NETAJI SUBHAS OPEN UNIVERSITY
School of Vocational Studies
Self Learning Materials

Advance Diploma in Psychological Counselling

PAPER-I
Basic Psychological Processes and Developmental Psychology (Theory)

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➢ UNIT - 1 BASIC PSYCHOLOGICAL PROCESSES AS RELATED TO COUNSELLING

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1.0 OBJECTIVES

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2 PSYCHOLOGY

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1.1 DEFINITION/CONCEPT OF PSYCHOLOGY

Psychology started its journey as a part of Philosophy. During the pre-scientific period of psychology, it took to pre-scientific methods of inquiry often relying on introspection and speculation to explore human mind and behaviour philosophically and theoretically. It only evolved as a separate science in the late 19th Century. At this stage, philosophers speculated about the mechanisms of mind and relied on introspection and speculation to explore the same.

The late 19th century marked the start of psychology as a scientific enterprise. Psychology as a self-conscious field of experimental study began in 1879, when German scientist Wilhelm Wundt founded the first experimental laboratory dedicated to psychological research in the University of Leipzig. Wundt is thus considered as the father of psychology. With the establishment of American Psychological Association in 1892 psychology took a step forward for farther development with John Dewey and William James as a functional science.

The word psychology comprised of two words namely psyche (soul) and logos (knowledge). So, psychology was originally thought to be a subject dealing with Soul. But with the development of a scientific approach to Psychology as a science of soul the concept became self-contradictory, neither can it be observed nor can't be subjected to any experimentation, which is the basic requirement of any science. Even whether there is anything as soul is a matter of doubt for many. So, the psychologists looked for something which were more tangible and comprehensible than soul.

Psychologists changed the subject from soul to Mind, as it was thought that mind is more concrete than soul, and can be better comprehended and understood than soul. With all the mental processes and emotions no one can deny that we do have a mind. However, subsequently the psychologists were not satisfied with mind as the subject matter of Psychology. It was argued that mind too cannot be a subject matter of a science as mind cannot be accessed directly, other than through introspection which literally means 'looking within', which is subjective and not verifiable.

Later the psychologists preferred Consciousness as the subject matter of psychology as it was considered that whether there is mind or not can be understood through consciousness. Consciousness is an indication of the existence of mind. Later the psychologists were not satisfied with consciousness too as the nature and quality of consciousness too cannot be verified externally. To understand consciousness, again we have to depend on introspection and subjective interpretation of the individual.

Psychologists then changed the subject matter of psychology from consciousness to Behaviour which is externally observable, can be influenced, changed and modified. So, till date behaviour is the subject matter of psychology as a science.

Thus, it is humorously said **'Psychology first lost its Soul, then it lost its Mind, then it lost Consciousness, it now has Behaviour of a kind'.**

1.2 THEORIES AND SCHOOLS OF PSYCHOLOGY AS RELATED TO COUNSELLING

STRUCTURALISM

Structuralism, also known as structural psychology, is a school of thought in psychology that emerged in the late 19th century. It is considered the first school of psychology and was developed by Edward Bradford Titchener as a theory of consciousness. Titchener is credited for the theory of structuralism. It is considered to be the first "school" of psychology. Being a student of Wilhelm Wundt at the University of Leipzig, Titchener's ideas on how the mind worked were heavily influenced by Wundt's theory of association of ideas leading to apperception, interpretation of perception from accumulation of experiences. Structuralism, conceived psychology as the science of consciousness and accumulated experience. Titchener attempted to classify the structures of the mind in a similar way as chemists classify the elements of nature.

Structuralism is a theory of consciousness that aims to understand how the adult mind is made up of the simplest components of experience, and how these components fit together to form more complex experiences. Structuralists use introspection, or self-reports of sensations, feelings, and emotions, to analyse the mind. The goal is to learn how each component functions individually, and how they work together to support complex mental processes.

Structuralism marked a significant departure from earlier philosophical and introspective methods and laid the groundwork for the scientific study of psychology. However, the process of introspection remained highly subjective, and there was very little agreement between individuals. Titchener believed that the mind is nothing but the accumulated experience of a lifetime. He believed that he could understand reasoning and the structure of the mind if he could define and categorize the basic components of mind and the rules by which the components interacted. Structuralism was challenged in the 20th century.

FUNCTIONALISM

In 1894 J.R. Angell along with John Dewey went against the Structuralism **of** Titchener. Though not an independent school of psychology Functionalism in contrast to Structuralism which addresses itself to contents, address to **operations.** While Structuralists task was to analyse a state of consciousness into its elements, the Functionalists was to discover how a mental process operates, what it accomplishes and under what condition it appears.

Functionalism may be regarded a movement that is interested in the utilities of mental processes. Functionalism studies mental activity not in and by itself, but as a part of the whole world of biological activity, a whole movement of organic evolution leading to the effort of the organism to survive. Thus, beside consciousness Functionalism tries to discover the processes of judging, feeling, and willing. Hence, fundamentally Functionalism may be defined as that of discovering the fundamental utilities of conscious activities, in short, the function of consciousness.

BEHAVIOURISM

Behaviourism, a highly influential academic school of psychology that dominated psychological theory between the two world wars. Classical behaviourism, prevalent in the first half of the 20th Century, was concerned exclusively with measurable and observable data and excluded ideas, emotions, and the consideration of inner mental experience and activity in general. In behaviourism, the organism is seen as “responding” to conditions that is stimuli, set by the outer environment and by inner biological processes.

The early formulations of behaviourism were a reaction by U.S. psychologist John B. Watson against the introspective psychologies. In *Behaviorism* (1924), Watson wrote Behaviourism claims that 'consciousness' is neither a definable nor a usable concept.

The period 1912–30 may be called that of classical behaviourism and Watson was then the dominant figure Classical behaviourism was dedicated to proving that phenomena formerly believed to require introspective study (such as thinking, imagery, emotions, or feeling) might be understood in terms of stimulus and response. It was dominated by the belief that every response is elicited by a specific stimulus.

Next a neo-behaviourism evolved from 1930 through the late 1940s. In this approach, psychologists attempted to translate the general methodology into a detailed, experimentally based theory of adaptive behaviour. This era was dominated by learning theorists like B.F. Skinner. The **Stimulus-Response Theory**, propagated that all behaviour can be explained by interactions between stimuli and the responses they evoke.

This theory is based on the principle of conditioning, a behavioural process whereby a response becomes more frequent or more predictable in a given environment as a result of repetitive reinforcement. One version of the stimulus-response theory suggested that the mere occurrence of a new response to a given stimulus, as when Russian physiologist Ivan Pavlov's experiments showed that dogs can be conditioned to salivate in response to a ticking metronome, is in itself sufficient to strengthen the connection between the two.

Another American psychologist Edward L. Thorndike argued that the probability that a particular stimulus will repeatedly elicit a particular response depending on the perceived consequences of the response. According to this view, new stimulus-response connections are strengthened only if the response is followed by certain kinds of consequences. His theory is based on Law of Effect which suggests that the effect of the response can modify the response to a given stimulus. Two more laws are required for the stimulus response connection these are Law of Readiness and Law Exercise.

GESTALT

This interpretation of behaviour given by Behaviourism was criticised by the **Gestalt school of psychology**, which argues that the mind cannot be broken down into individual elements. Gestalt psychology founded in the 20th century, is a school of thought that suggests people tend to view things as a whole, rather than as a collection of separate parts. The word "Gestalt" is German for "whole" or "put together", in psychology the word is often interpreted as "pattern" or "configuration." Gestalt psychologists argue that our perception of the world is not just a sum of individual elements, but rather a holistic experience where the whole is more than the sum of the parts.

There were three advocates of Gestalt theory namely Max Wertheimer, Kurt Koffka, and Wolfgang Kohler. In 1912 Wertheimer discovered the **phi-phenomenon**, an optical illusion in which stationary objects shown in rapid succession, cannot be perceived separately, seen as a whole, in continuity. The explanation of this phenomenon—also known as persistence of vision, is experienced when viewing motion pictures provided strong support to Gestalt principles.

The object is seen based on the context it is seen. Gestalt Psychology is based on a few major principles. Such as the principle of Prägnanz, where the elements are naturally perceived things in their context, the organisation. The **Law of Prägnanz**, also called "law of simplicity" or "law of good figure", states that when faced with a set of ambiguous or complex objects, the human brain seeks to make a meaning out of the disjointed elements. Based on the principle of **Figure-Ground Relationship** Gestalt theory gives a new

perspective to perception and vision. Thus, Gestalt principles in visual design introduces a few principles like similarity, proximity and continuity including figure/ground relationships.

Rubin's vase, referred as "The Two Face, One Vase Illusion", depicts the silhouette of a vase in black and the profiles of two inward-looking faces in white. The figure-ground distinction made by the brain during visual perception determines which image is seen.

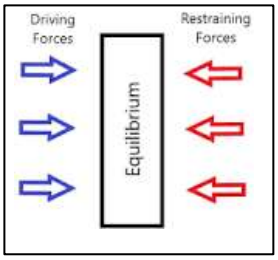
The second law is **Law of Similarity** suggests that we tend to group shapes, objects or design elements that share some similarity in terms of colour, shape, orientation, texture or size. The third **Law of Proximity** states that shapes, objects or design elements located near each other tend to be perceived as a group. The theory also is based on the **Law of Continuity**, where we perceptually group the elements together to form a continuous image. Another law, the **Law of Closure** suggests that the human brain has a natural tendency to visually close gaps in forms, particularly when identifying familiar images. Gestalt psychology's insights impact our understanding of perception, cognition and behaviour.

From the counselling point of view, Gestalt therapy was founded by Frederick (Fritz) and Laura Perls in the 1940s. It focuses on the phenomenological method of awareness that distinguishes perceptions, feelings and actions from their interpretations. It is a therapy rooted in dialogue, in which patients and therapists discuss differences in perspectives.

FIELD PSYCHOLOGY

Field Psychology is an extension of Gestalt theory that focuses on understanding human behaviour in its environmental context. This is an extension of the **Figure-Ground Relationship.** Kurt Lewin introduced this approach in the 1940s. Field psychology explains behaviour as a function of both the individual and his environment which Lewin describes "field" or "life space". It is the **psychological field** that contain the sum of all forces and influences that can impact a person's behaviour, including situational, cultural, and social elements.

The basic principles of the Field psychology are:



1. **Life Space**: The dynamic ever-changing environment that influence behaviour.
2. **Field Forces**: The life space contains psychological forces like needs, desires, social pressures, motives that drive behaviours.
3. **Valence**: The positive and negative elements assigned that bond together to objects, people, events in the life space.
4. **Vectors**: The forces that influence behaviours by directing them.
5. **Tension Systems**: The dynamic interplay between opposing forces, leading to maintain equilibrium and change.

Lewin's Field Psychology is applied in Social Psychology, Education, Organisational Psychology, Action Research, Counselling and Therapy. It is one of the most contemporary school pf psychology applicable in different fields.

PSYCHOANALYTIC MOVEMENT

Psychoanalytic movement in psychology was a significant departure from the previous schools of psychology which were more academic in nature, either they are pure science or its nearest kin. But

Psychoanalysis is neither academic nor a pure science, it has it's root in clinical practice, in the cure of the sick. Sigmund Freud, the founder of the movement in late 19th century, started his career in physiology of the nervous system. Soon Freud became interested in neurotic disorders and in actually dealing with cases. Influenced by cases dealt by Charcot, a renowned authority in Europe on mental disorders especially hysteria through hypnosis. Freud too was acquainted with the practice during his stay in Vienna.

While working in Paris, Freud gradually formed his theory of the sexual basis of the neurosis as a fundamental doctrine of psychoanalysis. He used the method of catharsis, a way to release pent-up emotions affecting the behaviour of the person. Freud and another psychologist Breuer interpreted that if the original emotional disturbance which may have been totally forgotten by the person, is prevented from expressing itself in the direct and normal way, may seek another channel and express itself in the symptoms of the neurotic person at a later stage of life.

This interpretation of neurotic behaviours indicates that an incident in the unconscious and long forgotten can become the source of behavioural disturbances much later. This points to the psychoanalytic theory of underground workings of psychic tensions. This led Freud to explain the existence of the conscious mind and the unconscious mind. According to him it is the unconscious that largely determines our behaviour. Later Adler and Jung, two psychologists gave their own interpretations of the theory of psychoanalysis.

Alfred Adler's individual psychology emphasize that personalities are indivisible and refer to the essential unity of the individual psyche. Carl Jung's Jungian therapy, also known as analytical psychology, is a structured psychotherapy an archetypal analysis approach that focuses on personal growth and self- realization of human experiences historically gathered from the past.

2.0 METHODS OF PSYCHOLOGY

Methodology in any science refers to procedures, techniques that researchers use to reach at specific conclusions. There are multiple methods that all scientific studies including psychologists use. As one of the major functions of psychology is to conduct studies and experiments with human behaviours in different contexts. several methods are followed to study human behaviour.
These are:
1. Introspection Method, 2. Observation Method, 3. Case History Method, 4. Clinical Method, 5. Survey Method
6. Experimental Method ,7. Genetic Method, 8. Statistical Analysis Method, 9. Testing Method and 10. Follow-up Method.

1. Introspection Method:

Introduced by E B Titchener this method is fully based on self-observation, that is a way 'to look within'. This method is based on the individual's own observation of his or her own inner feelings, mental state and experiences. It is not possible to know these from outside. This method totally depend on the individual own observation and report.
For example, a patient can report about his pains and other disturbances physical or mental in a better way than anyone outside. All treatment and clinical interventions depend on his reporting. Though this is a useful economical and easily applicable method, it has some challenges also.

Challenges

a) This is not verifiable, we cannot verify the reports given by the individual
b) At times even if he is reporting correctly there may be distortions as introspection may be influenced by one's own experience and attitude
c) Introspection cannot be applied with children, animals and persons with mental disorders

2. Observation Method:

Observation method is a useful one in areas where experimental methods cannot be applied. Here the observer studies behaviours and different attributes of the person by observing him or her externally and collect the required data.

For example, in the hospital the nurses or doctors make observation of patient's temperature, pulse, BP, facial expressions, bodily symptoms, etc. to come to conclusions about the patient's health condition.

This is a useful and easily applicable method to study children, mentally ill, animals and patients who are unconscious. This method can be also used to observe behaviours elicited by situations designed specifically for a purpose. The observer can even use the natural settings, situations, etc. to get the data by observing behaviours in their natural settings.

Use of natural settings is a better way to observe the person as the person is unaware that he or she is being observed. Hence, this method is also known as 'naturalistic observation' or 'objective observation.

This is a useful method where experimental methods cannot be used. It is easy and can be carried out with convenience.

But this method too has its challenges:

(a) Observation method can be biased as it may be influenced by the mental set, prejudices, predisposed ideas of the observer
(b) It can lead to subjective interpretation of the observer's report
(c) This method can also be time consuming and require longer time, energy and money that can be afforded

3. Case History Method*:*

The Case History method is one of the most used and unavoidable one especially in abnormal psychology. Often the case history technique is the first step to study personality. It tries to trace the background history of the patient. In most of the cases of mental disorder, behavioural problem and mental health, the origin and development of the problem can be understood from the case history of the person, it is the first step to diagnose the cause of abnormality of the personality. In case of any visit to a clinic of a doctor, a psychiatrist or for counselling a detailed case history is taken to find out the probable origin of the issue the person wants the treatment for. The case history records the physical, psychological, emotional, familial, social and economic conditions of the patient from early childhood till date, this includes the birth history and milestones of the person. Beside cases of mental abnormality this is widely used while treating problem children and juvenile delinquents. The case history of the patient is absolutely essential as without the case history it is difficult to diagnose and cure the disease.

This method too suffers from some problems.

a) Often case history data are not available
b) In cases of persons with severe forms mental abnormality or in cases of absence of close relatives or parents, background data of the patient are not available
c) Case history should be written in an objective manner, if any bias comes in while writing the data collected then that can mislead the treatment procedure.

4. Clinical Method:

The Clinical Method is used in medical situations, in hospitals while treating mental patients. The information includes the past history of the disease, history of treatment taken, changes if any, like-improvement, present condition, probable causes, signs and symptoms, etc. This information may be obtained from the patient, his close relatives like parents, siblings or others who accompany him or from his friends, neighbours, etc.

Though somewhat similar Clinical Method is more comprehensive than the Case History method. In a clinic there is a doctor who completes all types of physical examination. Along with the detailed physical examination the psychiatrist or psychologist makes a thorough study of the patient from the psychological standpoint.

Through this method psychologist tries to look for bodily and/or behavioural disorders which may be the root of cause of the mental ailment or the other way around. The mental conflicts of the patient can also cause physical problems which are known as psycho-somatic symptoms or problems. The various personality traits and emotional instability, etc. are also examined by this method.

Besides, there are social workers who collect the information about the environment and social surroundings of the patient and reports to the healer. If required the patient is advised to change his environment for the cure of his problem. In educational settings too in cases of physical abuse, ragging, problem behaviours of children/ students this method is often helpful.

The clinical method needs the coordinated efforts of the doctor, clinical psychologist or psychiatrist, therapist and social worker to complete the treatment. This method also needs the cooperation of the patient for cure of the disease.

Challenges

a) The major problem in case of this method is that it requires specialist help is which is not available easily and on time
b) At times the non-cooperation of the patient may stand in the way of getting the required information
c) Lack of proper coordination amongst the psychologists, doctor/psychiatrists, social workers may also hamper proper functioning of this method

5. Survey Method:

Survey Method is used to collect information from large number of people. Most of the situations Questionnaires, checklists, rating scales, inventories are used in this method to collect the required information. This method is often used to gather information about social and political opinion, customer preferences, general nature of the population on a certain criterion, etc. It is also used to collect information pertaining to awareness on different issues of economic, social, clinical or medical nature, about diseases and remedial programmes. Information on the educational status of a population, malnutrition status, opinion about health needs, health facilities available in a society, etc. too are gathered through the Survey Method.

Challenges

a) This method is applicable for large population and not suitable for individual cases
b) This method provides very generalist data and cannot help in specific and intricate case data

6. Experimental Method:

This is the most objective way of studying a behaviour, attitude and personality of an individual. Experimental methods are conducted in the laboratories under controlled conditions. In this method generally two types of

variables are used on which the experiments are conducted. One is an independent variable and the other is a dependent variable.

Independent Variable is one which the researcher manipulates or changes. **Dependent Variable** is the variable which is measured to see if it is affected by the independent variable. They are also known controlled variable and experimental variable. One is kept constant and the second is varied and changed to see the impact of the experimental one on the controlled variable.

For example, if we are to study the impact of therapy sessions on the client's stress levels, then the therapy session is an independent variable while the stress level is the dependent variable. However, there are also some other variables which are not wanted by the experimenter, but their interferences may affect the results of the experiment. In the laboratory situation such variables are to be controlled. These unwanted variables are called 'extraneous' or 'intervening' variables. Experiments are conducted under controlled conditions in order to restrict the effect of these extraneous variables on the subject of experiment.

Experimental method may also be conducted by using two groups called experimental group and control group. Experimental group also known as treatment group which receives the treatment or intervention that is tested.

The goal is to investigate the effects of the intervention on the control group. The Control group does not receive the intervention or treatment that is being tested. The goal is to provide a baseline for comparison with the Experimental group. So, the control group should closely match the experimental group in different ways like age, gender, ethnicity, etc. In such experiments, a variable is operated on the experimental group to observe this variation has on the control group of the experiment.

Following steps are taken in an experimental method:

a. Identification of the problem
b. Formulation of hypothesis
c. Designing the experiment
d. Testing the hypothesis by experiment
e. Analysis of results
f. Interpretation of results.

The advantage of this method is that, the results of the experiment may be verified by repetition of the same experiment again and again.
But this method has some demerits also.

Challenges

(a) Conducting experiment is expensive and time consuming
(b) This method requires professional people which is not always available
(c) This also requires a controlled laboratory like situation and cannot be conducted anywhere

7. Genetic Method:

Genetic Method also known as developmental method tries to assess and observe behaviour of a person from their different developmental stages. The development and consequent behaviours of a person totally depend, upon the accumulated experiences that the person gathers as he or she grows up. Hence, in order to understand the behaviour of adults we need to know their childhood developmental process as well as the factors that affected that development.

This can be done by two ways:

(a) Cross-sectional study in which, the children of different age groups are studied simultaneously

(b) Longitudinal study in which, the same individual is studied at different stages of life, which gives a better understanding of the behaviour as an interplay of hereditary and environment.

Challenges

The most difficult thing of this method is that it requires a long time and often if not followed systematically may not yield reliable result.

8. Statistical Analysis Method

The Statistical Analysis Method is one of the scientific methods of analysing facts and actions in a mathematical manner. It is basically a quantitative way of interpreting data. This help researchers analyze data to draw conclusions based on evidence, rather than assumptions or impressions:

There are two types of statistical methods used in psychology, descriptive statistics and inferential statistics. Descriptive statistics is numerical and describes and summarizes a set of data on certain parameters, which as a result, helps psychologists to better understand general trends in the data and inferential is non-numerical and makes inferences on the general population based on the testing.

Descriptive statistics

This type of analysis includes percentages, measures of central tendency (mean, median, mode), measures of dispersion, range, standard deviation, variance, and correlation coefficients. Descriptive statistics refers to the process of summarizing numerical and categorical data in a concise and informative manner. Measures of central tendency are used to describe the typical, average and central or normal distribution of scores. It involves using various measures, such as measures of central tendency or average, variability or deviations or dispersions, shape whether they are normal or skewed or kurtotic distributions, to describe key features of the data. Thus, descriptive statistics form the foundation for quantitative analysis and provide insights into the distribution and characteristics of a dataset.

Inferential statistics

Statistical inference is the process of using data analysis to infer properties of an underlying distribution of probability. Inferential statistical analysis infers properties of a population, by testing hypotheses and deriving estimates. Inferential statistics involves the use of a sample firstly to estimate some characteristic in a large population; and secondly to test a research hypothesis about a given population.

Inferential statistics can be broadly categorized as

Hypothesis Testing - this involves using sample data to assess the validity of a claim or hypothesis about a population parameter.

Regression Analysis - this method examines the relationship between two or more variables, aiming to predict the value of a dependent variable based on one or more independent variables.

Confidence Intervals - these provide a range of values within which a population parameter is likely to fall, along with a level of confidence (e.g., 95% or 99%).

Correlation Analysis, - this technique assesses the strength and direction of the relationship between two variables.

The 5 Statistical Analysis Methods for Research

- Mean which is often referred to as the average, is a fundamental statistical technique used to conduct statistical analysis

- Standard Deviation refers to dispersions of the scores, as not all data points will fall exactly at the mean
- Correlation between two or more variables
- Regression
- Hypothesis Testing

Another Statistical method is known as **Factor Analysis**. It is a sophisticated method aimed at reducing a large number of variables into a smaller set of factors. In this method we reduce the number of variables from a larger number of variables through inter-correlation. Thus, this technique is valuable for extracting the maximum common variance from a large number of variables, transforming them into a single score for further analysis.

Factor analysis is a powerful tool for data reduction and interpretation, enabling researchers to uncover underlying dimensions or factors that explain patterns in complex data sets. By adhering to its assumptions and appropriately choosing factor extraction methods, researchers can effectively use factor analysis to simplify data, construct scales, and enhance the validity of their studies.

Challenges

a) Statistical methods are basically quantitative representation of data, to make them meaningful we need to analyse them by adding qualitative interpretations and explanations
b) This method requires knowledge of mathematical skills and not all may have it

9. Testing Method:

Since 19th Century psychologists tried to devise tools to assess different tests to assess different mental attributes and to study various aspects of behaviour. Initially these methods were very gross and had no scientific basis. But with the development of psychology as a science more and more sophisticated and standardised tests were developed. These tests primarily assess intelligence, interests, aptitudes, special abilities, attitudes, personalities. These tests are of different types like group tests which can be applied on large groups at a time, individual tests which are to be applied on individuals one by one; there are also tests which require the person to perform certain behaviours they are known as performance tests or non-verbal tests as against those that require knowledge of language, they are called verbal tests. These tests are useful as they help the psychologists to know the nature and quality of the behaviour of the person tested.

Some of the well-known tests are Stanford-Binet Intelligence Scale and the Wechsler scales, Bender Gestalt Test of psychological and neurological impairments, Minnesota Multiphasic Personality Inventory (MMPI), some tests are there which reveal some inner or unconscious parts of our mind they are called Projective Tests like Rorschach Inkblot Test, Thematic Apperception Test (TAT), Children Apperception Test (CAT), Word Association Test, Draw A Person Test.

Challenges

a) Often standardised test for the required population and language are not be available
b) The tests need to be culture-free for universal application
c) Standardised tests are expensive and also not available easily

10. Follow up Method:

The Follow-up Method is one which is required to find out the impact of any intervention that has been made on the individual. The treatment of the patient may be transitory and short lived. Actually, the Follow-up Method

helps us to know whether the treatment or intervention made is effective or ineffective. The patient who is cured is again followed-up by the doctor. This shows whether the therapy is long lasting or not. The follow up method is therefore important to measure the degree of efficacy of the therapy. The follow up method is essential in order to have a concrete idea of the use of any method. This method is usually a part of all the interventions or methods used in psychology.

➢ UNIT – 2 STRUCTURE AND FUNCTION OF BRAIN

STRUCTURE:

2.0 OBJECTIVES

2.1 TO UNDERSTAND THE STRUCTURE AND FUNCTIONS OF HUMAN BRAIN
2.2 INTRODUCTION

2.2 Introduction

Psychology, neurology, and endocrinology are interconnected fields that together help explain how biological processes in the brain and body shape human behaviour, emotions, and mental health. While psychology focuses on mental processes and behaviour, neurology looks at the brain's structure and function, and endocrinology studies the hormonal systems that regulate many aspects of physical and mental well-being. Understanding these connections is essential in treating psychological disorders, as they often involve a combination of neurological and hormonal factors.

Psychology, neurology, and endocrinology are distinct fields, but they are interrelated in understanding the human body's functions, behaviour, and health. Together, these subjects provide a comprehensive view of how biological systems influence mental processes, emotions, and behaviour.

Interconnections Between Psychology, Neurology, and Endocrinology
These fields are highly interconnected, as they each provide insight into how the brain and body influence behaviour and mental processes. Here's how they relate:

Psychology and Neurology:
Psychological disorders often have neurological implications. For example, depression may involve imbalance in brain chemicals like serotonin and dopamine. Neurological assessments, including brain scans, imaging can help psychologists understand the biological basis of certain mental health conditions.

Neuroplasticity:
The brain's ability to reorganize itself by forming new neural connections can be studied in both psychology and neurology, especially in relation to learning, recovery from brain injury, and mental health.

Psychology and Endocrinology:
Hormonal changes can significantly influence mood and mental health. For example, cortisol (a stress hormone) and thyroid hormones can affect cognitive function, anxiety levels, and overall emotional well-being. Psychologists need to understand these influences when treating patients with mood disorders or anxiety.

Neurology and Endocrinology:
The brain and endocrine system communicate closely. For example, the hypothalamus, part of the brain, regulates the release of hormones from the pituitary gland, which in turn affects other endocrine glands.
Neurological disorders can affect hormone production. For example, damage to the hypothalamus or pituitary gland can disrupt the production of hormones like growth hormone or thyroid-stimulating hormone, leading to metabolic or growth problems.

Neuropsychology

Neuropsychology is the branch of science that studies the physiological processes of the nervous system and relates them to behaviour and cognition, in terms both of their normal function and of the dysfunctional processes associated with brain damage.

Neuropsychology aims at understanding the relationships between the brain, on the one hand, and the 'mind' and behavioural control, on the other. Although humankind has always been interested in this issue, the science of neuropsychology is relatively young.

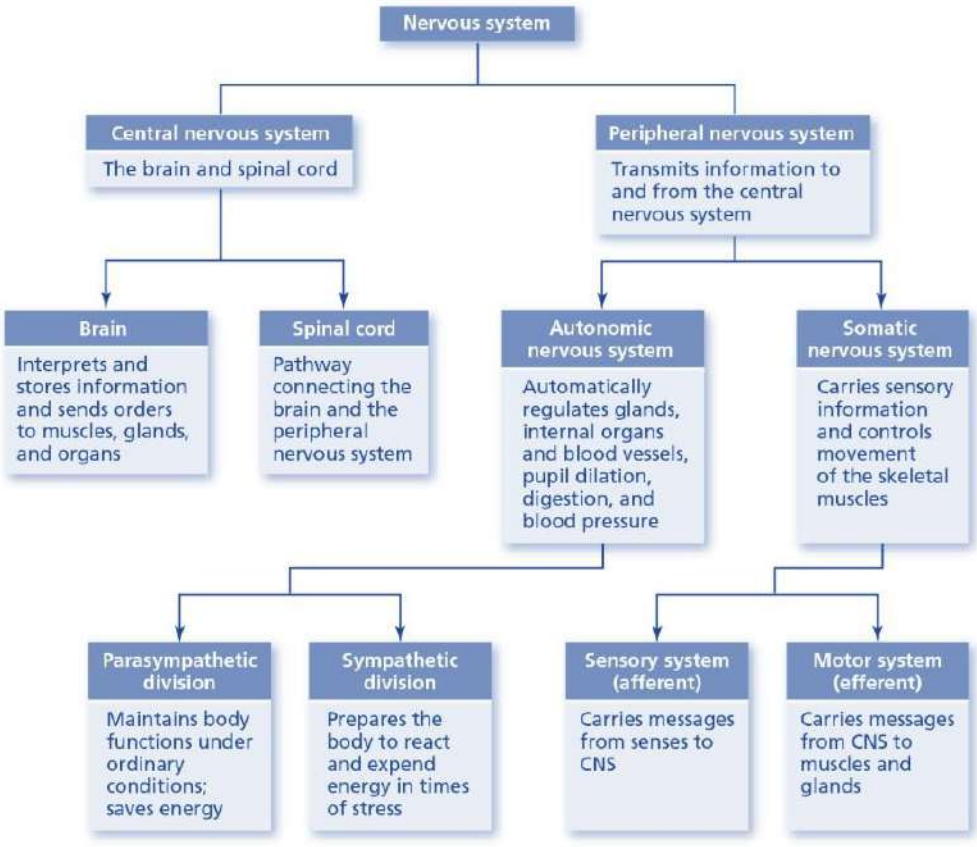
Understanding the nervous system is vital to understanding psychology in general. It is through the nervous system that we experience pleasure and pain, feel emotions, learn and use language, and plan goals,

Neuropsychology seeks to understand how the brain, through structure and neural networks, produces and controls behaviours and mental processes, including emotions, personality, thinking, learning and remembering, problem solving, and consciousness.

