self-actualising tendencies, which drive a person to achieve at their highest level. When a person interacts with the environment and others, he forms a structure of the self or self-concept which is an organised, fluid, conceptual pattern of concepts and values related to the self. If a person has a positive self-concept, he may feel good about what he is and often see the world as a safe and positive place. If he has a negative self-concept, he may feel unhappy with who he is.

### **Ideal Self v/s Real Self**

He divided the self into the ideal self and the real self. The ideal self is the person that you would like to be whereas the real self is the person you actually are. He stressed that we need to achieve consistency between these two selves. We experience congruence when our thoughts about our real self and ideal self are very similar. Greater sense of self-worth and a healthy and productive life is the result of high congruence.

Conversely, when there is a great discrepancy between our ideal and actual selves, we experience a state of incongruence. Consequently, it may lead to maladjustment.

### **Unconditional Positive Regard**

In his theory of personality, Rogers gave more unconditional positive regard, or unconditional love. According to him, when people are raised in an environment of unconditional positive regard, where conditions of worth are present, they have the opportunity to fully actualise. When people are raised in an environment of conditional positive regard, where worth and love are only given under certain conditions, they must achieve those conditions to receive the love or positive regard they yearn for. This contributes to incongruence and a greater gap between the real self and the ideal self.

### **The Good Life**

According to him, life is described in terms of principles rather than stages of development. These principles exist in fluid processes rather than static states.

He claimed that to achieve "the good life", a fully functioning person would continuously work to fulfill his or her potential in each of these processes. He stated several traits or tendencies about the fully functioning individuals.

These are as follows

**A growing openness to experience** These people move away from defensiveness.

**An increasingly existential lifestyle** These people live each moment fully, rather than distorting the moment to fit personality or self-concept.

**Increasing organismic trust** These people trust their own judgement and their ability to choose behaviour that is appropriate in life.

**Freedom of choice** These people are not restricted by incongruence and are able to make a wide range of choices more fluently. They themselves are responsible for their own behaviour. Higher levels of creativity These people are more creative.



## **Gordon Allport's Trait Theory of Personality**

Gordon Willard Allport was one of the pioneer trait theorists who attempted to list the traits that make an individual's personality, He founded the trait theory in 1936.

Allport's Personality Theory separates all traits into three basic sub-categories that are cardinal, secondary and central traits. This theory suggests that individual personalities are composed of broad dispositions. It is also based mainly on difference between individuals. The combination and interaction of various traits forms a personality that is unique to each individual, this theory focused on identifying and measuring these individual personality characteristics.

**'The basic principle of behaviour is its continuous flow". -Allport**

Motivation is an important personality concept in Allport's theory. At the same time, a person stream of activity has both a variable portion and a constant portion. The constant portion is described with the concept of trait and the variable portion is described with the functional autonomy or the tendency for a behaviour to continue to be performed for reasons that differ from the reasons that originally motivated it.

Both the trait and functional autonomy are motivational. Many traits have motive power and functional autonomy explains adult motivation.

### **Concept of Trait and Personal Dispositions**

Allport defines trait as neuro psychic structure having the capacity to render many stimuli functionally equivalent and to initiate and guide equivalent (meaningfully consistent) forms of adaptive and expressive behaviour. In simpler terms, a trait is a predisposition to act in the same way in a wide range of situations.

Traits are psychological entities that render many stimuli as well as many responses functionally equivalent. Many stimuli may evoke the same responses or many responses. e.g. feelings, perceptions, interpretations, actions have the same functional meaning in terms of traits.

## Common Traits v/s Individual Traits

Common Traits	Individual Traits
It includes any generalised disposition to which most people within a given culture can be reasonably compared.	It includes those characteristics of Individuals, which are unique or peculiar to individuals.
Majority of people within the particular culture could be measurably compared with one another on those common traits or dimensions.	These traits operate in unique ways within each person. It pinpoints the personality structure of any given individual.
o.g., social attitude, anxiety, value.	e.g. shy, introvert

### Types of Traits

Allport proposed that trait may be classified into a three-fold and somewhat overlapping category system. These are:

- **Cardinal Traits** These are traits that dominate an individual's entire personality, Allport suggested that these traits are developed later in life, and are infact quite rare.
- **Central Traits** Common traits that make up our personalities. Traits such as kindness, honesty and friendliness are all examples of central traits.
- **Secondary Traits** These are traits that are only present under certain conditions and circumstances. An example of a secondary trait 'would be getting nervous before delivering a speech to a large group of people.
- 

### Characteristics of Traits

In 1966, Allport published an article entitled, "Traits Revisited" in which he proposed eight basic characteristics of traits. They are as follows

- **A Trait has more than Normal Existence** Personality traits are real and important part of everyone's existence. e.g., honesty, punctuality, aggressiveness, etc. Everyone possesses certain generalised action tendencies.
- **A Trait is more Generalised than a Habit** Trait is relatively permanent and general features of our behaviour. While habits are more specific tendencies and are less generalised in terms of situation. e.g., brushing the teeth twice is a habit and cleanliness is a trait.
- **A Trait is Dynamic or atleast Determinative in Behaviour** Traits are not dormant waiting to be aroused by external stimuli. Traits guides and directs a person's actions.
- **A Trait's Existence may be Established Empirically** Traits cannot be observed directly. Their existence can be verified.

- **A Trait is only Relatively Independent of other Traits** Traits are not independent of others. There is no specific boundary separating one trait from another. The personality is composed of a network of overlapping traits only relatively independent of one another.

A trait is not synonymous with moral and social judgement.

- A trait may be viewed in light of either the personality that contains it or its distribution in the population at large.
- Acts or habits that are inconsistent with a trait are not proof of the non-existence of the trait.

### **Functional Autonomy**

Allport believed in looking at the person's present, rather than exploring the past. This belief is strongly evident in the concept of functional autonomy, in which a person's motives are independent of their origins.

The concept of functional autonomy of motives provides the necessary base for a theory of motivation. It simply means that adult motives are not related to past motives. In other words, the reasons why an adult engages in some behaviour are independent of whatever reasons that might have originally caused him/her to engage in that behaviour.

### **Types of Functional Autonomy**

- **Preservative functional autonomy** is the feedback mechanism in the nervous system that are governed by simple neurological principles. These mechanisms become neurologically self-maintaining over time and help to keep an organism on track. e.g. eating, brushing at the same time.
- **Propriate functional autonomy** refers to the acquired interest, values and attitudes of the person. It represents the striving for values and goals, the sense of responsibility that people take for their lives.

## **Gestalt Theory of Learning**

The Gestalt theorists were the first group of psychologists to systematically study perceptual organisation around the 1920's in Germany. This theory was developed by the research work of Max Wertheimer, Wolfgang Kohler, Kurt Koffka and Kurt Lewin.

In this theory, the psychologists tried to see learning as a more deliberate and conscious effort of the individual rather than a mere product of habit formation or a machine-like stimulus response connection. According to them, the learner does not merely respond to a stimulus, but mentally processes what he receives or perceives. Gestalt's theory focused on the mind's perspective.

### **Educational Implications of Gestalt Theory**

- **Problem Solving Approach emphasizes** that as the learner is able to solve problems by his insight, meaningful learning, learning by understanding, reasoning, etc must be encouraged in the school.
- **From Whole to Part** The teacher should present the subject matter as a whole to facilitate insight learning.

- **Integrated Approach** While planning curriculum, Gestalt principles should be given due consideration. A particular subject should not be treated as a mere collection of isolated facts. It should be closely integrated into a whole.
- **Goal Orientation** As learning is a purposeful and goal oriented task, the learner has to be well acquainted with these objectives.
- **Emphasis on Understanding** It has made learning an intelligent task requiring mental abilities than a stimulus response association.

## Kurt Koffka

Kurt Koffka (1886-1941) was a German Psychologist who developed Gestalt Psychology along with other psychologists. Koffka's interests were wide ranging and they included perception, hearing impairments in brain-damaged patients, interpretation, learning and extension of Gestalt theory to developmental psychology. His work on Gestalt Psychology is an attempt to understand the laws behind the ability to acquire and maintain meaningful perceptions in an apparently chaotic world.

The central principle of Gestalt psychology is that the mind forms a global whole with self organizing tendencies. However, the assumed physiological mechanisms on which Gestalt theory rests, are poorly defined and support for their existence is lacking. Contrary to behaviourist approach focussing on stimulus and response, Gestalt Psychologists sought to understand the organization of cognitive processes.

## Max Wertheimer's Views on Gestalt Theory

Max Wertheimer (1880-1943) was born in the Czech Republic. He was one of the trio of psychologists who founded the Gestalt Theory of Learning along with his collaborators namely Wolfgang Kohler and Kurt Koffka. In 1910, Wertheimer developed his Gestalt theory which emphasised higher-order cognitive processes in the midst of behaviourism. According to Wertheimer, the focus of Gestalt theory was an idea of 'grouping', i.e. characteristics of stimuli causes us to structure or interpret a visual field or problem in a certain way.

### Factors Determining Grouping

He proposed primary factors which determined grouping. These factors were called the laws of organisation and were explained in the context of perception and problem-solving. These factors were

- **Proximity** elements tend to be grouped together according to their nearness.
- **Similarity** items similar in some respect tend to grouped together.
- **Closure** items are grouped together if they tend to complete some entity
- **Simplicity** items will be organised into simple figures according to symmetry, regularity, and smoothness.

The main focus of Wertheimer was concerned with problem-solving. In 1959, Wertheimer provides a Gestalt interpretation of problem-solving episodes of famous scientists (e.g. Galileo, Einstein) as well as children presented with mathematical problems.

He believed that the essence of successful problem-solving behaviour is being able to see the overall structure of the problem. Gestalt theory applies to all aspects of human learning, although it applies most directly to perception and problem-solving. The work of Gibson was strongly influenced by Gestalt theory.

## Principles

Wertheimer formulated principles in his Gestalt theory. Some of important principles are given below

- The learner should be encouraged to discover the underlying nature of a topic or problem (i.e. the relationship among the elements.)
- Gaps, incongruities, or disturbances are an important stimulus for learning.
- Instruction should be based upon the laws of organisation i.e. proximity, closure, similarity and simplicity.

Example The classical example of these principles can be seen when children try to find the area of parallelograms. As long as the parallelograms are regular figures, a standard procedure can be applied (make lines perpendicular from the corners of the base).

However, if a parallelogram with a novel shape or orientation is provided, the standard procedure will not work and children are forced to solve the problem by understanding the true structure of a parallelogram i.e. the figure can be bisected anywhere if the ends are joined.

## Mental Health

Mental health is a state of well-being, in which an individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to his or her community. In this positive sense, mental health is the foundation for well-being and an effective functioning for an individual and for a community. It is more than the absence of mental illness, for the states and capacities noted in the above meaning and has value in themselves.

Mental, physical and social functioning are interdependent, Furthermore, health and illness may co-exist. They are mutually exclusive only, if health is defined as a state of balance including the self. The environment helps communities and individuals to understand how to seek its improvement. Mental health is an integral part of health, which is ultimately connected with physical health and behaviour

### Meaning of Mental Health

The concept of mental health is as old as human evolution. Our ancient scriptures are full of reference to mental diseases. But this concept is comparatively new. Mental health emphasises the importance of integration or wholeness of personality is "A mentally healthy person is one, who has a balanced personality, free from schism and inconsistencies, emotional and nervous tensions, discords and conflicts, a well adjusted person can deal with his potentialities as well as he can accept his limitations".

Generally a person, who likes himself may be regarded as mentally healthy, Conversely, strong dislikes of one's self is a typical symptom of maladjustment. A mentally healthy individual feels that he is an accepted member of a social group and they in turn like him. But the maladjusted person may react in totally different ways.

## Definitions of Mental Health

According to **PV Lewkan**, “Mentally healthy individual is one, who is himself satisfied, live peacefully with his neighbours, becomes a healthy citizen of the country and even after performing these fundamental duties has enough energy left to do something of benefit to society”.

According to **KA Menninger**, “Mental health refers to adjustment of human beings to the world and to each other with a maximum of effectiveness and happiness. It is the ability to maintain an even temper, an alert intelligence, socially considerate behaviour and happy disposition”.

### Problematic Areas of Mental Health and their Solutions

Mental health resources	On average, the higher the number of psychiatrists, psychologists and social workers per capita in a state, the lower the suicide rate.
Barriers to treatment	The lower the percentage of the population reporting that they could not obtain healthcare because of costs, the lower the suicide rate, the better the state's depression status.
Mental health treatment utilisation	The lower the percentage of the population that reported unmet mental healthcare needs, the better the state's depression status. When mental health treatment is utilised more, while holding the baseline level of depression in the state constant, the higher the number of anti-depressant prescriptions per capita in the states, the lower the suicide rates.
Socio-economic characteristics	The more educated the population, the greater the percentage with health insurance, the lower the suicide rate. The more educated the population, the better the state's depression status.
Mental health policy	The more generous a state's mental health policy coverage, the greater the number of people in the population that receive mental health services

## Concept of Mental Health by WHO

Since the founding of the United Nations, the concepts of mental health and hygiene has achieved international acceptance. As defined in the 1946, Constitution of the World Health Organisation, "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." In this, mental health is represented as a variety of human aspirations and prevention of mental disorder.

### Characteristics of Mental Health

The Indian concept of mental health is available in the Atharva Veda, which provides detailed information on mental disorders and their treatment.

**Atharva Veda** says that mentally ill personality consists of three gunas or characteristics: Satya, Rajas and Tamas. The imbalance of these gunas causes mental disorder, they exist in the mind since birth, but they keep certain equilibrium in a normal person. In 1963, Jadhoda proposes six criterias of the mentally healthy individual.

These are :

- The ability to love adequacy in interpersonal relationships, efficiency in problem-solving.
- Undistorted perception of reality including empathy and social sensitivity.
- Possessing a balance of psychic forces in the individual and a unifying outlook on life and resistance to stress.
- Can make decisions on his or her own.
- Growth, self development and self-actualisation including conception of self, etc.
- Attitude towards self concept and sense of identity.

### Difference Between Mentally Healthy and Unhealthy

Mentally Healthy	Mentally Unhealthy
Aware about self and and have respect for others.	Not aware about their own self have no respect for others
Understand one's own limitations and can also tolerate.	Can't understand the cause of behaviour
They can understand the basic needs that motivate behaviour.	They can't understand the basic needs that motivates behaviour

### Factors affecting Mental Health

Mental health plays a crucial role in the development of the personality, but there are many factors, which helps in developing positive and negative development of mental health. Mental ill-health is caused by different factors, which have been described by different authors in different ways. These are -

- **Heredity** Traits of the parents and ancestors are transmitted to the children through their genes. Intelligence and feeble mindedness are inherited. Heredity is the passing of traits from parents to offspring. It is the factor that shapes one's personality and behaviour.
- **Socio-Cultural** Through this factor children develop attitudes and behavioural patterns from past experiences. The community in which an individual belongs may contribute to the development of his/her mental health. School and religious institutions may also help in moulding child's personality.
- **Family Breakup or Loss** Separation or loss of a parent or sibling is extremely painful. Finding ways to cope and adjust to the changes by these events is critical for everyone.
- **Physical Ill Health** Diseases, injuries and other physical problems often contribute to poor mental health and sometimes mental illness. Some physical causes can directly affect the brain and contribute to mental illness.
- **Abuse** The mental health of the abused children is at great risk. Abused children are more likely to experience mental disorders or mental illness during childhood and into adulthood.

## **Education and Mental Health**

How can mental aberrations be prevented in school? It mostly happens that many students, particularly children and adolescents, cannot clarify their parents, teachers and psychologists. It is for the guide to understand the adolescent and to sympathise with them and to offer them affectionate advice. Scolding or punishing them is not very effective. They should be given an opportunity of expressing their desires and mental tendencies.

### **Importance of School**

It is the school that has the greatest influence, after the home, in forming the child's personality. And even in schools, the most important factor is the atmosphere existing there. In a healthy atmosphere, the children adopt discipline and other qualities on their own. The greatest need is for providing each child with work, adequate and proper to the needs of his personality. Hence, it is essential that the backward and the brilliant children should be given special treatment. Teachers presents an ideal to the children in their charge. Hence, their character and conduct could be such as can be profitably imitated by the children.

### **Factors of Mental Health in School**

In school, the teacher should keep the following factors vividly in mind, if he wants to preserve mental health and prevent mental disturbance among his students.

They are



- **Discipline** It should be exercised not through creating fear of punishment, but through arousing feeling of responsibility and the desire to be law abiding among the students. True-discipline is self-discipline.
- **Affectionate Behaviour** A teacher should maintain the same loving attitude towards all his students. Any discrimination in this treatment injures the feelings of students.
- **Play and Recreation** Students should be given opportunities for healthy expression through games and other forms of recreation.
- **Educational Guidance** It is essential that some subjects should be given their requirements and abilities so that their educational problems can be solved.
- **Balanced Curriculum** Develops all aspects of the student's personality, to increase his fund for necessary knowledge and to avoid all unnecessary strains on the mind.
- **Formation of Good Habits** It is desirable for the teachers to help students in the formation of good habits regarding a regular life, balanced diet, exercise, good behaviour and high-thinking, etc.

### Preservation of Mental Health

- Developing total potentialities of the individual.
- Attaining emotional maturity and stability.
- Achieving personal and social security and adequacy.
- Developing healthy human relationships and interactions.
- Helping the individual is acquiring a sound body and normal mental health.

## Mental Hygiene

It is a science, which deals with the process of attaining mental health and preserving mental health in the society. The term mental health is closely related with the term mental hygiene as the main objective of mental hygiene is to attain mental health.

In other words, mental hygiene is a means of mental health. That is why, we can say that mental hygiene is the means and mental health is an end. Apart from the treatment of mental disease, one important function of mental hygiene is the creation of favourable conditions.

### Definitions of Mental Hygiene

Mental hygiene is the science, which studies the principles and practices of preventing mental disorders and promoting mental health.

“Mental hygiene is that approach to human adjustment and achievement, which is related to the prevention of emotional maladjustment and preparation of the individual for skilled working”.

According to Ryan, “Mental hygiene means the discovery of mental aberrations in their developmental stages, prevention of as many diseases of this kind as possible in society and provision of a mentally healthy life in society for the greatest number of individuals”.

According to Rivillin, “Mental hygiene is the application of a body of hygiene information and technique. It cares for the purpose of the preservation and improvement of mental health of the individual and community”.

### **Aims of Mental Hygiene**

The aims and objectives of mental hygiene is not merely the prevention and curing of mental disease, but the development of a personality of each individual in society that makes for good adjustment with the environment.

It should attain a proper synthesis between the intellectual, emotional and physical aspects, that is satisfied and optimistic, and experiences minimum tensions and conflicts in its conduct with other individuals in society. The aim of mental hygiene is the evolution and development of a properly adjusted and balanced personality. Thus, we can say that approach of mental hygiene is positive rather than negative.

The aims and objectives of the mental hygiene can be summarised-

- To help to realize one's potential.
- To develop self-respect and respect for others,
- To understand one's limitations and tolerate the limitations of others.
- To prevent personality complications.
- To treat and remedying of mental defects
- To enable one to know his/her own self.

From the description of above points, it is apparent that mental hygiene has two prominent aspects, curative and preventive. In its curative aspect, it indicates ways and means of curing mental deviations, defects and imbalances, ways and means of preventing them or counteracting them are suggested by it, following which any and every individual can ensure his mental health.

In a preventive aspect, mental health and hygiene problems can be prevented by developing some programmes such as counselling and psychotherapy to treat an individual.