Introduction to Nervous System

The nervous system acts as the body's command centre, transmitting electrical signals between the brain and other body parts. It manages both voluntary and involuntary activities and oversees functions such as thinking, memory, and reflexes.

Components of the nervous system include:



Central Nervous System

The central nervous system (CNS) is the part of the nervous system that controls and processes information for the body. It's made up of the brain and spinal cord.

The Central Nervous System

The central nervous system is made up of the brain and spinal cord:

- The brain controls how we think, learn, move, and feel.
- The spinal cord carries messages back and forth between the brain and the nerves that run throughout the body.

Both the brain and the spinal cord are protected by bone: the brain by the bones of the skull, and the spinal cord by **vertebrae**, a set of ring-shaped bones. They're both cushioned by layers of membranes (called meninges) and cerebrospinal fluid. The fluid flows through hollow spaces in the brain called ventricles and around the spine in the spinal column. It protects the central nervous system, nourishes it, and takes away waste products.

- **Controls movement**: The brain controls how the body moves.
- **Controls thinking**: The brain controls how the body thinks, learns, and remembers.
- **Controls senses**: The brain controls the five senses.
- **Processes information**: The CNS collects information from sensory nerves and processes it to respond.
- **Carries messages**: The spinal cord carries messages between the brain and the rest of the body.

The CNS is made up of white and grey matter.

The brain's outer cortex is grey matter, while the inner area is white matter.

White matter is made up of axons and oligodendrocytes, while grey matter is made up of neurons.

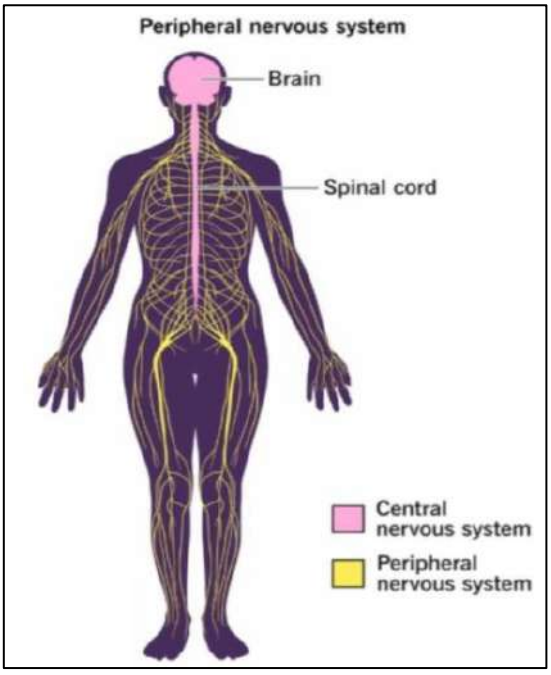
Gray matter typically processes and interprets information, whereas white matter transmits information to other areas of the nervous system. Glial cells protect and support neurons in both white and grey matter.

a. Peripheral Nervous System

The Peripheral nervous system (PNS) is that part of the nervous system that lies outside the brain and spinal cord. It plays key role in both sending information from different areas of our body back to our brain, as well as carrying out commands from our brain to various parts of the body.

Some of those signals, like the ones to the heart and gut, are automatic. Others, like the ones that control movement, are under our control.

The peripheral nervous system is everything else and includes nerves that travel from the spinal cord and brain to supply the face and the rest of the body. The term “peripheral” is from the Greek word that means around or outside the centre.



The peripheral nervous system has two main subsystems: autonomic and somatic.

- **Autonomic**: These are nervous system processes the brain runs automatically and without thinking about them.
- **Somatic**: These are functions that is managed by thinking about them. The two subsystems are how the peripheral nervous system does its three main jobs:

- **Senses**: The Peripheral nervous system is a key part of how the brain gets information about the world around you. This job falls under the somatic nervous system.
- **Movement**: The peripheral nerves deliver command signals to all the muscles in the body that is consciously controlled. This job also falls under the somatic nervous system.
- **Unconscious processes**: This is how the brain runs critical processes that don't depend on thinking about them. Examples of this include heartbeat and blood pressure. This job depends on the autonomic nervous system.

Types of nerve signals

Nerves consist of bundles of nerve cells, which have long, arm-like extensions called axons. The nerve cells and their axons twist and intertwine together to form nerve fibres. Some of the nerves in that bundle carry information into the brain, while others carry information out of the brain.

Sensory: These nerves carry information to the brain and spinal cord. They either connect directly to the brain through the cranial nerves or carry information to the spinal nerves, which then feed into the spinal cord. The sensory nerve connections to the spinal cord are on the back of the spinal cord.

Motor: These nerves carry command signals from the brain to various parts of the body. They only carry information away from the brain. The motor nerve connections are on the front of the spinal cord; meaning, these nerves are for sending muscle movement commands only.

Autonomic: These nerves control the automatic functions of the organs and systems in the body. Autonomic nerves often involve mixed nerve fibres, some of which carry commands from the brain to their destination, and others that carry information about an organ's function back to the brain.

Autonomic nervous system, which is a part of the peripheral nervous system, helps the brain control all of the vital organs in the body. That also helps the brain care for itself. An example of this is the brain controlling the heartbeat, which ensures the heart pumps blood to the body and brain. Without that blood flow, the brain would die in minutes.

The peripheral nervous system also relays nerve signals from those organs to the brain. Examples include feeling warmth inside of the stomach when you drink a hot beverage or feeling full after a meal.

The peripheral nervous system extends everywhere in the body that isn't the spinal cord or brain. It includes:

Cranial nerves: There are 12 pairs of nerves that connect directly to the brain, and 11 of them are part of the peripheral nervous system (the second cranial nerve, which controls the vision, is part of the central nervous system). These 11 nerves are part of the senses of smell, sound, taste, and the sense of touch you have in the skin on the head, face and neck. One of the 11, the vagus nerve, extends down and attaches to all vital organs from the neck to the colon.

Spinal nerves: These are 31 pairs of nerves that attach to the spine at about the same level as each segment bone (vertebra) in the spine.

The above nerves all branch out and become smaller nerves that spread throughout the body. They eventually end at places like the tips of the fingers and toes or just underneath the surface of the skin.

The peripheral nervous system spreads out through the rest of the body all over and consists of various types of nerve cells and structures.

Peripheral nerves and cranial nerves have command centres that are neurons as well as highways that send information called axons and dendrites.

The cell types are Neurons which are the cells that send and relay signals through the nervous system, using both electrical and chemical signals. Each neuron consists of:

- Cell body: This is the main part of the cell.
- Axon: This is a long, arm-like part that extends outward from the cell body. At the end of the axon are several finger-like extensions where the electrical signal in the neuron becomes a chemical signal. These extensions, known as synapses, lead to nearby nerve cells.
- Dendrites: These are small branch-like extensions (their name comes from a Latin word that means “tree-like”) on the cell body. Dendrites are the receiving point for chemical signals from the synapses of other nearby neurons.
- Myelin: This is a thin layer composed of fatty chemical compounds. Myelin surrounds the axon of many neurons and acts as a protective covering.

Neuron connections are incredibly complex, and the dendrites on a single neuron may connect to thousands of other synapses. Some neurons are longer or shorter, depending on their location in the body and what they do.

Glial cells : Glial cells have many different purposes, helping develop and maintain neurons when you’re young and managing how the neurons work throughout the entire life. They also protect the nervous system from infections, control the chemical balance in the nervous system and create the myelin coating on the neurons’ axons. Our nervous system has 10 times more glial cells than neurons

i. Autonomic NS

The autonomic nervous system is a component of the peripheral nervous system that regulates involuntary physiologic processes including heart rate, blood pressure, respiration, digestion, and sexual arousal.

1. Sympathetic
    - Also known as the "fight or flight" system
    - Activates the body's response to danger or stress
    - Increases energy expenditure
    - Inhibits digestion
    - Prepares the body for physical activity
    - Redirects blood to areas of the body needed for intense physical activity

2. Parasympathetic
    - Also known as the "rest and digest" system
    - Restores the body to a state of calm
    - Slows the heart rate
    - Decreases blood pressure
    - Stimulates the digestive tract
    - Constricts the pupil and ciliary muscle
    - Increases secretion by salivary and lacrimal glands
    - Increases gut motility
    - Broncho constricts the lungs

ii. Somatic Nervous System

The somatic nervous system is made up of two types of neurons: sensory neurons and motor neurons.

1. Sensory

Sensory neurons Also called afferent neurons, these neurons detect changes in the environment and send that information to the brain. They have receptor proteins that can detect changes in temperature, pressure, and pain.

2. Motor

Motor neurons Also called efferent neurons, these neurons send signals from the brain and spinal cord to muscles, skin, and glands. They control voluntary movements, such as walking or lifting an object.

The somatic nervous system sends information back and forth between the central nervous system (CNS) and the rest of the body. The CNS includes the brain and spinal cord.

Problems with the somatic nervous system Problems with the somatic nervous system can include:

- Cramps, spasms, tremors, or twitches
- Loss of touch sensations
- Tingling or numbness
- Neuropathic pain
- Loss of movement control
- Muscle atrophy

b. Neurons and Neurotransmitters

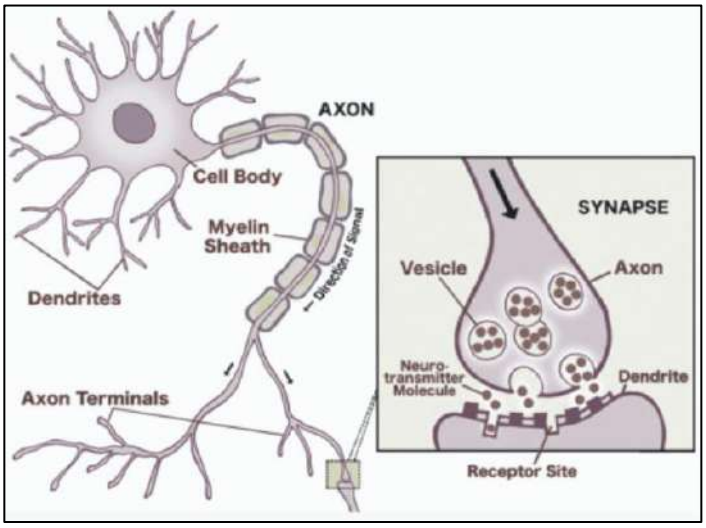
Neurotransmitters are our body's chemical messengers. They carry messages from one nerve cell across a space to the next nerve, muscle or gland cell. These messages help to move our limbs, feel sensations, keep our heart beating, and take in and respond to all information our body receives from other internal parts of our body and our environment.

Neurotransmitters are chemical messengers that our body can't function without. Their job is to carry chemical signals ("messages") from one neuron (nerve cell) to the next target cell. The next target cell can be another nerve cell, a muscle cell or a gland.

How do neurotransmitters work?

We have billions of nerve cells in our body. Nerve cells are generally made up of three parts:

- **A cell body.** The cell body is vital to producing neurotransmitters and maintaining the function of the nerve cell.
- **An axon.** The axon carries the electrical signals along the nerve cell to the axon terminal.
- **An axon terminal.** This is where the electrical message is changed to a chemical signal using neurotransmitters to communicate with the next group of nerve cells, muscle cells or organs.



Neurotransmitters are located in a part of the neuron called the axon terminal. They're stored within thin-walled sacs called synaptic vesicles. Each vesicle can contain thousands of neurotransmitter molecules.
As a message or signal travels along a nerve cell, the electrical charge of the signal causes the vesicles of neurotransmitters to fuse with the nerve cell membrane at the very edge of the cell. The neurotransmitters, which now carry the message, are then released from the axon terminal into a fluid-filled space that's between one nerve cell and the next target cell (another nerve cell, muscle cell or gland).

In this space, called the synaptic junction, the neurotransmitters carry the message across less than 40 nanometres (nm) wide. Each type of neurotransmitter lands on and binds to a specific receptor on the target cell (like a key that can only fit and work in its partner lock). After binding, the neurotransmitter then triggers a change or action in the target cell, like an electrical signal in another nerve cell, a muscle contraction or the release of hormones from a cell in a gland.

Neurotransmitters transmit one of three possible actions in their messages, depending on the specific neurotransmitter.

- **Excitatory.** Excitatory neurotransmitters "excite" the neuron and cause it to "fire off the message," meaning, the message continues to be passed along to the next cell. Examples of excitatory neurotransmitters include glutamate, epinephrine and norepinephrine.
- **Inhibitory.** Inhibitory neurotransmitters block or prevent the chemical message from being passed along any farther. Gamma-aminobutyric acid (GABA), glycine and serotonin are examples of inhibitory neurotransmitters.
- **Modulatory.** Modulatory neurotransmitters influence the effects of other chemical messengers. They "tweak" or adjust how cells communicate at the synapse. They also affect a larger number of neurons at the same time.

  After neurotransmitters deliver their message, the molecules must be cleared from the synaptic cleft (the space between the nerve cell and the next target cell). They do this in one of three ways.
  Neurotransmitters:
  - Fade away (a process called diffusion).
  - Are reabsorbed and reused by the nerve cell that released it (a process called reuptake).
  - Are broken down by enzymes within the synapse so it can't be recognized or bind to the receptor cell (a process called degradation).

Different types of neurotransmitters are there?

Scientists know of at least 100 neurotransmitters and suspect there are many others that have yet to be discovered. They can be grouped into types based on their chemical nature.

Amino Acid neurotransmitters are involved in most functions of the nervous system.

- **Glutamate.** This is the most common excitatory neurotransmitter of our nervous system. It's the most abundant neurotransmitter in our brain. It plays a key role in cognitive functions like thinking, learning and memory. Imbalances in glutamate levels are associated with Alzheimer's disease, dementia, Parkinson's disease and seizures.
- **Gamma-aminobutryic acid (GABA).** GABA is the most common inhibitory neurotransmitter of our nervous system, particularly in our brain. It regulates brain activity to prevent problems in the areas of anxiety, irritability, concentration, sleep, seizures and depression.
- **Glycine.** Glycine is the most common inhibitory neurotransmitter in our spinal cord. Glycine is involved in controlling hearing processing, pain transmission and metabolism.

Monoamines neurotransmitters play a lot of different roles in our nervous system and especially in our brain. Monoamines neurotransmitters regulate consciousness, cognition, attention and emotion. Many disorders of our nervous system involve abnormalities of monoamine neurotransmitters, and many drugs that people commonly take affect these neurotransmitters.

- **Serotonin.** Serotonin is an inhibitory neurotransmitter. Serotonin helps regulate mood, sleep patterns, sexuality, anxiety, appetite and pain. Diseases associated with serotonin imbalance include seasonal affective disorder, anxiety, depression, fibromyalgia and chronic pain. Medications that regulate serotonin and treat these disorders include selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs).
- **Histamine.** Histamine regulates body functions including wakefulness, feeding behaviour and motivation. Histamine plays a role in asthma, bronchospasm, mucosal oedema and multiple sclerosis.
- **Dopamine.** Dopamine plays a role in our body's reward system, which includes feeling pleasure, achieving heightened arousal and learning. Dopamine also helps with focus, concentration, memory, sleep, mood and motivation. Diseases associated with dysfunctions of the dopamine system include Parkinson's disease, schizophrenia, bipolar disease, restless legs syndrome and attention deficit hyperactivity disorder (ADHD). Many highly addictive drugs (cocaine, methamphetamines, amphetamines) act directly on the dopamine system.
- **Epinephrine.** Epinephrine (also called adrenaline) and norepinephrine (see below) are responsible for our body's so-called "fight-or-flight response" to fear and stress. These neurotransmitters stimulate our body's response by increasing our heart rate, breathing, blood pressure, blood sugar and blood flow to our muscles, as well as heighten attention and focus to allow you to act or react to different stressors. Too much epinephrine can lead to high blood pressure, diabetes, heart disease and other health problems. As a drug, epinephrine is used to treat anaphylaxis, asthma attacks, cardiac arrest and severe infections.
- **Norepinephrine.** Norepinephrine (also called noradrenaline) increases blood pressure and heart rate. It's most widely known for its effects on alertness, arousal, decision-making, attention and focus. Many medications (stimulants and depression medications) aim to increase norepinephrine levels to improve focus or concentration to treat ADHD or to modulate norepinephrine to improve depression symptoms.

Peptide neurotransmitters and Peptides are polymers or chains of amino acids.

Endorphins. Endorphins are our body's natural pain reliever. They play a role in our perception of pain. Release of endorphins reduces pain, as well as causes "feel good" feelings. Low levels of endorphins may play a role in fibromyalgia and some types of headaches.

Acetylcholine neurotransmitters

This excitatory neurotransmitter does a number of functions in our central nervous system (CNS [brain and spinal cord]) and in our peripheral nervous system (nerves that branch from the CNS). Acetylcholine is released by most neurons in our autonomic nervous system regulating heart rate, blood pressure and gut motility.

Acetylcholine plays a role in muscle contractions, memory, motivation, sexual desire, sleep and learning. Imbalances in acetylcholine levels are linked with health issues, including Alzheimer's disease, seizures and muscle spasms.

Several things can go wrong and adversely lead to neurotransmitters not working as they should. In general, some of these problems include:

- Too much or not enough of one or more neurotransmitters are produced or released.
- The receptor on the receiver cell (the nerve, muscle or gland) isn't working properly. The otherwise normal functioning neurotransmitter can't effectively signal the next cell.
- The cell receptors aren't taking up enough neurotransmitter due to inflammation and damage of the synaptic cleft

- Neurotransmitters are reabsorbed too quickly.
- Enzymes limit the number of neurotransmitters from reaching their target cell.
- Problems with other parts of nerves, existing diseases or medications one may be taking can affect neurotransmitters. Also, when neurotransmitters don't function as they should, disease can happen
- An increase in activity of glutamate or reduced activity of GABA can result in sudden, high-frequency firing of local neurons in our brain, which can cause seizures.
- Too much norepinephrine and dopamine activity and abnormal glutamate transmission contribute to mania.

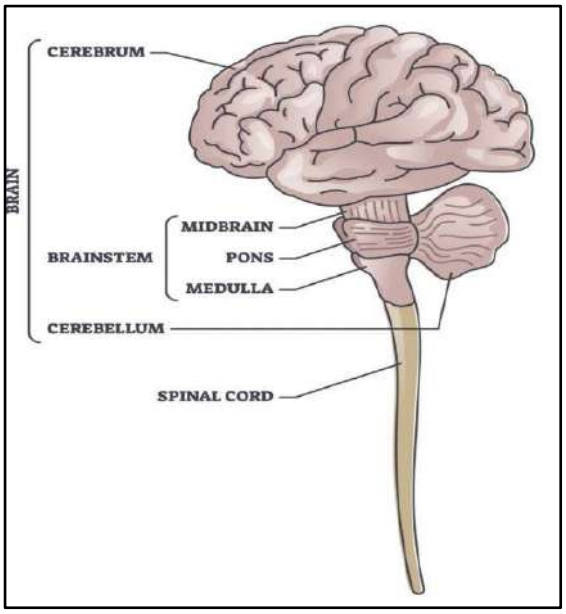
The role of neurotransmitters in our nervous system and the importance of developing medications that could influence these chemical messengers to treat many health conditions. Many medications, especially those that treat diseases of our brain, work in many ways to affect neurotransmitters.

2.1 Brain and Spinal Cord

a. Parts and Functions of Brain

i. Brain

The brain is incredibly intricate and dense. A typical adult brain weighs roughly 3 pounds. Its various folds and grooves are responsible for holding crucial information. The brain's primary regions include the cerebrum, the brainstem, and the cerebellum. About 60% of the brain consisting of fat. The remaining 40% of the brain consists of protein, water, carbohydrates, and salts.



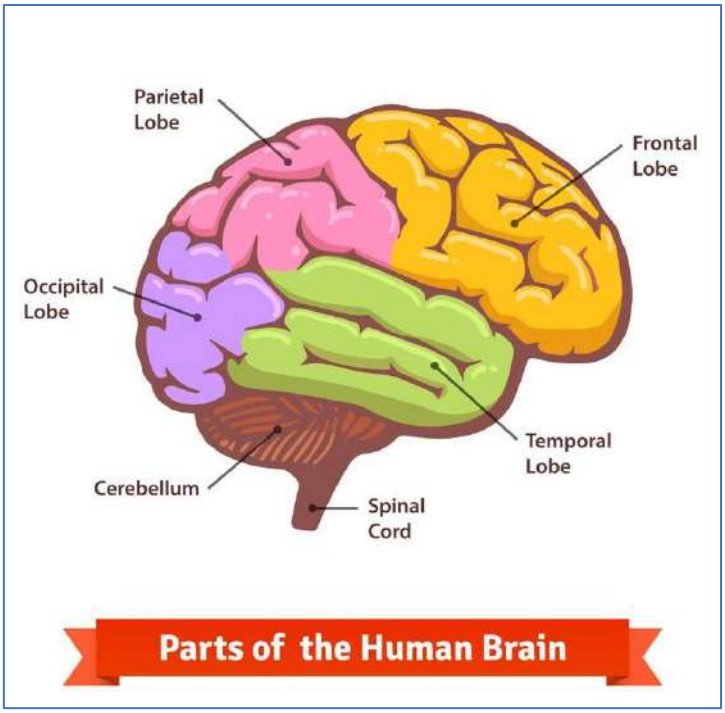
The Cerebrum

The cerebrum is the biggest part of the brain. A large part of the cerebrum is the cerebral cortex (also known as "gray matter").

The cortex has four areas called lobes that work together to create a person's personality and everything they know. Each lobe processes a different kind of information:

- The **frontal lobe** is involved in complex thinking, like planning, imagining, making decisions, and reasoning. It's located behind the forehead.
- The **parietal lobe** processes information about touch, taste, and temperature. It's behind the frontal lobe.

- The **temporal lobe** lets us understand sounds and language, recognize objects and faces, and create memories. It's near the ears.
- The **occipital lobe** processes light and other visual information from the eyes, letting us know what we're seeing. It's in the rear part of the brain.

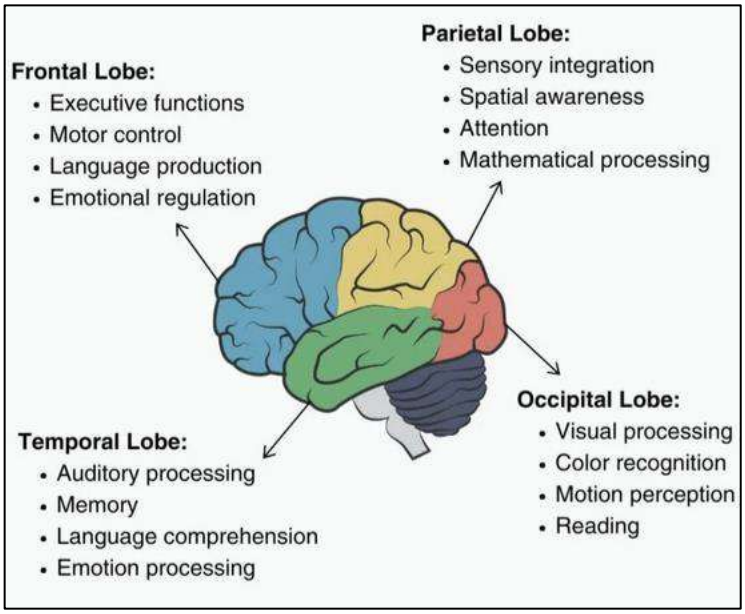


The cerebrum has two halves, called hemispheres. A band of nerve fibres (the corpus callosum) connects them in the middle, which lets them exchange information. The left hemisphere controls the movements of the right side of the body. The right hemisphere of the brain controls the movements of the left side of the body.
The surface of the cerebrum is covered by the cerebral cortex, often referred to as grey matter. Grey matter consists of a thin layer of tissue, approximately 3mm thick, containing billions of neurons. The grey matter is the structure whereby memories are stored, perceptions take place, and information is processed.

The neurons in the grey matter are connected to other parts of the brain by a layer of nerve fibers called white matter, named so because of the shiny white appearance of the substance that insulates it.

Grey matter is distinctively wrinkled in appearance – it is full of bulges separated by grooves. A bulge in the brain is called a gyrus, or gyri, when plural. The grooves in the brain are called fissures. The fissures and gyri expand the surface area in the cerebral cortex, ultimately increasing the number of neurons it can contain.

Animals with the largest and higher functioning brains, such as humans and some primates, have the most wrinkled brains and, thus, the largest cerebral cortices.



The Cerebellum

Behind the cerebrum is the cerebellum. The cerebellum — also called the "little brain" because it looks like a small version of the cerebrum — is responsible for balance, movement, and coordination.

In psychology, the cerebellum is often defined as a brain region responsible for coordinating and refining motor movements, ensuring balance and posture, and facilitating procedural learning.
While traditionally associated primarily with motor control, recent research has expanded our understanding of the cerebellum's role, suggesting its involvement in cognitive processes, emotion regulation, working memory, attention, and even some aspects of language processing.
Thus, in a psychological context, the cerebellum is related to the physical coordination of movements and the coordination of thoughts and emotions.
The cerebellum is also one of the few mammalian brain structures where adult neurogenesis (the development of new neurons)

Cerebellum functions

The cerebellum, situated at the base of the brain, plays a crucial role in both motor and cognitive functions.

While traditionally associated with motor coordination, balance, and fine-tuning of movements, research over the past few decades has revealed its significant involvement in higher cognitive processes (Buckner, 2013).

Motor Functions:

- Coordination of voluntary movements
- Maintenance of balance and posture
- Refinement of motor skills
- Motor learning and adaptation

The cerebellum receives sensory information about body position and intended movements from various brain areas, allowing it to coordinate smooth, precise actions without conscious awareness (Buckner, 2013).
It integrates this information to organize muscle group actions, including eye movements.

In motor learning, the cerebellum is vital for acquiring new skills. For example, when learning to ride a bike, the cerebellum helps fine-tune motor skills until the action becomes seamless and automatic.

Cognitive Functions:

- Attention and executive control
- Language processing
- Spatial and temporal processing
- Working memory
- Emotional processing

The cerebellum is located at the back of the brain, behind the brainstem, below the temporal and occipital lobes, and beneath the back of the cerebrum.

The cerebellum is also divided into two hemispheres, like the cerebral cortex. Unlike the cerebral hemispheres, each hemisphere of the cerebellum is associated with each side of the body.

The cerebellum consists of the **cerebellar cortex**, the outer layer, containing folder brain tissue, filled with most of the cerebellum's neurons. It plays a key role in processing and integrating information sent to the cerebellum.

There is also a fluid-filled ventricle and **cerebellar nuclei**, which is the innermost part, containing neurons that communicate information from the cerebellum to other areas of the brain.

Within the cerebellum, there are thought to be three anatomical lobes, which are divided by two fissures (large furrows)– the primary fissure and the posterolateral fissure:

- Anterior lobe (anterior meaning 'to the front'): Primarily involved in the coordination of limb movements.
- Posterior lobe (posterior meaning 'to the back'): The largest part and plays a significant role in planning, initiating, and timing movements.
- Flocculonodular lobe: The oldest part of the brain in terms of evolution. This part of the cerebellum is responsible for balance and spatial attention, as well as receiving visual input.

The cerebellum can also be divided into three functional areas:

- Cerebro cerebellum – this is the largest area of the cerebellum, responsible for planning movements and motor learning. It also works to regulate the coordination of muscle activation as well as eye movements.
- Spino cerebellum – this area functions in regulating body movements by allowing for error corrections.
- Vestibulocerebellum – this area is involved in controlling balance and flexes of the eyes.

The Brainstem

The brainstem connects the brain and the spinal cord.

The brainstem is a part of the central nervous system that connects the brain to the spinal cord. It's located near the bottom of the brain and controls vital functions like breathing, heart rate, and consciousness.

Parts of the brainstem

- **Midbrain**: The topmost part of the brainstem, which connects the brain and spinal cord. It contains the colliculi, tegmentum, and cerebral peduncles.
- **Pons**: One of the three parts of the brainstem.
- **Medulla oblongata**: One of the three parts of the brainstem.