### **Functions of Mental Hygiene**

Mental hygiene has four functions. These are

**Prevention** The most important function of mental hygiene is to prevent mental health problems by developing some programmes.

**Creative** To develop programmes like counselling, psychotherapy to treat an individual or a group or to treat a mental patient.

**Preservative** Not all people are mentally ill; rather some of them possess sound mental health. So, third function is to develop programmes through education for preserving mental health.

**Training** Another function of mental hygiene is to train a set of personnel who can help the people with psychological problems by trying to understand the problems and then helping them.

Whatever can be done to develop an emotionally stable citizenry must begin by an evaluation of

- the potential strength of young people as this is measured indirectly through their heritage.
- the educational and other environmental interests, attitudes and activities

## Principles of Mental Hygiene

To formulate general principles of mental hygiene is a difficult task as there is a wide range of differences among the individuals.

Some of the reasons for this are

- Human beings have multiple needs which grow in the course of development. These needs are contradictory in nature.
- There is no single, also absolute standards to judge human behaviour or action. However, in spite of these difficulties, we can formulate some general principles.

These are

**Adjustment in Home** Every child should develop such a type of behaviour at home so that he can adjust himself in any type of situation. Parents should take utmost care because the behaviour patterns that develop in early childhood leave a permanent impression on the child. Parents should try to develop competence, security, adequacy, self-esteem and discipline by catering to their basic needs.

**Adjustment in School** The school through its various activities can go a long way in creating an environment for the children to preserve and to develop their mental health.

**Adjustment in Society** Man is a social animal and he has to adjust himself with the society. Without proper social interaction, harmonious development of personality cannot occur. Hence, parents, teachers and society must provide socially acceptable channels for the release of pent up emotional feeling so that the children and adolescents can develop healthy personalities.

**Adjustment in Work** According to Freud, one is mentally healthy, if one can work successfully. School, through its programme, should develop the proper mental state towards work in children.

## Limitations of Mental Hygiene

Though, mental hygiene is an important aspect in our educational system, yet there are many limitations in implementing the principles of mental hygiene. Some of these are

- Majority of parents are not aware about mental hygiene. Hence, they does not give any importance on how to keep their children's mental health preserved and unimpaired.
- Teachers in our school system are so overloaded with work that they cannot devote time to organise different types of programmes which would help the students in curing their mental health intact.

- There is also a dearth of trained personnel to deal with the mental health problems of our population.

## **PART B - Approaches to Intelligence and Problem Solving**

### **Intelligence**

Intelligence is the ability to acquire and apply knowledge and skills. It has been defined in many different ways including, abstract thought, understanding, self-awareness, communication, reasoning, learning, having emotional knowledge, retaining, planning and problem solving.

The term intelligence means the ability to have benefit from experience, which implies the ability to behave adaptively, to function successfully within particular environments. The word “intelligence derives from the Latin word 'interleggere' which means to pick out or discern. It is a 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 learning, or narrow academic skill, rather it reflects a broader and deeper capability for comprehending our surroundings—'catching on', 'making sense' of things or 'figuring out what to do.

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, 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 organise this complex set of phenomena. Although, considerable clarity has been achieved in some areas, no such conceptualisation has yet answered all the important questions and none commands universal assent.

Few concepts in psychology have received more devoted attention and few have resisted clarification so thoroughly. Despite many efforts over the years to develop some independent definition of the term, its connotations have remained intimately intertwined with the techniques developed for its measurement

Binet, the inventor of the individual intelligence test, felt that intelligent behaviour would be manifested in such abilities as reasoning, imagination, insight, judgement and adaptability, so he designed his tests to evaluate just these functions. Still others have argued that all such abilities are

only manifestations of a single underlying factor (the so called general factor), which is presumed to be at the root of all intellectual functioning.

Intelligence may be regarded as a sort of mental energy (in the form of mental or cognitive abilities) available with an individual to enable him to handle his environment in terms of adaptation and facing novel situations as effectively as possible.

Thus, we can conclude that

- It is the ability to learn.
- It is the ability to deal with abstraction.
- It is the ability to make adjustment or to adapt to new situations.
- It is the ability or power of making appropriate responses to certain stimuli in a given situation.

## Definitions of Intelligence

According to David Wechsler, Intelligence is defined as "The aggregate or global capacity of the individual to act purposefully, to think rationally and to deal effectively with his environment".

According to Cyril Burt, "Intelligence is an innate general cognitive ability".

According to 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 ground work for the acquisition of new knowledge".

According to Woodworth and Marquis, "Intelligence means intellect put to use. It is the use of intellectual abilities for handling a situation or accomplishing any task".

## Approaches to Intelligence

There are many views regarding what constitutes intelligence. Different psychologists have given different viewpoints and formulated their own theories of intelligence.

Some important approaches to intelligence are as follows

### Modern Approach

The modern approaches of intelligence call into questions the following, such as Meta issues that are related to understanding a person's own thinking,

- Aspects which take into consideration knowledge. Specific behaviour of oriented adaptations towards achieving goals and multiple intelligences. So, modern approach integrates the concept of intelligence in the context of information processing.

## **System Approach**

System approach to intelligence is related to Gardner Theory of Multiple Intelligence in which intelligence is not just a single, unitary construct. He used converging operations, gathering evidence from multiple sources and types of data. Instead of speaking of multiple abilities that together constitute intelligence, Gardner speaks of eight distinct intelligences that are relatively independent of each other.

## **Contextual Approaches**

According to contextualists, intelligence cannot be understood outside its real-world context. The context of intelligence may be viewed at any level of analysis, focusing narrowly, on the home and environment or on entire cultures. Contextualists are particularly intrigued by the effects of cultural context on intelligence.

## **Cognitive Approaches**

Cognitive theorists are interested in studying how people or other organisms mentally represent and process what they learn and know about the world. The ways in which various cognitive investigators study intelligence differ primarily in terms of complexity of the processes being studied. This approach was advocated by Ted Nettelbeck, Arthur Jensen, Earl Hunt and Herbert Simon.

## **Social Intelligence**

Social intelligence is a major component to make healthy social relations with people in a society. The concept of social intelligence was given by Edward Thorndike in the year 1920. Through it, people connects with each other and understands about facts and phenomenas. It includes an awareness of situations and the social dynamics that govern them and a knowledge of interaction styles and strategies that can help a person to achieve his or her objectives in dealing with others. In other words, it is the capacity to to effectively negotiate complex social relationships and environment.

## **Definitions of Social Intelligence**

" In 1920, Thorndike states that "Social intelligence is the ability to understand and manage men and women, boys and girls to act wisely in human relations".

social In 1945, Cater V. Good states that "Social intelligence can be define as the ability to adjust oneself to the social environment and to act for its improvement it is an individual's ability to deal effectively with relationships and with noval social situations".

In 1983, Howard Gardner states that "Social intelligence is the capacity to know oneself and to know other is an inalienable part of the human condition as is the capacity to know objects or sounds and it observes to be investigated no less than these other less charged forms".

In 1984, M. Goldenson Robert states that "Social intelligence is the degree of ease and effectiveness displayed by a person in social relationships".

## **Elements of Social Intelligence**

**Knowledge Related to Society** Socially intelligent people know how to live and behave in the society. They are well-versed in social relations.

**Effective Listening Skills** It is seen that socially intelligent persons are good listeners. They leaves a good impression on others.

**Word Fluency and Conversational Skills** Socially intelligent persons can be easily identified by others as they have good conversational skills. They are highly socially intelligent person who can carry on conversations with a wide variety of people.

**Effective in Classroom Management** Socially intelligent teachers have skills to deal with individual differences. They know effective elements which are useful in classroom discipline management. Social intelligence is a key tool for teachers to remove the educational problems related to self and society.

## **Multiple Intelligence**

Multiple intelligence is a combination of distinct types of intelligences and each of these intelligences are independent to each other.

In multiple intelligence, each person posses each intelligence to an extent, but there is always a primary or more dominant intelligence. The Theory of Multiple Intelligence was given by Howard Gardner in the year 1983, who formulated the term of multiple intelligence. As per his theory, the traditional method to assess human intelligence i.e. I.Q. test is far too limited and there are eight different types of intelligence which a human posses.

Such as

1. Logical-Mathematical Intelligence (Number /reasoning smart)
2. Spatial Intelligence (Picture smart)
3. Linguistic Intelligence (Word smart)

4. **Bodily-Kinesthetic Intelligence (Body smart)**
5. **Musical Intelligence (Music smart)**
6. **Inter-personal Intelligence (People smart)**
7. **Intrapersonal Intelligence (Self- smart)**
8. **Naturalist Intelligence (Nature smart)**

## Definitions of Multiple Intelligence

According to Hattie, “Multiple intelligence provides students with multiple ways to access content improves learning”.

According to Hammond, “Multiple intelligence provides students with multiple ways to demonstrate knowledge and skills increases engagement and learning and provides teachers with more accurate understanding of students' knowledge and skills”.

## Elements of Multiple Intelligence

*Here are some elements that would help if they were introduced to classrooms*

**Visuals** Visual media can make complex concepts easier to comprehend so it helps make learners' lives easier.

**Realia** These are physical tangible objects that learners can touch and feel. These objects are very effective in teaching motor skills. For instance, in some subjects students have to attend lab and workshop sessions for better understanding.

**Colour** On the subjects that will need multi-media, colour is important if the object's colour is relevant to what is being learned

**Learning Ability** Some learners are not as good readers as others. For these learners, the concept will be hard to grasp if the lesson is primarily delivered using written materials. Incorporating some visuals in the teaching materials will help a big deal.

**More Emphasis on Identifying Strengths** There is a bigger need to identify the strengths and weaknesses of the students. With this understanding, the teacher can pick the teaching materials that work best for the learners.

## Emotional Intelligence

In Psychology, emotional intelligence is the ability to identify and manage your emotions, as well as other people's emotions. The concept of emotional intelligence was propounded by Daniel Goleman (1998), an American psychologist, in his book, 'Working with Emotional Intelligence. In his book, he



stated that emotional intelligence accounts for 67% of the abilities needed to be a successful leader. He further suggested that it is twice as important as technical proficiency or IQ. This research has subsequently been supported by a number of studies. He also identified five main components of emotional intelligence.

## **Definitions of Emotional Intelligence**

According to Peter **Salovey and John Mayer**, "Emotional intelligence is the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional meanings, and to reflectively regulate emotions in ways that promote emotional and intellectual growth".

According to **Hein**, "Emotional intelligence is the innate potential to feel, use, communicate, recognise, remember, learn from manage, understand and explain emotions".

## **Components of Emotional Intelligence**

*Daniel Goleman determined that there are five fundamental components of emotional intelligence which are follows*

**Self Awareness** As per this component, people with high emotional intelligence understand their emotions, strengths and weaknesses and they don't let their feeling rule them. They continuously work on these areas so that they can perform better.

They can also recognise the effect of their moods and motivations on others. To become a self-aware person, one must monitor his/her emotional state and identify his/her own emotions.

**Self-Regulation** As per this component, people have the ability to control their emotions and impulses. These people think before they act. They typically don't allow themselves to become too angry or jealous, and they don't make impulsive, careless decisions.

According to **Goleman**, emotional maturity is seen in this - component where people are able to take responsibility for their actions, being able to adapt to change, and also have the ability to respond appropriately to other people's irrational emotions or behaviour.

**Internal Motivation** According to Goleman, people who have an interest in learning and self improvement, set their goals and follow them. He also stated that an emotionally mature individual in this category has traits such as having initiative and the commitment to complete a task, and having perseverance in the face of adversity. These people are highly productive who love challenges and are effective in whatever they do.

**Empathy** According to Goleman, empathetic people have the ability to identify with and understand the wants, needs and view points of people around them. These people avoid stereotyping and judging too quickly and they live their lives in an open, honest way. He stressed that empathy can only be achieved if

self-awareness is achieved. He believed that one must be able to understand themselves before they can understand others.

**Social Skills** People with strong social skills have the ability to manage relationships in a way that benefits others. They are always ready to help others rather than focus on their own success. According to Goleman, these people have emotional maturity who can easily manage disputes, are excellent communicators and are excellent at building and maintaining relationships.

## Theories of Intelligence

There are different theories about intelligence in educational psychology. Different psychologists have given different viewpoints and formulated their own theories of intelligence. The main theories are Sternberg's Triarchic Theory and Gardner's Theory of Multiple Intelligence which are discussed below

### Gardner Theory of Multiple Intelligence

The Theory of Multiple Intelligence was proposed by Howard Gardner. He put forth on new and re-defined view of human intellectual competencies in his book, "Frames of Mind : The Theory of Multiple Intelligence" (1983). According to Gardner, intelligence is not a single entity, rather distinct types of intelligences exist. Each of these intelligences are independent of each other. This means that, if a person exhibits one type of intelligence, it does not necessarily indicate being high or low on other types of intelligence. He also put forth that different types of intelligence interact and work together to find a solution to a problem. He studied extremely talented persons, who had shown exceptional abilities in their respective areas and described eight types of intelligence.

### Types of Intelligence

*The eight types of intelligence according to Gardner are as follows-*

**Linguistic** It is a kind of skill involved in the production and use of language. It is related to reading, writing, listening, talking, understanding, etc. This is the capacity to use language fluently and flexibly to express one's thinking and understand others. Persons high on this intelligence are **word-smart**, i.e. they are sensitive to different word meanings, are articulate and can create linguistic images in their mind. e.g. poets and writers are very strong in this component of intelligence.

**Logical Mathematical** This type of skill is involved in scientific thinking and problem solving. This type of intelligence deals with abstract reasoning and manipulation of symbols involved in numerical problems. Persons high on this type of intelligence can think logically and critically. It is exhibited in scientific work. c.g. scientists and Nobel prize winners are likely to be strong in this component.

**Spatial** This type of intelligence have skills which are used in forming visual images and visual patterns. The kinds of skills used while navigating in space, forming, transforming and using mental images. The

person high on this intelligence can easily represent the spatial world in the mind. Pilots, sailors, sculptors, painters, architects, interior decorators and surgeons are likely to have developed visual spatial intelligence.

**Musical** This type of intelligence gives sensitivity to musical rhythms and patterns. It is the capacity to produce, create and manipulate musical patterns. Persons high on this intelligence are very sensitive to sounds and vibrations and in creating new patterns of sounds e.g. singers are likely to be strong in this component.

**Bodily Kinesthetic** In this type of intelligence, the whole or portion of the body is used flexibly and creatively. This consists of the use of the whole body or portion of it for display or construction of products and problem solving. It requires the skills and dexterity for fine coordinated motor movements such as those required for dancing, athletics, surgery, craft making and so on.

**Interpersonal** It is the sensitivity to subtle aspects of others behaviours. This is the skill of understanding the motives, feelings and behaviour of other people so as to bond into a comfortable relationship with others e.g. psychologists, counsellors, politicians, social workers and religious leaders have high degree of this intelligence.

**Intrapersonal** It is an awareness of one's own feelings, motives and desires. This refers to the knowledge of one's internal strengths and limitations and using that knowledge, to effectively relate to others. Persons high on this ability have finer sensibilities regarding their identity, human existence and meaning of life e.g. philosophers and spiritual leaders having strong intrapersonal skills.

**Naturalistic** It is the sensitivity to the features of the natural world. It is related to recognising the flora and fauna and making a distinction in the natural world. It is more possessed by hunters, farmers, tourists, students of biological sciences and the like.

Although Gardner's theory was widely popular over the last two decades but it was also criticised by other psychologists. Some Psychologists argued that his theory was too much based on his own intuition rather than any empirical data, while others felt that the intelligence described by Gardner were synonymous for personality type.

## Triarchic Theory of Intelligence

Triarchic Theory of Intelligence is another important modern theory of intelligence. It was proposed by **Robert Sternberg** in 1985. It attempts to understand the cognitive processes involved in solving problems.

According to **Sternberg**, "Intelligence is the ability to adapt, to shape and select environment to accomplish one's goals and those of one's society and culture". According to this theory, there are three basic types of human intelligence

Elements/Types of the Triarchic

Theory of Intelligence

Componential Intelligence

Experiential Intelligence

Contextual Intelligence

## Componential Intelligence

Componential intelligence or analytical intelligence involves the ability to think critically and analytically. Persons high on this dimension usually excel on standard tests of academic potential and make excellent students. It consists of internal mental mechanisms that are responsible for intelligent behaviour.

*This intelligence has three components, each serving a different functions :*

**Knowledge Acquisition Component** This refers to the meaningful acquisition of new information and relating that information (relation between onion and vegetable or jasmine and flower) to the prior knowledge (meanings of onion, vegetable, jasmine and flower) existing in the memory.

**Meta Component** refers to how one directs ones own thinking i.e. performance and knowledge acquisition components. It means the way in which one's thinking to understand the problem and choose the strategy to solve the problem using the performance components. It is the knowledge about one's own thinking.

Meta-components are higher-order mental processes that determine which performance and learning components will be used as well as the sequence in which they will be used. These components are common for all tasks; they plan, monitor and evaluate what one is doing. Furthermore, they activate performance and knowledge acquisition components.

**Performance Component** includes basic operations which are involved in any cognitive act/process. These are the processes that are used to perform a task or solve a problem. This component is the one that is measured best by existing intelligence tests.

## Experiential Intelligence

The second type of intelligence is experiential or creative intelligence, which emphasises insight and the ability to formulate new ideas. Persons who are high on this dimension have excellent mind and are able to find out which information/facts are crucial and which are not

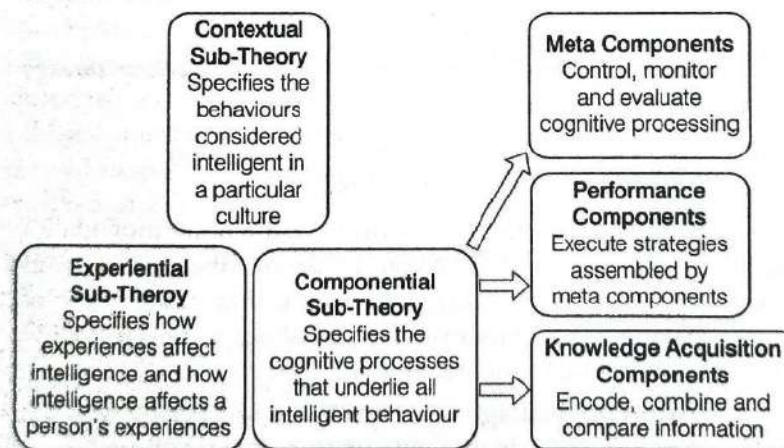
This is the kind of intelligence shown by many scientific geniuses and inventors, such as Einstein, Newton and some would say Freud. It focuses on the relationship between the person's inner, mental world and the outer external world.

This aspect is concerned with the effect of intelligence on one's experiences as well as the effect of person's interaction with the environment on intelligence. This view adds creativity (or novelty and originality) to the overall conception of intelligence.

A creatively intelligent person may not particularly perform well on a test of intelligence, but is able to combine different experiences in uniquely original ways. A second aspect of experiential intelligence is the ability to automatise or make routine tasks that are encountered repeatedly. An example of automatising is reading, which is carried out largely without conscious thought. Playing music is another example of this type of activity.

## Contextual Intelligence

Sternberg states the third type of intelligence as contextual or practical intelligence and in some ways, it is the most interesting of all. Persons high on this dimension are intelligent in a practical, adaptive sense, they have what many would term street smarts and are able to solve the problems of everyday life. People high on contextual sense remains practical or down to Earth in life. Such people remains involved in activities such as implementing, using, applying and seeking relevance.



**Elements of Triarchic Theory of Intelligence**

## Assessment of Intelligence

Generally, it is seen that intelligence of a person is different from the others. The intelligence of people are assess by a number of intelligence scales/tests which have been devised by many psychologists.