Functions of the brainstem

- **Breathing**: Regulates breathing
- **Heart rate**: Regulates heart rate

- **Blood pressure**: Maintains blood pressure
- **Sleep regulation**: Regulates sleep
- **Balance, coordination, and reflexes**: Helps with balance, coordination, and reflexes

Other Structures in the Brain

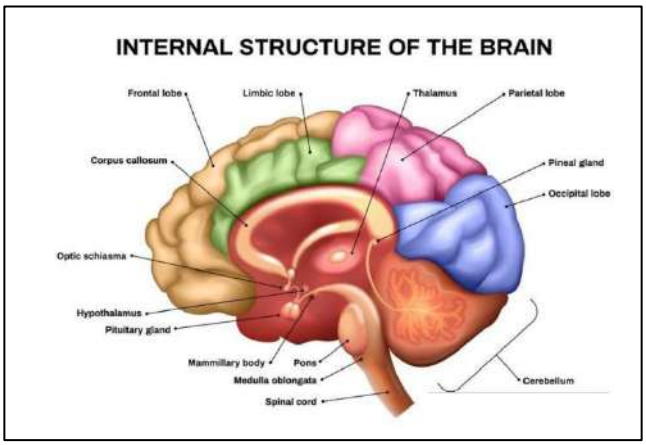
Many other smaller parts of the brain do important jobs, including:

- The **thalamus**, which receives messages about the senses, like vision, hearing, and touch coming from the eyes, ears, and fingers.
- The **hypothalamus**, which controls the pulse, thirst, appetite, sleep patterns, and other processes that happen automatically.
- The **pituitary gland**, in the brain produces hormones that control many bodily functions. It's also known as the "master gland". which makes hormones that control growth, metabolism, water and mineral balance, sexual maturity, and response to stress.
- **The prefrontal cortex (PFC)** is a part of the brain that controls complex cognitive behaviours, including decision making, reasoning, and social appropriateness. It also plays a role in regulating emotion, motivation, and sociability. Functions of the PFC is

  Decision making, Reasoning, Social appropriateness, Emotion regulation, Motivation, Working memory and Executive control:

  Damage to the PFC can cause a loss of executive function. People with damage to the PFC may have trouble planning, controlling their behaviour, and solving problems. They may also have difficulty maintaining social relationships.

  Stress can impair the function of the PFC. Many mental illnesses are associated with impaired prefrontal function.



Limbic System is part of the central nervous system and is located deep within the brain, specifically in the forebrain and within the cerebrum of the brain, immediately below the temporal lobes, and buried under the cerebral cortex (the cortex is the outermost part of the brain).

The nerve cells (neurons) within the limbic system are structured differently from those in the cerebral cortex.

Limbic System is responsible for processing emotions and memory functions; key structures within the limbic system include the amygdala, hippocampus, and hypothalamus.

The limbic system is involved in our behavioural and emotional responses, especially when it comes to behaviours we need for survival: feeding, reproduction and caring for our young, and fight or flight responses.

Almost all mental health conditions and conditions that affect our memory involve our limbic system. Common conditions that affect our limbic system include, but aren't limited to, the following:

- Alzheimer's disease.
- Anxiety disorders.
- Depression.
- Post-traumatic stress disorder (PTSD).
- Schizophrenia.
- Stress.
- Substance use disorder

b. Parts and Functions of Spinal Chord

i. Spinal Cord

The spinal cord is a long bundle of nerve tissue. In an adult, it's about 18 inches long and 1/2-inch thick. It extends from the lower part of the brainstem down the back.

The spinal cord has three sections that run the length of the spine. Each section's name describes the part of the spine it passes through.

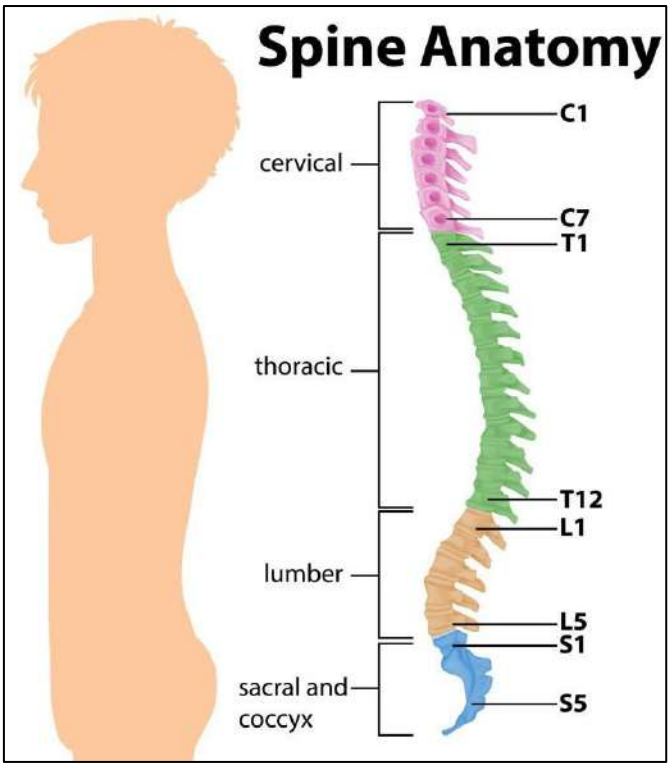
Covering the spinal cord and its protective layers is the vertebral column, or the spinal bones. These bones start at the base of the skull and extend down to the sacrum, a bone that fits into the pelvis. The cervical, thoracic, and lumbar regions have different numbers of bones. Most people have seven spinal bones in the cervical column, 12 in the thoracic column, and five in the lumbar column.

The CNS communicates with the rest of the body through the nerves, which are bundles of fibres that transmit signals to and from the CNS. The nerves which are attached to the spinal cord make up the peripheral nervous system (PNS).

The nerve roots exit the spinal cord and travel to both sides of the body, carrying messages back and forth between the brain and the peripheral nerves.

The middle structure of the spinal cord is made up of grey matter, and the external tissues are made of white matter. Within the spinal cord, there are 30 segments, each belonging to one of four sections:

- **Cervical** – These are 8 segments that transmit signals from or to areas of the head, neck, shoulders, arms, and hands.
- **Thoracic** – These are 12 segments that transmit signals from or to areas of the arms, chest, and abdominal areas.
- **Lumbar** – These are 5 segments that transmit signals from or to areas of the legs, feet, and some pelvic organs.
- **Sacral** – These are 5 segments that transmit signals from or to areas of the lower back, pelvic organs, genital areas, and some areas of the legs and feet.
- **Coccyx** – which is the base of the spinal cord.



Functions of the spinal cord

- **Movement**: Controls body movements and functions
- **Autonomic functions**: Controls involuntary functions like breathing, heartbeat, and bowel and bladder function
- **Senses**: Reports senses to the brain
- **Reflexes**: Manages reflexes
- **Structural support**: Provides structural support and builds body posture
- **Flexible movements**: Facilitates flexible movements

The spinal cord is protected by three layers of tissue called the dura mater, arachnoid mater, and pia mater.

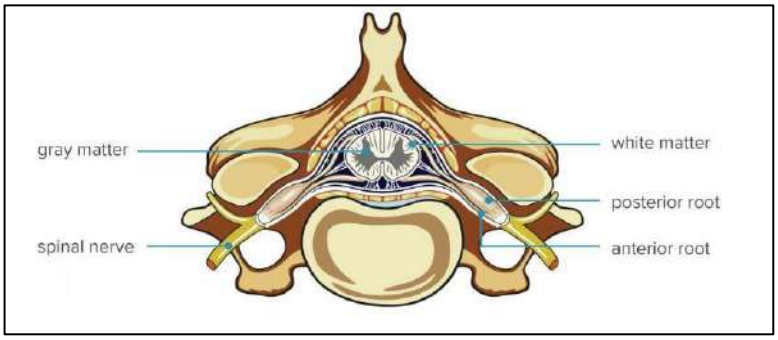
Dura mater: This is the outermost layer of the spinal cords meninges. It is a tough, protective coating.

Epidural space: Between the dura and arachnoid space is the epidural space. This is where doctors may insert local anaesthetic to reduce pain during childbirth and some surgical procedures, such as those to operate on a lung or abdominal aneurysm.

Arachnoid mater: The arachnoid mater is the middle layer of spinal cord covering.

Subarachnoid space: This is located between the arachnoid mater and pia mater. Cerebrospinal fluid (CSF) is located in this space. Sometimes, a doctor has to sample CSF to test for the presence of infection, such as meningitis or inject local anaesthetic into this space for some surgical procedures.

Pia mater: The pia mater is the layer that directly covers the spinal cord.



Key areas of a cross-section of the spinal cord include:

- **Grey matter**: The grey matter is the dark, butterfly shaped region of the spinal cord made up of nerve cell bodies.
- **White matter**: The white matter surrounds the grey matter in the spinal cord and contains cells coated in myelin, which makes nerve transmission occur more quickly. Nerve cells in the grey matter are not as heavily coated with myelin.
- **Posterior root**: The posterior root is the part of the nerve that branches off the back of the spinal column. Looking at the spinal cord cross-section, the top wings of the grey matter "butterfly" reach toward the spinal bones. The bottom wings are toward the front of the body and its internal organs.
- **Anterior root**: The anterior root is the part of the nerve that branches off the front of the spinal column.
- **Spinal ganglion**: The spinal ganglion is a cluster of nerve bodies that contain sensory neurons.
- **Spinal nerve**: The posterior and anterior roots come together to create a spinal nerve. There are 31 pairs of spinal nerves. These control sensation in the body, as well as movement.
  The spinal cord does not extend for the entire length of the spine. It usually stops in the top parts of the lumbar spine.
  For adults, this is usually the first or second lumbar vertebrae. Children's spinal cords may stop slightly lower, at the second or third lumbar vertebrae.

Cranial and Spinal Nerves

Humans have 12 pairs of cranial nerves arise from the brain and 31 pairs of spinal nerves
The 12 pairs of Cranial Verves are named as below and with respective main function

ii. Olfactory nerve (I): Smell
iii. Optic nerve (II): Vision
iv. Oculomotor nerve (III): Eye movement
v. Trochlear nerve (IV): Eye movement
vi. Trigeminal nerve (V): Sensory for face and motor for chewing muscles
vii. Abducens nerve (VI): Eye movement
viii. Facial nerve (VII): Facial expression and taste
ix. Vestibulocochlear nerve (VIII): Hearing and balance
x. Glossopharyngeal nerve (IX): Taste and swallowing
xi. Vagus nerve (X): Controls internal organs, including heart and lungs
xii. Accessory nerve (XI): Controls neck muscles
xiii. Hypoglossal nerve (XII): Controls tongue muscles

The 31 pairs of spinal nerves are grouped regionally as eight cervical, twelve thoracic, five lumbar, five sacral, and one coccygeal.

The names and breakdown of the 31 pairs of Spinal nerves

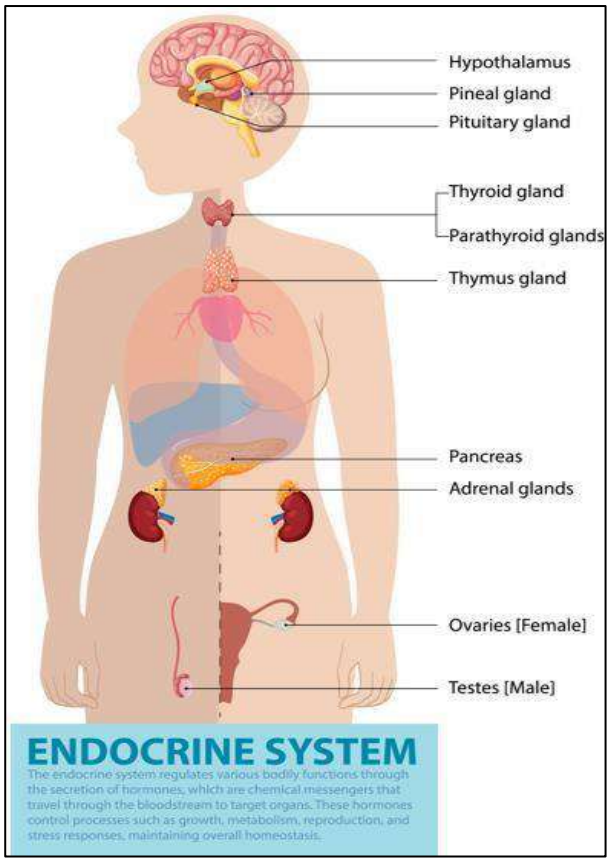
- Cervical: 8 pairs (C1-C8)
- Thoracic: 12 pairs (T1-T12)
- Lumbar: 5 pairs (L1-L5)
- Sacral: 5 pairs (S1-S5)
- Coccygeal: 1 pair (Co)

Introduction to Endocrine System

The endocrine system is a network of glands throughout the body that produce and secrete hormones, chemical messengers that travel through the bloodstream to reach target organs and regulate various bodily functions like growth, metabolism, reproduction, and mood, essentially acting as the body's primary communication system for long-term physiological processes.

- **Hormones:**
  Chemical signals released by endocrine glands, transported through the blood to specific target cells with receptors that recognize and respond to them.
- **Glandular components:**
  Major endocrine glands include the pituitary gland, thyroid gland, parathyroid glands, adrenal glands, pancreas, ovaries (females), and testes (males).
- **Function regulation:**
  Hormones control a wide range of bodily functions including:
  - Homeostasis
  - Growth and development
  - Metabolism and Blood sugar levels
  - Fluid balance
  - Body temperature
  - Mood and sleep patterns
  - Sexual development and function

- The endocrine system is one of two main systems in the body responsible for communication and regulation of body functions, coordinating functions such as growth, metabolism, and reproduction. The endocrine system utilizes hormones for communication and regulation, and these are typically released into the blood.
- Hormones are chemical messengers derived from the major classes of compounds used by the body more generally, such as proteins and lipids. Endocrine coordination via the release of hormones into the blood stream presents unique problems of production, distribution, and mechanisms for action. Receptors on cell surfaces and in the nuclei of cells play a critical role in the endocrine system. Without the active participation of receptors, hormones would be incapable of executing their wide-ranging effects.
- Over- or under-production of hormones, autoimmune diseases, and genetic mutations can lead to a variety of endocrine disorders, some of which are life-threatening if left untreated.
- Endocrine functions also change across the lifetime, so that unique endocrine processes and profiles are found during pregnancy, in the foetus, during puberty, and in aging. Those changes that accompany pregnancy and those that are important during the foetal period will be discussed.



c. Hormones and Glands

Endocrine system consists of three types of tissues:

- Endocrine glands.
- Organs.
- Endocrine-related tissues.

Endocrine system glands

Glands are special tissues in our body that create and release substances. Endocrine glands make and release hormones directly into our bloodstream.

The endocrine glands in our body from head to toe include:

•**Pineal gland:** This is a tiny gland in our brain that's beneath the back part of \our corpus callosum. It makes and releases the hormone melatonin.

•**Pituitary gland:** This is a small, pea-sized gland at the base of our brain below our hypothalamus. It releases eight hormones, some of which trigger other endocrine glands to release hormones.

•**Thyroid gland:** This is a small, butterfly-shaped gland at the front of our neck under our skin. It releases hormones that help control our metabolism.

•**Parathyroid glands:** These are four pea-sized glands that are typically behind our thyroid. Sometimes they exist along our esophagus or in our chest (ectopic parathyroid glands). They release parathyroid hormone (PTH), which controls the level of calcium in our blood.

•**Adrenal glands:** These are small, triangle-shaped glands on top of each of our two kidneys. They release several hormones that manage bodily processes, like metabolism, blood pressure and our stress response.

We have other glands in our body that aren't endocrine glands, such as sweat glands (a type of exocrine gland).

Endocrine system organs

Certain organs in our body also make and release hormones. An organ is a group of tissues that form a structure that performs specific important functions in our body. The organs that are part of our endocrine system include:

•**Hypothalamus:** This is a structure deep within our brain (which is an organ). It's the main link between our endocrine system and our nervous system. It makes two hormones that our pituitary gland stores and releases (oxytocin and vasopressin) and makes and releases two hormones (dopamine and somatostatin).

•**Pancreas:** This organ is in the back of our abdomen (belly). It's both an organ and a gland and is also part of our digestive system. It releases two hormones that are essential to maintaining healthy blood sugar levels: insulin and glucagon.

•**Adipose tissue (body fat):** This is a connective tissue that extends throughout our body. It's found under our skin (subcutaneous fat), between our internal organs (visceral fat) and in the inner cavities of bones (bone marrow adipose tissue). Adipose tissue releases many different hormones, including leptin, angiotensin and adiponectin.

•**Ovaries:** These are small, oval-shaped glands located on either side of our uterus. They produce and store our eggs (also called ova) and make sex hormones that control our menstrual cycle and pregnancy.

•**Testicles (testes):** These are small, round organs underneath our penis in our scrotum. They make sperm and sex hormones, particularly testosterone.

Other tissues that release hormones

Other tissues in our body release hormones. But we don't typically think of them as endocrine system tissues because they have other, more significant functions or roles. They include:

•**Digestive tract** (stomach and small intestine): Our digestive tract is the largest endocrine-related organ system. It makes and releases several hormones that play a role in our metabolism. Examples include gastrin and ghrelin.

•**Kidneys:** Our kidneys are two bean-shaped organs that filter our blood. They're part of our urinary system, but they also produce hormones, like erythropoietin and renin.

•**Liver:** Our liver is part of our digestive system, but it also produces hormones, including insulin-like growth factor 1 (IGF-1) and angiotensinogen.

•**Heart:** When our blood pressure rises, our heart releases two hormones called A-type natriuretic peptide and B-type natriuretic peptide.

•**Placenta:** The placenta is a temporary endocrine organ that forms during pregnancy. It produces hormones that are important for maintaining a healthy pregnancy and preparing our body for labour and breastfeeding

As mentioned above Hormones are secreted by Endocrine glands and they have specialised functions.

Glands	Hormone(s) secreted	Hormone function
Adrenal glands	Aldosterone	Regulates salt, water balance, and blood pressure
	Corticosteroid	Controls key functions in the body; acts as an anti-inflammatory; maintains blood sugar levels, blood pressure, and muscle strength; regulates salt and water balance
	Epinephrine	Increases heart rate, oxygen intake, and blood flow
	Norepinephrine	Maintains blood pressure
Hypothalamus	Growth hormone releasing hormone (GHRH)	Regulates growth hormone release in the pituitary gland
	Thyrotropin releasing hormone (TRH)	Regulates thyroid stimulating hormone release in the pituitary gland
	Gonadotropin releasing hormone (GnRH)	Regulates LH/FSH production in the pituitary gland
	Corticotropin releasing hormone (CRH)	Regulates adrenocorticotropin release in the pituitary gland
Kidneys	Renin and angiotensin	Controls blood pressure, both directly and also by regulating aldosterone production from the adrenal glands
	Erythropoietin	Affects red blood cell (RBC) production
Ovaries	Estrogen	Affects development of female sexual characteristics and reproductive development, important for functioning of uterus and breasts; also protects bone health
	Progesterone	Stimulates the lining of the uterus for fertilization; prepares the breasts for milk production
Pancreas	Glucagon	Raises blood sugar levels
	Insulin	Lowers blood sugar levels; stimulates metabolism of glucose, protein, and fat
Parathyroid glands	Parathyroid hormone (PTH)	Most important regulator of blood calcium levels
Pineal gland	Melatonin	Releases melatonin during night hours to help with sleep
Pituitary gland	Antidiuretic hormone (vasopressin)	Affects water retention in kidneys; controls blood pressure
	Adrenocorticotropic hormone (ACTH)	Controls production of sex hormones (estrogen in women and testosterone in men) and the production of eggs in women and sperm in men.
	Growth hormone (GH)	Affects growth and development; stimulates protein production; affects fat distribution
	Luteinizing hormone (LH) and follicle-stimulating hormone (FSH)	Controls production of sex hormones (estrogen in women and testosterone in men) and the production of eggs in women and sperm in men
	Oxytocin	Stimulates contraction of uterus and milk ducts in the breast
	Prolactin	Initiates and maintains milk production in breasts; impacts sex hormone levels
	Thyroid-stimulating hormone (TSH)	Stimulates the production and secretion of thyroid hormones
Testes (testicles)	Testosterone	Develop and maintain male sexual characteristics and maturation
Thymus	Humoral factors	Helps develop the lymphoid system
Thyroid gland	Thyroid hormone	Controls metabolism; also affects growth, maturation, nervous system activity, and metabolism

The above table gives the summarised view of The Glands, Hormones secreted and functions.

d. HPA Axis

The hypothalamic–pituitary–adrenal axis (HPA axis) is a complex set of direct influences and feedback interactions among three components: the hypothalamus (a part of the brain located below the thalamus), the pituitary gland (a pea-shaped structure located below the hypothalamus), and the adrenal (also called "suprarenal") glands (small, conical organs on top of the kidneys). These organs and their interactions constitute the HPS axis.

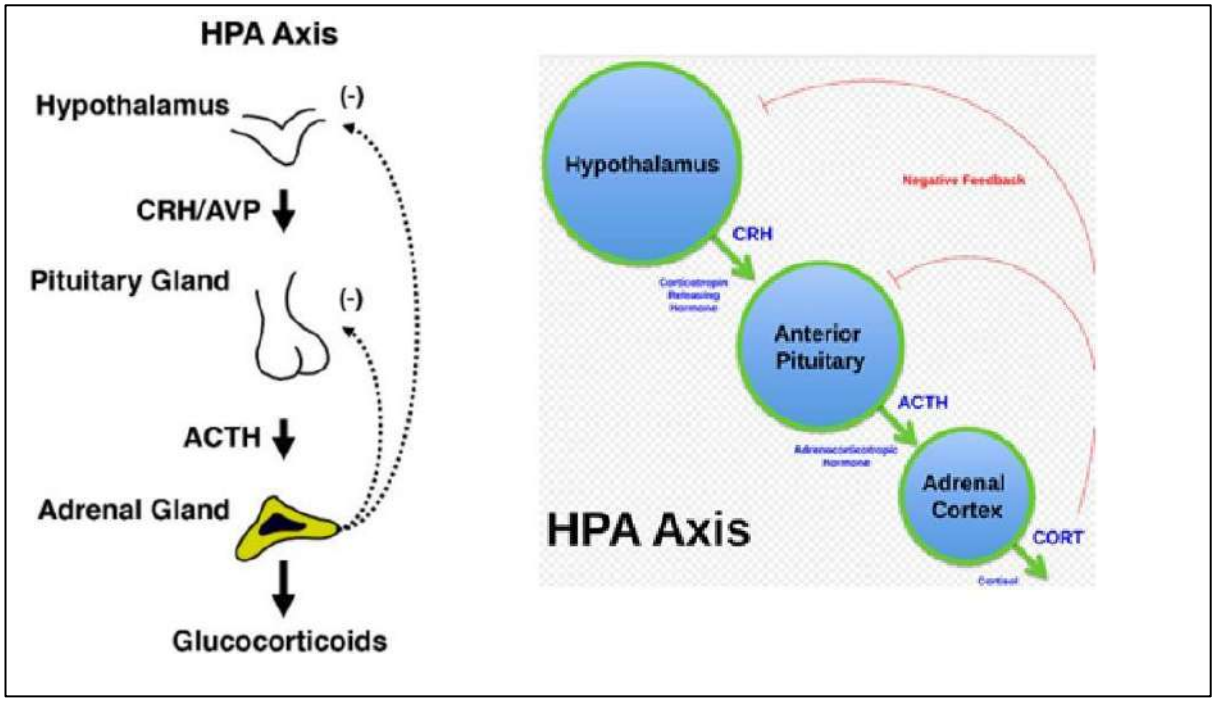
The HPA axis is a major neuroendocrine system that controls reactions to stress and regulates many body processes, including digestion, immune responses, mood and emotions, sexual activity, and

energy storage and expenditure. It is the common mechanism for interactions among glands, hormones, and parts of the midbrain

This axis is a hormone system that regulates the body's stress response. It's made up of the hypothalamus, pituitary gland, and adrenal glands, which work together to release hormones into the bloodstream.

Working Mechanism

- When the body experiences stress, the hypothalamus signals the pituitary gland to release hormones.
- The pituitary gland then releases hormones that trigger the adrenal glands to produce cortisol.
- Cortisol affects metabolism, immunity, and behavior.



Importance

- The HPA axis is a key part of the body's homeostatic response.
- It's important for maintaining mental and physical health.
- Dysregulation of the HPA axis can be linked to mental and physical disorders.

To Summarise –

Cortisol is a crucial component of the hypothalamic-pituitary-adrenal (HPA) axis, which governs the body's stress response.

- When the body experiences stress, the hypothalamus releases corticotropin releasing hormone (CRH).
- CRH signals the pituitary gland to release adrenocorticotropic hormone (ACTH).
- ACTH travels to the adrenal glands, which release cortisol.

Cortisol, is therefore a stress hormone that influences multiple organ systems and lead to health complications.

Below is a more comprehensive summary of cortisol's effects on distinct organ systems:

- Nervous System and Brain: Cortisol is involved in cognitive functions such as memory and focus; however, persistently high levels can hinder these abilities.

- Mood: Imbalances in cortisol levels may lead to fluctuations in mood, as well as increased feelings of anxiety and depression.

- Cardiovascular System:
    - Blood Pressure: Cortisol plays a role in regulating blood pressure by causing blood vessels to constrict.
    - Heart Rate: In conjunction with other stress hormones like adrenaline, cortisol can elevate heart rate during a "fight-or-flight" reaction.
    - Long-term Effects: Persistently high cortisol levels may lead to increased blood pressure, cholesterol, and triglycerides, thereby heightening the risk of cardiovascular disease.
- Musculoskeletal System:
    - Bone: Elevated cortisol levels can lead to reduced bone density, increasing the risk of osteoporosis.
    - Muscle Weakness: High levels of cortisol may result in muscle weakness, particularly affecting the upper arms and thighs.

- Digestive System: During periods of stress, cortisol can inhibit digestive processes, potentially resulting in various gastrointestinal issues.
- Reproductive System: An overabundance of cortisol can interfere with reproductive health, causing irregularities in menstrual cycles for women and diminished sexual desire in both genders.
- Additional Systems:
    - Skin: Elevated cortisol levels may result in alterations to the skin, including increased fragility, the appearance of purple stretch marks, and delayed healing of wounds.
- Metabolic System:
    - Blood Sugar: Cortisol aids in the management of blood sugar levels by enhancing glucose availability and facilitating the breakdown of fats and proteins for energy.
    - Insulin Resistance: Prolonged elevated cortisol can result in insulin resistance, which is a precursor to type 2 diabetes.
    - Weight Gain: Excessive cortisol may lead to weight gain, especially in the abdominal area, due to increased fat accumulation.
        - Lipolysis: Cortisol promotes lipolysis, the process of fat breakdown in adipose tissue, which can result in the release of fatty acids into the bloodstream.
    - Immune System:
        - Inflammation: Cortisol is involved in modulating the inflammatory response, helping to diminish inflammation during stressful or threatening situations.
        - Immune Suppression: Although beneficial in the short term, chronically high cortisol levels can weaken the immune system, making individuals more vulnerable to infections.

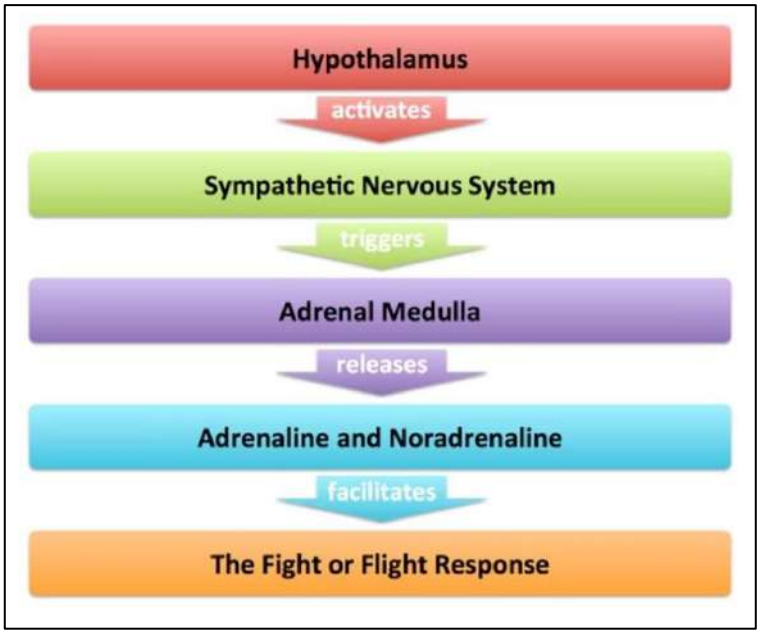
e. SAM Pathway

The SAM pathway, or sympathomedullary pathway, is a bodily system that helps the body respond to short-term stress. It's also known as the sympatho-adreno-medullary axis.

The sympathomedullary pathway (SAM pathway) is the route through which the brain directs the sympathetic branch of the autonomic nervous system (ANS) to activate in response to short-term stress.

The hypothalamus activates the sympathetic branch of the ANS, which then signals the adrenal medulla to secrete adrenaline and noradrenaline. The sympathetic nervous system itself has direct connections to the heart and activation speeds up heart rate and raises blood pressure. These effects are increased and sustained by the release of adrenaline and noradrenaline.

The end result is that oxygen is rapidly pumped to the muscles allowing for increased physical activity. As a result of all this the person is ready for 'fight or flight'.



Working Mechanism

- The hypothalamus detects a stressor, like an urgent deadline or danger.
- The hypothalamus activates the sympathetic branch of the autonomic nervous system (ANS).
- The ANS signals the adrenal medulla to release adrenaline (epinephrine) and noradrenaline (norepinephrine).
- The sympathetic nervous system increases heart rate and blood pressure.
- The adrenaline and noradrenaline increase the effects of the sympathetic nervous system, preparing the body for a "fight or flight" response.
- The body pumps oxygen to the muscles, which allows for increased physical activity.

The SAM pathway is often life-saving because it allows people to react quickly when they're threatened. SAM activation is considered to mediate short-term effects, with rapid responses, while the HPA axis activation leads to short and long-term effects

3.1 Counselling and Nervous System and Brain

Counselling significantly influences the brain and nervous system, promoting mental health and well-being. Engaging in therapy can lead to neuroplastic changes, where the brain forms new neural connections in response to experiences. This adaptability allows individuals to develop healthier thought patterns and behaviours.

Therapeutic approaches often incorporate techniques aimed at regulating the nervous system. For instance, Eye Movement Desensitization and Reprocessing (EMDR) therapy utilizes specific methods to help clients process traumatic memories, facilitating nervous system regulation.