## Intelligence Tests

Intelligence tests are psychological tests that are designed to measure a variety of mental functions, such as reasoning, comprehension and judgement. Intelligence tests assess the characteristics of human intelligence. Western psychologists discovered various methods to measure human intelligence. In this direction, the first attempt was made by Wilhelm Wundt, who established a laboratory in 1879 which was dedicated to Psychology to assess intelligence. In 1900, Cattell used some measures of intelligence such as, strength of grip, colour discrimination and rote memory .

However, the major effort was made by Alfred Binet, who was a French Psychologist and also known as the 'Father of Mental Testing' and pioneer of intelligence testing.

## Types of Intelligence Tests

Intelligence tests are of several types. They can be classified as either verbal or performance tests on the basis of the nature of items used.

*Some of the tests are as follows*

**Individual or Group Tests** An Individual intelligence test is one which can be administered to one person at a time. A group intelligence test can be administered to several persons simultaneously. Individual tests allow people to answer orally or in a written form while the group tests generally seek written answers usually in a multiple choice format.

**Verbal, Non-verbal or Performance Tests** An intelligence test may be fully verbal, fully non-verbal or fully performance based, or it may consist of a mixture of items from each category. Verbal tests presented in words and languages and can be administered only to literate people whereas non-verbal tests use pictures or illustrations as test items. Performance tests require subjects to manipulate objects and other materials to perform a task.

**Culturally Biased Tests** Psychologists have tried to develop that does not discriminate against individuals belonging to different cultures. In such tests, items are constructed in a manner that they assess experiences common to all cultures. Some of the important types of intelligence scales/tests are given below

## Binet-Simon Intelligence Scale/Test Stanford-Binet Intelligence Scale/Test

This general test of mental ability was devised by Alfred Binet and his colleague, Theodore Simon in 1905. At first, he gave a very crude scale of 30 items to assess mental age. This scale was revised in the year 1908, and he prepared a scale of 59 items for the age group 3 to 13 years along with a method of finding out the mental age. He again revised his scale in the year 1911 and prepared a scale which contained tests for age group 3 to 16 years.

With the help of this scale, Binet could identify whether a person is average, above or below, depending upon his mental age.

According to his test, if a person gives all the answers as per his age is considered 'Average', if gives all the answers set for people above his age is considered above average' and if does not give answer as per his age is considered 'below the average'.

### **Stanford-Binet Intelligence Scale/Test.**

The Binet-Simon Intelligence test was further revised and expanded by Lewis Terman in the year 1916 at Stanford University. This scale is known as Stanford-Binet Intelligence Scale. This scale had 90 items. In the year 1937, two higher age groups were added in this scale i.e. Superior adult mental age is 19 years and very superior adult mental age is 22 years.

In this type of test, intelligence is analysed by five factors of cognitive ability. These five factors are fluid reasoning, knowledge, quantitative reasoning, visual spatial processing and working memory. In this test, both verbal and non-verbal responses are measured.

During this test, each of the five factors is given a weightage and the combined score is often reduced to a ratio commonly known as IQ. It is the most commonly used test of intelligence today.

### **Wechsler Intelligence Scale/Test**

It is an intelligence test which was developed by a clinical psychologist, Dr. David Wechsler, in the year 1939. This test was developed for both children and adults. It is an individual test which has the unique quality of being simultaneously a verbal as well as a performance scale.

This scale/test consists of 11 tests, which 6 are verbal scale and 5 are performance scale. Such as

#### **Verbal Scale**

- Test of general information
  - Test of general comprehension
- Test of arithmetic reasoning
- Test of distinction between similarities
  - Test of memory/digit span • Test of vocabulary

#### **Performance Scale**

Digit symbol test .

Picture completion ttes

Block design test

Picture arrangement test

Object assembly test

The scores on these sub-tests are added together to assess the individual's intelligence.

*It is of two types:-*

(i) The Wechsler Intelligence Scale for Children (WISC) It covers children between the age of 6 to 16 years,

(ii) The Wechsler Intelligence Scale for Adults (WISA) It covers adults and elder adolescents.

## Intelligence Quotient

When intelligence is assessed by intelligence tests than it is expressed in terms of Intelligence Quotient (IQ). The concept of Intelligence Quotient was introduced by William Stem in the year 1912.

Intelligence Quotient (IQ) is the ratio of mental age and chronological age, which is multiplied by 100 in order to eliminate the decimal point.

*Intelligence Quotient (IQ) of a person can be expressed through the following formula:*

$$IQ = \frac{\text{Mental Age (MA)}}{\text{Chronological Age (CA)}} \times 100$$

Mental age is defined as the measure of an individual's mental attainment based on the age in which he/she takes individual average to reach that same level of attainment, In other words, mental age is the age level of an individual's mental ability: an

Chronological age is the actual age of a person which is based on the calendar date when he/she was born.

For eg If the mental age of a child is 12 years and his/her chronological age is 10 years, then what IQ level he / she possess?

According to the formula,

$$IQ = \frac{12}{10} \times 100 = 120$$

10 Hence, he/she possess IQ level 120.



## ***Intelligence Quotient given by Wechsler***

### *Classification of People on the Basics of IQ*

IQ Range.	Descriptive Label
Above 130.	Very superior
120-129	Superior
110-119.	High average
90-109	Average
80-89	Low average
70-79.	Borderline
Below 70.	Mentally challenged/Retarded

## **Problem-solving**

My In Cognitive Psychology, the term problem-solving refers to the mental process that people go through to discover, analyse and solve problems. The ultimate goal of the problem-solving is to overcome obstacles and to find a solution that best revolves around the issue. This is an essential exercise for individual advancement and also for the advancement of society.

### **Definitions of Problem-solving**

In 1968, Skinner states that “Problem solving is a process of overcoming difficulties that appear to interfere with the attainment of a goal. It is a procedure of making adjustment in spite of interferences”.

In 1948, Woodworth and Marquis states that “Problem-solving behaviour occurs in normal or difficult situations in which a solution is not obtainable by the habitual methods of applying concepts and principles derived from the past experiences which are very similar to the present situations”.

### **Nature of Problem Solving**

The problem-solving behaviour involves quite deliberate, conscious and serious efforts on the part of the problem-solver.

- One has to utilise one's thinking and reasoning powers and engage in serious mental work by systematically following some well-organised steps for the removal of the difficulties and obstacles.

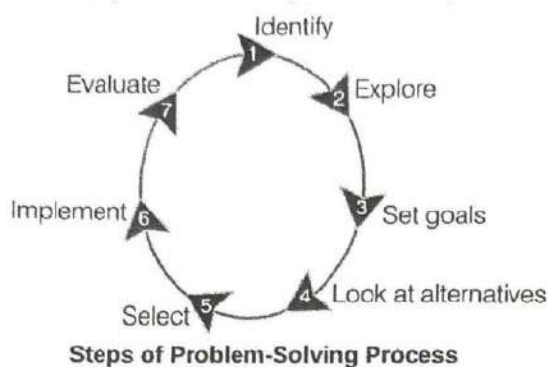
Problem-solving behaviour helps in the removal of or adjustment with, interferences and ultimately helps an individual to reach his goal and satisfy his motives.

progress and Problem-solving behaviour helps an individual in the growth and development of his personality, making his life happier and wiser by appropriate adjustment. It also contributes significantly to the development of society.

## Steps in Problem Solving

In order to solve a problem, it is important to follow a series of steps. These steps are known as problem solving cycle, which includes developing strategies and organising knowledge.

*The major steps of problem-solving process are given below:-*



**Identifying the Problem** The first step in the problem-solving process is to identify the problem, by sizing up the situation. It may seem an obvious and simple step, but it is the most important step in the problem-solving process. It is the base of the whole process. If a wrong problem is identified, the whole process gets futile.

*Some useful techniques for identifying the problem includes*

comparison with others

monitor weak signals

checklist

brain storming

comparison of current performance with last performance

listing complaints

role playing

**Exploring the Problem** After identifying the problem, its root cause should be find. Often people focus on symptoms or effects of the problem, but ignore the real cause. The point here is to focus on analysing the problem for the real cause. It also helps in fully defining the problem, so that it can be solved.

**Setting Goals** After exploring and analysing the problem, the focus should be on making a goal statement that emphasises on the successful end of the problem. Making a goal statement, helps in clarifying the direction to take in solving the problem and gives definite focus on the solution of the problem. It is a way of addressing the problem and fixing the gap between the problem and the goal.

**Look at Alternatives** After analysing and setting up goals, the next step is to develop possible solutions. This is a creative as well as practical step, where every possible solution is identified.

*Various alternative solutions are identified through the following techniques :*

Analysis of past solutions

Reading Researching Thinking

Asking questions

Discussing

Brain storming

## # Mind Mapping

- Mind mapping is another technique that can be used for identifying alternative solutions. It was developed by Tony Buzan in 1970.
- Mind mapping uses pictures and word phrases to organise and develop thoughts in a non-linear fashion. It helps the people to see the problem and its solution.
- To do mind mapping, take a sheet of plain paper and in center write or draw the issue that is to be solved. Draw lines out of main problem and each line should represents different aspects of the problem. It gives a clear picture of the problem.

**Select the Best Solution** After getting a wide variety of possible solutions, the next step is to select the best solution to solve the problem. Resources and other considerations like money, time, policy, people, rules, procedures that can affect the solution are also selected.

**Implementation** It is the most crucial part of the problem-solving process. Action plan is developed in order to implement the solution of the problem. Action plan confirms the plans and events of solving the problem.

**Evaluation** This is the final step in the problem-solving process. The effectiveness of the solution is reviewed against the desired outcomes. In this stage, careful analysis of solution is done.

## Factors Affecting Problem Solving

Problem-solving is not a flawless process. There are a number of factors which interfere in the problem-solving process. These are as follows: can

**Functional Fixedness** It is the tendency to view problems only in their customary manner, It prevents people from fully seeing all of the different options that might be available to find a solution.

**Assumption** While dealing with the problem, people often make assumptions about the constraints and obstacles that prevent certain solutions.

**Irrelevant or Misleading Information** In the problem-solving process, it is important to distinguish between relevant and irrelevant information. When the problem is complex, it becomes easier to focus on misleading or irrelevant information and it should be avoided.

**Mental Set** It is the tendency of people to use only solutions that have worked in the past rather than looking for alternative solutions. It can often work as heuristic by making a useful problem solving technique. or it can also lead to inflexibility, making it more difficult to find effective solutions.

## Critical Thinking

Critical thinking is a type of thinking that helps a person in stepping aside from his own personal beliefs, pre-judices and identify the truth.

opinions to sort out the facts and Critical thinking represents challenging thought process which leads a person to new avenues of knowledge and understanding. Infact, it is a sructural approach of thinking to find ways and means for the improvement of thinking process itself. For critical thinking, a person must have higher cognitive abilities and skills for the proper interpretation, analysis, evaluation and interference as well as explanation of the gathered information resulting in a purposeful, unbiased and self-regulatory judgement.

## Definitions of Critical Thinking

**Edward Glaser** defines critical thinking as follows

- An attitude of being disposed to consider in a thoughtful way and the problems and subjects that came within the range of one's experiences.
- Knowledge of the methods of logical inquiry and reasoning.
- Some skill in applying those methods.

Critical thinking calls for a persistent effort to examine any belief or supposed form of knowledge in the light of evidence that supports it and further concludes to which it tends. According to **Michael Scriven and Richard Paul**, "Critical thinking is the intellectually disciplined process of actively and skillfully

conceptualizing, applying, analyzing, synthesizing, reasoning or communication as a guide to belief and action”.

## Nature of Critical Thinking

- It is a higher order well-disciplined thought process. It involves the use of cognitive skills like conceptualisation, interpretation, analysis, synthesis and evaluation for arriving at an unbiased, valid and reliable judgement the gathered or communicated information or data as a guide to one's belief and action. of
- The value of critical thinking lies in its quality of being most skillful and responsible thinking that facilitates good judgement.
- It is self-correcting and sensitive to the contemporary issues and circumstances.
- . It is the basis and reliable support for carrying out the process of problem-solving.
- . It discourages the child to merely adopt things without proper understanding. Rather it makes him/her a self-reliant, conscious, independent enquirer and discoverer to find out the reality beyond assumptions.

Thus, it is our responsibility to encourage our youngsters to have the required critical thinking which is essential to discover the realities of the world,

## Importance of Critical Thinking

*It helps to understand the logical connections between ideas. .*

- *It helps to identify, construct and evaluate arguments.*

*It helps to solve a problem critically without losing any important fact. .*

- *It helps a person to identify the relevance and importance of ideas.*
- *It also helps to detect inconsistencies and common mistakes in reasoning.*

## Metacognition

The term 'metacognition' was first coined by John Flavell, an American Developmental Psychologist, in the year 1979. The word 'meta' means 'beyond' and 'cognition' means 'thinking', so the term 'metacognition' refers to '**beyond thinking**'.

According to him, "*metacognition is a cognition about cognitive phenomenon, or basically thinking about thinking*".

### Definitions of Metacognition

In 1988, Cross and Paris states that "Metacognition is the knowledge and the control that children have over their own thinking and learning activities".

In 1999, Hennessey states that "Metacognition is the awareness of one's own thinking, awareness of the content of one's conception, as active monitoring of one's cognitive processes, an attempt to regulate one's cognitive processes in relationship to further learning, and an application of a set of heuristics as an effective device for helping people to organize their methods of attacks in general".

## **Nature of Metacognition**

- It highlights in-depth thinking in which cognitive processes are actively controlled.
- It focuses on planning which includes how a task can be accomplished. It monitors, understands and estimates progress towards the completion of a particular task.
- With the help of metacognition, a student can be aware of how dedicated he is to reach his goals, of how strong his trait of perseverance is, and of how focused his attention is to a task that involves thinking or writing. He can also regulate his dedication, disposition, and attention.

## **Components of Metacognition**

John Flavell identified two components of metacognition which are given below

### **Metacognitive knowledge**

It is the awareness individuals possess about themselves and other people as cognitive proknowledge

It has three types such as

**Declarative Knowledge** It means person's knowledge or understanding one's own capabilities.

**Procedural Knowledge** It means task knowledge, including content and length.

**Strategy Knowledge** It means conditional knowledge or one's ability to use strategies to learn information as well as for adapting these strategies to new situations.

### **Metacognitive Regulation**

It has the sequential process that one uses to control cognitive activities and to ensure that a cognitive goal has been achieved. This process helps to regulate and oversee learning and consists of planning and monitoring cognitive activities. These processes also check the outcomes of those activities.

*It has three skills such as*

**Planning** It involves suitable selection of strategies and the right assignment of resources.

**Monitoring** It includes awareness of understanding and task performance.

**Evaluating** It refers to the assessment of the final result of a task and the efficiency carried out during that particular task performance.

## Creativity

Creativity is a mental process involving the generation of new ideas or concepts, or new associations of the creative mind between existing ideas or concepts. It is simply the act of making something new..

As we know that no two individuals are alike. Humans are made by God, thus, every one of us is a unique creation, but does not possess the same creative abilities as others have.

Some of us have creative talents and contributes to advancement in the fields of an art, literature, science, business , and other spheres of human activity. Abraham Lincolon, Homi Bhabha, Mahatma Gandhi, Einstein, Shakespere and many others are the examples of having creative thinking abilities. With the help of creativity, people creates something new and lead a unique life which is different from others.

## Definitions of Creativity

In 1973, Stagner and Karwoski states that “Creativity is the production of a “totally or partially’ novel identity”. In 1931, Pearman states that “Creativity is the power of the human mind to create new contents by transforming a

relations and thereby generating new correlates”. In 1978, MJ Levin states that “Creativity is the ability to discover new solutions to problems or to produce new ideas, inventions or work of an art. It is a special form of thinking, of viewing the world and interacting with it in a manner different from that of the general population”. In 1974, Wilson, Guilford and Christensen states that a way

“The creative process is any process by which something new is produced i.e., an idea or an object including a new form or arrangement of old elements. The new creation must contribute to the solution of some problems”.

## Nature of Creativity

- It is not confined to any individual, groups of individuals, caste, colour or creed. It is universal. Everyone of us possesses it and is capable of demonstrating creativity to some extent

- It is a God given gift as well as is the result of influence of cultural background, experiences, education and training

- It produces something new or novel.

It is a kind of adventurous thinking, calling a person to come out in the open to express himself according to his/her will and to function unrestricted by routine or previous practice.

- It has a wide scope which is not restricted by any limits or boundaries or scientific inventions or production of work.

It covers multifarious human aspects like writing stories, composition of poems, performance in the field of dance and music and so on.

# PART C - Principles and Theories of Learning

## Learning

When we hear the word 'learning', most of us think of studying in school. We think about subjects or skills we intend to master, such as Mathematics, English, Science, etc. But, learning is not limited to schools only. We learn everyday in our lives. For e.g. Babies learn to kick, crawl, teenagers learn to cycle or lyrics of their favourite songs, middle-aged people learn to change their diet patterns, etc.

So, in the broadest sense, learning occurs when experience causes a relatively permanent change in an individual's knowledge and behaviour. The change may be deliberate or unintentional, for better or for worse, correct or incorrect and conscious or unconscious.

Therefore, learning can be defined as any relatively permanent change in behaviour that occurs as a result of practice or experience.

*Learning has three important elements*

- It is a change in behaviour for better or worse.
- It is a change that takes place through practice or experience, changes due to growth or maturation.
  - Before it can be called learning, the change must be relatively permanent; it must be for a long time.

Learning is an active process that needs to be stimulated and guided towards desirable outcomes. External stimuli that induce learning include particularly, the influence of the teacher through the assignments he/she makes, the questions he/she asks, the visual aids and other procedures that he/she utilises to arouse learning interest and activity among students,

Learning is the acquisition of habits, knowledge and attitudes. It involves new ways of doing things and it operates in an individual's attempts to overcome obstacles or to adjust to new situations. When learning



takes place, it can be expected that a more or less permanent change will be evidenced in the learner's behaviour.

## Definitions of Learning

According to **Woodworth**, (1945) "An activity may be called learning in so far as it develops an individual in anyway, good or bad and makes his environment and experiences different from what it would otherwise have been".

According to **Kingsley and R Gary** (1957), "Learning is the process by which behaviour in the broader sense is originated or changes through practice or training".

According to **Hilgard** (1958), "Learning is the process by which an activity originates or is changed through reading encountered situation, provided that characteristics of the changes in activity cannot be explained on the basis of native response, tendencies, maturation or temporary states of the organism (e.g. fatigue 10 an the or drugs, etc)",

According to **Kimble** (1961), "Learning is a relatively permanent change in behavioural potentiality that occurs as a result of reinforced practice."

According to Henry P Smith (1962), "Learning is the acquisition of new behaviour or the strengthening or weakening of old behaviour as the result of an experience".

According to **Pressey, Robinson and Horrocks** (1967), "Learning is an episode in which a motivated individual attempts to adapt his behaviour so as to succeed in a situation which he perceives as requiring action to attain a goal".

According to **Gardner Murphy** (1968), "The term 'learning', covers every modification in behaviour to meet environmental requirements".

According to **Crow and Crow** (1973), "Learning is an acquisition of habits, knowledge and attitudes. It involves new ways of doing things and it operates in an individual's attempts to overcome obstacles or to adjust to new situations, represents progressive changes in behaviour. It enables him to satisfy interests to attain goals".

## Principles of Learning

Learning principles are laws of learning. They provide a research-based and conceptual foundation for how people learn. Learning principles add insight into what makes people learn most effectively.