Understanding the interplay between counselling and the brain enhances the effectiveness of therapeutic interventions, leading to improved mental health outcomes.

Counselling is a professional relationship that empowers individuals, families, and groups to achieve mental health, wellness, education, and career goals.

Engaging in counselling can lead to neuroplastic changes, where the brain forms new neural connections in response to experiences. This adaptability allows individuals to develop healthier thought patterns and behaviours.
Understanding the interplay between counselling and the nervous system enhances the effectiveness of therapeutic interventions, leading to improved mental health outcomes.

Counselling plays a significant role in regulating the nervous system by providing individuals with tools and strategies to manage stress, process emotions, and ultimately achieve greater emotional stability, particularly when dealing with trauma or anxiety that can disrupt the nervous system's balance; this is achieved through techniques like mindfulness, relaxation exercises, and exploring the root causes of emotional distress.

Key points about counselling and the nervous system:

- **Understanding the impact of stress:**
  Therapists help clients understand how stress manifests physically and emotionally, which is directly linked to the nervous system's response.
- **Regulation techniques:**
  Counselling often incorporates practices like deep breathing, progressive muscle relaxation, and mindfulness meditation to help individuals learn to calm their nervous system when feeling overwhelmed.
- **Trauma processing:**
  For individuals with a history of trauma, therapy can be crucial in helping them process traumatic memories and address the resulting dysregulation in their nervous system.
- **Coping mechanism development:**
  Therapists guide clients in developing healthy coping mechanisms to manage stress and triggers that can activate the fight-or-flight response.
- **Polyvagal theory application:**
  Some therapists utilize the Polyvagal Theory, which explains how the nervous system responds to different situations, to guide clients in understanding their body's signals and promoting a sense of safety.

Benefits of counselling for nervous system regulation:

- **Reduced anxiety and panic attacks:**
  By addressing the underlying causes of anxiety, therapy can help individuals manage and reduce the frequency of panic attacks.
- **Improved sleep quality:**
  Learning relaxation techniques through therapy can lead to better sleep patterns.

- **Enhanced emotional resilience:**
  By developing better emotional regulation skills, individuals can become more resilient to life stressors.
- **Physical health benefits:**
  Managing stress through counselling can positively impact physical health by reducing the body's stress response

➢ UNIT – 3 BASIC MENTAL PROCESSES - SENSATION, PERCEPTION, EMOTION, MEMORY, MOTIVATION, INTELLIGENCE

STRUCTURE:

3.2 SENSATION

Sensation in psychology is any concrete, conscious experience resulting from stimulation of a specific sense organ, sensory nerve, or sensory area in the brain. Sensation is defined as the process of the sensory organs transforming physical energy into neurological impulses the brain interprets with the help of a few organs of our body known as sense organs. This process is known as transduction, or the conversion of one form of energy into another. The word transduction means an action or process of converting something and especially energy or a message into another form. In terms of physiology, transduction is the translation of arriving of a stimulus into an action potential by a sensory receptor. Here Transduction is the conversion of physical energy into neural activity or impulses. For example, it is the process of converting a specific thought into a general idea or when the light reaches the retina, the photoreceptors in the eye change shape, triggering a neural impulse that is sent to the brain.

By sensory receptors we mean nerve endings that sense environmental stimuli, which translate the information and carries it to the brain. Each sensory system is a kind of channel, consisting of a sensitive element called receptor, which are nerve fibres leading from this receptor to the brain or spinal cord, and the various relay stations and processing areas within the brain. When a sensory channel is stimulated, we have a sensation that characteristic of that channel.

The major features of sensation are as follows:

- Sensation is the simple experience that arises from the stimulation of the sense organ
- Sensation refers to physiological arousal of a sense organ by a stimulus
- Sensation is a physical feeling caused by having one or more of the sense organs stimulated
- Sensation is the capacity to receive impressions through sensory channels through the sense organs

These sensory channels are located in specialised organs in the human body such as the eyes, ears, nose, and mouth as well as in some internal organs. Thus, we have five organs as our five senses of **vision, hearing, smell, taste, and touch.** But the number of human senses is closer to ten than five. The sense of touch

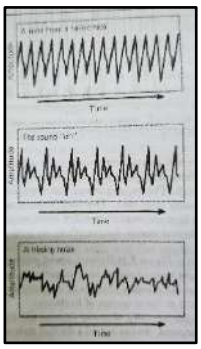
contains senses of warmth, cold and pain senses. Furthermore, sense organs in the muscles, tendons, and joints tell us about the position of our limbs and the state of tension in the muscles. This is called **sense of kinesthesis**.

There is also **vestibular sense** which is also known as the balance sense or equilibrium sense, is the ability to maintain posture, balance, and orientation in space. Walking, running and climbing are activities that require this vestibular sense. This relates and depends on the ear's **vestibular apparatus**.

It is through these sense organs that all living beings get their first experience of the reality outside. Any sensory experience of the living being that we have, there are two stages. In the first stage a sensory impulse caused by a stimulation from outside reaches the nervous system and in the second stage the brain registers a sensory image of the stimulation received. These two stages happen for all the senses that the organism possesses.

Visual sensation is part of the visual sensory system, which helps us make sense of the world around us. It refers to the conscious experience of perceiving information through the sense of sight. It is a complex and diverse field that draws inspiration from various subjects such as cognition science, information science, and artificial intelligence. Sight is processed through the 'Visual' sense. Visual stimuli are picked up by visual receptors located in the eye. Visual receptors are stimulated by light, colour and movement.
For example, when a sudden ray of light reaches our eyes, the nerve related to it is stimulated and the brain immediately registers the impression. Till this stage the stimulation remains only as a sensory image and its meaning is not understood by the organism. At this stage the optic nerve, when simulated responds by way of producing visual sensation only.

Hearing is probably the second important sense after vision through which we know the world around us. When there is a sound in the surrounding or the environment the molecules of air around is pushed together and are put under a positive pressure, and the molecules in turn push against the molecules close to them which again push the neighboring molecules. This results in a wave of pressure moving through the air just as the ripples move in the water, however they are much faster. There is also negative pressure created behind the positive pressure, the two moves at the same speed. The alterations in the air pressure moving in all directions from the source are called **sound waves** and these are the physical stimuli for everything that we hear.



The sound pressure can vary in **intensity,** which we measure in units as **decibel (dB).** Usually, scientists found there are three complex sound waves. There is one which is **continuous** and waves in a graph looks very similar this happens when a musical note is played in a harmonium. The second is a **sustained sound**, such as '*oh*', here the same pattern repeats itself. The third is **aperiodic** which does not repeat or follow a regular pattern or cycle, like the hissing noise.

Smell is another sense which stimulates are nerves on the different events and materials around us. The receptors for smell respond to chemical substances which are volatile in nature. Smell receptors are located high up in the nasal passage leading from the nostrils to the throat. They lie in two small patches, one on the left and one on the right, in the roofs of the passages. Since they are little off the main route of air as it moves through the nose in normal breathing, the sense of smell is relatively dull when we are breathing normally and quietly. A sudden sniff or vigorous intake of air, however, stirs up the nasal passages and more of it to the receptors. This is why animals and people sniff when they are trying to identify an odour. Air currents inhaled

through the nostrils are wafted to the upper part of the nasal cavity, where they stimulate the **olfactory**, or **smell receptors**.

The sense of **taste**, also known as **gustation**, is the ability to perceive flavors and textures in food and drinks through the taste buds on the tongue and elsewhere in the mouth. The receptors for sense of taste are located on the taste buds located at different places on the tongue. The basic tastes that we experience are four namely sweet, sour, salty and bitter. The tongue is not uniformly sensitive to all stimuli. Sweetness is sensed by the taste buds sensitive to sugars and sweet molecule placed on the tip of the tongue; sourness is detected by taste buds sensitive to acids and sour molecules located at the sides of the tongue; similarly saltiness is sensed by taste buds that are sensitive to salts and salty molecules which are placed partly on the tip of the tongue and partly on the sides of the tongue; bitterness sense is sensed by taste buds to bitter molecules located at the back of the tongue.

Touch sense is located on the surface of our bodies. The skin is described as the “giant sense organ” that covers the body. Four skin senses are usually distinguished like pressure or touch, cold, warmth and pain. Much of the senses that are received from the skin are such simple sensations as itching, tingling, feelings of hot and cold or painful sensations of injury. The sense of touch has been very effectively explored while devising reading Braille.

Another sense that human body has is the **Kinesthetic sense**, also known as proprioception which helps us to sense the position, orientation and movement of the body. This gives an idea about **position** of the joints and limbs and relation to each other; it also helps in giving an idea of the **movement** of the body, its speed, direction and duration; this sense also helps to know the **muscle tension**, the amount of force applied by the muscles and also a sense of **balance** in order to maintain equilibrium and stability of the body.

The skin is not uniformly sensitive, it is sensitive at some points and not so sensitive at others, this is also described as ***punctuate sensitivity***. The **Kinesthetic sense** relating to the sense of touch on the skin experience the four types of senses that is **pain, pressure, sense of cold and sense of heat**. In general, the spots of greatest sensitivity to touch, cold, warmth and pain stimuli are different. In short there are four separate maps of the sensitive points corresponding to the four types of stimuli mentioned. Apart from that we also experience a number of other sensory experiences which are generated within the body like **sense of thirst, hunger** then another type of sense that we experience when these needs are appeased.

There are mainly four types of features of any sensation generated by an external stimulus. They are:

1. Quality of a sensation
2. Intensity of a sensation
3. Extensity of a sensation
4. Protensity or duration of a sensation

The quality of a stimulus can be divided into two categories that is **Generic** and **Specific**. For instance, the difference between the visual senses and auditory senses are Generic while sensory experiences within one sense are called Specific, e.g. when we see red colour and green colour the difference between the two sensory experience is called Specific.

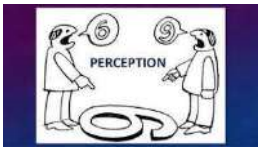
Sensations belonging to the same quality may differ in **intensity**. A bright light produces intense sensation of light, and a dim light produces a faint sensation of light. Intensity is the strength of the sensory stimulation. To measure the intensity of a stimulus we need to refer to the level of the intensity by which we can notice the

stimulus which is called the threshold of the stimulus. It has three levels, namely **absolute threshold** that is the minimum stimulation to detect the stimulus, **subliminal threshold** when stimuli are below the absolute threshold and difference threshold means minimum difference to detect the difference between two stimuli also called **just noticeable difference (JND).** Here we can refer to the **Weber-Fechner Law** which suggests that our perception of the intensity of a stimulus grows at a slower rate than the actual physical increase of the intensity.
Extensity of sensation is the attribute of sensation that allows us to perceive space or size. It is dependent on the extent of the area that a sense organ is stimulated. This is most noticed in visual and tactile sensations. **Protensity** or duration refers to the duration or length of experiencing the stimulation.

3.3 PERCEPTION

Perception in psychology is the process which interprets the sensory experiences that we acquire through our senses. This is that stage where the individual recognizes and adds meaning to the sensory experiences that are received through the five sense organs. So, perception is the process of selecting, organizing, identifying, and interpreting sensory information and helping the individual to get a coherent picture of the world.

Perception is the process by which individuals register and evaluate information detected from the internal or external environment, consciously or unconsciously.



Perception is the process by which an individual selects, organizes and interprets stimuli into a meaningful and coherent picture of the world. Thus, sensation is objective in nature and perception is subjective depending on the individual's interpretation of the sensory experience. Sensation does not require conscious awareness, whereas perception requires conscious awareness and attention.

The five stages of perception are stimulation, organization, interpretation, memory, and recall. These stages are the way for one to experience and give meaning to the surroundings. The vast topic of perception can be subdivided into visual perception, auditory perception, olfactory perception, haptic (touch) perception, and gustatory (taste) perception.

These are sensory awareness of the world, inner feelings of the body, inner seeing, and inner speech.
Perception deals with structure, or more specifically, with correlation among stimuli, among elements in stimuli, and among the representations of all these in the neural processes of the perceiver. Perception is an active process, involving selection, that is, the organism perceives rather than receives information.

People's behaviour is based on their perception of what reality is, not on reality itself. Perception is that organizing process by which we come to know of objects in their appropriate identity, as tree, man, building and so on. Social perception of others is initially based on the information that we obtain about them.

Factors affecting perception
Perception refers to the cognitive process by which individual interpret and make sense of the sensory information from their environment.

- motivation & interest
- expectation or perceptual expectancy
- emotions

- stimulus characteristics
- experience
- cultural backgrounds

Perception of Space, Depth & Three Dimension

The terms “shape” and “form” are often used interchangeably. Shape or form is defined as areas of visual field that are set off from the rest of the field by visible contour. To perceive a shape, its contours must be sharp enough to mark off region that is called shape. If the contour becomes too weak or disappears, the shape also disappears.

In our visual field (whatever we look out in the environment around us) some area is segregated to form figures and the rest is relegated to the background (that part which is not important for us) against which the figures are perceived. Figure-ground segregation is essential for the perception of shape.

It is not only the characteristics of visual perception; it is there in all sense modalities. For example, when we listen to the music, the vocal part of the music (what a singer sings) becomes figure and the instrumental part is relegated to the background. If the listener is interested in the instrumental part (“figure”) of the music then the vocal part becomes “ground”.

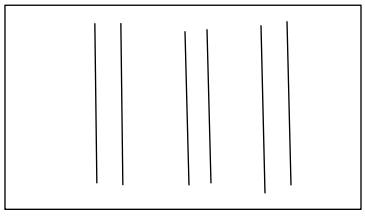
The Gestalt psychologists in Germany, principally Kohler, Koffka, and Wertheimer, proposed that the brain has the innate capacity for organizing perceptions. They identified the laws of organization which determine the way in which we perceive the objects. They maintain that electrical fields in the brain are responsible for the organization of perception. They were also interested in exploring figure-ground distinction, what makes figures stand out against a background.

Laws of Perception

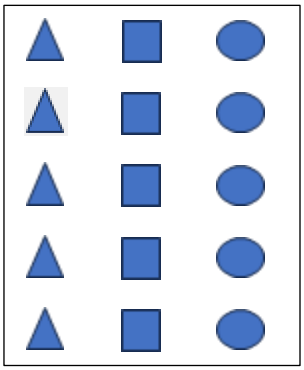
(i) Good Form (Law of Pragnanz):

This law states that perceptual organization will always be as “good” as the prevailing conditions allow. The simplest organization requiring the least cognitive effort will always emerge. Pragnanz means that we perceive the simplest organization that fits the stimulus pattern.

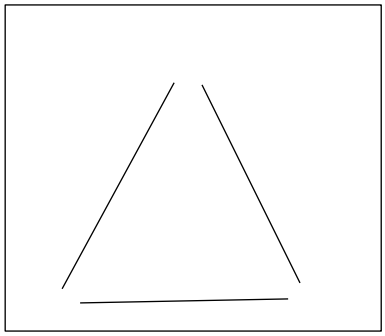
(ii) Proximity: All the stimuli that occur together in space or time will be organized together. In the Figure below we observe three groups of two vertical lines. You will find it difficult to see six individual lines.



(iii) Similarity: Other things being equal, elements which are similar in structure or have common characteristics will be grouped together. In Figure below five squares, five triangles, and five circles in columns are grouped together.



(iv) Closure: An incomplete figure will be seen as a complete one. Below, is a figure consisting of incomplete lines, that have gaps in them. It is perceived as a triangle despite the fact that its sides are incomplete. A closure like phenomenon yields subjective contours. In the figure given below the triangle does not exist still, it is perceived as a triangle in the figure.



Perception of space also refers to the perception of size and distance. The problem emerges from the fact that the image of the three-dimensional world is projected on the two-dimensional retina. We perceive distance, depth and three-dimensional objects and these can be divided into two factors that is Monocular Factors and Binocular Factors.

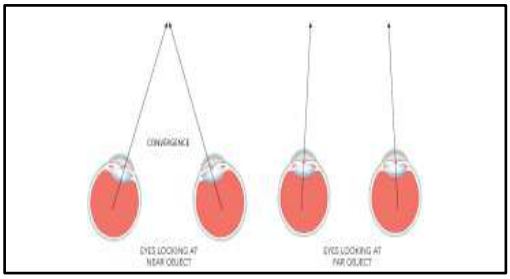
When we see objects through one eye, that is in case of Monocular vision, then distance and three-dimensional effects are perceived by following causes

1. Interposition of objects : objects that are in front covers those that are behind
2. Linear position/perspective : objects that are far away are smaller compared to those that are nearer
3. Aerial perspective : objects that are far away cannot be seen clearly while those that are closer are much clearer
4. Light & shade : the distance and depth of any surface or object can also be perceived by the light and shadow effect, for example, places or objects which are in a cavity or placed at a lower level, are under shadow while places or objects which at a height or above the ground level looks brighter as they get more light on them
5. Parallax : the apparent difference in an object's position when it is viewed from different points, for example, if we cover one eye and move our head then the objects which are near and at a distance are seen to move at different directions, this gives a sense of depth and three-dimension
6. Accommodation : while we see objects, which are far away and those that are closer, the muscles around the eye lens changes which is called accommodation and we see the distance of the object seen

In case of Binocular vision, the factors that help us to see distance, depth and three-dimension are the following:

1. Convergence : in case of Binocular vision, we see through both the eyes, the fovea (that is the small pit in the retina of the eye that helps us to focus on the object

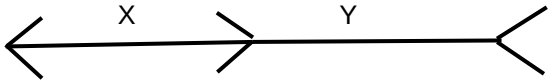
providing the highest visual acuity) the eye balls come closer to each other in case of objects or images are closer and for objects or images that are at a distance the eye balls move away from each other



2. Retinal Disparity: this refers to the difference in the images seen by each eye due to the horizontal separation of the two eyes, this helps to perceive depth and three-dimension, the disparity can be horizontal as well as vertical; the images projected on the retinas of each eye are slightly different as such the image of the same object appears to have different locations

At times we also see images which are not exactly what we see or perceive they are generally of two types namely**, Illusion** and **Hallucination**. Illusion refers to a misleading image presented to the vision, perception of something objectively existing in such a way as to cause misinterpretation of its actual nature. Here we see a thing, but it is not correct.

Example:



Is X longer that Y

Muller-Lyer Illusion

Hallucination refers to a false perception of objects or events involving our senses, sight, sound, smell, touch and taste. Hallucinations seem real, but they're not.

There are different types of hallucinations depending upon the sensory experiences, such as:

- Visual hallucinations
- Auditory hallucinations
- Olfactory hallucination
- Tactile hallucination
- Gustatory hallucination
- General somatic hallucination

In cases of hallucination a person perceives something that does not exist or perceives something that does exist but perceives it incorrectly.

Examples of hallucinations are, hearing sounds or voices that nobody else hears, seeing things that are not there like objects, shapes, people or lights, feeling touch or movement in your body that is not real like bugs are crawling on the skin or the internal organs are moving around.

Hallucinations can be treated depending upon the cause for which one is hallucinating. It can be caused by temporary conditions such as high fever, severe dehydration or infection, anxiety or mental illness. Once the underlying cause is treated hallucinations may disappear.

3.4 EMOTION

Emotions are reactions that human beings experience in response to events or situations. There are three major aspects of our mind such as cognitive, affective and conative. Cognitive refers to the thinking aspect of our mind consisting of perception, attention, memory, learning, reasoning, decision-making, problem solving processes; **Affective** means the emotional or feeling aspect of our mind involving motivation, attitudes, values, beliefs; while the third that is the **Conative** aspect means the actions or behaviours that we perform, involving efforts, volition, goal-directed initiatives and so on. The three aspects are interdependent and are related to each other. The cognitive processes influence the affective experiences, the affective states in turn influence the cognitive aspects and the conative state that is the behaviours and actions are directed by the cognitive and affective states of the mind.

Emotions mean this **Affective** state of the mind. Charles Darwin proposed the evolutionary theory of emotion, which suggests that emotions are adaptive to our environment and improve our chances of survival. Evolutionary psychology is a scientific discipline that approaches human cognition, emotions, and behaviour through a lens that incorporates the effects of evolution over time. It combines two sciences, psychology and biology. Developmental psychologists explain that in normal infant development, there are a variety of inner reflexes that help new-borns to adjust in their early stage of life when they are most vulnerable and dependent on others. Fear and disgust are two of the earliest basic emotions that emerge in babies, along with happiness, anger, surprise, and sadness. These emotions appear to be hardwired in the developing human, and an evolutionary psychologist would explain they are adaptive behaviours to assist in their survival.

If any emotional experience is analysed, we get three stages such as
(1) External expression or behaviour,
(2) internal behaviour or response and
(3) emotional experience or consciousness.
In case of any emotion the organism performs a physical behaviour such as if the individual experiences fear he runs away from the situation, when he is angry, he throws his limbs, shouts, when he is happy, he smiles or laughs. In case of any living being emotions are a collection of many physiological changes which disrupt the normal functioning of the body. Such as the increase in heart rate, increased secretion of hormones, secretion from endocrine glands, changes in the nervous system, muscular changes and so on. Though initially they disrupt normal behaviour pattern, gradually they become the motivating force behind our activities. In the third stage when the individual experience any emotion they become conscious of the feeling, and it may be either pleasant or unpleasant.
Different methods were adopted to measure the physical changes when emotions were experienced. One such measuring instrument is Psychogalvanometer. Psychogalvanometer measures the intensity of an emotion and its nature. It has been found that the psychogalvanic reactions differ with different emotions. Psychogalvanic reactions, also known as electrodermal activity (EDA) refer to changes in the electrical conductivity of the skin in response to emotional or physiological stimuli.
During Psychogalvanic reactions following things are seen:
1. Stimulation: The body receives an emotional or physiological stimulus.
2. Sympathetic nervous system (SNS) activation: The SNS responds, releasing neurotransmitters.
3. Sweat gland activation: The SNS stimulates sweat glands, increasing sweat production.
4. Electrical conductivity change: The increased sweat production alters the electrical conductivity of the skin.

Of the many factors that influence psychogalvanic reactions, Emotions like fear, excitement, stress and Physiological states excitement or arousal, relaxation are a few. Psychogalvanic reactions provide valuable

insights into human emotional and physiological responses, but require careful consideration of limitations and contextual factors, like complexity in interpretation, variation from individual to individual, context dependency and so on.

Don Hockenbury and Sandra E. Hockenbury in their book titled "Discovering Psychology," suggested that emotions are complex psychological states that involve three distinct components: a **subjective experience**, a **physiological response**, and a **behavioural or expressive response**.

Subjective Experience implies that in spite of the fact that the basic emotions are universal in nature, regardless of the culture and background but experiencing emotions can be highly subjective. They are reactions generated by cognitive state of mind which are subjective in nature.
Physiological Response refers to a physical state which accompanies the emotions. Many of these physiological responses are regulated by the sympathetic nervous system, a branch of the autonomic nervous system also known as involuntary nervous system which regulates involuntary body functions, such as heartbeat, blood flow, breathing, and digestion.
Behavioural Response is finally that component that is the actual expression or outward signs of the internal reactions, and these emotions express through the behaviours and actions of the individual.

Some of these expressions are considered universal, such as a smile to indicate happiness or a frown to indicate sadness. But as the individual grows up majority of the emotions and their expressions are subjective as they are influenced by the experiences, social norms as well as the environment of the individual.

There are different theories of emotion in psychology on the affective states of the mind and how the emotions are evoked. Here we may discuss the **Willian McDougall's Instinct-Emotion theory**. According to him we are born with some instinctive behaviours which are accompanied by a particular emotion. His theory suggests that the motor phase of an instinct excite a specific emotion. McDougall mentions of 14 instinctive behaviours with 14 accompanying emotions. Later this was revised and 17 instinctive behaviours were mentioned with 17 emotions. McDougall also mentioned that we have two types of emotions such as Primary emotions and secondary emotions. Primary emotions are associated with the instincts that we are born with. But as we grow up two or more primary emotions are combined to form secondary or mixed emotions. For example, according to McDougall gratitude or thankfulness is a combination of emotions like affection and sense of inferiority, hatred is a combination of anger, disgust and fear, shame combines sense of inferiority and superiority of self.

In 1884 the well-known American Philosopher cum Psychologist William James and in 1885 a Danish Physiologist Lange together gave another explanation to the way an emotion is evoked. This is known as the **James-Lange theory** of emotion. This theory maintains that emotional experiences are actually the result of physiological changes within the body. This theory refuted the concept that physiological reactions follow the emotions caused by the external stimulation. According to this theory physiological responses precede the emotional reactions.
The sequence given below may explain this:

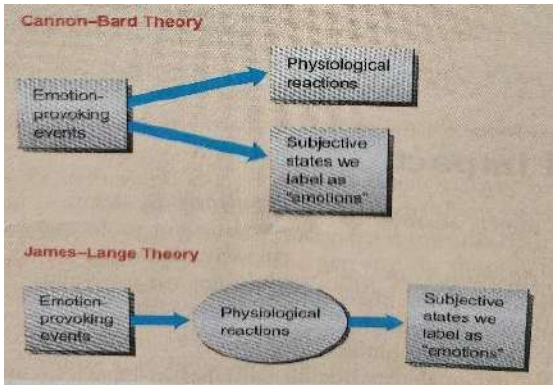
Stimulus ⟶ **Physiological reactions** ⟶ **Emotional Experience**

According to James-Lange theory, we do not flee from a situation because we are afraid, we are afraid because we flee or run away from the situation. In this explanation when the different physical reactions or changes reach the brain through the nervous system then we experience emotional experiences like anger, fear, joy, etc. This theory claims that the mental consciousness of the physiological reactions of the person is emotion.

When different stimulations give rise to different types physiological reactions, they in turn create a kind of mental feelings which are named as emotions. So, according to the James-Lange theory physiological reactions or changes within the body and feelings or emotional experiences generated by these are same.

The criticism of this theory is that several experiments with animals and with human beings has shown that in cases where the connection between the nervous system and the brain was disconnected or in cases where they got disconnected by accident the subjects were experiencing emotions. In other experiments physiological reactions were artificially created from outside but that did not create any emotional reaction in the organism.

The **Cannon-Bard theory** came as a challenge to the James-Lange theory. The Cannon-Bard theory, proposed by Walter Cannon and Philip Bard, is a physiological theory of emotion that explains the relationship between emotional experiences, physiological responses, and cognitive interpretations. The Cannon-Bard theory remains an important contribution to understanding emotions, highlighting the interplay between physiological and cognitive processes. This theory asserts that various emotion provoking events induce simultaneously the subjective experiences known as emotions and the physiological reactions that accompany them. People experience emotional and physiological responses at the same time, with each response acting independently. An example would be experiencing fear when one sees a deadly snake while your body prepares to run.



The major features of this theory are: Simultaneous processing that is emotional stimuli are processed simultaneously by the cerebral cortex, thalamus and hypothalamus (parts of the brain where sensory information are processed & they control the physiological homeostasis and behaviour); Physiological response implying that the hypothalamus triggers physiological responses like e.g., increased heart rate, sweating; Cognitive interpretation which means that the cerebral cortex gives cognitive interpretation of the emotional experience such as fear, joy, etc.; Emotion thus is constituted as a combination of the physiological response and cognitive interpretation of the brain.

According to Cannon-Bard theory emotion is a complex process involving multiple brain regions and physiological systems. It also claims that physiological responses are not sole indicators of emotion and cognitive interpretation plays a crucial role in influencing and interpretation of emotional experiences.
The major criticism of this theory is that it oversimplifies the entire process of emotions that the individual experience and experimentally this has been challenged by many.

The **Two-factor theory** of Stanley Schachter and Singer known as **Schachter-Singer theory** was built upon Cannon-Bard's ideas. Schachter-Singer theory is a cognitive theory of emotion that suggests our thoughts are actually responsible for emotions. Similar to this theory is the cognitive appraisal theory. It posits that someone must first think before experiencing an emotion. For instance, your brain judges a situation as threatening, and as a result, you experience fear. This theory states that emotion-provoking events produce increased arousal or stimulation. In response to this the individual look for the cause behind these events. Then the emotional experience or the feeling is interpreted depending upon the nature of the cause. In short, the Two-factor theory states that emotional conditions are determined by the cognitive interpretations that are attached to the feeling.

The **Cognitive appraisal theory** of Richard Lazarus put forward in 1970, in a somewhat similar way emphasized cognitive interpretation of the emotional experience. It states that felt emotions result from appraisal or evaluation of information from the environment and from the bodily conditions. As appraisal involves cognition that is processing of information from the environment, the body and the memory this theory is primarily a cognitive one. This process is influenced by past emotional experiences, dispositions, attitudes and understanding and expectations of the consequences of an emotional behaviour. Without the appraisal no emotion can be experienced by the individual.

The role of the appraisal in emotion has been investigated in many experiments. One of the best-known experiments illustrates the relation between the felt emotion and the appraisal of the environmental situation. In the experiment with students were shown an emotion producing movie depicting the circumcision (crude operation of the sex-organs of 13–14-year-old boys) rights of Australian Aborigins. Three different sound tracks were prepared to get along with this film.

1. One group heard a 'trauma' track to enhance all the gory details
2. Second group heard a 'denial' track, which made it easier for the subjects to say that the film does not bother them
3. Third group heard 'intellectualisation' sound track in which the rite was viewed from detached scientific standpoint of an anthropologist
4. Fourth group saw the movie with no sound track, in 'silent' condition

Heart rate and skin conductance was measured while the film was shown. It was found that stress reactions, high skin conductance, were highest for the trauma track, next highest in silent picture and lowest in denial and intellectualisation conditions. Skin conductance is a measure arousal indicator. In this method if a small amount electricity, so small that it cannot be felt, is passed across an area on the skin (usually the palm of the hand) the resistance to the flow decreases as a person becomes more aroused and alert, known as Galvanic Skin Response (GSR).