*Some of the principles of learning are discussed below*

Learning is an active process in which learners use sensory input to construct meaning. People learn best when they can take in information using a variety of sensory inputs.

- Learners link new information with prior knowledge and experiences in meaningful ways. Prior knowledge and experiences are primary factors in a persons ability to learn new information.

Learning requires the use of various forms of language (c.8. words, symbols, numbers and images) to capture and develop thinking.

Learning is influenced by many contextual factors including differences in background, knowledge, thinking patterns; and cultural, linguistic and social backgrounds. Teachers should create learning contexts that maximize student's learning opportunities.

Learning is influenced by emotional state, social interactions, interpersonal relations and communication with others. Learning is dependent on positive social interactions, communication and relationships.

Learner's motivation both extrinsic and intrinsic, a key component to ensure engagement and learning. Motivation is the activation of goal-oriented behaviour, Because the learning process is based on establishing and achieving learning goals, figuring out how to motivate students is a key to effective learning experiences.

Learner's persistent effort, developmentally appropriate challenges and instructional support results in rigorous learning. Students need both support and challenge to achieve rigorous learning.

- Learners need multiple opportunities over time to practice in supportive, respectful environments. Significant learning takes time and must be supported in a safe learning environment. Teacher must support through close monitoring of progress toward achieving the learning goals.
- Learners need regular, specific and timely feedback with opportunities to use the feedback to maximize learning experiences.
- Learners reflect, monitor and adjust their thinking and reasoning to achieve learning goals (metacognition). The ability to self-assess and monitor one's own work accelerates learning,

## Theories of Learning

Theories of learning are organised set of principles, explaining how individuals acquires, retains and recalls their knowledge. There are number of theories of learning which have been formulated to answer the questions like, what goes into the process of learning?, How does an individual learns a set of facts and figures, skills, habits, attitudes and similar other things in his/her life?

*These theories may be broadly classified as follows*

**Behaviouristic Theory** Behaviourism is a learning theory that only focuses on objectively observable behaviours and discounts any independent activities of the mind. Behavioural theorists define learning as nothing more than the acquisition of new behaviour based on environmental conditions.

**Cognitive Theory** Cognitive Learning theory is a broad are influenced by internal and external factors in order to produce that explains thinking and differing mental process and how they learning in individuals.

**Social Learning Theory** Social learning theory is the view learn new behaviours, values and attitudes. It requires attention , the ability to replicate the behaviour and a motivation to act, in the same way.

## Behaviouristic Theories of Learning

*Behaviouristic theories of learning are as follows*

### Thorndike Connectionism or Behavioural Theory or Trial and Error Theory

**Edward Lee 'Ted' Thorndike** ( 31st August, 1874- 9th August, 1949) was an American Behavioural Psychologist, who developed Learning Theory on the basis of behaviourism. Skinner Theory of operant conditioning was built on the ideas of Edward Thorndike. Thorndike was a pioneer not only in behaviourism and in studying learning, but also in using animals in psychological experiments.

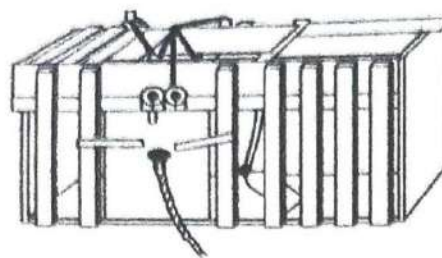
**Connectionism** is a learning theory based on the concept of bonds formed between stimulus and response i.e. natural connections between Situations (S) and Responses (R) are formed and strengthened. The stimulus affects the organism which responds to it.

Thus, S-R bonds are formed which are considered as physical conditions. This theory of learning is related to conditioning, that utilises the concept of association of connection. It emphasises that the behaviour begins with conditioned reflexes and natural responses and new behaviours result from the acquisition of new bonds through experience. Thorndike formulated the major laws of learning on the basis of his belief in connectionism.

EL Thorndike had a powerful impact on both psychology and education. He was a strong supporter of educational research and helped in creating the intelligence and aptitude tests.

### Thorndike's Puzzle Box

One of Thorndike's major contributions to the study of psychology was his work with animals. He believed that learning occurred through trial and error. The animal made many responses, many of them were wrong and ineffective and eventually learned to repeat those that got desirable results,



**Puzzle Box**

Thorndike felt that the learning was a matter of creating associations between stimuli and response and no speculation about mind was necessary or useful. Through long, extensive research with these animals, he constructed a device called 'puzzle box'.

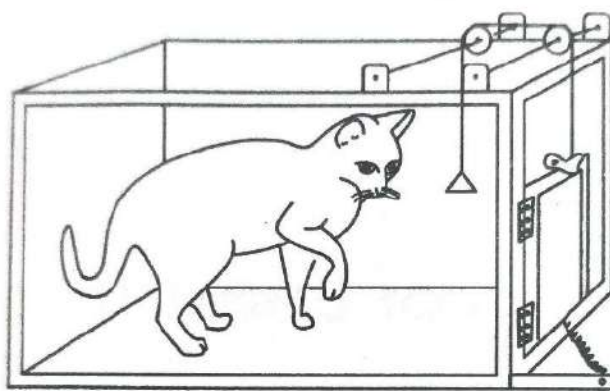
The puzzle box was approximately 20 inches long, 15 inches wide and 11 inches tall. The box had a door that was pulled open by a weight attached to a string that ran over a pulley and was attached to the door. The string attached to the door led to a lever or button inside the box. When the animal pressed the bar or pulled the lever, the string attached to the door would cause the weight to lift and the door to open.

## Experiment by Thorndike on Cat

In one of his experiments, he put a hungry cat in a puzzle box (Cage). There was only one door which could be opened by correctly manipulating a latch. A fish was placed outside the box. The smell of the fish acted as a strong motive for the hungry cat to come out of the box.

*Thorndike described this situation in his words as:*

“It tries to squeeze through every opening, it claws and bits at the bars or wires, it thrusts its paws through any opening and claws at everything it reaches.’ In this way, the cat made a number of random movements and in one of the random movements, the latch was manipulated accidentally. The cat came out and got her reward (fish). Gradually, in subsequent trials, the cat learned the art of opening the door.



**Cat in the Puzzle Box**

**The experiment sums up the following stages in the process of learning:**

**Drive:** In the above experiment, she was hungry and was intensified by the sight of the food.

**Goal :** To get the food (fish) by getting out of the box. Black The cat was confined in the box with a closed door.

**Random Movements ;** The cat persistently tried to come out of the box without knowing how.

**Chance of Success** As a result of this striving and random movements, the cat, by chance succeeded in opening the door

**Selection of proper movement :** radually, the cat recognised the correct way to manipulate the latch. She selected the proper way of manipulating the latch out of its movements.

**Fixation:** At last, the cat learned the proper way to open the door by eliminating all the incorrect responses and fixing only the right one. Then, she was able to open the door without any error or in other words, learned the correct way of opening the door.

Thorndike explained learning with his '**law of effect**'. Animals tended to repeat a behaviour that resulted in a pleasing effect. early version of the concept of positive reinforcement that Skinner has used effectively. Behaviour was varied during a trial and error phase. Thorndike believed that the animal stumbled upon a behaviour that produced a This was an desirable effect.

This created a link between stimulus (cage) and a response (stepping on switch or pulling the lever). Later, in the same stimulus situation, that response occurred faster. Thorndike compared the performance of, chickens, cats, dogs and monkeys in similar task.

He produced a graph called a "learning curve" showing the number of seconds the animal took to escape on each trial.

Thorndike concluded that all animals learn, solely by trial and error or reward and punishment. He observed the cat's behaviour in the puzzle box and described what happens when all the beings learned together. All learning involves the formation of connections and connections are strengthened according to the 'law of effect'.

## **Thorndike's Laws**

Thorndike presented laws of learning on the basis of his belief in Connectionism Theory. Originally, these laws are the outgrowth of experiments in the field of animal psychology. He first presented his theory in his book 'Animal Learning' published in 1898.

His major laws are Primary and Subordinate Laws. Primary Laws include Law of Readiness, Law of Exercise and Law of Effect. Whereas, Subordinate Laws are composed of Law of Multiple Response, Law of Attitude, Prepotency of Elements, Law of Response by Analogy and Law of Associative Shifting.

With the subject of the importance of these laws in learning, Thorndike points out, "Both theory and practice need emphatic and frequent reminders that man's learning is fundamentally the action of laws of readiness, exercise and effect". Thus, in Thorndike's opinion man's learning takes place according to these laws.

## **Law of Readiness**

### **Primary Laws**

"When a bond is ready to act, act gives satisfaction and not to act gives annoyance". If a person is ready to learn, he/she can learn quickly. The law of readiness describes those situations in which the person, who learns or either invites the object of his/her learning or rejects it. Readiness means a preparation of action. If a person is not prepared to learn, then learning cannot be instilled in him/her. Readiness includes all those preparatory adjustments which immediately precedes the activity. Reminding the learner of his/her past experiences, the understanding of new things, diverting attention towards the subject to be learned, changing the environment to suit the learning, are all included in readiness. The readiness creates a mental set for learning

## **Law of Exercise**

It has two important aspects. It is based on the law of use and disuse. The law of use states that “when a modifiable connection is made between a situation and a response, that connection's strength is being increased”.

Similarly, the law of disuse states, that “when a modifiable connection is not made between a situation and a response over a length of time, the connection's strength is decreased”.

The repeated application of an activity fixes it firmly in the mind, while on the other hand, the relation is weakened through continuous disuse. Drill and practice helps in increasing efficiency and durability of learning.

According to Thorndike's S-R bond or Connectionism Theory, the connections are strengthened with trial and practice.

Whenever, there is an appropriate situation, the activity which is firmly entrenched, might takes place. It is the experience that whenever any action is repeated, it becomes easy and prompt. Learning and re-learning helps in mastering the activity.

Repetitions of activities fix knowledge and skills to be learned. Practice makes it perfect. Lack of practice weakens memory and skills. It may be said that longer is the period of disuse, greater is the loss of memory and weakening of skills.

## **Law of Effect**

The 'law of effect' is the 'effect of learning. The trial or steps leading to satisfaction stamps in the bond or connection. Satisfying states lead to consolidation and strengthening of connection, whereas dissatisfaction, annoyance or pain lead to the weakening or stamping out of the connection. Success brings with it satisfaction and along with it a strengthening of the relation of the experiences. Failure increases dissatisfaction and the absence of the relation among the experiences weakens them. The success can be compared to reward and failure to punishment, and the desire to repeat success avoids failures as the inevitable antecedents.

## **Subordinate Laws**

Other five subordinate laws were also mentioned by Thorndike in relation to the three major ones.

*The five subordinate laws are:*

## **Law of Multiple Response**

A person varies or changes his/her response till an appropriate behaviour is succeeded. A person solves a problem with his instinctive and learned behaviour. There are multiple responses in the behaviour, which guides a person in achieving success and making learning possible. The learner reaches the solution by variation in the response.

## **Law of Set or Attitude**

Learning is conditioned or guided by the attitude or set of the person which determines not only what the person will do, but what will satisfy or annoy the person. The response of a person is dependent upon his/her attitude towards the situation. Learning is affected more in the individual if he/she is set to learn more or to excel.

## **Prepotency of Elements**

According to this law, the learner reacts selectively to the important or essential in the situation and neglects the other features or elements which may be irrelevant or non-essential. The ability to deal with the essential or relevant part of the situation, makes analytical and insightful learning possible. In this law, Thorndike is really anticipating insight in learning which was more emphasized by the Gestaltians.

## **Law of Response by Analogy**

The person uses old experiences in responding to a new situation. A person will respond in a manner similar to the one in which he/she has behaved previously, if he/she finds some similarity between the situations.

## **Law of Associative Shifting**

The response of person/learner shifts in respect to the basic or associative stimulus. The learner's response is shifted from one stimulus to another.

*Educational implications of the theory are:*

A task can be started from the easier aspect towards its difficult aspect, which will help the children to learn properly. .

- Trial and error method can be used in teaching.

Rewards and punishment affects the learning of the child.

- Habits are formed as a result of repetition. With the help of this theory the wrong habits can be modified and good habits can be strengthened.

. Practice is the main feature of trial and error method. It helps in reducing errors committed by children in learning a concept.

## **Pavlov's Classical Conditioning Theory**

Classical conditioning gets its name from the fact, that it is the kind of learning situation that existed in the early 'classical' experiments of Ivan P Pavlov. In late 1920, this famous Russian Psychologist began to establish many of the basic principles of conditioning. It is also sometimes called respondent conditioning or Pavlovian conditioning

It focuses on the learning of involuntary emotional or psychological responses such as fear, increased muscle tension, salivation or sweating. These sometimes are called respondents because they are automatic responses to stimuli. Through the process of classical conditioning, humans and animals can be trained to react involuntarily to a stimulus that previously had no effect or a very different effect on them.

Pavlov did experiments on the digestive systems of dogs. He was trying to determine how long it took a dog to secrete digestive juices after it had been fed, but the intervals of time kept changing. At first, the dogs salivated in the expected manner while they were being fed.

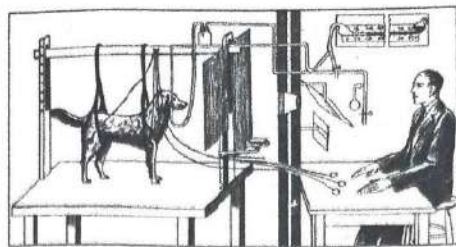
Then the dogs began to salivate as soon as they saw food. Finally, they salivated as soon as they saw the scientist in the room. Pavlov decided to make a detour from his original experiments and examine these unexpected interferences in his work.

## Acquisition or Learning of Conditioned Responses

For studying the digestive system in dogs, Pavlov had designed an apparatus, that could accurately measure the amount of saliva produced by the dogs in response to food or other things in his environment. Normally, when food is placed in the mouth of any animal, the salivary glands automatically start releasing saliva to help with chewing and digestion. This is a normal reflex or involuntary response in both animals and humans.

The food causes a particular reaction, the salivation. A stimulus can be defined as any object, event or experience that causes a response, the reaction of an organism. In case of Pavlov's dogs, the food is the stimulus and salivation is the response.

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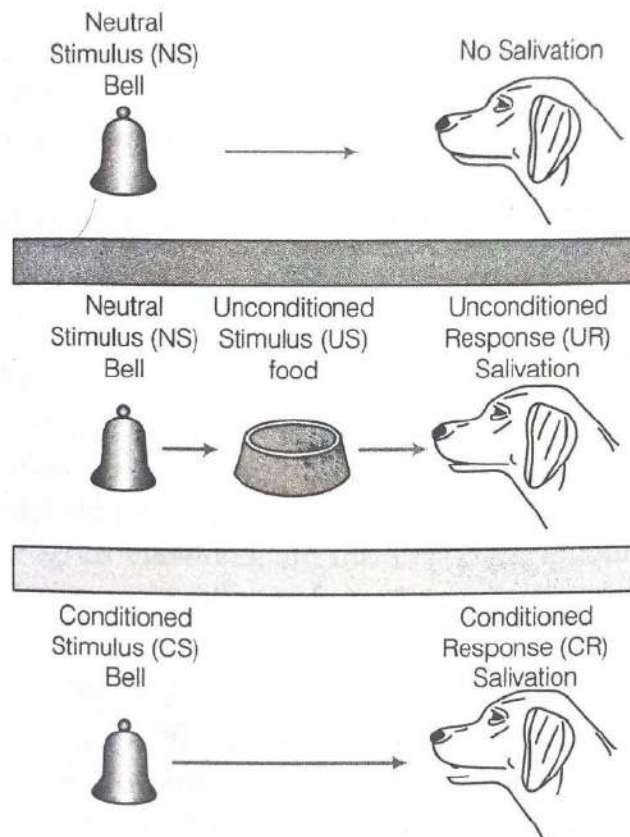
Pavlov's Apparatus for Studying the Conditioned Salivary Response

At the beginning of his experiments, Pavlov began by a sound of bell and recording a dog's response. As expected, there was no salivation. At this point, the bell was a Neutral Stimulus because it brought forth no salivation. Then Pavlov fed the dog, the response was salivation. The food was an **Unconditioned Stimulus (US)** because no prior training or conditioning was needed to establish the natural connection between food and salivation. The salivation was an **Unconditioned Response (UR)**, because it occurred automatically without any conditioning.

Using these three elements—the food, the salivation and the bell, Pavlov demonstrated that a dog could be conditioned to salivate after hearing the bell. He did this by pairing of sound of bell with food. At the beginning of the experiment, he sounded the bell and then quickly fed the dog. After Pavlov repeated this several times, the dog began to salivate after hearing the sound of bell, but before receiving the food.



Now, the sound had become a **Conditioned Stimulus (CS)** that could bring forth salivation by itself. The response of salivating after the tone was now a **Conditioned Response (CR)**.



## Elements of Classical Conditioning

Pavlov eventually identified several key elements that must be present and experienced in a particular way, for conditioning to take place,

**Unconditioned Stimulus** It is original, naturally occurring stimulus, that leads to reflex or involuntary response. In case of Pavlov's dogs, food is the unconditioned stimulus,

**Unconditioned Response** The reflex response to the unconditioned stimulus is called unconditioned response. In case of Pavlov's experiment, salivation to food is the unconditioned response.

**Conditioned Stimulus** Pavlov determined that almost any kind of stimulus could become associated with the unconditioned stimulus, often enough. In case of Pavlov's experiment, bell was the neutral stimulus because it had no effect on salivation. After being paired with food, so many times, the bell came to produce the same salivation response. The neutral stimulus can now be called conditioned stimulus.

**Conditioned Response** It is a learned response to the previously neutral stimulus, that has changed into conditioned stimulus. In case of Pavlov's experiment, the salivation on hearing the sound of bell is conditioned response.

## Skinner's Operant Conditioning Theory

**BF Skinner (1904-1990)** was the behaviourist, who gave the Theory of Operant Conditioning. It is the learning in which voluntary behaviour is strengthened or weakened by consequences or antecedents. Skinner began with the belief that the principles of classical conditioning accounts for only a small proportion of learned behaviours.

Many human behaviours are operants, not respondents. Respondents are elicited by specific stimuli such as Pavlov's bell. In a respondent situation, an individual learns merely by being in the situation and responding to it. But not all behaviours are of this type. Most of human behaviours are operant behaviours, which are emitted not elicited. as

Classical conditioning describes only how existing behaviours might be paired with new stimuli, it does not explain, how new operant behaviours are acquired. Behaviour, like response or action, is simply a word for what a person does in a particular situation. It lies between the antecedents and consequences. Antecedents are the events that precede a behaviour or action, and consequence is the event that follows an action or behaviour. There is a relationship in antecedent, behaviour and consequence.

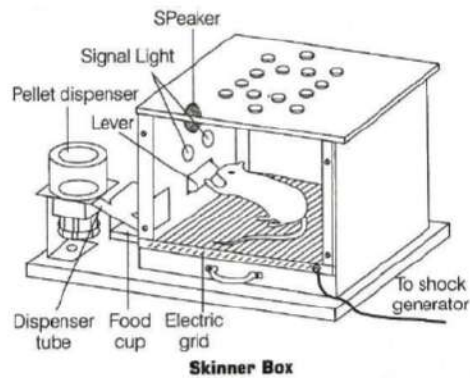
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Research in operant conditioning shows that operant behaviour can be altered by changes in the antecedents, the consequences or both.

## Skinner's Experiment

In the 1930s, BF Skinner began his influential experiments on operant conditioning. He wanted to study reinforced responding without breaking the experiment in discrete trials. To do all this, he invented the Skinner box or it is often called the operant chamber. It is a simple box with a device at one end that can be worked by the animal in the box. For rats, cats and monkeys the device is a lever, for pigeons the device is a small panel, called a key which can be pecked. The lever and key are switches that activate when positive reinforcement is being used. Thus, positive reinforcement is contingent upon pressing a lever or pecking a key.

The first step in the operant conditioning of a hungry rat is to get food pellets when they are delivered by the experimenter, who operates the pellet, delivery mechanism from a push button switch outside the operant chamber. The pellets are delivered one by one, after a time the rat eats each pellet as soon as it drops. Then the experimenter stops releasing the pellets and the rat is left alone in the box with the lever, which will release the pellets. After an initial period of inactivity the rat being hungry, begins to explore the box. Eventually, it presses the lever accidentally. A pellet of food is released i.e. the reinforcement is contingent upon pressing the lever.



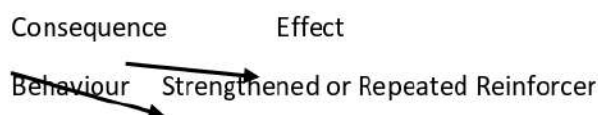
After eating the food pellet, the rat continues exploring and after a while, it presses the lever again and again and the pellet is released, when it presses the lever third time. Usually, after the fourth or fifth press, the rat begins to press the lever more rapidly and operant behaviour is developed. Skinner preferred the term 'reinforcement' to reward. According to Skinner, "reward is a subjective interpretation of behaviour associated with pleasurable events, whereas reinforcement is simply defined as an effect that increases the probability of a response".

## Concepts Given by Skinner

### ***Reinforcement***

The concept of reinforcement is one of the major contributions by Skinner to behaviourism. The word itself means to strengthen. A reinforcer is any consequence that strengthens the behaviour it follows. Reinforced behaviours increase in frequency or duration.

*The reinforcement process can be diagrammed as follows*



Therefore, reinforcement can be defined as the environmental event that is the consequence of an instrumental response and that makes the response more likely to occur again.

*There are two types of reinforcement*

- The first is called positive reinforcement which occurs when the behaviour produces new stimulus. It is a stimulus or event, which, when it follows a response, increases the likelihood that the response will occur again. Response results in the occurrence of the reinforcer. e.g. food for hungry animals, praise from parents, reward from teachers and many other stimuli or events will serve as positive reinforcers, when they are contingent on some behaviour. When the

consequence that strengthens a behaviour in the appearance (addition) of a new stimulus, the situation is defined as positive reinforcement.

- In contrast, when the consequence that strengthens a behaviour in the disappearance (subtraction) of a stimulus, this process is called negative reinforcement. If a particular action leads to avoiding or escaping an aversive situation, the action is likely to be repeated in a similar situation. The word 'negative' refers to the fact that the response causes the termination of an event.

## **Punishment**

Negative reinforcement is often confused with punishment. The process of reinforcement (Positive or negative) always involves strengthening of behaviour. On the other hand, punishment involves decreasing or suppressing of behaviour. A behaviour followed by a punisher is less likely to be repeated again in the similar situations. It is the effect that defines punishment as consequence.

*There are two forms of punishment*

The first is presentation punishment. It occurs when the appearance of a stimulus following the behaviour suppresses decreases the behaviour, e.g. running laps, extra work, etc.

The second is the removal punishment. It involves removing a stimulus. e.g. taking away the privileges from children. It decreases the chances of behaviour occurrence again by removing a pleasant stimulus following the behaviours.

## **Schedules of Reinforcement**

It refers to the time plan of when and how often a response is reinforced. Reinforcement may be continuous or intermittent. When people are learning a new behaviour, they will learn it faster if they are reinforced for every correct response. This is continuous reinforcement schedule. Initially, it is used during the initial operant conditioning. Then, the new behaviour is mastered that can be maintained by reinforcing reinforcement. Interval and ratio schedules may be either fixed or variable.

intermittently rather than every time. An intermittent reinforcement schedule helps people to maintain skills without expecting constant results. There are two basic types of intermittent reinforcement schedules. One is called an interval schedule, that is based on the amount of time that passes between reinforcement. The second is a ratio schedule, that is based on the number of responses, learners give between

**All the reinforcement schedules are summarised in the table given below**

## Reinforcement Schedules

Schedule	Continuous	Fixed interval	Variable interval	Fixed ratio	Variable Ratio
<b>Meaning</b>	Reinforcement after every response	Reinforcement after set period of time	Reinforcement after varying number of response	Reinforcement after a set number of responses	Reinforcement after varying lengths of time
<b>Example</b>	Turning on the television	Piece work	Weekly quizzes	Weekly Quiz	Pop quizzes
<b>Response Pattern</b>	Rapid learning responsp	Response rate increases as time for reinforcement approaches then drops after reinforcement	Slow and steady rate of responding very little pouse after reinforcemen	Rapid response rate pause after reinforcement	Slow, steady rate of responding very little pause after reinforcement
<b>Reaction When Reinforcement Stop</b>	Very little persistence rapid disappearance of response.	Little persistence rapid drop in response rate when time for reinforcement passes and no reinforcer appears	Greater persistence slow decline in response rate	Little persistence rapid drop in response rate when expected number of responses are given and no reinforcer appears	Greatest persistence response rate stay high and gradually drops off

## .. Hull's Reinforcement Theory and Drive Reduction Model

Clark Hull was majorly influenced by the work of Pavlov, Darwin, Thorndike and Tolman. Hull is best known for his Drive Reduction Model and Reinforcement Theory which postulated that behaviour occurs in the response to drives. He was an influential behaviourist, American psychologist and learning theorist. Hull's theory was first presented in 1943, in his book "Principles of Behaviour" . This theory was extended in 1952 through his last book 'A Behaviour System'.

Hull used the term 'drive' to refer to the state of tension or arousal caused by biological or physiological needs. Thirst, hunger, need for warmth are the example of drives. A drive creates an unpleasant state, a tension that needs to be reduced.

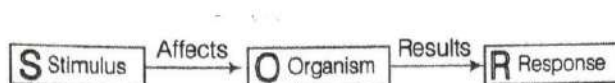
When the goal of the drive is attained (food, water, warmth) the drive is reduced, atleast temporarily. He did not include cognitive aspects such as purpose, ideas, intelligence, values or knowledge as a part of his theoretical constructs as these cannot be directly observed.

## Drive Reduction Model

Hull's model was Drive Reduction Model. He mentioned two types of drives. Primary drives are tied to innate biological needs, such as food, water, sex, etc. They are internal stimuli that compel the organism to act in a certain way. Secondary drives, also called learned drives, are those that develops through association of stimuli with the reduction of primary drives. Once developed, the secondary drives can also impel the organism into action. e.g. the need to acquire money is the secondary drive. Primary and secondary drives constitutes motivation and motivation is a major factor of behaviour. In Hull's model, the reduction in drive constitutes reinforcement of S-R association (Stimulus- Response).

Through repetition of the reinforcement, the probability of the occurrence of the response, i.e. its habit strength increases. Thorndike's law of effect appears in Hull's model as the law of primary reinforcement. The reinforcement is the reduction of the drive state and any behaviour associated with such reinforcement. Secondary reinforcement operates in a similar manner.

***Hull developed version of behaviourism in which***



### Affects Results

The response depends on the characteristics of stimulus and organism. Hull was interested in studying intervening variables that affected behaviour such as initial drive, incentives, etc. The Hull's drive reduction or need satisfaction model plays an important role.

*Hull Theoretical framework consisted of many postulates, wrole are as follows*

- Organism possess a hierarchy of needs which are aroused under conditions of stimulation and drive.
- Habit strength increases with activity that is associated with primary and secondary reinforcement.
- Habit strength aroused by a stimulus, other than the one originally conditioned, depends upon the closeness of the second stimulus.
- Stimuli associated with cessation of a response becomes conditioned inhibitors.

## Reinforcement Theory

Clark Hull presented the Reinforcement Theory to explain learning. He gave no importance to consciousness in learning. He has presented behaviourist and instrumentalist explanation of learning. According to him, in learning, an organism learns to respond to a stimulus. An organism learns gradually by practice. His theory is also called goal gradient or reinforcement gradient, which can be said the refined form of the Thorndike's law of effect.

Hull gave an important place to motivation in the learning process. It is a kind of drive in organism. It helps in the formation of habits resulting from practice and also it is a source of practice. An organism cannot learn anything in absence of motivation. As soon as the motivation arises, the organism becomes active and the actions are also goal directed.

The organism repeats the same action and out in a particular way to get reward, in the form of motivation. On the other hand, the tendency of repeating the responses, which are not rewarded, decreases. Reward strengthens the relationship between stimulus and response in an organism. Reward is also called reinforcement.

Goal gradient or reinforcement gradient is the central point of Hull's theory. Therefore, his theory is called reinforcement theory. The attainment of goal brings stability to the relation between stimulus and response. It reduces the tension of the organism, which helps it in learning the specific response.

Hull accepts the importance of practice in learning. Hull suggested that animals and humans repeats any behaviour that reduces the drives. This reduction of drive serves as a reinforcer for learning. This reinforcement increases the livelihood that the same behaviour will occur again in the future, when the same need arises. Thus, learning involves dynamic interplay between survival drives and their attainment. The bonding of the drive with the goal of the drive is a type of reinforcement and his theory is a reinforcement theory of learning.

Physiological and physical reinforcement are also important in learning process. Hull's theory began to fall out of favour in middle part of 20th century. His theory lacks generalisation due to emphasis on quantifying of variables, Also, it does not show that how secondary reinforcers reduces drive, as they do nothing directly to reduce physiological and biological needs. Also, it does not explain that why people engage in behaviours that do not reduce drives.

## Gagne's Hierarchical Theory of Learning

**Robert Gagne** was an American Educational Psychologist, best known for his writings, 'Conditions of Learning' and 'Instructional Technology Foundations.' His focus was on intentional or purposeful learning, which is a type of learning that occurs in school or specific training programmes. He believed that events in the environment influence the learning process. This theory identifies the general type of human capabilities that are learned, in terms of behavioural changes. Once the learning outcomes are identified, an analysis of conditions of learning is done.

***There are four elements of Gagne's theory, which are as follows***

- Learning
- Types of learning .
- Hierarchial Step Model
- Designing of instruction

## **Learning**

*According to Gagne, learning is*

- cumulative, human intellectual development which is the building of increasing complex structures of human capabilities.
- the mechanism by which an individual becomes a complete functioning member of tcapabilities
- the result of different kinds of human behaviour. Different human capabilities are required both from the stimulation, from the environment and the cognitive processing undertaken by the learners.

## **Types of Learning**

Gagne identifies five major types of learning i.e. verbal information, intellectual skills, cognitive strategies, motor skills and attitude. Different internal and external conditions are necessary for each type of learning.

### **Types, Conditions and Principles of Human Capabilities/Learning**



Types of Human Capabilities/ Learning	Conditions	Principles for Instructional Events
Verbal Information	Retrieving stored information : The internal conditions to support this learning includes: <ul style="list-style-type: none"> <li>Pre-existing of organised knowledge</li> <li>Strategies for processing the new information</li> </ul>	<ul style="list-style-type: none"> <li>Provide meaningful context of information for encoding.</li> <li>Provide elaborations, imagery, or other encoding cues.</li> <li>Organise information, so that it can be learned in chunks.</li> </ul>
Intellectual Skills	Mental operations that permits individuals to respond to conceptualisations of the environment. <ul style="list-style-type: none"> <li>Discrimination</li> <li>Concrete and defined concepts</li> <li>Using rules</li> <li>Problem-solving: combining subordinate rules in order to solve a problem.</li> </ul> The internal conditions to facilitate this type of learning includes: <ul style="list-style-type: none"> <li>Recalling pre-requisite skills</li> <li>Interacting in a variety of ways with the new learning</li> </ul>	<ul style="list-style-type: none"> <li>Provide varied concrete examples and rules .</li> <li>Provide opportunities for interacting with examples in different ways .</li> <li>Assess learners in new situations.</li> </ul>
Cognitive Strategies	An internal process by which the learners plans, controls and monitors his/her own ways of thinking and learning, including <ul style="list-style-type: none"> <li>Task specific</li> <li>General</li> <li>Executive</li> </ul>	<ul style="list-style-type: none"> <li>If task is specific, it describes the strategy, if task is general, it demonstrates the strategy.</li> <li>Provides opportunities for strategy specific practice with support and feedback.</li> </ul>
Attitude	An internal state, <i>i.e.</i> , pre-disposition that affects an individual's choice of action.	<ul style="list-style-type: none"> <li>Provides respected models who enact positive behaviour and reinforce the model .</li> <li>When learner enacts the behaviour, provide reinforcement.</li> </ul>
Motor Skills	Capability to perform a sequence of physical movements. It involves <i>three stages</i> : <ul style="list-style-type: none"> <li>Learning the sequence of the movement.</li> <li>Practicing the movement .</li> <li>Refining the movement from the feedback from the environment</li> </ul>	<ul style="list-style-type: none"> <li>Establish executive sub-routine and provides for mental rehearsal.</li> <li>Arrange several repetitions of skills with correct feedback.</li> </ul>

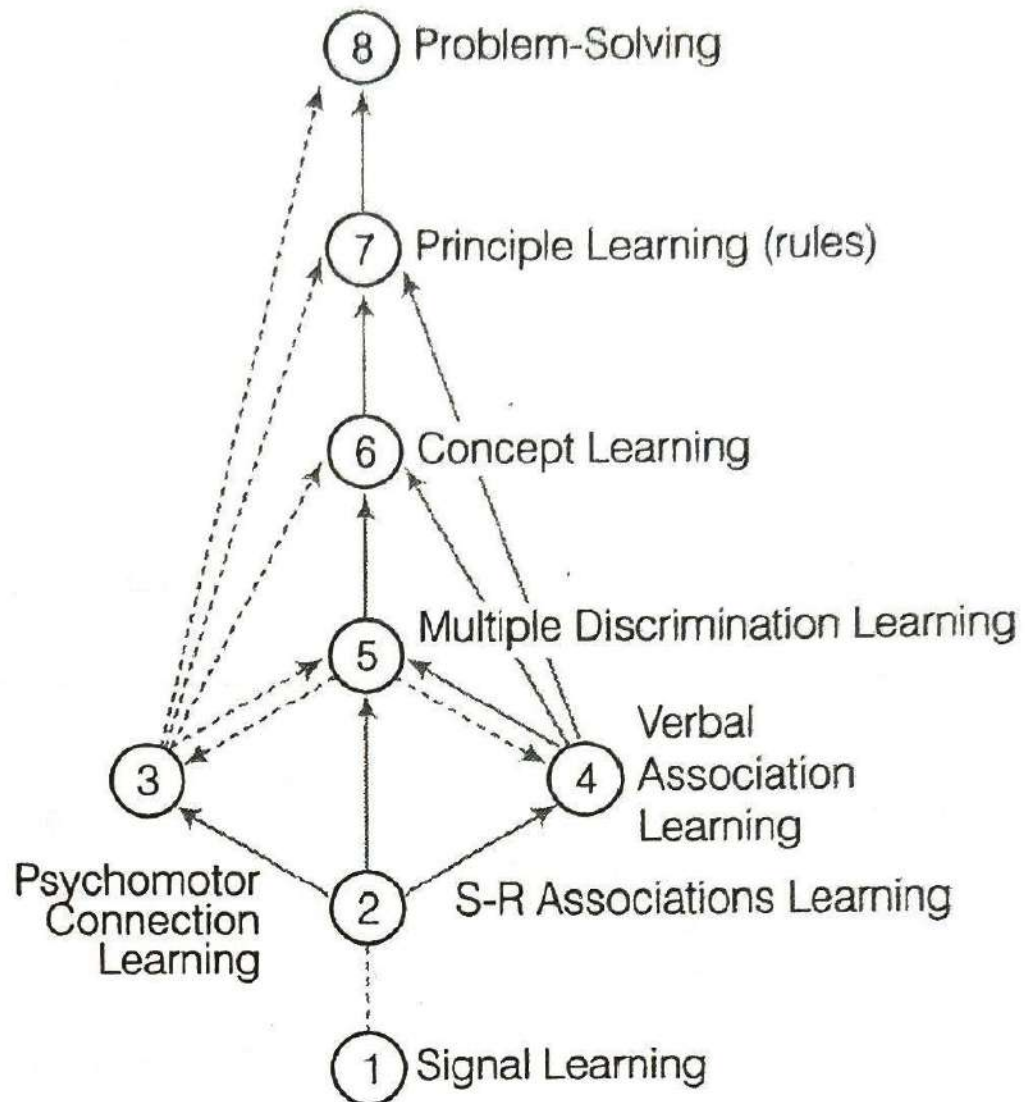
## Hierarchical Step Model of Learning

Gagne identified eight basic steps and arranged them in the hierarchical order. According to Gagne, the higher orders of learning in the hierarchy build upon the lower levels, requiring progressively to greater amount of previous orders for their success. The lowest four orders tends to focus on the behavioural learning and highest four on cognitive learning simple tasks function as real components of a more complex tasks. The underlying assumption of the hierarchy is that the basic skills are necessary to perform the most complex skill (problem-solving). These steps are as follows

**Signal Learning** This is the simplest form of learning and consist Pavlov's classical conditioning response, where the individual learns to carry out a general conditioned response towards a given signal. The subject is conditioned to emit a desired response as a result of stimulus.

**two or Stimulus Response Learning** This form of learning is also known as Skinner's operant conditioning. The individual shows a certain Response (R) to a discriminated Stimulus (S). **Psychomotor Connection Learning/Chaining** This is a more advanced form of learning in which the subject develops the ability to connect more previously-learned stimulus response bonds into a linked sequence.

**Verbal Association Learning** It is a form of chaining in which the links between the items being connected are verbal in nature. Verbal association is one of the important process in the development of language skills. **Multiple Discrimination Learning** Separate associations which have been learnt are connected to form multiple discrimination. This involves developing the ability to make appropriate (different) responses to a series of similar stimuli that differ in a systematic way.



### Hierarchical Step Model

#### Designing Instruction

In designing instruction, the skills are to be learned at the lowest level and mastered before proceeding. The instructor should use positive reinforcement and repetition, with each new skill building upon previously acquired skills.

#### Steps of Instruction

**Gain Attention** The first event or step of instruction is to gain attention to get the reception of stimuli.

**Informing Learners of the Objective** It is important to inform the learner of the purpose and expected outcome of the learning to provide the motivation to learners.