Another theory of **Relationships among Emotions** was offered by Robert Plutchik in 1980. This is primarily a descriptive theory where it is claimed that certain primary emotions are there through evolutionary processes which are basic in nature and they can be arranged in an orderly way to bring out relationships based on three dimensions (1) intensity, (2) similarity to one another and (3) polarity or oppositeness.

Major Emotions

1. Anger

Anger is a powerful emotion characterized by hostility, agitation, frustration, and antagonism toward others. When a threat generates feelings of anger, one may be inclined to fend off the danger and protect oneself. Anger is often displayed through:

- **Facial expressions**: such as frowning or glaring
- **Body language**: such as taking a strong stance or turning away
- **Tone of voice**: such as speaking gruffly or yelling
- **Physiological responses**: such as sweating or turning red
- **Aggressive behaviours**: such as hitting, kicking, or throwing objects

While anger is often thought of as a negative emotion, it can sometimes be a good as it can be constructive in helping clarify needs in a relationship, or can motivate the person to take action and find solutions to things that are bothering or frustrating. However, anger can become a problem when it is excessive or expressed in unhealthy, dangerous, or harmful ways. Uncontrolled anger can quickly turn to aggression, abuse, or violence.

2. Fear

Fear too is a powerful emotion that play an important role in survival. When the individual face some sort of danger and experience fear, he goes through what is known as the fight or flight response. The muscles become tense, heart rate and respiration increase, and the mind becomes more alert, priming your body to either run from the danger or stand and fight. This response helps ensure that the individual are prepared to deal with the threats in the environment effectively. Expressions of this type of emotion can include:

- **Facial expressions**: such as widening the eyes and pulling back the chin
- **Body language**: attempts to hide or flee from the threat
- **Physiological reactions**: such as rapid breathing and heartbeat

Of course, not everyone experiences fear in the same way. Some people may be more sensitive to fear, and certain situations or objects may be more likely to trigger this emotion.

Fear is the emotional response to an immediate threat. We can also develop a similar reaction to anticipated threats or even our thoughts about potential dangers, and this is what we generally think of as anxiety such as Social anxiety.

3. Happiness or Joy

Happiness is often defined as a pleasant emotional state that is characterized by feelings of joy, mirth, contentment, gratification, satisfaction, and sense of well-being.

This type of emotion is sometimes expressed through:

- **Facial expressions**: such as smiling
- **Body language**: such as a relaxed state
- **Tone of voice**: such as joyful and pleasant way of speaking

While happiness is considered one of the basic human emotions, the things we *think* will create happiness tend to be heavily influenced by culture. The realities of what actually contributes to happiness are often much more complex and more highly individualized. People have long believed that happiness and health both physical and mental are connected, and research has supported the idea that happiness can play a role in both physical and mental health.

4. Affection & Love

Affection is a feeling of liking, caring, and fondness for someone or something. It can also be a moderate feeling or emotion. Affection is often linked to love, and can denote more than just friendship or goodwill.

The emotion of love affection develops at different stages of our growth and becomes more and more specified as they grow.

This type of emotion is sometimes expressed through:

- **Facial expressions**: such as smiling, expression of care
- **Body language**: such as an expression of caring approachable, soft way of speaking,
- **Physical affection: s**uch as cuddling, holding hands, massages, kissing, and hugging, kindness
- **Tone of voice**: such as caring and pleasant way of speaking

3.5 MOTIVATION

Motivation is closely related with emotions, the demarcation line between the two is often a very thin one. Motivation is an internal process that activate, guide and maintain behaviour. Motivation is the driving force that initiates, guides and sustains behaviour of the organism towards achieving a particular goal. Usually, motives are released by an intrinsic factor which is called incentives. There are different types of motivation such as Intrinsic Motivation which is driven by personal interest, enjoyment, or satisfaction, Extrinsic Motivation

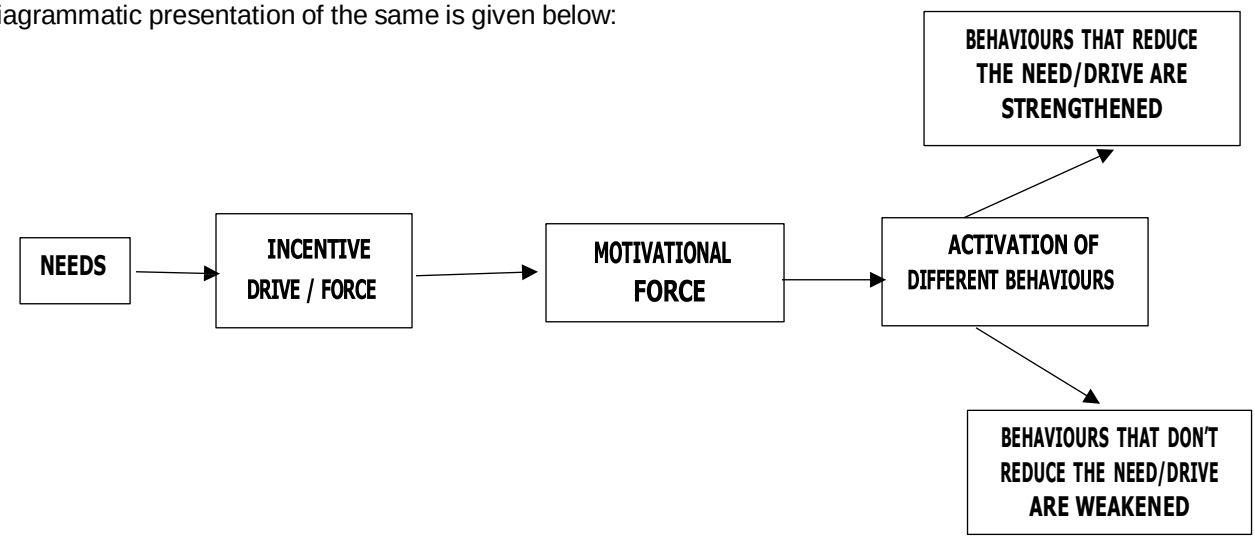
which is released by external rewards, recognition, or pressure, Positive Motivation that focuses on achieving a desirable outcome of the activity performed and Negative Motivation that focus on avoiding an undesirable outcome.

In psychology there are certain theories of motivation which explains the way motivation works in causing behaviours.

Drive Theory:

Proposes that motivation is driven by the reduction of physiological needs. According to this theory biological needs arise within our body and they create unpleasant feelings in us. These feelings are hunger, thirst, fatigue, etc. In order to eliminate these feelings and restore balance in physiological state we perform certain behaviours. These needs are the forces that work as incentives which release the necessary energy and motivates the individual to behave in a way which will satisfy the need and restore the psycho-physical balance.

A diagrammatic presentation of the same is given below:



Initially this theory laid stress on physical needs working as the incentives which release the motivation of the person to make them behave towards the reduction of the needs. Here the drives or needs work as the incentives or keys which unlock the motivational force activating the behaviours. In this case the behaviours which reduce the need or drive get strengthened and those that don't are weakened and removed.

Expectancy Theory

Expectancy Theory proposes that motivation is influenced by expectation from outside. So, it is not caused by drives or needs which are within. This theory lay stress on the outcomes we expect after performing the behaviour. Thus, motivation is created by external factors rather than by internal forces.

Herzberg's Two-Factor Theory

Herzberg's Two-Factor Theory suggests that motivation is influenced by environmental factors and motivators which relate to external factors which relates to awards, appreciation, accolades, and so on. This is similar to Intrinsic/Extrinsic Motivation. Intrinsic motivation comes from within, while extrinsic motivation is driven by external rewards.

Goal-Setting Theory

Goal-Setting Theory suggests that specific, challenging goals lead to higher motivation and performance. Often, we set goals which are challenging that is difficult to attain but the individual wants to achieve.

Maslow's Hierarchy of Needs

Maslow's Hierarchy of Needs proposes that people have different levels of needs, from basic physiological needs to self-actualization. Abraham Maslow's hierarchy of needs is one of the best-known theories of motivation. Maslow's theory states that our actions are motivated by certain physiological and psychological needs that progress from basic to complex.

He first introduced the concept of a hierarchy of needs in his 1943 in a paper, titled "A Theory of Human Motivation," and again in his subsequent book, "Motivation and Personality." This hierarchy suggests that people are motivated to fulfil basic needs before moving on to other, more advanced needs. As a humanist, Maslow believed that people have an inborn desire to be self-actualized, that is, to be all they can be. To achieve this ultimate goal, however, a number of more basic needs must be met. This includes the need for food, safety, love, and self-esteem.

Maslow believed that these needs are similar to instincts and play a major role in motivating behaviour. There are five different levels of Maslow's hierarchy of needs, starting at the lowest level known as physiological needs.

Maslow's hierarchy of needs is often displayed as a pyramid. The lowest levels of the pyramid of needs are made up of the most basic needs while the most complex needs are at the top.

Once lower-level needs have been met, people can move on to the next level of needs. As people progress up the pyramid, needs become increasingly psychological and social.

At the top of the pyramid, the need for personal esteem and feelings of accomplishment takes priority. Maslow emphasized the importance of self-actualization, which is a process of growing and developing as a person in order to achieve individual potential.

Physiological Needs

The physiological needs include those that are vital to survival. Some examples of physiological needs include:

- Food
- Water
- Breathing
- Homeostasis

In addition to the basic requirements of nutrition, air, and temperature regulation, physiological needs also include shelter and clothing. Maslow included sexual reproduction in this level of the hierarchy as well, since it is essential to the survival and propagation of the species.

Security and Safety Needs

At the second level of Maslow's hierarchy, the needs start to become a bit more complex. At this level, the needs for security and safety become primary.

People want control and order in their lives. Some of the basic security and safety needs include:

- Financial security
- Health and wellness
- Safety against accidents and injury

Finding a job, obtaining health insurance and health care, contributing money to a savings account, and moving to a safer neighbourhood are all examples of actions motivated by security and safety needs.

Together, the safety and physiological levels of Maslow's hierarchy of needs make up what is often referred to as "basic needs."

Love and Belongingness

The social needs in Maslow's hierarchy include love, acceptance, and belonging. At this level, the need for emotional relationships drives human behaviour. Some of the things that satisfy this need include:

- Friendships
- Romantic attachments
- Family relationships
- Social groups
- Community groups
- Churches and religious organizations

In order to avoid loneliness, depression, and anxiety, it is important for people to feel loved and accepted by others. Personal relationships with friends, family, and lovers play an important role, as does involvement in groups—such as religious groups, sports teams, book clubs, and other group activities.

Esteem Needs

At the fourth level in Maslow's hierarchy is the need for appreciation and respect. Once the needs at the bottom three levels have been satisfied, the esteem needs begin to play a more prominent role in motivating behaviour. At this level, it becomes increasingly important to gain the respect and appreciation of others. People have a need to accomplish things, then have their efforts recognized. In addition to the need for feelings of accomplishment and prestige, esteem needs include such things as self-esteem and personal worth.

People need to sense that they are valued by others and feel that they are making a contribution to the world. Participation in professional activities, academic accomplishments, athletic or team participation, and personal hobbies can all play a role in fulfilling the esteem needs.

People who are able to satisfy esteem needs by achieving good self-esteem and the recognition of others tend to feel confident in their abilities.[3] Conversely, those who lack self-esteem and the respect of others can develop feelings of inferiority.

Together, the esteem and social levels make up what is known as the "psychological needs" of the hierarchy.

Self-Actualization Needs

At the very peak of Maslow's hierarchy are the self-actualization needs. Self-actualizing people are self-aware, concerned with personal growth, less concerned with the opinions of others, and interested in fulfilling their potential.

"What a man can be, he must be," Maslow explained, referring to the need people have to achieve their full potential as human beings.

Maslow's said of self-actualization: "It may be loosely described as the full use and exploitation of talents, capabilities, potentialities, etc. Such people seem to be fulfilling themselves and to be doing the best that they

are capable of doing. They are people who have developed or are developing to the full stature of which they capable."

In brief the theory is often depicted as a pyramid, with each level representing a different need:

- Physiological needs: The most basic needs for survival, such as food, water, shelter, and rest
- Safety needs: The need for security, stability, and freedom from fear
- Social and belonging needs: The need for friendship, intimacy, and acceptance
- Esteem needs: The need for respect, recognition, and status
- Self-actualization needs: The need to achieve one's full potential and creativity

Maslow's theory is based on the idea that people must satisfy lower-level needs before they can move on to higher-level needs. For example, a person must feel safe before they can pursue higher-level needs, such as love and belonging. Maslow's theory was published in 1943 and is still considered one of the most influential ideas in personality science and motivation psychology

Social Learning Theory

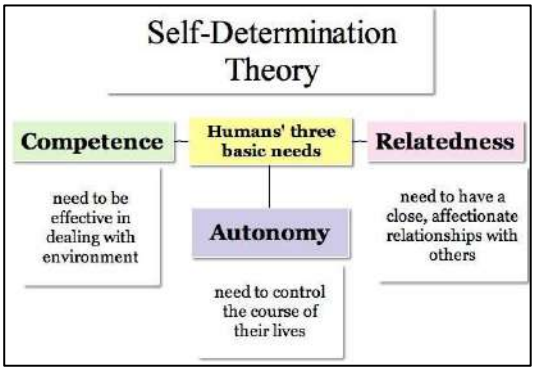
Social Learning Theory suggests that motivation is influenced by observation, imitation, and reinforcement. Social learning theorists believe that people pattern their behaviour after role models and specially the family members being most influential persons. Therefore, individuals tend to participate in activities and join groups that reinforce familiar behaviour. They are called social as they are learned in social groups specially in in the family as children grow up and get to interact with people.

Social motivation can be described as a set of psychological dispositions and biological mechanisms biasing the individual to preferentially orient toward the social world i.e., social orienting, to seek and take pleasure in social interactions, i.e., social reward, and to work to foster and maintain social bonds.

Social motivation involves social orienting, expressed preference for the social world social reward that is finding social experience and social interaction rewarding. It, further asserts the efforts of maintaining and developing and maintaining social bonds. The social motivation hypothesis posits that disinterest in social experiences early in life impairs the development of the social aspects of life that is the socialisation process.

Social motives are general and persisting characteristics of a person and as they are learned their strength varies from person to person. Three most social motives are need for **achievement** implying to perform better, to improve and take up challenging tasks, need for **affiliation** that is acceptance and need for **power** which implies having impact reputation and influence on others.

Researches carried out is 2011 by Barr & Shields revealed that **social interactions** are powerful motivators for activity. Interactions with peers gave a purpose for physical activity and an opportunity for peer support and peer modelling



Self-Determination Theory

Deci and Richard M. Ryan's Theory of Motivation of 1985, proposed the Self-Determination Theory (SDT) wherein it is stated that motivation is driven by three basic psychological needs **autonomy, competence, and relatedness**. SDT suggests that satisfying these needs leads to optimal motivation and psychological health**.** Human beings have

complex personalities they are rarely driven by only one type of motivation. Different goals, desires, and ideas inform them about what is wanted and required.

Autonomy: This is a need to feel that one has a choice and are willingly endorsing the behaviour, sense of independence and freedom in decoding one's own behaviour.

Competence: This state of mind to feel that one has the required skills to do a work and can effectively perform the activities.

Relatedness: This is a need to feel connected with others, a sense of belongingness. Each individual need other people to some degree.

Cognitive Evaluation Theory (CET)

According to CET intrinsic motivation can be both *facilitating or undermining*, depending on the social and environmental factors in play. Referring to the Needs Theory, this theory argues that interpersonal events, rewards, communication and feedback that gear towards feelings of competence when performing an activity enhance intrinsic motivation for that particular activity.

Thus, according to the CET theory motivation needs to be intrinsic and influence the individual. It also implies that intrinsic motivation will be enhanced or undermined depending on whether the needs for autonomy and competence are supported or thwarted respectively.

3.6 MEMORY

Human memory involves the ability to both preserve and recover information and experience gathered over the time. In psychology, memory is the process of acquiring, storing, and retrieving information. It's a key part of human cognition that allows us to understand the present, recall the past, and make sense of the future. So, it is a part of the cognitive aspect of our life.

Psychologists have found that memory includes three important categories: sensory short-term, and long-term. It is an informational processing system with explicit and implicit functioning that is made up of a sensory processor, short-term (or working) memory, and long-term memory.

Thus, memory is the result of and an influence on **perception, attention, and learning**. Memory involves three major processes: encoding, storage, and retrieval. Human memory involves the ability to both preserve and recover information and this process of recovering information stored is called remembering.

The three main processes of memory are:

- **Encoding:** Here information is learned and interpreted. This involves a **memory trace** where some physical change in the brain, in a neuron or in the activity between neurons, occurs when a memory is formed
- **Storage:** Here information is maintained
- **Retrieval**: Here information is accessed and recalled

Encoding is defined as the initial learning of information; storage refers to maintaining information over time; retrieval is the ability to access information when you need it. If you meet someone for the first time at a party, you need to encode her name, while you associate her name with her face. Then you need to maintain the

information over time. If you see her a week later, you need to recognize her face and have it served as a cue to retrieve her name. Any successful act of remembering requires that all three stages be intact.

This model suggests that we possess three distinct systems for storing information. One of these, known as **Sensory Memory.** The moment the individual receives a sensory input from the environment and it goes into our sensory memory. Sensory Memory provides temporary storage of information brought to us by our senses.

The second type of memory is known as Short Term Memory (STM). But this part of the memory is short-lived. Short term memory holds relatively small amounts of information for brief periods of time usually 0 to 20 seconds.

The third memory system known as Long-Term Memory allows to retain vast amounts of information for very long periods of time.it is this memory system that allows us to remember events that happened a few hours, days, months or even years in the past. Ref. Fig.1

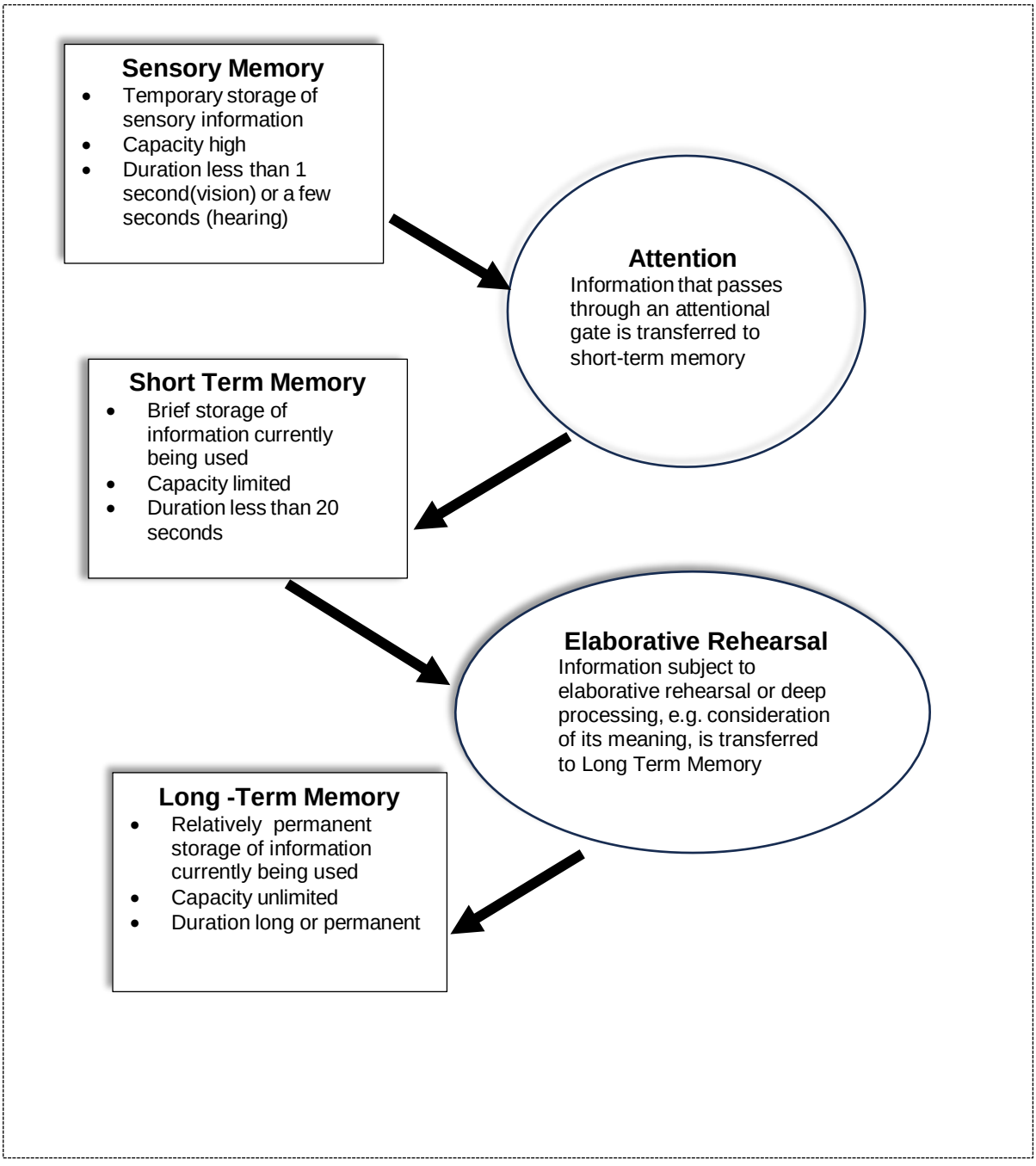


Fig. 1

Much of the sensory inputs received many of those are unattended but a part of sensory inputs which draws the attention of the individual or felt to be relevant goes to the Short-Term Memory (STM) stage. This Short-Term Memory is rehearsed for retaining them, but those part which are not rehearsed fall out of the STM and they are lost. Only a part of the sensory stimulation is encoded and goes into the Long-Term Memory and stored for future retrieval. In 1968 a model was given by Atkinson & Shiffrin known as Atkinson-Shiffrin Multi Store Model Fig. 2.

Fig.2

The Atkinson Shiffrin Model

Retention of the sensory input is very short and they do not remain there for more than 20 seconds. However, this varies from experiment to experiment. This is also explained under the title Information Processing Model. Fig.3.

Fig. 3

Psychologists have thus identified three categories of memory: **sensory, short-term, and long-term**.
The Long-term memory can be further divided into three types:

- **Semantic Memory:** Stores facts, meanings, concepts and information riles for using them in our thinking and communication.as well as about the environment. This is considered to be very stable. Information stored here in semantic memory in logical hierarchies from general to specific.

- **Episodic Memory**: It consists of long-term memory of specific things that happened at a particular time and place. This stores episodes that happened long or short in the life of the individual that is, personal events.
- **Procedural Memory:** In psychology, procedural memory is a type of memory that stores and retrieves procedures for motor, cognitive, or visuospatial skills. It's a type of implicit memory, which means it's usually below the level of conscious awareness. Stores memories of how to perform certain actions.

In the memory structure two processes are important the way sensory inputs are retained. These are attention and rehearsal. Much of the sensory inputs which are received in the sensory memory ate lost as they are not attended only those which are rehearsed called maintenance rehearsal reach the short-term memory stage. A significant part of those which reach that stage too is retained for only a few seconds and get lost in no time. Then those which are received as input and transformed into a code is called encoding. Encoding means converting information into a memorable form. Storage involves putting the encoded information into memory. Retrieval involves accessing stored information when needed. Some of the information from the long-term memory too are lost. Fig.4.

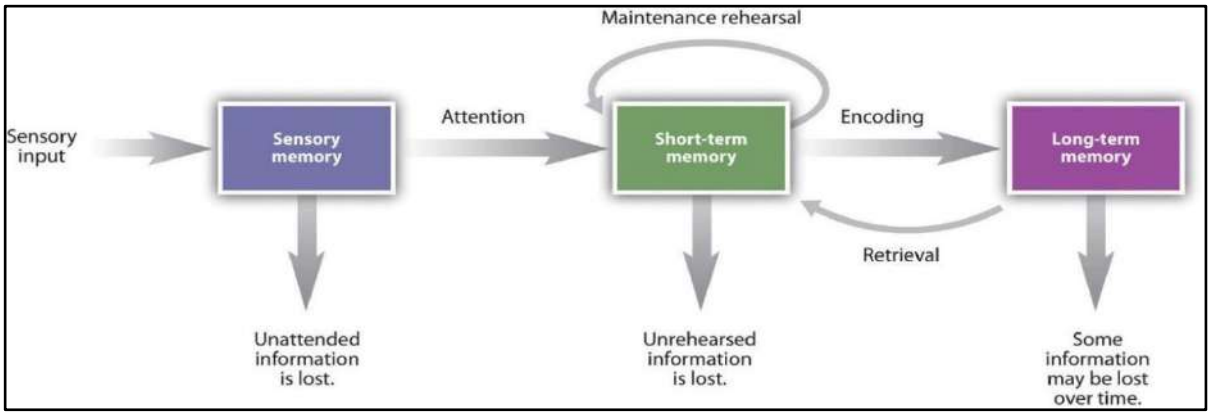


Fig. 4

Several experiments are carried out on memory. Hermann Ebbinghaus was a German psychologist who pioneered the experimental study of memory. Piaget's experiments on memory too demonstrated to him that "memory seems to be a special case of intelligent activity, applied to the reconstruction of the past rather than to knowledge of the present or anticipation of the future".

The issue of Memory does not end here. Memory has no use if the same cannot retrieved as and when needed this is called **Remembering**. When we remember we basically try to retrieve the **image** that is retained in our memory store. Remembering can again be of two kinds namely **Recall** and **Recognition**. When we retrieve the image or the matter or event without any cue or something before us to help us to remember it is called Recall. Recognition is that when the image or matter or event is before us and we just see it and recognise it. Only when this retrieval process happens and the stored memories are recovered for our use then the process of memory is completed.

Factors that influence Memory are:

1. Attention
2. Repetition
3. Emotion
4. Sleep
5. Motivation
6. Stress
7. Organization
8. Age

To improve memory that is retention in the long-term memory we can follow certain methods such as

- Paying **attention** to what we want to remember
- **Creating a mental image** of what we want to remember
- **Practicing** retrieval by testing our-self on what we want to remember
- Using **Mnemonic devices**, that is artificially associating
- **Chunking**, when we form groups on the stored information
- **Repetition or rehearsal** of the stored information

Forgetting

Forgetting is an integral part of the memory. Forgetting typically involves a failure in memory retrieval. While the information is somewhere in your long-term memory, we are not able to actually retrieve and remember it. We remember only those which are not forgotten.

The reasons for forgetting are:

Decay Theory

We forget due to lack of use or decay over time this is **Decay Theory**. According to this theory if the **memory trace** is not used, they may decay, fading away or become unavailable. Information that is **not brought to attention in sensory memory** or not continuously **rehearsed in Short-Term Memory (STM)** will fade away from **Long Term Memory (LTM)**. So, **decay theory** is also called **disuse**.

Interference Theory

It suggests that new information that enters the long-term memory (LTM) interferes with the recall of earlier memories. We forget when there is Interference that is due to conflicting information known as **Interference Theory**. For example, when learning something new, you might forget old memories or facts that are similar to the new information.

There are two kinds of Interferences –

1. **Proactive Interference** – (forward moving) means past learning interferes with the recall of later learning.
2. **Retroactive Interference** – (backward moving) this refers to difficulty in recalling what we have learnt earlier because of learning a new material. Later learning interferes with the recall of past learning.

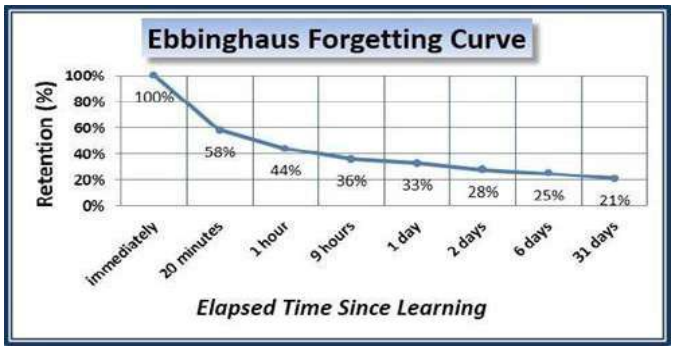
Repression Theory

The third theory known as **Repression Theory** maintains that forgetting is due to unconscious suppression. **State-dependent retrieval** theory suggests that we might forget when a person's physical or psychological state is not similar to the state during encoding and retrieving of the information.

Injury of the brain or mental illness may also cause forgetting.

Purposeful Forgetting

According to Freudian Psychology there is another type of forgetting called **Purposeful Forgetting**. In this situation we forget because certain things we do not want to remember and relegate it in our unconscious part of the mind. This **Intentional forgetting** happen when an unpleasant or a trauma or a loss that is painful is suppressed and forgotten. This is also known as **Motivated Forgetting.**



Hermann Ebbinghaus (1913), is the first researcher who studied forgetting by using "**nonsense syllables,**" He found that spacing out one's study sessions that is distributed practice, will produce far better retrieval of information studied in this way than does massed practice, or study all at once.

3.7 INTELLIGENCE

Intelligence is an **inherited ability** that helps us to perform certain activities. As defined in psychology it is an ability to learn from and adapt to novel situations and to use that knowledge to create a desired outcome. Intelligence is a combination of several skills, such as problem solving, understanding abstract concepts, and critical thinking. Although contemporary definitions of intelligence vary considerably, experts generally agree that intelligence involves several mental abilities.

Specifically, current definitions tend to suggest that intelligence is the ability to:

- **Learn from experience,** which means intelligence helps in acquiring, retaining, applying and using of knowledge.
- **Recognize problems** this implies using knowledge to identify the problems it might address.
- **Solve problems,** implying that after identifying the problem, using the knowledge and experience learned to come up with solutions to problems.

Characteristics of Intelligence

Intelligence is an ability that:

1. **Universal in nature:**

That Intelligence is universal in nature implies that it has evolved in human beings from the very beginning of human civilization to cope with the environment that always challenges the very existence of the organism. Initially human life was dependent on instincts for their survival but gradually with the increase in the complexity of the environment instincts were found to be inadequate for the survival and better skills were required. Intelligence gradually develops developed with the mental development of the individual. It is Universal because it is holistic and helps in almost all the behaviours and mental functions that the human being performs.

2. **Adjust with New & Changed Environment:**

As intelligence emerged with the need to adjust with the changed and novel situations it is required for all humans to cope with the reality which is everchanging. Sir Cyril Bust opined that intelligence is the ability which combines physical and mental skills to form new ways to adjust with new and changed environment. Henry Goddard (1866–1957) an American psychologist mentioned that intelligence not only helps in resolving present

problems but also apply it in future situations. Goddard believed that intelligence disabilities were inherited and could be eliminated through eugenics, or the belief in sterilization as a means to improve the human race, or institutionalization of those with the trait. He proposed that intelligence could be measured and graded according to an 'intelligence quotient', or IQ.

3. Performs Higher Mental Functions:

3.1. Abstract thinking

Intelligence helps in thinking of an object without the presence of the object in the environment. We use images of the objects or ideas to think about them. This is a highly complex process whereby human beings reach to the solutions of critical problems and researches.

3.2. Relational thinking

Intelligence is the ability to perform relational thinking amongst two or more objects, persons or ideas. According to Spearmen well-known British psychologist, intelligence involves three processes for performing relational thinking which contributes in building of knowledge. These are called 'Neogenetic Laws'.

They are:

(a) **Acquisition of experience –** in this stage as we grow-up we acquire experiences from the environment. These are acquired through our senses and they help to form concepts and ideas which together form the basis of our knowledge.

(b) Education of Relation – at this stage mind forms relations between different concepts and experiences acquired and this gives to formation of new knowledge.

(c) Education of Correlates – at the third stage from the relations formed newer relations are formed and these lead to the formation knowledge which are built upon the concepts and relations formed earlier.

According to Spearmen these three laws are the basis of all knowledge, simple as well as complex.

3.3. Abstraction and Generalisation

It is intelligence that helps us to identify common qualities of different objects which is called abstraction and then apply the common idea formed to other objects or situations which is called the process of generalisation.

3.4. Reasoning both Deductive and Inductive

One of the most important functions of intelligence is to perform the ability to reason. This process again takes place in two directions namely, deduction and induction. When we reach to a conclusion by observing different conditions it is called induction. Here we reach to one idea or conclusion from several observations. Deduction is the opposite that is where we reach to different concepts from one general concept or idea. Here the general idea is applied on a number of other conditions. This can be referred to the logical process known as inductive logic and deductive logic.

4. Better Mental Organisation

Intelligence helps in higher mental organisations. We possess several skills and are able to perform many mental functions. These require a better organisation for their proper use and performance.

5. Adds speed to mental functions

Intelligence also adds speed to our mental functions. This has been proved if we compare the speed with which mental functions are performed by those who are mentally challenged and those who possess average or above average intelligence.

6. Application of Knowledge

It has been found that intelligence helps us to apply previous knowledge and experiences in subsequent situations effectively. This improves individuals' mental functions and knowledge.

Theories of Intelligence

Different psychologists at different time offered different theories of Intelligence. This is related to the concept and nature of mental abilities and intelligence. Human abilities are those components which encompass various skills, activities, and capacities that enable individuals o perform different tasks, solve problems and adjust with the environment. There can be physical abilities as well as mental abilities. Though there are not much controversy about the nature of physical abilities, there are different opinions and explanations about the nature of mental abilities. Different psychologists offered different theories regarding the type and nature of mental abilities. There are three major theories that we can discuss. First is Spearman's Two-Factor Theory**.** Thurstone's Primary Mental Ability Theory and Sampling Theory proposed by Thomson.

Presently, intelligence is a diffused concept and there are multitudes of theories that attempt to explain it in different ways. Some propose a concept of 'general intelligence', some involve different other factors to explain intelligence.

Spearman's Two-Factor theory

Charles E. Spearman (1863-1945) a British psychologist, offered a theory of Mental Abilities where he mentioned that mental abilities are comprised of Two Factors. One factor he mentioned is a '**general factor'** called **"g"** and another factor known as **"s"** which is a specific factor, present in specific activities for a particular activity. So, if we are capable of 100 activities it is expected that we have 100 specific factors one for each activity.

Spearman's two-factor theory thus proposes that intelligence has two components that is general intelligence or **"g"** and specific ability or **"s".** Whenever an activity is performed the individual uses some amount of **'g'** depending on the activity and the specific ability for that particular activity. The general factor or intelligence, '**g'**, is present in varying degrees in different human activities. The general factor is universal and global in nature, being used for all the activities that we perform.

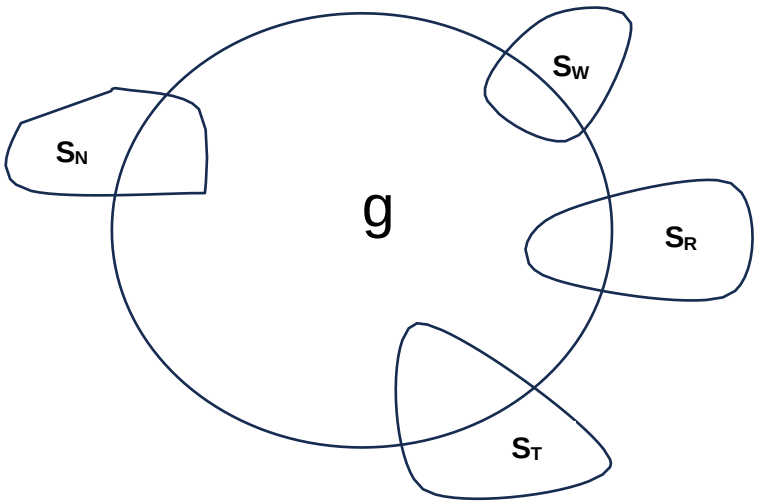


Table 1: g – is the general factor; S – are specific factors;

Sw is the **specific factor for writing** and the extended part is the amount of **g factor** required for writing; similarly, S_R is **specific factor for reading** and the extended part in the **g- area** is the amount of general factor required for reading; while it is seen that in case of S_T is for activity of thinking and beside the **specific factor for thinking** it requires more **g** than other activities like writing or reading. So, the amount of **g** varies from activity to activity. So, there are innumerable specific factors, S_N while **g** is the single factor used in different quantities in different activities.

Though quite popular, there are criticisms of Spearman's theory. It has been stated that beside 'g' and 's' there are some abilities which are not as general as 'g' or as specific 's' as unique as specific factor. They are present if a group of activities they are called group -factor. For example. The skill of language is not used in all activities but a group of activities like writing, reading, thinking, speaking, etc. Hence Spearman later added another factor to his theory that is **group-factor**.

Thurstone's Primary Mental Ability Theory

Psychologist Louis Leon Thurstone's theory Of Primary Mental Abilities states that there is no single general ability which is universal or global in nature required in all the activities that we perform. Rather intelligence is a combination of several specific mental abilities. Thurstone's theory was developed in the 1930s and had a significant impact on how psychologists understand intelligence. He spoke If 7 such Primary Abilities that are used in different combinations in different activities.

The 7 Primary Abilities are:
Verbal comprehension – V
Word fluency – W
Numerical ability – N
Spatial ability – S
Memory – M
Perceptual speed – P
Reasoning - R

For example, while writing we require V, W, M and P; in performing numerical work we require N, M and, R, but if we work with geometrical problems, we may require N, V, P, M, R. This concept of primary abilities being used in different activities in different groups is similar to the group factor which Spearmen later added to his theory.

Sampling Theory of Thomson

The sampling theory of intelligence is a psychological theory that suggests that tests sample a range of elementary abilities. The theory was originally proposed by Thomson in 1916 and 1951. This theory states that we do not have a single general ability or a group of abilities, rather there are innumerable abilities which cannot be name or we do not know how many such elementary abilities. While performing an activity we use a Sample of these elementary abilities.

Of these three theories the concept of Intelligence as a single ability, is found only in Spearman's Theory as none of the other two theories mentions of a single ability which can be named as Intelligence.

A simile to these interpretations can be drawn from political theories of governance. Spearman's theory represents a **Monarchical Structure** as the General Factor works as the single Universal ability as a Monarch of the mind. The Primary Mental Ability Theory represents an **Oligarchical Structure** where a group of people administers the country. In this theory the 7 Primary Abilities works together to support the mental activities that we perform. The Sampling Theory resembles the **Democratic Structure** where several people decide the government, so in this theory several factors are used in the activity that is performed.

Beside the above there are a few more interpretations of the concept of mental abilities or intelligence.

Thorndike's Multifactor Theory

Thorndike believed that there was nothing like General Ability. Each mental activity requires an aggregate of different set of abilities. He distinguished the following four attributes of intelligence:

(a) Level—refers to the level of difficulty of a task that can be solved.

(b) Range—refers to a number of tasks at any given degree of difficulty.

(c) Area—means the total number of situations at each level to which the individual is able to respond.

(d) Speed—is the rapidity with which we can respond to the items.

Vernon's Hierarchical Theory

Vernon' description of different levels of intelligence may fill the gaps between two extreme theories, the two-factor theory of Spearman, which did not allow for the existence of group factors, and the multiple-factor theory of Thurstone, which did not allow a ''g'' factor. Intelligence can be described as comprising abilities at varying levels of generality. Vernon's theory emphasizes the importance of the general cognitive factor, or "g factor", in all mental abilities. He also placed two broad group factors at the next level, corresponding to verbal-educational and practical-mechanical aptitudes.

He offered a model that describes the structure of human intelligence by organizing it into levels with increasing generality or complexity:

- **Higher level -** General Intelligence: Broad group factors, or G, which represent general intelligence, or the general cognitive ability that underlies all of the individual's mental abilities factor with the largest source of variance between individuals.
- **Intermediate level**: General abilities, which are broader cognitive abilities that encompass multiple areas of mental functioning such as verbal-numerical-educational (v:ed) and practical-mechanical-spatial-physical (k:m) ability.
- **Lower Order level:** minor group factors are divided from major broad group factors such as fluency, language abilities, mathematical abilities, scientific and technical abilities, and spatial abilities.
- **Lower level:** Narrow Specific abilities, such as concrete and specialized cognitive abilities, ''s''(specific) factor as stated by Spearmen

:

Beginning in 1969, Vernon became increasingly involved in studying the contributions of environmental and genetic factors to intellectual development. Vernon continued to analyze the effects of genes and the environment on both individual and group difference in intelligence. He concludes that individual difference in intelligence are approximately 60 percent attributable to genetic factors, and that there is some evidence implicating genes in racial group differences in average levels of mental ability.

Gardener's Theory of Multiple Intelligence

Howard Gardner in his book ''Frames of Mind, The Theory of Multiple Intelligence'' (1983), puts forth a new and different view of human intellectual competencies. He argues boldly and cogently that we are all born with potential to develop a multiplicity of Intelligence.

Howard Gardner's theory of multiple intelligences suggests that people have a variety of intelligences, including:

- **Bodily-kinaesthetic intelligence:** People with this intelligence are good at physical control, body movements, and actions. They may also have excellent hand-eye coordination and dexterity.
- **Interpersonal intelligence:** People with this intelligence are good at understanding and dealing with others. They are often skilled at managing relationships and resolving conflicts.

- **Intrapersonal intelligence:** People with this intelligence are good at understanding their own emotions, motivations, strengths, and weaknesses.
- **Naturalistic intelligence:** People with this intelligence are interested in the natural world, including plants, animals, and the natural patterns around them.
- **Visual-spatial intelligence:** People with this intelligence are good at visualizing the world, modifying their surroundings based on their perceptions, and recreating their visual experiences.
- **Social intelligence:** This intelligence is a combination of interpersonal intelligence and intrapersonal development.
- **Spatial intelligence:** This intelligence refers to the ability to understand and process three-dimension, visualise and perceive reality.

Gardner's theory suggests that each intelligence is made up of several separate sub-capacities. An intelligence allows a person to solve problems or create products that are valued in their culture.

Sternberg's Triarchic Theory

Psychometrician Robert Sternberg (1985) has constructed a three-pronged, or triarchic theory of intelligence. Sternberg developed this triarchic hypothesis of intelligence, sometimes known as the three forms of intelligence. This theory shifts away from a psychometric approach to intelligence towards a more cognitive approach, categorising it as cognitive-contextual theories. The triarchic theory of intelligence originated as an alternative to the concept of general intelligence factor.
The three types are:
Analytical Intelligence—is what we generally think of as academic ability. It enables us to solve problems and to acquire new knowledge. Problem—solving skill include encoding information, combining and comparing pieces of information and generating a solution.
Creative Intelligence—is defined by the abilities to cope with novel situations and to profit from experience. The ability to quickly relate novel situations to familiar situations (that is, to perceive similarities and differences) fosters adaptation. Moreover, as a result of experience, we also become able to solve problems more rapidly.
Practical Intelligence—or ''street smarts'', enable people to adapt to the demands of their environment. For example, keeping a job by adapting one's behaviour to the employer's requirements is adaptive.

Sternberg's intelligence theory has been the subject of several criticisms and challenges throughout the years. Educational psychologist Linda Gottfredson, for example, claims that the theory lacks a solid empirical foundation and that the data presented to support it is sparse.

Eysenck's Structural Theory

Hans Eysenck's structural theory of intelligence is based on the idea that intelligence is a biological phenomenon with social consequences. Eysenck's theory includes the following ideas:
- **Intelligence is biological:** Eysenck believed that intelligence is a biological fact that is integral to the physical brain.
- **Intelligence is heritable:** Eysenck believed that intelligence is heritable and correlates with brain structure and function.
- **Intelligence has functional value:** Eysenck believed that intelligence has functional value outside of schools.
- **Intelligence can be measured:** Eysenck believed that intelligence can be measured through reaction times on cognitive tasks and electroencephalograms (EEGs).

Eysenck identified three neurological correlates of intelligence. They are i.e. reaction time, inspection time and average evoked potential. First two are observed behaviour. Third behaviour, is description of mental waves. Brighter individual progressively takes less time in responding. They show less variability in reaction time. Their inspection time is also less as compared to less intelligent.

Eysenck also identified three correlates of intelligence:

- **Reaction time**: Brighter individuals respond more quickly and have less variability in their reaction time. These are observable behaviours
- **Inspection time**: Brighter individuals have less inspection time than less intelligent individuals. This too can observed externally.
- **Average evoked potential**: The average evoked potential of intelligent individuals is more complex. This is measured through mental waves. He found that the waves of intelligent individuals are complex. Brighter individual progressively takes less time in responding. They show less variability in reaction time. Their inspection time is also less as compared to less intelligent. Average evoked potential is measured by the wavelength in electro-encephalogram.

Such theories are constantly being proposed and are being evolved by psychologists.

➢ UNIT - 4 DEVELOPMENTAL PSYCHOLOGY

STRUCTURE:

4.0 OBJECTIVES

4.1 To understand the concept development of child psychology, human development and growth

4.2 To understand different stages of development namely, physical, psychological or emotional, social, and moral development at different stages like childhood and adolescent

4.3 To get an insight into the adolescent issues, their development and problems

4.4 To understand and get an oversight into the Theories of Personality

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4. 1 Child Psychology & Adolescent Psychology

4.1.2 Physical Development in children & adolescent

4.1.3 Emotional & Psychological Development in children & adolescent

4.1.4 Social Development and Moral Development in children & adolescent

4.1.5 Sexual maturity in boys and girls. Social maturity. Adolescent problems

4.1.6 Personality- Definitions, Development, Structure, Measurement.

CHILD PSYCHOLOGY

Child Psychology - Concept & Stages of Development

Child Psychology occupies a broad area in Human Psychology, covering how human beings change and grow as they develop from birth through to adolescence to adulthood. It is a study of how children develop, both consciously and subconsciously, from prenatal stage through adolescence. The basic areas from which child psychology needs to be studied are development, milestones, behaviour, emotions, socialisation.
The stages are:

- Infancy (neonate and up to one year age)
- Toddler (one to five years of age)
- Childhood (three to eleven years old) - early childhood is from three to eight years old, and middle childhood is from nine to eleven years old.
- Adolescence or teenage (from 12 to 18/19 years old)

However, the years are not water-tight rather they may vary from person to person. For instance, children with above average intelligence may reach earlier than those who possess lesser intelligence. Even the parenting and environmental factors affect the onset and the duration of these stages.

It's a branch of psychology that focuses on children's development in all spheres namely physical including motor and sensory, mental including cognitive and emotional and social along with the milestones and behaviours associated with each stage.

- Physical development
- Cognitive development, such as thinking, learning, memory

- Emotional development and
- Social development

Knowledge of child psychology is important, particularly for those who work with children and adults trying to change their behaviour and carry out counselling with them. Childhood is a very influential time in a person's life and has its impact at every stage of our development and life till death. Events that happen when we're young can have a direct effect on how we feel and behave as adults. In short, the nature and quality of one's childhood leaves its footprint at all stages of our life.

PHYSICAL DEVELOPMENT

Human development is a branch of psychology with the goal of understanding people, how they develop, grow, and change throughout their lives. This discipline can help individuals better understand themselves and their relationships with others.

Physical development is one aspect of human development. While the physical structures of the body change and grow, they often develop in conjunction with emotional and cognitive changes. This process continues through the three general stages of the human experience that is childhood, adolescence, and adulthood.

Physical development occurs at different times for all children depending on many factors, such as a child's unique characteristics, the family's values and culture, and access to available resources. However, many infants and toddlers experience developmental milestones within similar timeframes of growth. In order to support the best possible physical development, all infants require responsive care from loving adults, proper nutrition, and appropriate and stimulating environments. In the stages of infancy and early childhood when they are toddlers, physical development occurs rapidly over the first years of a child's life. Here comes the importance of parenting and child rearing skills.

Infants are born to explore to the world around them. While each child will grow to master many of the stages in physical development on their own schedule, infants are often eager to progress from those innate abilities to further movement in their mouth, eyes, and bodies as they seek people and objects of comfort or interest. They continue practicing skills and building one form of physical movement upon another, step by step as they move closer to desired objects.

Infants develop physically from the top to down, starting with their heads and necks. At birth, an infant has a very difficult time holding up their head because his or her neck muscles are not strong enough to provide support. As infants and toddlers grow, their determination to master movement, balance, and fine-and gross-motor skills remains strong. Rolling and crawling occur as infants develop skills in using large-muscle groups. Grasping and picking up objects with fingers are part of small-muscle growth.

There is no exact age at which all infants should be able to grasp objects or hold up their head without support. However, many infants and toddlers experience developmental milestones within similar timeframes of growth. Two factors are important in determining the stages for each behaviour that they acquire at different age, they are **Readiness and Sense of Satisfaction** for each successful behaviour. **Readiness** is the quality of being able to perform a particular behaviour. Readiness in development refers to the age-related ability of an individual to function effectively in certain situations at a particular stage of development. In other words, it is the preparedness that an organism has to perform a particular skill. For every skill that we acquire during the developmental process there is a particular stage or age when we are ready to learn that behaviour.

Sense of Satisfaction refers to the feeling of joy after completing a behaviour satisfactorily. This sense reinforces the behaviour that is performed by the child and motivates the child to move forward.

Physical development, including gross- and fine-motor skills, are dependent on the interest of infants and toddlers as they practice learned skills and look to develop new ones. Healthy physical development is dependent on adequate nutrition, brain development, functioning of the central nervous system, muscles, bones, and the interactions and experiences offered to infants and toddlers.

A child's physical development from birth to 7 years can be broken down into three stages:

- **Birth to 1 year**: Babies develop strength and balance, and learn to move around.
- **1 to 3 years**: Children learn basic motor skills like throwing, climbing, and tumbling.
- **3 to 7 years**: Children develop a high level of competence in their fundamental motor skills.

Here are some physical development milestones for children:

Newborn to 2 months: At this stage the infant's life is predominantly dominated by Reflexes.

Such as:

- **Sucking reflex** is a survival instinct in babies that allows them to feed and soothe themselves.
- **Hand-to-mouth reflex**, also known as the **Babkin reflex**, is a primitive reflex in newborns that connects the hands and mouth. Breastfeeding is made easier by this reflex because it stimulates the breast to increase milk flow. The Babkin Reflex starts around 9 weeks before birth, stays active for the first 3 months after birth, and typically integrates around 4 months.
- **Grasping reflex** is an involuntary response in newborns that causes them to close their fingers or curl their toes when their palms or soles are stroked. This is a spinal reflex that is regulated by higher brain centres. It helps newborns develop muscle tone and movement.
- **Rooting reflex,** a technique that involves applying firm pressure to the top lip between the nose and lip to help with breathing. It is a part of Neurophysiological Facilitation of Respiration (NPF), a set of techniques that can help respiration.
- **Moro reflex** is an involuntary protective motor response against abrupt disruption of body balance or extremely sudden stimulation. It is an involuntary response to a sudden loss of support or loud noise. It involves the infant extending their arms and legs, crying. The Moro reflex usually disappears by 3–6 months of age. However, it may persist in infants with chronic motor disabilities.
- **Babinski reflex** is a normal reflex in infants and children up to two years old. It occurs when the bottom of the foot is stroked from the heel to the toes, causing the big toe to move upward and the other toes to fan out.
- The infant is able to **differentiate** sounds, **orients** and **associates** to human voice with a face and sweet and sour taste
- **Visual tracking** is the ability to move the eyes efficiently from left to right or focus on an object as it moves across a person's visual field. This skill is required for reading, writing, drawing, playing and activities requiring visual attention. At this stage the infant can fix focal distance of 8 inches.
- The infant starts to make **crawling movements** and can **move head laterally** when placed in prone position

6–8 months: the Infant can sit alone, reaches for toys while sitting, can hold an object.

11–12 months: Learns to walk if one hand is held.

15–18 months: Can climb stairs with help

2 years: The toddler loves such energetic activities like running, jumping, and hopping. Swimming, climbing, imitating animal behaviours, crossing or jumping over obstacles, etc. Can walk and run fairly well, learns to kick a ball forward.

3 years: Some of the physical development milestones for a 3-year-old child are

- **Gross motor skills** like they can run, jump, kick, and throw a ball, and can catch a bounced ball most of the time. They can also pedal a tricycle, and may be able to steer it well by age 4.
- **Fine motor skills** like holding the spoon to feed themselves, dressing and undressing themselves except for buttons and laces. They can also draw straight lines and copy a circle, and can stack 10 blocks.
- **Balance** like they can stand on their tiptoes, and can walk along a plank.
- **Other skills** that they can acquire are washing and drying their hands, concentrating on tasks for about eight or nine minutes. At this age, the child is extremely active, mobile and learning in very physical ways. Children at this age are walking, running, kicking and throwing. They are exploring their world and picking up new skills, like kicking a ball or riding a tricycle.

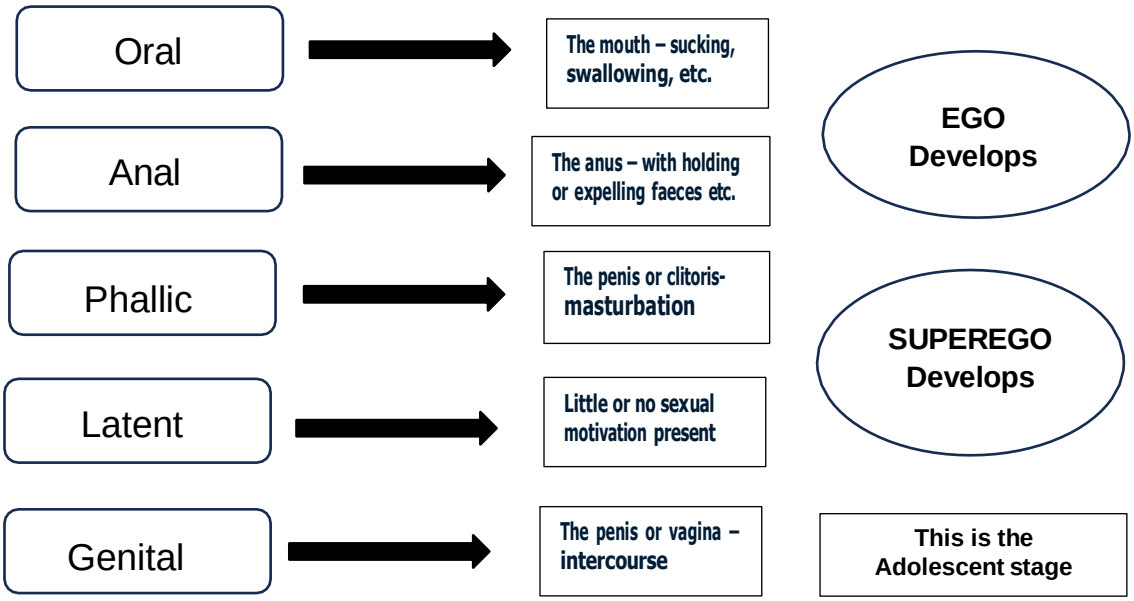
6 years: On an average the child weighs about 23 kgs and is about 46 inches in height. Children also learn about healthy lifestyle choices, such as making healthy food choices, managing hygiene, and dressing and using the toilet independently. They can jump which requires balance and coordination, and strength of the leg and core muscles, can swim, run and can perform jumping jacks an exercise that exercises arms and legs, and requires coordination and stamina. They can do Yoga too at this stage.

Sexuality in Childhood

Besides physical development during the stages of infancy to adolescence there is also a basic **sexual development** in them. From his several researches Sigmund Freud found that there are five **psychosexual stages** from infancy to adolescence. According to this theory, children progress through a series of stages during which their focus of pleasure and satisfaction shifts from different body parts, known as erogenous zones.

According to Freud the focus of sexuality in adults is reproduction. But as during infancy and childhood sexuality remains within one's own body, so these stages are known **Auto-erotic stage.** The five stages are the **oral, anal, phallic, latent, and genital stages** which are the erogenous zones associated with each stage serving as sources of pleasure. According to Freud the Psychosexual energy, which he calls the Libido, was described as the driving force behind behaviour. Freud proposed that unresolved conflicts and traumas during these early stages can lead to psychological problems in adulthood.

Freud stated that children also develop some complexes during this time they are **Oedipus Complex, Castration Complex** and **Ambivalence.** It has been found by Freud that during infancy the boys have a sexual attraction for mothers and girls for fathers. This is called **Oedipus Complex.** In such situations the boys consider fathers as their rival and girls consider mothers as their rival. The **Electra complex** is a term used to describe the female version of the Oedipus complex. It happens when a girl, aged between 3 and 6, becoming subconsciously sexually attached to her father and increasingly hostile toward her mother. The boys are afraid that they will be castrated by the father and this is known as the **Castration Complex.** In a girl's psychosexual development, Freud proposed, she's first attached to her mother until she realizes she doesn't have a penis. This causes her to resent her mother for "castrating" her — a situation Freud referred to as "penis envy." Later when they realise that their parents are taking care of them and arranging for all their comfort, they develop both a sense of rivalry and gratitude this is called **Ambivalence.** The **Latent period** is reached by the age of 5 years.



COGNITIVE DEVELOPMENT

Ulric Richard Gustav Neisser (December 8, 1928 – February 17, 2012) was a German-American psychologist, a professor of Cornell University, and member of the US National Academy of Sciences, who is referred as the "father of cognitive psychology". The three main elements of cognitive theory are **perception, attention**, and **memory**. The process of selecting, organizing, and interpreting stimuli creates a person's perception.

Early childhood generally refers to the period from birth through age 5. Cognitive development in early childhood means how children think, explore and figure things out. It is the development of knowledge, skills, problem solving and dispositions, which help children to think about and understand the world around them.

Brain development is part of cognitive development. This refers to a set of intellectual abilities that researchers consider to be 'normal' for an infant, toddler, pre-schoolers or kindergartener. In other words, it's the quantification, or systematization of how much a child should be able to do or understand by a certain age.

Researches of developmental scientists have found that the brain acquires a tremendous amount of information about language in the first few years of life even before infants can speak. By the time babies utter or understand their first words, they know which particular sounds their language uses, what sounds can be combined to create words, and the tempo and rhythm of words and phrases.

Some of the most important cognitive skills for a child are:

- Attention and response
- Language learning
- Memory
- Thinking
- Information processing
- Problem-solving
- Simple reasoning
- Understanding cause and effect
- Pattern recognition

Theory of Cognitive Development by Jean Piaget

Swiss psychologist Jean Piaget came up with the theory of cognitive development in 1952. According to Piaget, the environment does not shape the child's behaviour; rather, children and adults actively seek to understand their environment and adapt. With Jean Piaget cognitive development, came to be known in 1936 as Cognitive Learning Theory (CLT), he figured out how our minds develop and how we acquire language.

Piaget's theory is the most comprehensive theory of cognitive development in children. The theory propagated that we can learn as much about children's intellectual development from their incorrect answers to test questions as we can from their correct answers. He describes four distinct stages in cognitive development in children: sensorimotor, preoperational, concrete, and formal.