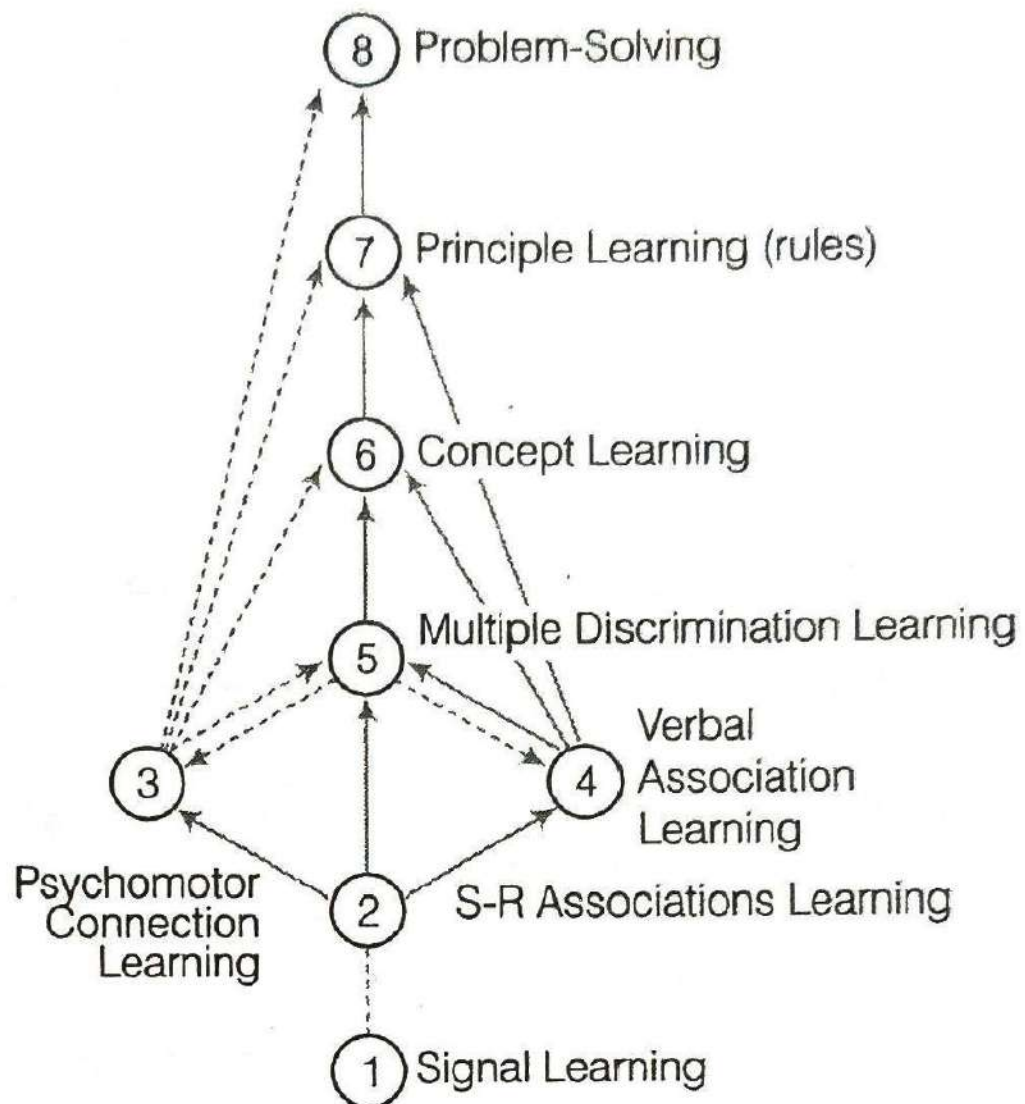
**Stimulating Recall of Prior Learning** The learners are asked to recall the existing relevant knowledge.

**Presenting the Stimulus** Relevant stimulus to the subject matter should be presented.

**Providing Learning Guidance** It requires the instructor to make the stimulus as meaningful as possible, by colour and not according to the concrete physical characteristics.

**Principle Learning** A principle is a chain of two or more concepts. In principle learning, one needs to associate more than one concept.

**Problem-Solving** This is the highest level of cognitive process according to Gagne. It involves developing the ability to invent a complex rule, algorithm for the purpose of solving the problem.



### Hierarchical Step Model

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**Presenting the Stimulus** Relevant stimulus to the subject matter should be presented.

**Providing Learning Guidance** It requires the instructor to make the stimulus as meaningful as possible.

**Eliciting Performance** The learners are asked to demonstrate the newly learned behaviour.

**Providing Feedback** Giving informative feedback to learner's performance is important.

**Assessing Performance** It consists of assessments to verify that learning has occurred.

**Enhancing Retention and Transfer** It refers to retaining the learned capability over a long period of time and transferring it to new situations outside the learning environment.

Events of Instruction

Internal Process	Instructional Event	Action Example
Reception	Gaining attention	Use abrupt stimulus change
Expectancy	Informing learners of the objective	Tell learners what they will be able to do after learning
Retrieval to Working Memory	Stimulating recall of prior knowledge	Ask for recall of previously learned knowledge of skills
Selective Perception	Presenting the stimulus	Display the content with distinctive features
Semantic Encoding	Providing learning guidance	Suggest a meaningful organisation
Responding	Eliciting performance	Ask learner to perform
Reinforcement	Providing feedback	Give informative feedback
Retrieval and Reinforcement	Assessing performance	Require additional learner performance, with feedback
Retrieval and Generalisation	Enhancing retention and transfer	Provide varied practice and spaced reviews

# Cognitive Theories of Learning

*Cognitive theories of learning are discussed below*

## ***Kurt Lewin's Field Theory***

*“Learning is more effective, when it is an active rather than a passive process”.* **Kurt Lewin**

Lewin, as a Neo-Gestaltist, transferred the Gestalt Model to everyday situations. He presented his theory in 1917. He was highly influenced by Einstein and applied the idea of Einsteinian field physics to psychology. For Kurt Lewin, behaviour was determined by totality of an individual's situation. Human behaviour is a function of both the person and the environment in which the behaviour takes place, including the social parameters, Lewin viewed the social environment as a dynamic field which impacted in an interactive way with human consciousness.

In the field theory, a field is defined as the totality of co-existing facts, which are conceived of as mutually interdependent. The needs of individual organise perception of the field and acting within the field. There is a dynamic interaction of elements in the field. The behaviour of individual was purposeful and visualised the forces in the field, which included positive forces, which attract people and negative valence forces which repel people. The blending of these forces produced dynamic interactions.

The psychological field as life-space, within which people had to be viewed in order to understand the behaviour. In this, the individual and groups could be seen in topological terms (using map for representation).

According to Lewin's theory, learning is essential in coping with opposing force fields. Changes in valances and values are important for an individual to deal with the ongoing situations. Also, a holistic investigation of human behaviour should also include the environment in which the learning is taking place. It includes the psychological environment of the learners and others with whom he/she interacts.

Lewin's field theory lead to field research on human behaviour. Lewin believed that it was possible to study social and psychological phenomena experimentally. He conducted experiments, in natural settings, where he manipulated complex situational variables and observed the effects.

## **Features of Kurt Lewin's Field Theory**

- Behaviour is the function of the field that exists at the time behaviour occurs.
- Analysis begins with the situation as a whole from which component parts are differentiated.
- The concrete person in a concrete situation can be represented mdifferentiated

- Topology (life space), Psychology (need, aspiration) and Sociology (force, fields, motives), comprises of well integrated system.

Lewin's field theory is the "proposition that human behaviour is the function of both the person and the environment". Symbolically, it can be represented as:

$$\mathbf{B = f(PE)}$$

Where, B = Behaviour

F= Field (Life space)

P= Person

E=Environment

It means that behaviour is the function of the person in their environment.

Lewin's field theory leads to the development of actual field research on human behaviour. His approach has guided experiments in the field of social cognition, social motivation and group processes. Most importantly, Lewin helped in the development of action research.

### **Action Research**

*Kurt Lewin first coined the term 'action research in 1944. In his paper, " Action Research and Minority Problems "(1946), he described action research as a comparative research on the conditions and effects of various forms of social action and research that uses a spiral of steps. Each of which is composed of a circle of planning, action and fact finding about the result of the action.*

*Action research is a research initiated to solve an immediate problem or a reflective process of progressive problem-solving led by individuals working in teams or as a part of community of practice to improve the way they address issues and solves problems.*

### **Tolman's Sign Learning Theory or Sign Gestalt Learning Theory**

Edward Tolman made significant contributions to the field of psychology. He developed a Cognitive Theory of Learning, which came in the year 1932 with the publication of his work Purposive Behaviour in Animals and Men, which became his trademark to the field of psychology. He thought learning as developing from bits of knowledge and cognitions about the environment and how an organism relates to it. This idea was in contrast to the theories of Thorndike and Hull, who thought of learning as a strict stimulus response connection. His theory is also known as 'Sign Learning' or 'Sign Gestalt Learning Theory'.

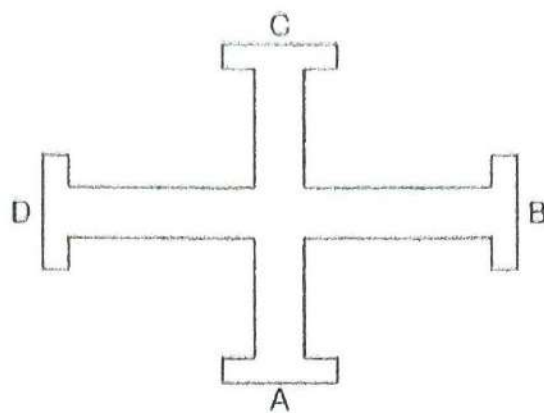
### **Experiment**

To study learning, Tolman conducted several classical experiments. One of his most well known experiments involved maze running. He examined the role of reinforcement that rats learn to find their way through complex mazes. These experiments eventually led to the concept of latent learning, which describes learning that occurs in

the absence of an obvious reward. It is the learning which is not apparent in learner's behaviour at the time of learning, but which manifests later, when a suitable motivation and circumstances appear. In one of his experiments, he illustrated purposive behaviour in rats.

*For this, Tolman used the apparatus shown in the figure drawn below*

A was the starting point of the box and B was the goal. A hungry rat learned to run to B very quickly. Tolman wondered, what was the learning of rats in this process. One explanation was that the rat has learned the response of turning right, which led to food. But, Tolman said that the rat had developed a cognitive map of the maze, where the place of the reward was located. A test was developed to determine the right answer. Once the rat learned to run from A to B, it was started from C. The stimulus response explanation predicted the rat would turn right and reach D.



The cognitive map explanation predicted that the rat would reach the reward B. The test showed that most of the rats reached B, leading Tolman to conclude that a cognitive map was most likely developed by the rats in maze running.

Tolman's termed his system of psychology as 'purposive behaviourism'. He started as a behaviourist but acquired an interest in Gestalt theories. He believed that individuals do more than merely responding to stimuli. They act on beliefs, attitudes, changing conditions and strive towards goal. Tolman believed that reinforcement is not the only factor, that is important for learning to occur. He believed that behaviour is holistic, purposive and cognitive. Behaviour is not just a response to a stimulus, but is cognitive coping with a pattern of stimuli.

Tolman advocated his theory in explaining the process of learning.

*The main features of his theory are given below:*

**Molar Theory** Tolman's theory is molar. According to him, although group behaviour is made of individual's behaviour, yet in defining behaviour, group should be emphasised, not individual.

**Goal Directed Behaviour** Every behaviour has some aim and the form of it is established by the means of reaching the goal and passing the obstacles. The group behaviour is group directed



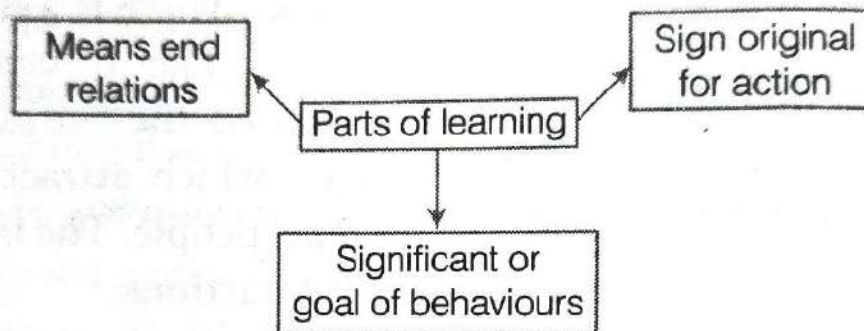
Changing Behaviour The group behaviour of an individual is not stable and fixed. It keeps on changing.

## **Cognitive Map**

*Cognitive Map was coined by Tolman. It is an internal perceptual representation of external environmental features and landmark. Individuals acquire large number of cues from environment and build-up expectancies about their permanence or changeable characteristics. By using this internal representation of a physical space, the individual could get to the goal. Shortcuts and variable routes are also possible with the cognitive maps.*

Tolman, in **Sign Gestalt Theory**, has put forth the three parts to learning, which work together as a Gestalt Theory.

*The three parts of learning are:-*

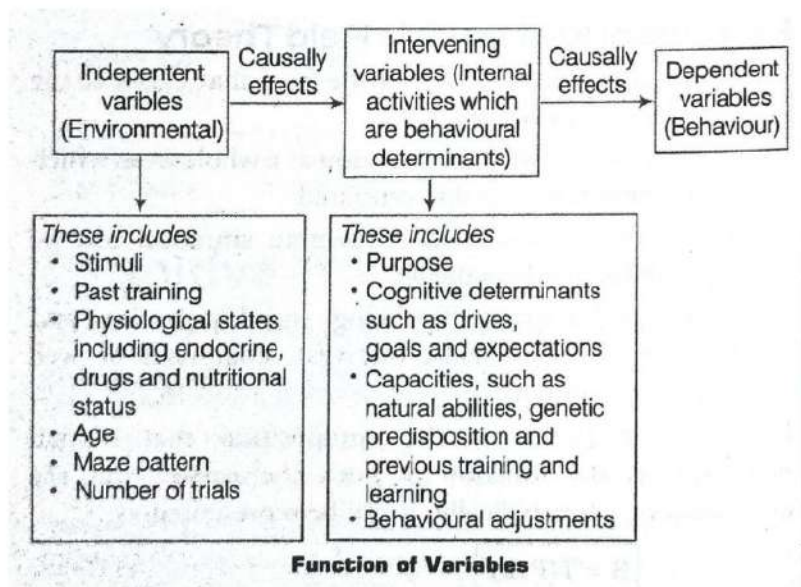


He believed that learning is an accumulation of these Sign Gestalts and these are configured into cognitive maps. Input about the environment also influences the behaviour. It causes certain Gestalts to be selected or not, in relation to individual's purpose or goal and other factors. Therefore, learning is unique to each individual.

Tolman also introduced **intervening variables** into the roman culture of learning psychology. In Tolman's system there were three classes of variables.

*These are*

- Dependent variables (behaviours or responses being observed and measured) .
- Independent variables (Environmental and Individual)
- Intervening variables (These are hypothetical constructs. They are definable and measurable, but not observable. They have functional relationships with both independent and dependent variables.)



## Types of Learning

Tolman identified six types of learning

**Learning by Cathexes** It is connecting or associating basic drives with desired goals with the end results of developing preferences for certain types of food, drink.

**Equivalence Beliefs** These are the sub goals leading to major ones. It acquires similar attractiveness as the end goals.

**Field Expectancies** Cognitive maps enables an individual to route himself/herself based on these maps.

**Field Cognition Modes** The perceptions, memories and inferences function influences the learning of an individual. Drive Discrimination It is the learning to discriminate between competing or more refined drives.

**Motor Patterns** It is the learning and refinement of sensory motor skills.

## Social Learning Theory

*Social theory of learning is discussed below*

## Albert Bandura's Social Learning Theory

**Albert Bandura** was a prominent American Learning Theorist, who gave the Social Learning Theory, which plays the role of a bridge between behaviourist and cognitive learning theories because it encompasses attention, memory, and motivation. His theory explains that people learn from one another through observation, imitation and modelling.

He stated that *"Most human behaviour is learned observationally through modelling, by observing others, one forms an idea of how new behaviours are performed and on later occasions this coded information serves as a guide for action."*

Unlike traditional behavioural theories, which were dominant during 20th century and were based on the concept that learning is a result of direct experience with the environment through the process of association and reinforcement.

Bandura's theory explained that direct reinforcement could not account for all types of learning. Rather, he believed that learning can also occur simply by observing the actions of others. He further explained that people can learn new information and behaviours by simply watching other people's actions.

## Bobo Doll Experiment by Albert Bandura

To explain his theory, Bandura demonstrated that children learn and imitate behaviour that they have observed in other people. For this, he did a Bobo Doll Experiment, where he watched children who were observed adults attacking Bobo Dolls. When hit, the dolls fell over and then bounced back up again.

After this, the children were allowed to play in a room with the Bobo doll, then they began to imitate the same aggressive behaviour of the adults, they had previously observed. However, when they observed adults, acting aggressively and then being punished, Bandura noted that the children were less willing to imitate an aggressive behaviour themselves.

Besides observations, learning can also take place while hearing verbal instructions, reading or watching the actions of characters in books and films. Bandura stated that the person, whose behaviour a person observes and often imitates are known as 'model' and observational learning is referred to as 'modelling'.

## Principles of Social Learning

*Bandura formulated four principles of social learning*

**Attention** Bandura stated that a person cannot learn if he/she/is not focused on the task. If we see something as important or different in some way, we are more likely to make it the focus of our attention. Social context helps to reinforce these perceptions. It includes modelled events

such as distinctiveness, affective valence, complexity, prevalence, functional value and observer characteristics, such as sensory capacities, arousal level, perceptual set, past reinforcement.

**Retention** In this principle of learning people learn by internalising information in their memories. They recall that information later when required to respond to a situation that is similar to the situation within which they first learned the information. It includes symbolic coding, cognitive organisation, symbolic rehearsal, motor rehearsal and so on.

**Reproduction** As per this principle, people reproduce previously learned information i.e. behaviour, skills and knowledge when required. It includes physical capabilities, self-observation of reproduction, accuracy of feedback and So on.

**SeMotivation** Bandura stated that in order for observational learning to be successful, we have to be motivated to imitate the behaviour that has been modelled. Reinforcement and punishment plays an important role in motivation. For example, if a child sees another student rewarded with extra credit for being in the class on time, he might starts to show up a few minutes early each day.

It is seen that Social Learning Theory of Bandura has been applied extensively to understanding of aggression and psychological disorders, particularly in the context of behaviour modification. It is also considered as the theoretical foundation for the technique of behaviour modelling which is widely used in training programs.

## Factors Affecting Social Learning

*There are various factors which affect social learning of people. These are as follows:-*

### Personal Factors

**Physical and Mental Health :** Social learning is greatly affected by the learner's physical and mental health maintained by him/her, particularly at the time of learning. A tense, emotionally, mentally, physically disturbed learner can not show satisfactory results in social learning.

**Personal Inadequacy :** A nervous sense of inadequacy is a factor which affects the social learning. Suppose a student is not so brilliant, but his/her parents are very ambitious and sets high goals for him/her. This will lead him/her to frustration and as a result, he/she may develops problems of maladjustment.

**Parental Attitude:** If a child is rejected by his/her parents from an early childhood, the child may develops the feeling of insecurity, hopelessness and loneliness. Rejection and lack of affection may affect the social learning of the child.

**Environment at Home:** If a child comes from a family which encourages him/her to learn new things and does not become a hurdle in his/her life, this kind of environment leads effective social learning. Whereas, if a child comes from a broken family (death of parents, divorce and separation), it may badly affect the social learning of a child.

**Goals of Life:** The goals of life of a person affect the process and product of social learning. A learner's mode and ways of looking towards things, his inclination towards learning a particular subject and patience and persistence in pursuing his/her learning, despite the heavy odds, all depends on his/her goals and principles of life.

**Readiness and Will Power :** Both of these are important in social learning. It is true that no power on Earth can help a learner if he/she is not ready to learn. In the same way, if he/she has a will to learn a new thing, then automatically, he/she will find way for himself/herself in effective learning.

## **Social Factors**

**Religious Beliefs:** In this era of modernisation, adolescents, often gets confused about the traditional religious beliefs for which they do not find any rational basis and as a result they suffer from a lack of positive attitude and get frustrated. This ultimately, affects social learning of children and an adolescents.

**Mobility of Parents:** Children, whose parents moves from one place to another very frequently, face different types of problems. This may lead to maladjustment on the part of the children, who suffers from a feeling of insecurity. Thus, it is also a major factor which affects social learning.