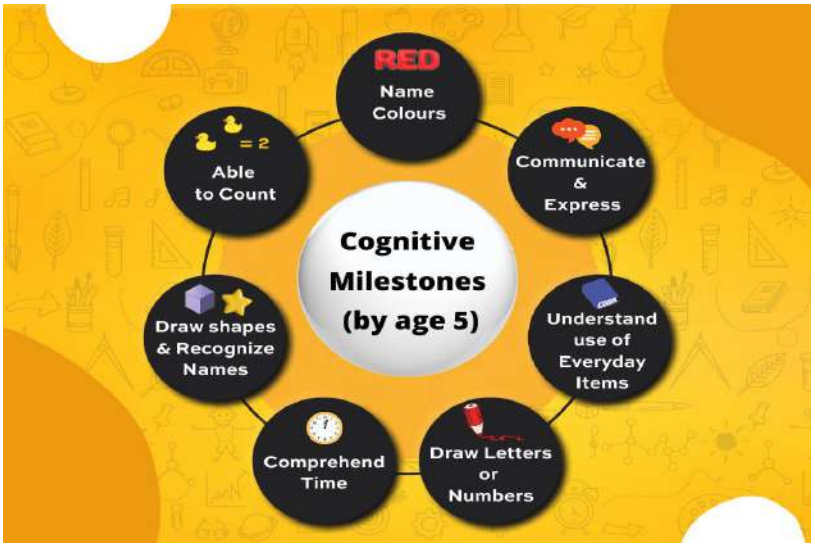
The four stages of growth:

1. **Sensorimotor Stage:** This is the stage from birth to age 2 where the child is able to differentiate between himself/herself and the environment. At this stage infants build an understanding of the world through their senses and movement like touching, feeling, listening, and watching.
2. **Preoperational Stage:** At this stage of age 2–7 years, the child needs concrete physical situations. Objects are classified in simple ways based on their important features. However, the child is not able to conceptualize abstractly. The pre-operational stage is when language and abstract thinking arise. This is the stage of symbolic play.
3. **Concrete Operational Stage:** At this stage age of 7–11 years, the child begins to think abstractly and conceptualize things, creating logical structures that explain the child's physical experiences. This is when logical and concrete thought come into action.
4. **Formal Operations Stage:** This is the stage from age 11–15 in which cognition reaches its final form. The child's abstract thinking is similar to that of an adult, and he or she is capable of deductive and hypothetical reasoning. At this stage children learn logical and abstract rules and solve problems.

Each child goes through the stages in the same order, but not all at the same rate, and child development is determined by biological maturation and interaction with the environment. At each stage of development, the child's thinking is qualitatively different from the other stages, that is, each stage involves a different type of intelligence. There is a strong connection between the development a child undergoes early in life and the level of success that the child will experience later in life.

When young children are provided an environment rich in language and literacy interactions and full of opportunities to listen to and use language constantly, they can begin to acquire the essential building blocks for learning how to read. A child who enters school without these skills runs a significant risk of starting behind and staying behind.

Stage	Age	Skill
Sensorimotor	Birth to 18/24 months	Object permanence
Preoperational	2 to 7 years	Symbolic thought
Concrete Operational	7 to 12 years	Logical thought
Formal Operational	12 years onward [Adolescence to adulthood]	Scientific reasoning



Vygotsky's theory

Lev Vygotsky 1932, described an alternative theory of Cognitive Development. He believed that children's cognitive development arises through their physical interaction with the world. Vygotsky's theory is based on the premise that the support of adults and peers enables the development of higher psychological functions. It is also described as the sociocultural theory. Vygotsky believed that a child's initial social interactions prompt development.

There are two main themes of Vygotsky's theory.

Vygotsky believed cognitive development is influenced by **cultural** and **social factors**. The area of proximal development is described as the gap between the actual development level and the level of potential of the child. The impact of this is seen when children develop the ability to solve problems independently in situations where they are collaborating with more able peers or adults (Vygotsky, 1931).

This highlights how a more knowledgeable person can provide support to a child's cognitive development. Thinking and speech are considered essential. Vygotsky described that there is a connection between cognitive development and language development and the thinking process. To confirm this, he showed how younger children use speech to think out loud. But as they grow-up they gradually start using silent speech that is speak silently (inner speech) to form mental concepts and cognitive skills.

Ecological Systems Theory

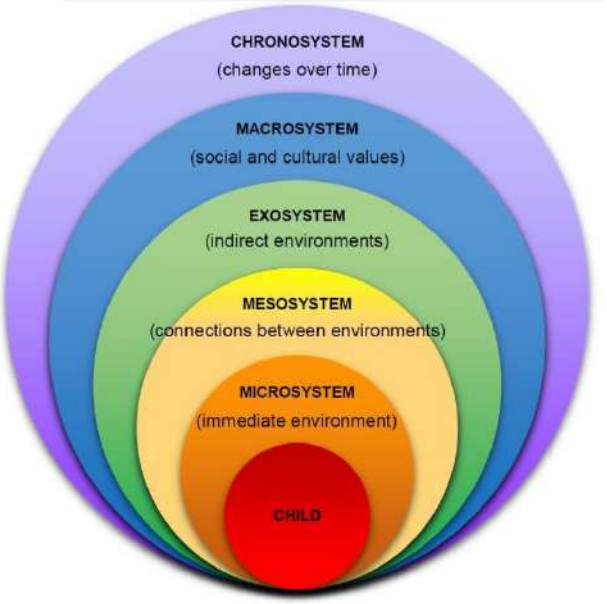
American psychologist Urie Bronfenbrenner (1974) suggested another most modern theory. Similar to the theory of Vygotsky, Bronfenbrenner claimed that the child's environment determines the cognitive development of the child. He divided the environment of the child in five structures which impact the child's

Bronfenbrenner's five structures are the **micro-system, mesosystem, exosystem, macrosystem, and chronosystem**. These are the surrounding environment of the child like family, school, values, customs, and cultures. They are interrelated to each other and influence others the child's development.

The model typically includes five levels of influence namely intrapersonal/individual, interpersonal, institutional/ organizational, community, and policy

The ecological systems theory holds that we encounter different environments throughout our life which influence our behaviours in varying degrees.

Bronfenbrenner's ecological systems theory focuses on the quality and context of the child's environment. He states that as the child develops, the interaction within these environmental structures becomes more and more complex. This complexity helps in the maturity of the child's physical and cognitive growth.

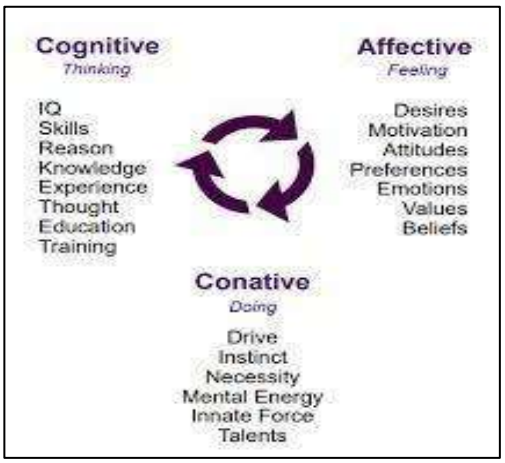


EMOTIONAL DEVELOPMENT

CONCEPT OF EMOTION

Human mind has three major psychological processes such as **cognitive, affective and conative**. **Cognitive** process involves thinking, understanding, and decision-making skills. It's related to a person's strategy, beliefs, and creative thinking; **Affective** process involves emotions and motivation. It's related to a person's positive emotions and attitude; and **Conative** process involves natural tendencies, impulses, and directed efforts. It's related to a person's desire, intention, initiative, and willingness. The cognitive-affective-conative model is used to explain how these three processes interact to influence a person's behaviour.

Of these aspects of mind, the **Affective** aspect is very significant as it is connected with the cognitive aspect and leads to the conative stage for action or reaction.
The word **Emotion** has been derived from the Latin Word **'Emovere'**, which means to be excited or irritated. 'Emovere' can be interpreted as "to stir up" or "to move". It can also be thought of as **"energy in motion"**.



Thus, emotions imply a state of mind which creates excitement in human beings and elicits a specific reaction towards an object or a person. Therefore, when a person experiences an emotion then he or she gets physically excited and his or her normal equilibrium or psycho-physical balance is lost.

Affective factors or emotions of the people are then the feelings they experience about themselves others and the surrounding environment. The emotions are generally understood as representing a synthesis of subjective experiences of the organism that provide necessary force for the activities that the person is going to perform. In other words, the Emotions are the mental reactions experienced as strong feelings usually towards a specific

person or object and typically accompanied by **physiological, neuro-chemical and behavioural changes** in the body.

Several psychologists are carrying out researches to identify the nature of emotions found in infants especially at birth. Emotions at birth are very much connected with instincts and are inherited. Moreover, these emotions are primary in nature and very few in number. These emotions do not rely not rely on cognitive processes rather they relate to the physical reactions of the child.

Carroll Izard's discrete emotions perspective is one of the most well-recognized theories of infant emotional development. Izard proposes that infants are born with some core or basic emotions that are universal, biologically determined and expressed and recognized similarly across all individuals, meaning all humans are born ready to experience and express these emotions without much variance.

René Descartes' theory of emotion, or passions of the soul, is based on the idea that emotions originate from both the body and the intellect. Descartes identified **six primitive passions namely love, wonder, hatred, desire, joy, and sadness**. Descartes believed that emotions are not inherently negative, rather they can provide the basis for beneficial and rational behaviours. He thought that it is possible to control emotions by organizing them and learning how they work. The goal is to achieve balance and manage emotions so that they could serve practical purposes.

Naturalist **Charles Darwin** proposed that emotions evolved because they were adaptive and allowed humans and animals to survive and reproduce. Feelings of love and affection lead people to seek mates and reproduce. Feelings of fear compel people to fight or flee the source of danger. Emotions motivate people to respond quickly to stimuli in the environment, which helps improve the chances of success and survival.

The **James-Lange theory** is one of the best-known examples of a **physiological theory of emotion**. William James and physiologist Carl Lange, suggested that emotions occur as a result of physiological reactions to events. For example, according to this theory of emotion, when we see something fearful and we tremble it is not due to the emotion of fear but we experience fear because we are trembling. In short, we are not trembling because we are frightened, instead, we feel frightened because you are trembling.

Walter B. Cannon and Philip Bard proposed a theory known as **Cannon-Bard theory** states that we experience **emotions and physiological reactions** such as sweating, trembling, and muscle tension **appear simultaneously**. More specifically, it suggests that emotions result when the thalamus sends a message to the brain in response to a stimulus, resulting in a physiological reaction.

Schachter-Singer Theory also known as the two-factor theory of emotion, is an example of a **Cognitive Theory of Emotion**. This theory suggests that physiological arousal occurs first, and then the individual must identify the reason for this arousal to experience an emotion. A stimulus leads to a physiological response that is then cognitively interpreted and labelled, resulting in an emotion.

The Lazarus theory of emotion, also known as the **Cognitive Appraisal Theory**, is a theory that states that people respond to experiences in the following order:

- **Cognitive**: People understand the event first.
- **Emotional**: People experience emotions second.
- **Physical**: People experience physiological responses last.

The Lazarus theory of emotion says that humans respond to experiences cognitively first, emotionally second, and physically last. Lazarus believed that the order is always the same in every situation. In this theory **Cognitive appraisal is the** first step where the person evaluates the situation, event, or stimulus; in the second step comes the **Emotional response** which depends on the person's appraisal of the situation; and finally in the third step comes **Action** where the person's response appears towards the situation.

According to this theory, our emotions are not solely a product of the situation or stimulus itself, but rather, they depend on our cognitive interpretation and assessment of that situation.

1. **Cognitive appraisal:** The first step in the Lazarus Theory of Emotion is cognitive appraisal, which refers to the individual's evaluation of a situation, event, or stimulus. This appraisal process can be broken down into two components:
    - **Primary appraisal**: This involves evaluating the event's relevance to the individual's well-being, goals, or values. The individual assesses whether the event is irrelevant, benign-positive, or stressful (i.e., threatening, challenging, or harmful).
    - **Secondary appraisal**: This involves assessing the individual's resources, coping abilities, and potential responses to deal with the event. The secondary appraisal helps determine the intensity of the emotional response and the type of coping strategies employed.

2. **Emotional response:** The emotional response is the result of the cognitive appraisal process. The individual's perception of the situation and their evaluation of their ability to cope with it directly influence the type and intensity of the emotion experienced. In other words, emotions are not solely determined by the situation, but rather, they depend on how the individual interprets and evaluates the situation's personal relevance and their coping capacity.
3. **Coping strategies:** According to Lazarus Theory of Emotion, individuals employ different coping strategies to manage the emotional responses generated by the cognitive appraisal process. These strategies can be problem-focused, e.g., addressing the source of the stress) or emotion-focused, e.g., managing the emotional response itself.
4. **Dynamic process:** The Lazarus Theory of Emotion emphasizes that the emotional experience is a dynamic and ongoing process. As individuals continually appraise and reappraise situations, their emotional responses and coping strategies may change accordingly.
5. **Implications:** The Lazarus Theory of Emotion has significant implications for understanding emotional regulation, stress management, and mental health. By recognizing the role of cognitive appraisal in emotional experience, individuals can develop coping strategies and interventions that target their perceptions and interpretations of situations, rather than focusing solely on the situations themselves.

In summary, the Lazarus Theory of Emotion posits that emotions are the result of a two-step cognitive process involving the appraisal of a situation and the subsequent interpretation of its personal relevance. This theory emphasizes the role of cognitive appraisal in determining emotional responses and has important implications for understanding emotional regulation, stress management, and mental health.

Thus, the Emotional theories vary in terms of what they focus on. The major theories of emotion can be grouped into three main categories:

1. **Physiological theories** suggest that responses within the body are responsible for emotions, like the James Lange Theory.
2. **Neurological theories** propose that activity within the brain leads to emotional responses, like the Cannon Bard Theory.

3. **Cognitive theories** argue that thoughts and other mental activities play an essential role in forming emotions like the Schachter-Singer Theory**,** Lazarus theory**.**

EMOTIONAL DEVELOPMENT

'Emotional development is the emergence of the experience, expression, understanding, and regulation of emotions from birth and the growth and change in these capacities throughout childhood, adolescence, and adulthood. The development of emotions occurs in conjunction with neural, cognitive, and behavioural development and emerges within a particular social and cultural context.' [Izard and Trentacosta (2020)]

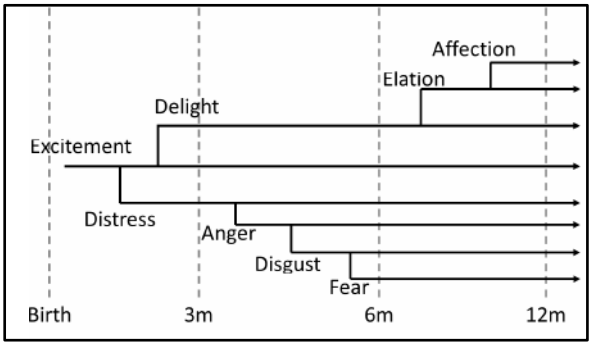
Emotional development is hence the process of learning to understand, express, and manage emotions, and to form relationships with others. It's a complex process that begins in infancy and continues into adulthood. Emotions thus develop through the interaction with the environment and social relationships. **Emotions though natural and owe their origin to nature they require nurturing, and in brief, in the process of emotional development nature and nurture are totally intertwined.**

The first emotions children experience are primary emotions, called Primary emotions or universal emotions. The first emotions that can be recognised in babies include joy, anger, sadness and fear. Gradually emotions like joy, sadness, disgust, fear, anger, and surprise develop and all of these appear during the first year of life.

The rate of emotional development in children and young people can vary from person to person. Some children may show a high level of emotional development while quite young, whereas others take longer to develop the capacity to manage their emotions well into adolescence.

John Watson a well-known psychologist stated that children have only three emotions namely **love, rage, and fear.** Watson believed that he could artificially condition these emotions into the child, which proved somewhat successful. Newer emotions appear through conditioning from these three primary emotions.

As the children grow the emotions get specialised from being general in nature and newer emotions appear as the child interacts with the environment and other people around him. Along with Watson another psychologist **Katherine Bridges** also believed that at birth the child has only one affective state that is **Excitement** and for any feeling, the child gets excited. However, very soon the child learns to differentiate between the two different types of emotions as per their origin.



The child is able to differentiate between **Excitement for Delight** and **Excitement for Distress**. Gradually from these two newer emotions develop, namely from delight emerge positive emotions like affection, joy, mirth, love, happiness and similar emotions. From the feeling of distress emotions like anger, fear, disgust, unhappiness, hatred, and such negative emotions emerge. This development is known as specialisation of emotions, from general very basis primary emotion more and more emotions emerge which are suitably expressed towards different situations.

At the **early-stage** babies smile at familiar faces and caregivers, and begin to respond to negative emotions of others. As children's sense of self develops, more complex emotions like shyness, surprise, elation, embarrassment, shame, guilt, pride and empathy emerge.

Michael Lewis in the year 2022, describes the emergence of a set of self-conscious emotions. Development of embarrassment, empathy, and jealousy are dependent on the development of self-awareness during the second year of the child's life.

At the **school-going stage** children learn to identify emotions, understand why they happen, and how to manage them. They also develop more complex emotions like shyness, surprise, and embarrassment. School aged children and young people learn to identify emotions, to understand why they happen, and how to manage them appropriately.

Adolescence Period

Adolescence is a trying period emotionally. At this stage the adolescent is faced with rapid physiological changes and a sudden upsurge of adult like sexual drive, at a time when he or she lacks the experience of an adult to cope with it.

During **adolescence** the young people become more aware of their own as well as others' feelings. They may also be excited to take on new challenges, but some may need more support to build confidence. Once self-conscious emotions such as guilt, embarrassment, and shame emerge in middle childhood, very few new emotions develop. Adolescents' cognitive skills to reason about abstract concepts improve their ability to manage and reason about their own emotions and improve emotional competence in relationships (Rosenblum & Lewis, 2006).

During the stage of adolescence, the adolescents face additional need for **autonomy**. They want to be free from parental control and demand more time to be spent with peers and less time with the family. Adolescents become less emotionally dependent on their parents, but this **emotional autonomy often emerges after a period of conflict and increased experience of negative emotions**. As such often this period is known as **a period of 'storm and stress'.** The adults around them do not understand the change and continue to treat them as children while the adolescents consider themselves to be grown up and resist being treated as children.

As a result, young adolescents often experience more negative emotions than younger children, which gradually decreases during the high school years. However, girls often experience a longer period of elevated negative emotional feelings than boys.

The rise in **negative emotional experiences** during early adolescence appear in conjunction with the capacity for abstract thinking. Adolescents often experience emotional distress in response to ambiguous and imagined romantic exchanges, and their capacity to experience complex and diverse emotions further promotes the development of abstract thinking. As adolescents grapple with increasingly abstract and complex social problems, they often **seek a stable peer group as the context for emotional management**. Positive peer relationships emerge from the recognition of equality and the tendency to offer emotional support. Adolescents who are not accepted by their peers face numerous risks, including school dropout and delinquency. Overall, positive and supportive peer relations during adolescence promote healthy emotional development and mental health as the adolescent enters adulthood.

Dating relationships also become prominent during adolescence, but young adolescents may still have difficulty in understanding that one person can evoke different and conflicting emotional responses. Therefore, dating during adolescence is often characterized by extreme emotional variations. Dating partners are also

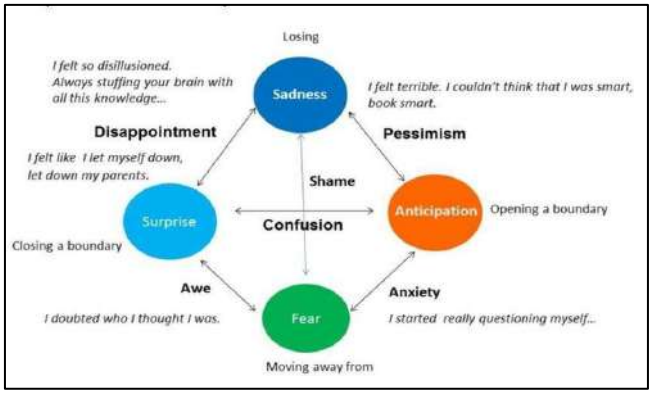
prone to experiencing jealousy, particularly when they make errors in determining the intent of their partner's actions.

Identity development is important for adolescents as they approach adulthood.
When adolescents or young adults are exploring many **identity options**, they often have high levels of anxiety and show interest in exploring those options. Adolescents who make an early commitment to a particular identity, usually an identity promoted by their family, have low levels of anxiety and do not experience much conflict in their family relationships. Adolescents who are not exploring identity options tend to have low levels of motivation and often appear bored or apathetic. They have poorer peer relationships and are at great risk for mental-health problems during adulthood. Finally, young adults who have achieved a stable sense of identity tend to be more empathetic and are more successful at managing their emotions. [Christopher J. Tentacosta; Carroll E. Izard]

Hence, adolescence is a time of intense emotional development, when young people become more aware of their feelings which are often conflicting in nature and new to them. These affect their relationships with their peer groups as well as with the family.

This process of emotional development during adolescence is marked by:

- **Emotional ups and downs:** Adolescents often experience extreme highs and lows, and their moods may seem unpredictable. This is because they are still learning how to control and express their emotions. **Mood swings** are very common due to the uncertainty and conflicting thoughts, the adolescent may experience frequent and sometimes extreme changes in their mood.
- **Feeling overly sensitive:** During puberty, since the body undergoes many changes, it is very common to feel uncomfortable about them and become overly sensitive about their physical appearance. As a result, they **feel irritated** quite easily, **lose their temper** or **feel depressed**.
- **Self-consciousness:** Adolescents are self-conscious about their physical appearance and compare themselves to their peers. They are often **confused about the changes** that they find happening in their physique which they often cannot explain immediately.
- **Looking for an identity:** Since at this stage the adolescents are in the process of becoming adults, they often feel inclined to figure out what makes them **unique** as a person. They try to look for an identity for themselves. They often try to identity some person famous or someone they admire as their role model and identify themselves with that person. This is a period of **Hero-worship**.
- **Feeling uncertain:** Since the adolescents are neither completely an adult and nor a child anymore, this stage can potentially lead to uncertain times. As a transition phase, they begin to wonder and think about new and unfamiliar aspects of life such as career, livelihood and marriage.
- **Decision-making:** Adolescents sometimes may act without thinking, as their decision-making skills are still developing.
- **Sexual attraction:** Adolescents may feel sexually attracted to people they want to be more than friends. **Puberty** is the phase after when one develops sexual maturity. One aspect of sexual maturity is being curious about sex and also about bodies of people that one is attracted to. With the onset of puberty, it is normal for a boy or a girl to be sexually attracted to each other especially the opposite sex.



- **Self-esteem:** Adolescents' **self-esteem** is affected by how they think they look. Some adolescents may be excited to take on new challenges, while others may need more support to build their confidence.
- **Feeling conscious about self:** The onset of puberty can vary on an individual basis. Therefore, the way one grows maybe different from the way others grow. This makes them **conscious about the way the body grows up**. These experiences are more pronounced for girls because they develop faster and earlier than boys. Also, the changes in their bodies such as development of breasts and widening of hips are more noticeable. This may make them feel more **conscious about their body** in presence of their peers of the same age group.
- **Extreme emotions:** Adolescents tend to experience more extreme emotions, both negative and positive, than their parents even in response to the same event. This often are misunderstood by adults around them and **create conflicts** and **confusion** between them.

In order to ensure healthy emotional development in adolescents certain steps need to be taken, like

- **Communication:** Parents can develop as model effective communication practice by listening attentively and with patience the issues that the adolescents want to discuss, sharing of experiences, and asking open-ended questions and suggesting solutions.
- **Self-regulation:** Parents can provide opportunities for adolescents to identify, communicate, and manage their feelings and actions. Parents can support the adolescents to cope with the psycho-physical changes that they experience in their life during adolescence.
- **Healthy behaviours:** Parents can encourage healthy behaviours like sleeping, physical exercise, and relaxation. In cases of extreme disruption of physical and mental health conditions help of specialists can be referred.
- **Self-esteem and Confidence**: Adolescents feel better about themselves if they experience success in domains they care about and are praised for that success by people they respect. To build self-confidence the adolescents need to build positive relationships, work on a growth mindset, create actions that challenge themselves, practise self-affirmations when and where possible.
- **Occupational Therapy:** Occupational therapy offers a safe and empathetic space where teens can explore their feelings and challenges. This supportive environment encourages open communication and trust, making it easier for adolescents to address their mental health concerns and work towards positive change. This enables young people with physical, learning and mental health needs to participate in and successfully manage the activities that they want or need to do at home, at school or work and during their free time.

One of the major principles of emotional development at all stages is the appearance of newer emotions leading to **Emotional Specialization** in individuals. This process varies from person to person due to differences in **inheritance or genetics, environment, life experiences, nurturing, personality traits, brain structure and functions** and so on.

These emotional specializations have distinct influence on the perceptions, behaviours, and interactions of individual persons.

Emotional specialization can manifest in various ways, such as:

1. **Emotional intelligence:** Some people are naturally more empathetic, self-aware, or skilled at managing their emotions.
2. **Emotional expression:** Individuals may specialize in expressing certain emotions, like enthusiasm, calmness, or creativity.
3. **Emotional regulation:** People may be better at regulating specific emotions, such as anxiety, anger, or sadness.
4. **Emotional resonance:** Some individuals may be more attuned to the emotions of others, making them excellent listeners or friends.

The numerous benefits of Emotional specialization are development of new behaviours and experiences, like:

1. **Improved relationships:** By acknowledging and appreciating individual emotional strengths, the individual can build stronger, more empathetic connections.
2. **Enhanced personal growth:** Embracing emotional specialization can help in the development of unique strengths and talents.
3. **Better decision-making:** This helps in making more informed decisions that align with the values and goals of life.

In conclusion, we can state that emotional specialization is a valuable concept that highlights the uniqueness of each person in respect to their emotional strengths and abilities.

SOCIAL DEVELOPMENT

Social development in human beings means the ability to understand the environment around and skills to form relationships with the people and forces around. It is a process which grows with the passage of time. It is a process of learning how to interact with others and the society around us. Social development thus is a complex process that occurs throughout life and involves the development of behaviours, attitudes, opinions, relationships and beliefs.

At the time of birth, the child is neither social nor unsocial, the child can be described as **asocial** in nature. Since the child does not have any contact with people the question of social development does not arise at all. At this stage the child's existence rotates around his or her own self. In the language of psychologist Uhl at birth the child remains an **Egoist**. But very soon the child becomes conscious of his surroundings and learns to respond to the different forces and factors of the environment. It is from this consciousness that the child's social development begins and gradually he or she becomes a fully conscious social being. The child starts acquiring different types of social skills and learns to respond to demands of the different social forces and factors. The child becomes conscious of the society around and seeks company of others and learns to respond and interact with people in her surroundings.

This process of being conscious of the people and environment around is called the process of **socialization**. From the stage of being a self-centered individual the child learns to be a social person. From 'I' he starts recognizing the other person that is 'You', but the child is yet to identify 'You' with 'I', implying that the child is unable to conceptualize 'We'. Gradually the child learns to identify himself with others and develops the concept of togetherness and forms such relationships as 'We', 'They', and is able to respond accordingly.

Socialization refers to the developmental processes through which individuals acquire the values, behaviours, and motivations necessary to become competent members of a culture. It refers to the process whereby the individual's life standards, skills, motives, attitudes, and behaviours change to conform to those regarded as desirable and appropriate for his or her present and future role in any particular society.

Here we can mention the **gregarious instinct** that McDougall referred in his theory of 14 instincts. According to McDougall it is the gregarious instinct that is associated with the feeling of loneliness that the child develops an urge to seek company of others. Though modern psychologists do not ascribe to McDougall's theory of an inherited social instinct they do believe that human beings have an inherent tendency or propensity to be a social being. Human beings are born with a natural inclination to become a social being in order to cope with the environment around which to a large extent is social in nature.
In children it is the process of learning how to interact with others, form relationships, and develop a sense of self-identity. It is a gradual process that begins in infancy and continues throughout childhood. Moreover, the child is born with some inherent mental organisations for dependence, sympathy, cooperation, sense of gratitude which equip the child to acquire different social skills.

Social development in early childhood is the process by which children learn to interact with others, form relationships, and develop a sense of self. It's a crucial stage that lays the foundation for future social, emotional, and cognitive development. From the age of two or three the child joins school and is introduced to a formal social set-up. During this period along with the process of social recognition the individual identity of the child too develops. The two processes namely individualisation and socialisation instead of being exclusive are inclusive in nature and are dependent on one another.

During the late childhood period that is the age of eight to ten years the child social consciousness becomes very strong and the child shows eagerness to participate in group games, fairs, exhibitions, competitive sports, cultural and recreational activities. The major factors that influence the child's social development are socially accepted norms and values that prevail in the society the child is growing up. These values are again and again imposed on the child and the child has to conform to them. In the Furfey Scale for Developmental Age developed by Paul Hanly Furfey, by the age of ten the child has a sense of respect and allegiance to the group he or she belongs to. This social feeling gradually replaces the ego-centricism in children and the process of socialisation is accelerated.

The social norms and the values that the child gradually assimilates from the family develop, often unconsciously, the 'Super Ego' as described in Freudian Psychoanalytic theory.

Some of the social development milestones for children during childhood:

- **Toddlers:** Learn to express feelings, explore, and become more independent. They also learn to get along with others, solve problems, and try new things.
- **Preschoolers:** Learn to share toys, take turns, and manage strong emotions. They also become more aware of others' feelings, want to make friends, and practice being independent.
- **Friendships:** Children develop friendships with certain kids and discover that they have special qualities that make them likable. They also learn that not everyone thinks exactly as they do.
- **Cooperation:** Children become more aware of others' feelings and actions, and stop competing as much. They learn to cooperate more when playing with friends and take turns and share toys.