## **School's Environment**

**Inadequate Curriculum:** Our present curriculum is not meeting the psychological, social as well as the physical needs of our children at different stages. This creates frustration in our children, as a result of which the children find themselves maladjusted in their real life situations.

**Lack of Proper Recreational Facilities:** Children who are not getting space for extra curricular activities like play, library, debate, discussion, etc, may suffer from maladjustment problems.

**Improper Classroom Environment:** If there is no good relationship between students and teachers, as well as among the peers, the students may suffer from an emotional problems, which in turn will affect the social learning of children.

# Social Competence

Social competence or interpersonal competence is the condition of possessing the social, emotional, and an intellectual skills and behaviours need to become a member of society and to act wisely. It is one of the most widely investigated areas of human social behaviour. It is needed for the successful social adaptation. In other words, it is a set of positive social skills which helps a person to:

- show respect and express appreciation for others.
- being able to work and communicate well with others and listen to other's ideas.
- demonstrates an appropriate behaviour that is accepted as per the social noridea
- use a range of skills or processes which aims at resolving conflicts.

When we talk about a child's social competence, it depends upon a number of factors such as the child's social skills, social awareness, and self-confidence. When the above mentioned human skills develops appropriately, then, these facilitates the growth of a variety of social abilities among people.

In the early stage of life of a children, parents are the primary source of social and emotional support for them. Gradually, when children reaches to maturity, peers begin to play a significant role in a child's social-emotional development as they become a source of an entertainment and support. Young children engage in fantasy play that allows them to assume different roles, learns to take another person's perspective and develops an understanding of the social rules and conventions of their culture. This give and take relationship with peers provides an opportunity for the development of social competencies such as cooperation and negotiation.

## Definitions of Social Competence

According to **Schneider** (1993), "Social competence is enabling one to engage in an appropriate social behaviour, thus, enhancing one's interpersonal relationships, in a way that are not harmful to others."

According to **Argyle** (1999), "Social competence is an ability, the mastery of social skills, which makes it possible to generate the desired effect in social relationships."

## Social Cognition

Social cognition is a multi-faceted topic of psychology that can be broadly defined by what an individuals know about their social environment. It is a process through which people thinks about others, interacts with them and also thinks about the world, in which they live. Cognitive

processes are important in social interactions like perception, attention, memory and action planning which helps to attain social cognition.

***Social cognition involves:-***

- those processes which helps in perceiving other people and how we get to know about the other people around us.
- such mental processes that involved in perceiving, remembering, thinking about and attending to the other people in our social world.
- the concepts of Psychologists through which they understand why people attend to certain information about the social world, how this information is stored in memory and how it is used to interact with other people.

Social cognition is not merely a simple topic within social psychology but it is an approach to study any subject with social psychology. When researchers use a social-cognitive perspective, they can study different human-related topics such as self-concept, attitudes, person's perception, prejudice, stereotypes, discrimination, persuasion, decision-making and other areas.

## **Role of Social Cognition**

The role of social cognition can be seen through the given example. Imagine, that a person is going to meet an unknown person. Not only he/she would worry about an impression and signals like facial expressions (fear or disgust, happy, etc.) of him but would also concern about the receiving responses from that individual.

How does he/she forms an impression on this person?, What meaning does he/she reads into the other person's behaviour? It helps a person to understand the other persons, one can identify how to deal with such kind of situations. Thus, we can say that social cognition is a level of analysis that aims to understand social psychological phenomena by investigating the cognitive processes that underlie within them. It mainly focuses on how people process, store and apply information about other people and social situations in a positive way.

## **Society and Social Relationship**

A society is a group of people who lives together and follows some set of rules which are made by these people in order to maintain social harmony and fraternity among them. A society shares the same geographical or social territory, subject to the same political authority and dominant cultural expectations. Human societies are characterised by patterns of relationships between individuals who shares distinctive cultures institutions.

## **Definitions of Society**

According to **Talcott Parsons**, "It may be regarded as the most general term referring to the whole complex of relations of man to his fellows".

According to **Maciver and Charles Page**, "It is a system of usages and procedures of authority and mutual aid, of many groupings and divisions, of controls of human behaviour and of liberties. This ever changing complex system we call it society".

According to **Prof Wright**, "Society is a system of relationships that exists among the individuals of the groups".

According to **Adam Smith**, "Society is an artificial device of natural economy".

According to **AW Green**, "Society is the largest group in which an individual have relationships".

## **Social Relationship**

Social relationship is any relationship between two or more individuals which is formed by humans to achieve a set goal. For e.g, if a person interacts with other person in order to fulfill his biological or societal needs, thus, the relation created by this interaction process is known as 'social relationship'. Thus, social relations are formed by interaction process among people.

**These interactions takes place at three levels such as:-**

- Individual-between individuals
- Individual-between groups
- Group -between groups

The interactions which takes place at these three levels will ultimately, form social relationships and through these relationships society is formed.

Without an interaction and awareness, no relationship can be formed and without social relationship no society can be formed. Where people are aware and do interaction process and take care of feelings and expectations of each other, that is called a society.

## **Types of Social Relationships**

There are different types of social relationships such as of husband- wife, mother-father, brother-sister, friend friend, teacher- student, servant- owner, customershopkeeper, voter-candidate and so on. Some of these relations are based on an economy, religion, blood, political, and so on.

These relationships are created with the reciprocal interaction and awareness. Some of the social relations are also based on enmity or conflict, but most of the relationships have mutual companionship, communalism, participation and basic elements of simple life. Social arrangements are based on social relationships which leads to the formation of a healthy society.



## Socialisation

When a child is born, he lacks all the types of social traits. When he comes into the contact of his parents and family he learns to smile, talk, recognising people, and in the later ages he learns the special traits of the society like norms, customs, values, etiquettes and roles of the society in which he lives. In sociology, when a child is developed into a social being, then this process is known as socialisation. Through this process, people are taught to be proficient members of a society.

## Definitions of Socialisation

According to **DMacionis**, "The life long process by which an individual becomes the proper member of society and develops human characteristics".

According to **Horton and Hunt**, "Socialisation is a learning process in which groups interact and learn social norms to develop themselves".

According to **Ogburn**, "Socialisation is the process of learning the norms of the group and society".

According to **Maclver**, "Socialisation is the process through which social beings develop relationships and associations with each other".

According to **Bogardus**, "A process of learning to live and work together is called socialisation".

## Goals of Socialisation

With the help of socialisation, a child learns to make adjustment in the community and society. He becomes aware about the things he must take care of for such adjustment and how he can develop his strengths.

***The important aims/goals of socialisation are as follows :-***

**Develop the Basic Discipline:** Socialisation aims to inculcate basic disciplines among children, ranging from etiquettes to behave with others to the methods of science. Through socialisation, an individual can be taught about the accepted ways by which he/she may express his/her emotions.

**Teach Appropriate Social Roles:-** We have many social roles throughout our life. For instance, many people take the social role of child, sibling, partner, parent, friend, and worker at some point in their lives. Thus, socialisation helps to play such role in an effective way.

**Enable Self-Regulation:-** Socialisation helps to develop self-regulation which involves an ability to control one's impulses, behaviour, and emotions until an appropriate time or place is available for an expression. In other words, self-regulation is the routing of our feelings through our brains before acting on them according to a situation. Through self-regulated behaviour, a person often

postpones or modifies the immediate gratification for the sake of a future goal. In such situation, the person becomes able to tolerate frustration. Thus, socialisation helps to develop strategies for coping with disappointment, frustration, rejection, and anger in life.

**Empower Achievement:-** Socialisation helps to find out goals for life that what a child wants to become in the futu (adulthood). In this sense, the child works to achieve his/her goals by following society's rules and gives purpose to his/her adulthood and to that long process which the child has to go through to achieve those set goals. Thus, with the help of socialisation, the child acquires an important skills like motivation, to achieve the goals and the ability to explain success and failure.

**Implement Developmental Skills:-** Socialisation aims to provide social, emotional and cognitive skills to children, so that they can function successfully in the society. These skills depend on the culture of the society and are important to develop among children to live an effective life. Hence, socialisation is extremely important to children's well-being. It of results in the development of values, qualities, attitudes and morals among people that are important for their life.

# PART D - Guidance and Counselling

## Guidance

Human life is a long series of struggle. On the one side, human works to achieve his/her goal by continuous process and on the other side, he/she keeps on struggling with his/her environment-related situations. This struggle continues from the birth till the death and human works to achieve his/her aim by removing the difficulties of life.

For this, human develops his strengths and capabilities and prepare plans. But sometimes such situation arises where he faces difficulties to fulfill his/her aim. Then, he/she needs such a guide, who can give him/her an appropriate guidance, which may help him/her to overcome that particular situation and to achieve his/her goal. Generally, guidance is a process, through which a person gets an appropriate help to achieve the desirable aims in life.

Literally, 'Guidance' means to direct', 'to point out' or 'to show the path'. It is the assistance or help rendered by a more experienced person to a less experienced person to solve certain major problems of the individual (less experienced) i.e. educational, vocational, personal, etc.

Guidance is considered a concept as well as a process. As a concept, it is concerned with the optimal development of the individual. As a process, it helps an individual in self-understanding and in self-direction.

## Definitions of Guidance

According to Chisholm "Guidance seeks to help each about himself, his abilities, and his previous development in individual become familiar with a wide range of information the various areas of living and his plans or ambitions for the future".

According to Al Jones "Guidance is an assistance, given to an individual in making intelligent choices and adjustments". According to **Dunsmoor & Miller** "Guidance is a means of helping individuals to understand and use wisely the educational, vocational and personal opportunities, they have or can develop and as a form of systematic assistance, whereby students are aided in achieving satisfactory adjustments to school and life".

According to Crow and Crow "Guidance is not giving directions. It is not the imposition of one person's point of view upon another person. It is not making decisions for an individual, which he should make for himself. It is not carrying the burdens of another life".

According to the Secondary Education Commission (1964-66) "Guidance involves the difficult art of helping boys and girls to plan their own future wisely in the full light of all the factors that can be mastered about themselves and about the world, in which they are to live and work".

Thus, from the above definitions, we can say that guidance helps an individual to make his own selection and solution' out of varied type of opportunities and problems. It helps a person to adjust with different environments and situations, according to his own capacities.

## Nature of Guidance

- It is a helping service, whether is given to an individual or a group. Its aim is to provide assistance to individuals.
- It is a self-oriented, problem-solving and multi-faceted individual
- It can be given to any individual who needs that scope of guidance is very wide which includes individuals of any age, any interest, and of any nature.
- It cannot be given by any person. It is a work of experts. In the field of psychology, it is work of techniques which needs expert guides, career experts, psychologists and counsellors.
- It helps a person to adjust in the environment where he/she lives and also adjust with oneself and others.
- It helps to develop self-dependence and self-determination in the person, to solve his difficulties and problems by himself.

## Principles of Guidance

**Principle of All-Round Development of the Individual Guidance:** It must take into account the all-round development of the individual when bringing about desirable adjustment in any particular area of his personality

**Principle of Human Uniqueness:** No two individuals are alike. Individuals differ in their physical, mental, social and emotional development. Guidance service must recognise these differences and guide each individual according to their specific need.

**Principle of Holistic Development :** Guidance has to be imparted in the context of total development of personality. The child grows as a whole and even if one aspect of personality is in focus, the other areas of development which are indirectly influencing the personality have also to be kept in mind.

**Principle of Cooperation** : No individual can be forced into guidance. The consent and cooperation of the individual is a pre-requisite for providing guidance.

**Principle of Continuity:** Guidance should be regarded as a continuous process of service to an individual in different stages of his life.

**Principle of Extension:** Guidance service should not be limited to a few persons, who give observable evidence of its need, but it should be extended to all persons of all ages, who can benefit from it directly or indirectly.

**Principle of Elaboration** :Curriculum materials and teaching procedures should be elaborated according to the view point of guidance.

**Principle of Adjustment** : While it is true that guidance touches every aspect of an individual's life, it is chiefly concerned with an individual's physical or mental health, with his adjustment at home, school, society and vocation.

**Principle of Individual Needs** : The individual and his needs are of utmost significance. Recognition of individual freedom, worth, respect and dignity is the hallmark of guidance. Freedom to make a choice and take a decision needs to be respected and encouraged.

**Principle of Expert Opinion** : Specific and serious guidance problems should be referred to persons who are trained to deal with particular area of adjustment for their expert opinion.

**Principle of Evaluation:** The guidance programme should be evaluated in terms of its effectiveness and improvement. Evaluation is essential for the formulation of new goals or re-drafting the existing goals.

**Principle of Responsibility:** Parents and teachers have great responsibility in the execution of the work of guidance. The responsibility for guidance should be centred on a qualified and trained person, who is the head of the guidance centre. Principle of Periodic Appraisal Periodic appraisal should be made of the existing guidance programme so that requisite changes, if any can be carried out for its improvement.

## **Need of Guidance**

Guidance is important in today's world in almost every sphere of life.

***The need of guidance can be seen through the following points:***

- It helps a person to develop his/her capabilities and prepares him/her to cope up with different situations.

- There are many examples of individual differences among people who face difficulties performing in different situations. Some are shy, social, kind, etc., by nature. Thus, guidance helps individuals, to adjust in his/her environment and act accordingly.
- It helps students to choose which stream and career is best for them. Usually, this situation arises at the time of career selection and after board exams. Thus, guidance plays a very important role at this time and helps youths to opt best career plan which gives meaning to their life.
- It plays an important role to prepare an individual as per the objectives of the ever-changing curriculum. Today, the scope of curriculum is not limited to only intellectual and physical development of students but it has changed as per the need of the society. The goal of the present curriculum is the all-round development of the youth of the nation and attach to the need of industrial development which also aims to prepare future generation who could get the better option in career. In other words, today's curriculum is career-oriented.
- It is necessary to help the individual to attain the maturity of judgement, stability of emotions and volitional control which are characteristics of true self-direction.
- It helps to understand oneself, one's talents, abilities and potentialities and also the limitations.
- It also helps to recognise and develop favourable attitudes and habits and the elimination of undesirable traits.
- It plays a crucial role to help those students who do not complete their education, due to various reasons like due to fear of failure, bad conduct of peers and teachers, home's environment, poverty and so on. Thus, an appropriate guidance is very essential for such students, which will encourage them to complete their education and become successful in their life. Thus, guidance plays a very important role in every sphere of life.

## **Types of Guidance**

There are different types of guidance which are important in human life are given below:

### **Educational Guidance**

It is the most important among various types of guidance. It is that specific area of guidance, which identifies and takes care of students problems that pertain to their educational progress and experiences.

It is directly concerned with the students, thus, it is important for student's life. The chief aim of educational guidance is to develop the ability of coordinating with the school environment in the students to create necessary awareness, so that they may select themselves, proper learning objectives and situations.

It is seen that students often face difficulties in understanding what is taught in the classroom and their work place thus, expected change in behaviour is not fully achieved. Failures in examinations and tests, poor standards and unsatisfactory involvement in the academic work by students, are some of the often-noticed problems. Thus, these problems need to be solved to the maximum extent by assisting them. Here, it plays a very crucial role to identify and rectify such types of problems.

### ***Objectives of Educational Guidance***

- To monitor the academic progress of the students.
- To identify the gifted, creative, backward, and other category of special learners.
- To assist the students, to understand themselves i.e., to understand their potentialities, strengths and limitations.
- To help students, to adjust with the school's environment, its rules and regulations, and social life connected with it.
- To help students, to participate in the educational activities, in which they can develop leadership, etiquettes and other social qualities.
- To help students, to make educational plans consist with their abilities, interests and goals.

### ***Guidance at Different Educational Levels***

**At Elementary Level :** As, it is the first level of education, where children are only a beginner, thus, guidance programme should be planned in such a manner, which must help the students to make good beginning, to plan intelligently, to get the best out of their education and prepares them for secondary level. Educational guidance should be used in diagnosing difficulties, which will arise at this level and also for identifying the special needs of children.

**At Secondary Level :** At this level, children are at the adjustment stage, thus, educational guidance should be planned in such a manner which can help the students to understand themselves better, to understand different areas of education, to select an appropriate courses to get information about different educational opportunities, to develop good study habits and social connections. The students should be helped to be acquainted with the vocational implications of various school subjects.

**At Tertiary Level :** Educational guidance must give directions to students about the purpose and scope of higher studies and help them to choose the better option in studies which should be appropriate as per their abilities. Thus, in order to assist students, each higher-level institution must have a guidance unit with due provision of guidance services.

Thus, we can say that, educational guidance is concerned with the assistance given to pupils in their choices and adjustments with relations to schools, curriculum courses and school life.

### **Vocational Guidance**

It is a process of providing assistance to students in choosing and preparing for a suitable occupation or vocation. It helps an individual to choose an occupation, prepare for it, enter upon it and progress in it. It is concerned primarily with helping individuals, to make decisions and choices involved in planning a future and building a career.

#### **Objectives of Vocational Guidance**

- To help the people for choosing an occupation according to their potentialities, capabilities & interests.
- To give assistance during school years, so that the individual will be able to adjust on the job work conditions and with the others.
- To help individuals, to develop an attitude towards work that will dignify whatever type of occupation they may wish to enter.
- To provide the knowledge about the different career options and institutions where the facility of training is available.
- To give information about the working conditions and future prospects of different occupations.
- To bring the excellence in the job performance by accepting the particular occupation as a vocational for an individual.
- To provide assistance as per the need of the indi by considering the individual individual.
- To plan such a strategy which may help physically challenged persons to get the best career option in life without any hurdles.

Thus, it helps a person to choose vocation as per his/her be choice and suitability. It starts at school and college level to where students need this at the time to choose a suitable career Thus, it helps a person to choose vocation as per his/her be choice and suitability. It starts at school and college level to where students need this at the time to choose a suitable career.

### **Personal Guidance**

It refers to the help, given to individuals towards a better adjustment in the development of attitudes and behaviours in all areas of life. It helps people to adjust with psychological and social environment. Its aim is to solve the emotional and psychological problems. Educational and vocational guidance can also be called personal guidance.



Personal guidance may be defined as the assistance offered to the individuals to solve their emotional, social, ethical, and moral as well as health problems. Thus, personal guidance deals with all those problems of life which are not covered under educational and vocational guidance.

### **Objectives of Personal Guidance**

- To help an individual in analysing and understanding the personal problems of individuals.
- To make individuals sensitive about their environment.
- To assist the individuals in solving their problems related to different spheres of their life like family, school, vocation and adjustment in the environment.
- To enhance the adjustability of individuals.
- To understand the personal complexity and causes in order to find out the bes individuals
- To help in developing good relations with family members, relatives and society members to remove mal-adjustment and performing the role in a better way.
- To develop understanding and insight into the various life situations, so that individuals may bring excellence and adjustment in new situations.

Thus, we can say that personal guidance is the process which helps a person to understand all spheres of his/her life and solve problems related to these spheres.

### **Health Guidance**

Health is regarded as the wealth. Health guidance is the guidance which is given about the overall health care to an individual or group of individuals. Total health is the goal of health guidance. The health guidance may be a cooperative effort of principal, doctors, counsellor/ psychologist, teachers, students and parents. They all work together to achieve the aim of health guidance.

To promote preventive care, the conditions of school hostel, canteen needs to be checked. Similarly, health education through formal classes is also essential in school education. In the present day, the concern of health guidance also pertains to give guidance in HIV/AIDS which is necessary for students to know without any delay.

### **Objectives of Health Guidance**

- To give education about good and healthy habits.
- To help individuals, to encourage them to develop personal hygiene concept.
- To provide adequate time-table to follow, to be healthy in concept.
- To create awareness about the healthy food habits, life-style, workouts, and so on, to be both physically and mentally healthy.
- To provide information that where to get proper treatment of any disorder or illness.
- To educate people, about different types of diseases and also the ways to keep oneself healthy.

Thus, health guidance plays a vital role to keep ourselves healthy and protective from different types of diseases and disorders.

## **Social Guidance**

We are social animals. Thus, we need to adjust in a society where we have to follow some set of rules and to act accordingly. Educational institution is a miniature society and the class is an example of multi-cultural and multi-lingual space, where students come from different socio-economic status, linguistic and socio-cultural backgrounds study. But sometimes, social relationships constitute a problem area for most of the students where they find difficulty in adjustment.

It is very important that the students, to be helped in acquiring the feeling of security and being accepted by the group, in developing social relationship and in becoming tolerant towards others. This is the task of social guidance. Formally, social guidance can be given by educational institutions, whereas informal guidance may be provided by family, religious institutions, media, etc.

## **Objectives of Social Guidance**

- To adjust oneself in the society and to attain maturity.
- To prepare oneself for livelihood.
- To achieve economic independence and self-reliance.
- To understand the family and marital relations and related responsibilities.
- To sensitise about gender issues and make people able to respect each other.
- To develop healthy relations with peers and society members.

Thus, we can see that social guidance provides meaning to life by providing guidance at such place where it is needed the most.

## **Counselling**

Counselling is the process of assisting and guiding clients, especially by a trained person on a professional basis, to resolve, personal, social or psychological problems and difficulties.

In a real sense, it is a consultation, mutual interchange of opinions. It aims at helping the clients to understand and to accept themselves as they are. It is a process which is done between two individuals i.e. one is the counsellor, who listens and gives an appropriate advice and on the other is a counselee (client) who is given counselling.

It takes place within a professional setting. It is initiated and maintained as a means of facilitating changes in the behaviour of the client. It is a professional task for professionally trained people who are master in their respective field.

## Definitions of Counselling

According to Wren "Counselling is a dynamic and purposeful relationship between two people who approach a mutually defined problem, with mutual consideration of each other to the end that the younger or less mature or more troubled of the two is aided to a self-determined resolution to his problem".

According to **Shertzer and Stone** "Counselling is interaction process which facilitates meaningful understanding of self and environment and results in the establishment or clarification of goals and values for future behaviours".

According to **Merle M Ohlse** "Counselling is an accepting, trusting and safe relationship in which clients learns to discuss openly what worries and upsets them, to define precise behaviour goals, to acquire the essential social skills and to develop the courage and self-confidence to implement desired new behaviour".

According to **Edwin Lewis** "Counselling is a process by which a troubled person (client) is helped to tell and behave in a more personally satisfying manner through interaction with an uninvolved person (counsellor) who provides information and reactions, which stimulate the client to develop behaviour, which enable him to deal more effectively with himself and his environment".

Thus, from the above definitions we can say that, counselling is a two-way process which involves two individuals. There are mutual relationships between the two individuals. It helps an individual to gain self-understanding, self-acceptance and self-realisation. It also helps an individual to become happy, more creative and better adjusted after having an effective counselling.

## Nature of Counselling

- It is a process by which a person is assisted to behave in a more rewarding manner.
- It aims to promote healing, comfort, clarification, and reconciliation to the counselee.
- The three basic elements of counselling are the counselee i.e. a person in pain desiring to be healed, the counsellor i.e. the helper who listens and provides help, and the negative experience i.e. the cause of pain and distress.
- In the counselling process, the counselee identifies the negative experience and is helped to choose a path that is more satisfactory with the help of a counsellor.

- Its function is to produce changes in the individual that will enable him to extricate himself from his difficulties.
- The nature of counselling is to assist individuals through a helping relationship to alleviate current negative responses to a challenging situation.

## **Objectives of Counselling**

- To enable an individual, to become oriented to the educational environment.
- To provide information about different aspects of life.
- To help, to recognise problems with learning and to develop coping skills.
- To help to identify and express positive feelings and behaviours needed for successful learning.
- To demonstrate how effort and persistence affect learning.
- To encourage and develop special abilities and right attitudes.
- To achieve academic goals and to apply study skills necessary for academic success at each grade level.
- To develop mutual understanding between a counsellor and a counselee.
- To help to make plans as per the educational qualifications, requirements and desire of success of the counselee.
- To develop skills and social adjustment techniques in the counselee.

## **Characteristics of Counselling**

- It is a process which involves two individuals; one seeking help and the other, a professionally trained person, who can help the first.
- In counselling, there should be a relationship of mutual respect between the two.
- The counsellor should be friendly and cooperative and the counselee (client) should have trust and confidence in the counsellor.
- It is important to help a student, to take a decision, make a choice and to seek a direction.
- It helps a counselee to acquire independence and develop a sense of responsibility, explore and utilise his potentialities.
- It is more than just giving advice. The progress comes through the thinking that a person with a problem does for himself, rather than through solutions offered by tpotentialities
- It produces changes in the individual that will enable him to extricate himself from his difficulties.
- It involves a face-to-face relationship between two persons.

## **Principles of Counselling**

**Principle of Acceptance :** According to this principle, each client must be accepted as an individual and dealt with as such. The counsellor should give due regard to the rights of the client.

**Principle of Permissiveness:** Counselling is such a relationship which develops optimism and the environment shapes according to the person. All the thoughts accept the relative relationship of counselling.

**Principle of Respect for the Individual :** All the schools of thoughts of counselling advocate for the respect of the individual i.e. respecting an individual's feelings must be an integral part of counselling process.

**Principle of Thinking with the Individual :** Counselling emphasizes thinking with the individual. It is essential to differentiate think for whom? And 'why to think'? It is the role of the counselor to think about all the forces around the client to join client's thought process and to work collectively with the client regarding his problem.

**Principle of Learning :** All the assumptions of counselling accept the presence of learning-elements in the counselling process.

**Principle of Consistency with Ideals of Democracy :** All the principles are associated with ideals of democracy. The ideals of democracy desire to accept a person and want to respect the rights of others. The process of counselling is based upon the ideals of a person's respect. It is a process which accepts individual differences.

## **Types of Counselling**

There are different types of counselling, which are important in human life. These are given below:-

### **Directive Counselling**

It is a counselling, in which a professional plays an active role in a client's decision making by offering advice, guidance, and recommendations, It is counsellor-centered, which gives complete importance to the counsellor. Its chief exponent was BG Williamson. Its major goal is to replace the emotional behaviour of an individual with deliberately rational behaviour. Under this process, the counsellor plans the counselling process, his work is to analyse the problem, identify the exact nature of the problem and to provide various options.

Williamson stated that directive counselling is good to address the problems relating to educational and vocational adjustment. It is a concept, where educational and vocational guidance relates to the personality dynamics and inter-personal relationships.

It is more useful where the individual wants information and advice for choice of a career. This approach does not focus its attention on personality development as such. Here, the problem is the focal point of the counselling and not the counselee. The counselee is under the counsellor and is not equal to him.

Here, a counsellor can look at the counselee directly. It is useful due to its limited time which saves a lot of time. It gives happiness to the counselee, as he gets a solution to the problem.

## Steps of Directive Counselling

*There are six steps of directive counselling which have been given by Williamson*

**Synthesis** It includes collection of information about the individual through structured interviews, psychological case history methods, interaction with family members, friends, etc.

**Analysis** After collection of data, the information is organised in the logical manner to analyse the individual in terms of his qualifications, assets potentials, liability adjustment, cultural background, habits, etc.

**Diagnosis** The diagnosis consists of the interpretation of the data in relation to the nature and problem, the causes of problems and so on.

**Prognosis** Under this step, a prediction is made about the future development of the problem.

**Counselling** Here, the counselling is to bring about adjustment and re-adjustment to an individual in relation to his/her problem.

**Follow up** It is extremely important among all the given steps. An individual may be able to solve immediate problems through counselling but new problems may occur or the original problem may re-occur. Thus, follow-up with the counselee is extremely necessary. The role of counsellor is important as he/she has to make the individual understanding and accept his/her strength, weakness and faults.

## Limitations of Directive Counselling

- It kills the initiative.
- It makes a counselee helpless.
- It does not guide counselee to be efficient and confident.
- It is undemocratic.
- It makes the counselee dependent on the counsellor. Steps of Non-Directive Counselling

## **Non-Directive Counselling**

It is counselee-oriented. Its chief exponent was Carl Rogers. In this counselling, the counselee is allowed for free expression. The role of counsellor is to only direct and guide. Counsellor asks a few questions, so as to think about the solution of the problem. Counselee takes an active part, gains insight into the problem with the help of the counsellor and arrives at the decision and action to be taken.

Here, the role of counsellor is passive. Here, goal is independent and integration of the counselee rather than the solution. The main role of the counsellor is to create an environment in which the counselee can work out with his own understanding. In this type of counselling, emotional aspect of a counselee is more emphasised, rather than the intellectual aspect. The main emphasis is to establish a warm, permissive and accepting environment, which helps the counselee to express his self-structure.

In this type of counselling, the counselee is free to choose the objectives of his life. Through this counselling, a counselee becomes able to take decisions in a limited period of time.

## **Steps of non directive counselling**

*There are five steps of non-directive counselling which have been given by Carl Rogers:-*

**Defining the Problematic Situation :** At first, the counsellor defines the problematic situation.

**Free Expression of Feelings :** In the second step, the counsellor provides such situation where the client can express his emotions freely.

**Development of Insight:** As the counselee starts to have self-realisation, a counsellor keeps on explaining his emotions so that a counselee can develop a proper insight.

**Classification of Positive and Negative Feelings :** In this step, the counsellor identifies the negative and positive feelings of the counselee and classifies them.

**Termination of Counselling Situation:** In the end, the counsellor looks for a point where he can terminate the counselling situation after all the above steps. This step can be taken by anyone either the client or the counsellor.

## **Limitations of Non-Directive Counselling**

- It is a time-consuming process.
- In this counselling, wisdom and judgement of the client cannot be relied upon.
- In this counselling, all the problems cannot be sorted out through talking.

- This type of counselling cannot be utilised in institutions, such as school.
- Due to passivity of a counsellor, sometimes, a counselee hesitates to speak out freely.

### **Eclectic Counselling**

The combination of directive and non-directive counselling depending upon the situational factors is known as Eclectic Counselling. Its chief exponent was Bordin (Thorne).

In this type of counselling, the counsellor is neither fully active nor fully passive, rather he studies different aspects of a counselee's personalities and selects certain useful techniques for him. Under this process, the counsellor can begin his work from the directive counselling and then starts to use non-directive counselling method, keeping in with the time and place. In this, counselee and counsellor are active and together finds the solution. The major techniques of this type of counselling are compilation of data, assurance, case history, examination, and so on. In this type of counselling, objectives and integrative methods are used.

### **Steps of Eclectic Counselling**

- Take initial interview, to collect the relevant data about the counselee.
- Selection of appropriate techniques, keeping in mind the needs of the counselee.
- Use of techniques under specific circumstances as per the desire and need of the counselee.
- In this step, evaluation of the effect is done of the used techniques.
- In this step, due preparation is made, for giving counselling and guidance to a counselee.
- Under the final step, the advice is sought out from the counselee and other related individuals regarding the topics of its programs and other aims. .

### **Limitations of Eclectic Counselling**

- It has no set of rules, as it is not clearly defined by the scholars, which makes this type of counselling unclear.
- It is very difficult to present a synthesised form of directive and non-directive counselling, because these two are like poles apart.
- There is no definite rule as to how much freedom should be given to a counselee. .



### Difference Between Guidance and Counselling

Guidance	Counselling
Guidance is a process of helping young persons learn to adjust to self, to others and to circumstances.	Counselling means consultation, mutual interchanging of options deliberating together.
Guidance is a wider process.	Counselling has a narrower meaning
Guidance includes counselling.	Counselling is a part of guidance.
Guidance may be individual as well as in group.	Counselling is individual.
Guidance is related with personal, educational, vocational and other problems.	Counselling is mainly related with mental health and emotional problems.
Guidance can be given by any person. Training is not required for guidance Psychologist.	Pre-training is must for counsellor.
Guidance may be provided through books or magazines.	In counselling, mutual discussion, consultation and interchange of opinions plays a significant role.

### Approaches to Counselling

There are various ways to take and provide counselling. In counselling, there are different situations of counsellor and counsee and their contribution is also different from each other. Thus, this can be known as different approaches to counselling where situations are different. These approaches are as follows:

## **Cognitive-Behavioural Counselling (Albert Ellis-REBT)**

Under Cognitive-Behavioural counselling, counselling is given by keeping in view of thinking, presumption, evaluation, etc.

In this regard, Rational Emotive Behavioural Therapy (REBT) is more important which belongs to the behavioural school of therapy. REBT is the pioneering form of Cognitive Behavioural Therapy which was devised by Albert Ellis, an American Psychologist in 1950s. It is an active-directive therapy, based on challenging faulty beliefs, to resolve emotional and behavioural problems.

REBT is based on the ABCD technique, which was formulated in the year 1950.

Such as-

- Action (For example, a person crashes his car)
- Belief (This leads him to believe that he is a bad driver)
- Consequence (He stops driving because he fears that he will have another accident)
- Dispute (The counsellor disputes that he is a bad driver, and points out that most people have at least one accident in their driving career).

The goal of REBT and ABCD technique is to help counselee replace irrational thinking with rational thinking.

Albert Ellis, published REBT in his first book, in the year 1962. As per REBT, humans have both logical and irrational behaviours by birth. REBT believes that humans deliberately create emotional problems like, self-blame, self-pity, anger, crime, shame, depression and anxiety and human turns back in behaviours like procrastination, compulsion, avoidance and addiction.

It is an Action-Oriented approach to manage cognitive, emotional, and behavioural disturbances. It is a practical approach to assist individuals in coping with and overcoming adversity as well as achieving goals. It is considered as an educational process in which a therapist often deals in an active and direct form that how to identify the illogical and self-defeated opinions and how to solve and change these situations with positive ones. Ellis, suggested that rather than simply being warm and supportive, the therapist needs to be blunt, honest, and logical in order to push people towards changing their thoughts and behaviours in positive way.

## **Humanistic Counselling**

This type of approach has originated from the Existentialist Humanist Philosophy. It gives emphasis on to understand the counselee effectively.

This recognises the uniqueness of every individual. Camp (1971), Rogers (1975), Baruth and Hubar (1985) are the supporters of this type of approach. They all believed that human interaction is the main focus for the effective counsellor.

Humanistic approach assumes that everyone has an innate capacity to grow emotionally and psychologically towards the goals of self-actualisation and personal fulfilment.

Humanistic counsellors believe that problems are not caused by life events themselves, but how we experience them. Thus, our experience affects and is affected by how we feel about ourselves and also influence our self-esteem and confidence. Therefore, this approach encourages the counsellee to learn to understand how negative responses can lead to psychological discomfort. It aims for self-acceptance of both negative and positive aspects of our characters and personalities.

The main goal of humanistic counsellors is to help counsellees to explore their own thoughts and feelings and to work out their own solutions to their problems.

This is very similar to the approach used in coaching, except those coaches that are more focused on the present, and less on the past.

But, coaching aims to address the issue of 'how', and counselling looks more at 'why'. Thus, we can conclude that the Humanistic approach has three general characteristics, one is the existentialist concept, second is the client-centred approach and third is the holistic approach.

### **Person-Centered Counselling (Carl Rogers)**

The Person-Centred Approach to Counselling belongs to the humanistic school of therapy. It was devised by Carl Rogers, an American Psychologist in the 1940s. It is also known as 'Client-Centred Therapy' and 'Rogerian Therapy', which is a non-directive form of Talk Therapy.

This approach deals with the ways in which individuals perceive themselves consciously, rather than how a counsellor can interpret their Unconscious thoughts or ideas. Ultimately, this approach sees human beings as having an innate tendency to develop towards their full potential. But, sometimes this ability can be blocked or distorted by certain life experiences, particularly those experiences which affect our sense of value.

In this approach, the therapist works to understand an individual's experience from their perspective. Thus, the therapist must positively value the counsellee as a person in all aspects of his experiences. This approach emphasises that it is vital in helping the counsellees to feel accepted, and better able to understand their own feelings.

This approach can help the counsellee to reconnect with their inner values and sense of self-worth, thus, enabling them to find their own way to move forward and progress. This approach focuses on the belief that the counsellees (clients), and not the counsellor, is the expert of their

own thoughts, feelings, experiences and problems. It clearly mentions that the counselee is the person, who is most capable of finding an appropriate solutions. The counsellor not course does suggest any of action, make recommendations, ask questions or try to interpret anything, the counselee says, rather the responsibility for working out problems rests wholly with the counselee. When the counsellor gives response, his aim is to reflect and clarify what the counselee has been saying. The only work of an expert and trained client-centred counsellor is to show empathy, warmth and genuineness, which he believes will enable the counselee's self-understanding and psychological growth.

**Carl Rogers** identified three basic principles of the Person Centred Approach, such as

**Congruence** The therapist is congruent with the client such as honest.

**Unconditional Positive Regard** The therapist provides the counselee with unconditional positive regard. Such as warm, positive feelings, regardless of the counselee's behaviour. This refers to the therapist's deep and genuine caring for the counselee.

**Empathy** The therapist shows empathy to understand the counselee. It means the ability to imagine oneself in another person's position.

Thus, we can say that in this Person-Centred approach, the counsellor has a very positive and optimistic view of human nature who gains trust of the counselee at the end.

## Theories of Counselling

*There are many different theories of counselling which are briefly explained*

### **Behaviouristic Theory**

Its main focus is to analyse the behaviour of the counselee. In other words, behaviourists are more interested to know and understand about the behavioural characteristics of the counselee rather than his past experiences. The insight of the level of emotions or awareness for the behavioural counsellor is not enough. He accepts the acts or behaviour of the counselee rather than speech.

The behaviourist stresses more on the symptoms of the person who is facing some problem. These problems are related to the counselee, who fails to deal with the situation, due to his inappropriate behaviour. Thus, the behaviourist counsellor stresses more on the activity of a counselee,

## **Rational Theory**

It accepts that cognition and perception are two most effective determinants. A person acts according to his thought. It is mainly based on analysis of work. It accepts that understanding of behaviour depends on the belief that all the people can learn to believe in themselves. People can think or act for themselves. They can take decisions for themselves and express their feelings.

*Ellis, represented the general hypothesis of Rational Theory in the following ways*

- I am good, you are also good- this is the significance of a healthy mind.
- I am not good; you are also not good- this indicates the unhealthy mind of people who have pessimistic approach.
- I am good, you are not good-this is the condition of the mind of that person, who blames others for his approach
- I am not good, you are good-this is the general condition of people who think themselves weak as compared to others.

In this theory, the counsellor helps the counsellee to reconstruct his lost ego trait. He also helps to develop his ego trait in timely manner, so that he can develop positive attitude towards life, boost his self-confidence, and solve his problems for which he used to blame others.

## **Emotive and Reality Theory**

The main characteristic of this theory is that counselling is arranged in different steps. As per the steps, various stages of counselling have been accepted in this theory. All these stages are considered connected to each other and interactive. This is the basis of this theory and the founder of the specific method of counselling.

*The stages are as follows:-*

- First stage- Investigation of problem
- Second stage- Defining of binary problem
- Third stage- Identification of the alternatives
- Fourth stage- Planning
- Fifth stage- Taking action
- Sixth stage- Evaluation and feedback

In this theory, special significance is given to the emotional aspect as well as real or actual circumstances. Therefore, counselling should be done as per the practical, self-centred and emotional situations, in order to suit the real conditions and to enable a person, to imagine such

a system where he can create an appropriate environment for his contemporary world along with the development.

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