Adolescence

It appears that most teens do not experience adolescence as a period of 'storm and stress', to the degree once famously suggested by G. Stanley Hall, a pioneer in the study of adolescent development. Only small numbers of teens have major conflicts with their parents (Steinberg & Morris, 2001), and most of the disagreements that take place between them are minor. For example, in a study of over 1,800 parents of adolescents from various cultural and ethnic groups, Barber (1994) found that conflicts occurred over day-to-day issues such as homework, use of money, curfew time in respect to remain outside home especially in the evening, clothing, doing home chores, and selection of friends. These disputes occur because an adolescent's drive for independence and autonomy conflicts with the parent's supervision and control. These types of arguments tend to decrease as teens develop.

As adolescents seek to form their identities, they pull away from their parents, and the peer group becomes very important (Shanahan, McHale, Osgood, & Crouter, 2007). Despite spending less time with their parents, most teens report positive feelings toward them (Moore, Guzman, Hair, Lippman, & Garrett, 2004). Warm and healthy parent-child relationships have been associated with positive child outcomes, such as better grades and fewer school behaviour problems, in an experiment done by Hair et al., 2005.

Although peers play greater role during adolescence, family relationships remain important too, rather there the adolescent move away from the childhood dependency on parents and tries to re-negotiate the parent–child relationship. They strive for more independence and autonomy during this time, and protest against too much of parental supervision and monitoring.

They spend more time in the presence of peers, instead of parents. Parents' attempts to set rules and know their adolescents' friends, activities, and whereabouts are not accepted by the adolescents. (Stattin & Kerr, 2000) Psychological control by intrusion into adolescents' emotional and cognitive world and pressuring them to think in particular ways is another area of conflict that affect the life of the adolescents' and become more problematic in their adjustment.

During adolescence, peer groups evolve from primarily single-sex to mixed-sex. Adolescents within a peer group tend to be similar to one another in behaviour and attitudes, which has been explained as being a function of **homophily**, adolescents who are similar to one another choose to spend time together and influence each other's behaviours and attitudes.

Peer pressure is usually depicted as peers pushing a teenager to do something that adults disapprove of, such as breaking laws, smoking or using drugs. One of the most widely studied aspects of adolescent peer influence is known as **deviant peer contagion** (Dishion & Tipsord, 2011), peers reinforce these problem behaviours by laughing or showing signs of approval which often resulting in future problem behaviours in the adolescents. Although deviant peer contagion is more extreme, regular peer pressure is not always harmful. Peers can serve both positive and negative functions during adolescence. Negative peer pressure can lead adolescents to make decisions or engage in behaviours which is risky in nature and can lead to problematic behaviours in future.

Another social factor that appears during adolescence is **romantic relationships**. The same-sex peer groups that are formed during childhood expand into mixed-sex peer groups that are more characteristic of adolescence. Romantic relationships often form in the context of these mixed-sex peer groups (Connolly,

Furman, & Konarski, 2000, 'The role of peers in the emergence of heterosexual romantic relationships in adolescence', Child Development).

Adolescent development does not always follow the same pattern for all individuals. Though certain features with respect to biological changes associated with puberty and cognitive changes associated with brain development, are relatively universal, other features of adolescence especially social and emotional depend largely on the environment and their up-bringing within and outside the family. These variations are mostly seen in respect to different social, cultural norms and moral conditions present in the family and the country of residence. The factors that determine such changes are gender, ethnicity, immigrant status, religion, sexual orientation, socioeconomic status and are country specific.

Social development in adolescence is a process of establishing a sense of identity, purpose, and role. It also involves developing social skills and navigating relationships with peers and family. The social skills that mainly emerge during adolescence are:

- **Empathy:** Adolescents learn to understand and appreciate the feelings of others that is they are capable of empathising.
- **Communication:** Adolescents are able to express their emotions verbally, listen actively, interpret and understand non-verbal cues or body language of others.
- **Cooperation:** Adolescents develop such social skills as cooperation, group work, to work with others towards common goals, participate in group projects.
- **Respect:** Adolescents understand relationships and can respond accordingly and interact with others in a respectful and deferential manner toward seniors and superiors and affectionately towards younger persons.
- **Independence:** Adolescents grow to be independent as such they prefer to spend more time with their peers and friends and comparatively less time with parents, family or elders.
- **Peer groups:** Adolescents spend time with peers and friends who are similar to them in behaviours, attitudes and values.
- **Conflict:** Adolescents may have more arguments with family members as they seek more independence and question different points of view and rules set by them.
- **Risk-taking:** Adolescents often engage in risk-taking behaviours, such as breaking laws, smoking or using drugs.
- **Body image**: Body image is a key factor in developing a sense of self and identity, the adolescents are more concerned about their looks and how others perceive them. Accepted social presence
- **Experimentation**: Adolescents may experiment with different identities, values, and beliefs.
- **Social brain regions**: Adolescents activate social brain or social cognition regions more strongly than adults, which often make them more open to new ideas and newer acquaintances.

Factors that influence Social Development

Social development is influenced by a number of factors some of which are congenital some are learnt. These jointly affect and guide social development in children. They are:

Maturation: Maturation is an inherited process which takes a natural course of development, there are behaviours which appear at a certain age even if there is no learning or training for that. In psychology it is the process of growth and development that occurs throughout a person's life. It involves the development of mental, physical, emotional characteristics and in the process social development of the child. It occurs in stages, and each person develops at their own pace. Through this the child in each stage completes and strengthens the social skills and attitudes. Several experiments are there which proves the role of maturation

in human development. In one experiment conducted by Dennis two 7 months old babies were kept in a secluded environment where no one laughed before them. In spite of that it was found that the two babies laughed at due time without any provocation or effort. Maturation is essentially a process of refinement and modification from within and inborn ripening and progress of capacities of the organism.

Intelligence: Intelligence is the ability to learn from and adapt to novel situations and to use that knowledge to create a desired outcome. It is a combination of several skills, such as problem solving, understanding abstract concepts, and critical thinking. These affect the social development of the child.

Learning: This is an important factor as from childhood social behaviours are learnt from the environment. Parents are the first teacher for the child it is they tell the child how to behave in a particular situation. The learning process in social development follows a systematic way to improve the skills and knowledge of learners. It is a core function of human development. The fist social behaviours that the child learns is from the family. For example, ways of greetings, behaviours towards elders and younger persons, and similar basic social skills are learnt from the family. Next stage of learning in the school. Children learn to cooperate form groups, helping each other in class, sharing etc. re learnt when the child attends school. Next social learning takes place in the neighborhood, in the different groups the child is enrolled like sports group, coaching classes, drawing class, classes where the child goes to learn music and so on.

Socio-economic Status: The socio-economic status of the family has a major influence on the social development of the child. The economic status of the family often compels the child to perform certain work that brings them in contact with adults who influence on their social behaviours and attitudes. It has been noticed that children from different social strata and economic background greet people in different ways, such as the either fold their hand to pay respect to elders, some touch their feet, some say good morning or good afternoon again some do not even know how to greet elders or relatives. Socio-economic status significantly influences social development by determining the child's access to resources, opportunities, and quality of life as well as the economic standing of the family can greatly affect their social participation and life trajectory within a community, thus influencing the child's socialisation process. Even the educational level of the child affects the social development of the child. Child raised in low-income households are more prone to cognitive and behavioural challenges, whereas higher levels of parental education are associated with positive developmental outcomes in the socio-emotional and cognitive development of the child. Low socioeconomic status is associated with increased risk for emotional and behavioural problems among children. Studies have shown that the socio-economic status of the family moderates genetic and environmental influences on child's social and mental growth.

Social Diversity: Different societies have different social and cultural practices and the children imbibe those practices and behaviours as they grow-up. Social diversity refers to the process where children learn and internalize values, norms, and behaviours from a variety of social groups, religious groups, including different cultures, ethnicities, genders, and abilities, which shapes their understanding and the socialization of children. In fact, these mould their views and understanding of the reality. Through these diversities children learn to interact with others around and essentially, through this process children learn to navigate a society with diverse people and from different groups. Cultural factors influence the development of all children.
Even there are diversity in the different social behaviours that the children perform. Some of them express friendly behaviours more while there is aggressiveness too. Children express positive attitudes towards others but at the same time negative feelings too are there. This diversity depends largely on the nature of interactions they have with their surroundings and the behaviours they see in their parents and in the family and in the neighbourhood. Psychologist Mengert

Sympathy: Sympathy is one of the basic factors of the process of socialization. It is a social quality which refers to the ability to understand and share the feelings of another person. Sympathy develops only when the child is able to understand the feelings of others. In all human beings there is a natural urge to sympathise with others, however, the nature and intensity are different for different persons. This totally depends on and the nature and type of environment the child grows in, witness behaviours of others and their emotional interactions with others. Sympathy is more of a feeling of pity for another. There is another aspect of Sympathy which is called **Empathy.** It is different than sympathy. Empathy is the ability to understand how someone feels while sympathy is our relief in not having the same problems. When we relate with empathy, we give the other person space to own their emotions and feelings.

Friendship: Friendship is a quality that is found in children from the age of 2 years. Friendship plays a crucial role in social development by providing a platform for children to learn and practice essential social skills like communication, empathy, cooperation, and conflict resolution. Initially the child becomes friendly with children of similar age group as play partners, in play schools, and as they grow up, they learn to form peer groups with similar feelings, attitudes and interest. Essentially, having friends allow children to develop social competence through mutual interaction and support. Friendship contributes to the development of several social skills like communication, building empathy, understanding social norma and associated behaviours. Children also learn to cooperation as well as competitive skills when they form friends. Positive social interactions with friends can enhance self-worth by providing validation and a sense of belongingness. Children learn to identify themselves with their friends and also develop an identity for themselves. They emulate others and many social behaviours are thus learnt by them.

Resistance: Another factor that affects social development of children is resistance. The child as a toddler resists to be bathed, to wear clothes this attitude later takes the form of negative attitude and stubbornness. In the adolescence stage they adolescent resistance takes a major role as many a times they resist discipline of the parents or the family. They try to resist to be controlled or abide by social norms. Under peer pressure or unhealthy dynamics impact the social development negatively. Often there is resistance to any change the adults may want to bring in their behaviours or attitudes. Children also learn the social skills of adjustment through this as when they are not able to succeed in their resistance or understands that it is not effective, they learn to accept the changes and modify themselves accordingly instead of resisting the change. Such social skills as adaptation, conformation, understanding the views of others are learnt gradually by the child. As the child grows up with the development of intelligence this resistance is reduced with social consciousness, sense of belongingness with different groups.

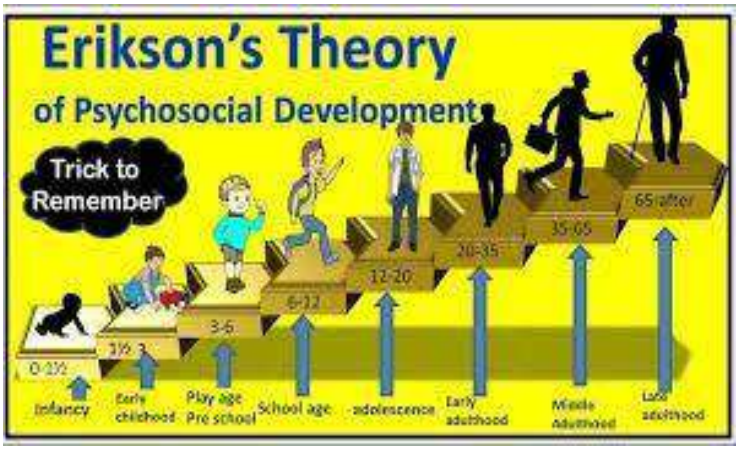
Aggression: Another important factor that contributes to wards the socialization of children is aggressiveness in them. It is closely related to resistance. The natural tendency of the children to fight with others, hit them or become violent gradually get reduced as social norms are understood and environmental pressures work on the children. They learn to express the crude ways of trying to fight or be violent is expressed in a more socially acceptable and better form, this process is called the process of **Sublimation.** The process of sublimation is a healthy defence mechanism that transforms unacceptable impulses into socially acceptable behaviours. It is one of the mature ways of coping with difficult situations. It can help people reduce stress, anxiety, or guilt. It is a process whereby anger, violence and similar negative behaviours are channelised into socially acceptable behaviours and activities like sports, debates, competitive games, instead of lashing out at others. Sigmund Freud first introduced the concept of sublimation in his psychoanalytic theory. He believed that the appreciation of ideal beauty is rooted in primitive sexual urges that are transfigured in culturally elevating ways.

Cooperation & Competition: Cooperation is when people work together to achieve a shared or common goal. It's a fundamental part of human social life and is essential for society to function. Cooperation is guided by certain factors like **culture -** children and families belonging to the same culture tend to cooperate with other well and easily, **trust** - children are more likely to cooperate if they trust others in the group, **empathy -** which is an ability to understand another person's emotional experience and imbibe that as one's own and **social norms** this help children and families to conform with the norms and to cooperate with each other easily. Opposite to cooperation is **Competition.** Like most behavioural characteristics, competitiveness is a spectrum as some people are relatively less competitive, others more so, and a few seem obsessed with winning in every single context. In psychology competitiveness is a social situation in which individuals believe their goals are negatively related to others' goals. Competitiveness manifests in a group setting and the nature and the characteristics of the group influence social competition in individual members of the group. Competitive behaviour refers to the actions and interactions between individuals that aim to establish dominance or superiority of one over others.

Erik Erikson (1902–1994) proposed a theory of psychosocial development of personality which differs from the Freud's controversial theory of psychosexual theory of development. Erikson emphasized that the ego makes positive contributions to development by mastering attitudes, ideas, and skills at each stage of development. This mastery helps children grow into successful, contributing members of society. During each of Erikson's eight stages, there is a psychological conflict that must be successfully overcome in order for a child to develop into a healthy, well-adjusted adult.
According to the psychosocial theory, every individual has eight stages of development over one's lifespan, from infancy through late adulthood. At each stage there is a crisis or task that one needs to resolve. Successful completion of each developmental task results in a sense of competence and a healthy personality. Failure to master these tasks leads to feelings of inadequacy.

The stages are:
Trust vs. Mistrust - From birth to 12 months of age, infants must learn that adults can be trusted, as the adults meet a child's basic needs for survival. Infants are dependent upon their caregivers, when caregivers are responsive and sensitive their infants develop a sense of trust, they see the world as a safe and a predictable place. Unresponsive caregivers who do not meet their baby's needs can engender their feelings and lead to developing anxiety, fear, and mistrust in the babies, their baby may see the world as unpredictable. If infants are treated cruelly or their needs are not met appropriately, they are likely to grow-up with a sense of mistrust for the people around them.
Autonomy vs. Shame/Doubt - As toddlers (ages 1–3 years) begin to explore their world, and learn to control their actions as per their choice. They exhibit preferences for certain things in the environment, such as food, toys, and clothing. A toddler's tries to resolve the issue of independence or autonomy vs. shame and doubt by establishing their independence. At this stage they say 'I can do it'. The child's input in basic decisions has an effect on her sense of independence. If denied the opportunity to act, the child may start doubting his or her own abilities, this may affect the self-esteem of the child and lead to low self-esteem or feelings of shame.
Initiative vs. Guilt - Once children reach the pre-school stage (ages 3–6 years), they are capable of initiating activities and asserting control over their world through social interactions and play. According to Erikson, pre-school children must learn to resolve the task of initiative vs. guilt. By learning to plan and achieve goals while interacting with others, preschool children can learn a task and this initiative happens if parents allow a child to explore within limits and support the child's choice. These children will develop self-confidence and feel a sense of purpose. Those who are unsuccessful at this stage develop feelings of guilt.

Industry vs. Inferiority - During the elementary school stage (ages 6–12), children face the task of industry vs. inferiority. At this stage children begin to compare themselves with their peers and see how they are similar. If they find themselves to be comparable to others, they develop a sense of pride and fulfilment in school, sports, social activities, and family, but they feel they are unable to match their peers they develop feelings of inferiority and inadequacy. Due to these negative experiences, an inferiority complex might develop into adolescence and adulthood.



Identity vs. Role Confusion - In adolescence (ages 12–18), children face the task of identity vs. role confusion. According to Erikson, an adolescent's main task is developing a sense of self identity. Adolescents explore various roles and ideas, set goals, and attempt to discover their selves. Adolescents who are successful at this stage develop a strong sense of identity and can attain their own ambitions, beliefs and values. They are comfortable to face and resolve problems. If adolescents are unable to make a conscious search for identity, or are pressured to conform to their parents' ideas for their future, they may develop a weak sense of self and experience role confusion.

Intimacy vs. Isolation - People in early adulthood (20s through early 40s) are concerned with intimacy vs. isolation. After we have developed a sense of self in adolescence, we are ready to share our life with others. Erikson believed that if one has a strong sense of self, they can develop successful intimate relationships. Adults who do not develop a positive self-concept in adolescence may experience feelings of loneliness and emotional isolation.

Generativity vs. Stagnation - When people reach their 40s, they enter the time known as middle adulthood, which extends to the mid-60s. The social task of middle adulthood is generativity vs. stagnation. Generativity involves finding your life's work and contributing to the development of others through activities such as volunteering, mentoring, and raising children.

Integrity vs. Despair - From the mid-60s to the end of life, we are in the period of development known as late adulthood. Erikson's task at this stage is called integrity vs. despair. He said that people in late adulthood reflect on their lives and feel either a sense of satisfaction or a sense of failure.

SOME IMPORTANT SOCIAL SKILLS FOR CHILDREN

We can mention some important social skills that the child needs to learn for social development. These are necessary for the socialisation process that the child undergoes.

1. Communication

Communication is an essential social skill that enables children to make and effectively respond to statements. Children can constructively share and exchange thoughts and ideas and develop conversation skills necessary for socialization. It means ability of the child to expressing oneself.

For example: Praise the child when they communicate well. For instance, "I know you were excited to share this with me, but I'm glad you let me finish speaking first!" Positive reinforcement goes a long way.

2. Empathy

Empathy in children develops gradually, so parents, teachers, and caregivers are best off nurturing this skill by extending grace as often as possible. Children will eventually learn to appreciate the similarities and

differences between peers—a soft skill essential for understanding and respecting boundaries and personal space. It refers to understanding someone else's feelings and showing concern for others

For example: When two children demonstrate impatience or difficulty sharing, one may express, "I know you want to play too—I love this toy! We can take turns."

3. Cooperation

Effective cooperation teaches children that most efforts are more powerful when combined. Children who learn to cooperate early develop patience and learn to participate and function within a community. This means helping out, sharing, and following rules.

For example: Children in classroom settings are encouraged to communicate through peer projects. Parents and caretakers can promote cooperation by facilitating "family work" like home chores and preparing meals.

4. Conflict Resolution

Disagreements and dissatisfaction are common among children, especially when learning to share and communicate. Children can achieve optimal **conflict resolution habits** by learning to recognize their emotions, pinpoint the source of the problem, and brainstorm solutions. This implies identifying the source of a problem and working toward a solution.

For example: A child might become upset at the park because another child chose not to play with them. Encourage the child to express how they feel with I-statements. For instance, "I felt sad that you didn't want to play a game with me." Then, your child may offer a solution. "Maybe we can try a different game next time."

5. Manners and Etiquette

Some children may behave disrespectfully, like burping loudly or being rowdy to gain attention. While some unruly behaviours are playful and innocuous, teaching children to be **polite and respectful in social settings** is essential. Children need to learn saying please and thank you.

For example: Elders should be a role model to the child by showing them respect and demonstrating good manners with others. Saying please and thank you in public service settings, friends' houses, and whenever one interacts with people.

6. Respect for Diversity

Children can better understand those around them by discussing the differences between peers and family backgrounds. In addition, **respect for diversity** promotes empathy, making children better learners. This means recognizing and respecting the inherent worth and dignity of others.

For example: A child watching a television show or reading a book may ask about someone's gender identity, sexual orientation, religion, or race. If the elders are unfamiliar with what the child is asking, they should take the time to educate themselves—use this as a learning opportunity alongside the child.

7. Self-Control

Impulsivity and emotional control are challenging for children to achieve in their developmental years. However, keeping rules and expectations simple can improve executive functioning and the ability to focus attention. The child has to be taught to regulate emotions and thinking before acting that is learning to control own behaviour.

For example: A child struggling to adhere to a routine may eventually become accustomed to the cadence of a regular schedule, which is especially beneficial for activities like reading time, chores, and bedtime. Consider "gamifying" these activities to create motivation.

8. Assertiveness

While some children have no problem stating their thoughts, others are more avoidant. Avoidant children may avoid disagreement out of fear of negative consequences, causing them to become submissive. By increasing **assertive communication**, children become more confident as they age. The child needs to learn expressing oneself while respecting opposing beliefs.

For example: An assertive child, when presented with an opportunity they are not particularly interested in (such as a sport, game, or other extracurricular activity), can politely decline. Encourage assertiveness by targeting individual behaviours like learning to say no, discussing their feelings, and making requests.

9. Patience

Patience can help children maintain healthy relationships and achieve future goals when nurtured. Children who develop patience in their early years are less dependent on others and hone advanced problem-solving skills. The child needs to have patience to wait to receive or achieve something and honouring the process

For example: the elders must consider different activities requiring patience, such as planting or painting. Reinforcing patience activities can improve the child's friendships and ability to achieve their goals.

10. Positivity

Navigating sadness and anger can be challenging for children who haven't yet developed reliable emotional intelligence. By acknowledging and processing negative feelings, children can become more confident in their ability to recover and learn from mistakes. This involves being optimistic while receiving honest criticism by practicing positive affirmations.

For example: Parents and elders must practice positive affirmations with the child to improve their self-esteem and self-belief. These should be kept short and in the present tense. For instance, "I am doing my best, and I am proud of myself."

PERSONALITY – CONCEPT & STRUCTURE

The word "personality" is derived from the Latin word "persona," meaning "mask," which in ancient Greek and Roman theatre was worn to represent different characters to depict the nature of the role actors were portraying. These masks weren't meant to conceal identity, but to project the specific qualities and traits of the character being portrayed. In today's world, personality represents an individual's unique pattern of thoughts, feelings, and behaviours, the unique identity of the individual. Personal qualities behaviours, attitudes, feelings and other such traits are the most common reference points of the psychological definitions of personality.

To trace the history the term personality has been defined in many ways, but as a psychological concept two main meanings have evolved. The first relates to the consistent differences between people, the second meaning emphasizes those qualities that distinguish man from other species. However, that no definition of personality has found universal acceptance. The study of personality can be said to have its origins in the fundamental idea that people are distinguished by their characteristic individual patterns of behaviour—the distinctive ways in which they walk, talk, furnish their living quarters, or express their urges. Psychologists examine such functions and processes as attention, thinking, or motivation, and how these different processes are integrated so as to give each person a distinctive identity, that is the personality of the individual.

The systematic study of personality as a recognizable and separate discipline within psychology may be said to have begun in the 1930s with the publication in the United States of two textbooks, *Psychology of Personality* (1937) by Ross Stagner and *Personality: A Psychological Interpretation* (1937) by Gordon W.

Allport, followed by Henry A. Murray's *Explorations in Personality* (1938), and by Gardner Murphy's integrative and comprehensive text, *Personality: A Biosocial Approach to Origins and Structure* (1947).

Physiological type theories: These theories propagate personality is categorised in relation to bodily characteristics. However, these concepts were dismissed later. Two general sets of theories are considered here, the humoral and the morphological.

Humoral theories: Perhaps the oldest personality theory, these propose that personality traits stem from imbalances in four bodily fluids or "humors", such as blood (sanguine), yellow bile (choleric), black bile (melancholic), and phlegm (phlegmatic). As biological science has progressed, these primitive ideas about body chemistry have been replaced by more complex ideas and by contemporary studies of hormones.
Morphological (body type) theories: The morphological theory of personality, developed by Ernst Kretschmer and later expanded by William H. Sheldon, suggests that personality traits are linked to specific body types or somatotypes, with Kretschmer associating certain mental disorders with particular physiques. *Physique and Character*, first published in 1921, he wrote that among his patients a frail, rather weak (asthenic) body build as well as a muscular (athletic) physique were frequently characteristic of schizophrenic patients, while a short, rotund (pyknic) build was often found among manic-depressive patients. Slim and delicate physiques are associated with introversion, while those with rounded heavier and shorter bodies tend to be cyclothymic—that is, moody but often extroverted and jovial.

Also, during the 1930s, American anthropologist Margaret Mead in her book *Sex and Temperament in Three Primitive Societies* (1935), showed that masculinity is not necessarily expressed through aggressiveness and that femininity is not necessarily expressed through passivity and consent. These demonstrated variations in personality characteristics due to influences of biology, learning, and cultural pressures.

Allport (1937) the famous psychologists described personality as "the dynamic organization within the individual of those psychophysical systems that determine his unique adjustment to his environment". Personality is the dynamic organisation of the inner traits and characteristics of the individual and the environmental factors. Personality is a self-regulating system which is constantly changing and evolving. This organization entails the operation of what is known as mental and what is known as physical. Personality is not the manifest behaviour or impression which an individual makes on others. It is something behind the manifest behaviour; it does something when an individual is aroused to make a response to the impinging stimuli or to meet environmental demand.

Allport assumes that not only every individual's mode of adjustment to the environment is different qualitatively, but there are also quantitative variations in respect of common traits.

Though personality gives distinctiveness and identity to the individual, its role is not confined to making the individual distinctive. It also serves a useful purpose by making an individual to behave in the interest of his survival. Later on, Allport (1965) revised his definition of personality.

The revised definition contains the word 'characteristic' for 'uniqueness' and words 'behaviour and thought' in place of 'adjustment': "Personality is a dynamic organization within the individual of those psychophysical systems that determine his characteristic behaviour and thought".

Although it is not possible to discuss various definitions of personality, Pervin's (1970) definition has implications for the purpose of research and measurement. It integrates three different aspects of existence: biological world of relation with others and the mode of relation with oneself.

The definition is reproduced below: "Personality represents those structural and dynamic properties of an individual or individuals as they reflect themselves in characteristic response situations".

The above definition recognizes the importance of parts and their relationship as the constituents of personality. It implies that personality is to be ultimately defined in terms of behaviour and that consistency within a single individual, consistency across all the individuals and consistency along the group of individuals are the salient features of personality.

- A dynamic and organized set of characteristics that distinguish an individual.
- The distinctive pattern of behaviours, thoughts, feelings, and motivations that characterize a person.
- Personality encompasses the enduring traits, patterns, and predispositions that influence how individuals think, feel, and behave in various situations.
- It's believed to be relatively stable and consistent across different contexts and times, though it can be influenced by life experiences and environmental factors.

Trait-based personality theories, such as those defined by Raymond Cattell, define personality as traits that predict an individual's behaviour.

Based on this definition we can deduce certain characteristics of personality. Elaborating his definition Allport presented the following assumptions regarding personality:
First, it is a dynamic organisation. It is noting static or unchangeable in nature. Dynamicity implies that it is everchanging and ever growing.
Second, the factors that form the personality are psycho-physical in nature that is that are partly physical and partly psychological.
Third, personality does not refer to behaviours or activities. Rather it is an organisation of which is behind the behaviours and activities of the individual
Fourth, personality is the product of the constant interaction and adjustment between the different psycho-physical factors that exist in every individual.

Apart from the above theories there are several theories that offer different concepts of personality. They are discussed in the next Unit in detail we are going to just refer them here.

Psychoanalytic theories: The most influential integrative theory of personality is that of psychoanalysis, which was largely promulgated during the first four decades of the 20th century by the Austrian neurologist Sigmund Freud. Although its beginnings were based in studies of psychopathology, psychoanalysis became a more general perspective on normal personality development and functioning. Sigmund Freud's psychoanalytic theory maintains that personality is formed by the interaction of three components that is the unconscious id, the mediating ego, and the moralistic superego, along with the development through psychosexual stages.

The Swiss psychiatrist Carl Gustav Jung, an early adherent of Freud’s theories, questioned the degree of emphasis that Freud gave to sexual motivations in personality development. Jung accepted the significant effect of the unconscious processes, but unlike Freud he preferred to emphasize that behaviour is motivated more by abstract, even spiritual, processes than by sexual drives. Carl Jung's personality theory, also known

as analytical psychology, posits that personality is shaped by both conscious and unconscious forces, including archetypes, and emphasizes the importance of individuation, the process of integrating these forces to achieve psychological wholeness. This theory suggests that personality is inherited and part of the collective unconscious—which includes both conscious and unconscious aspects.

The Austrian psychiatrist Alfred Adler, an early follower of Freud's, also disputed the importance of sexual motives. Adler's theory of individual psychology, also known as Adlerian psychology, focuses on how people strive for significance and belonging. He described a coping strategy that he called compensation, which he felt was an important influence on behaviour. Adler believed that personality develops in childhood and is shaped by social experiences. The six tenets of Adlerian theory, central to understanding his individual psychology, are: striving for success or superiority, subjective perception, unity and self-consistency, social interest, style of life, and creative power. Adler's theories may lack the excitement of Freud's and Jung's, being devoid of sexuality or mythology, but they are nonetheless practical, influential, and highly applicable.

Personality trait theory maintains that traits are more or less stable patterns of thoughts, feelings, and behaviours that define an individual, develop through a complex interplay of genetics, environment, and life experiences, shaping a person's unique characteristics. Traits refer not to single instances of a behaviour, but to persistent although not unvarying behaviour that, according to psychologists, implies a disposition to respond in a particular situation in an identifiable or definite way. According to Allport, traits represent structures or habits within a person and are not the construction of observers; they are the product of both genetic predispositions and experience.

It was Guilford (1959) who regarded trait as that aspect of the whole personality which distinguishes one individual from another, in a relatively enduring way.

This concept of personality of Guilford puts stress on three aspects of a trait:
(a) a quality with respect to which people differ;
(b) this quality should be recognized to be different from other qualities;
(c) the quality must be found to have consistent manifestation at different occasions.

PERSONALITY – DEVELOPMENT & MEASUREMENT

Personality development refers to the lifelong process by which an individual's unique characteristics, including thoughts, feelings, and behaviours, emerge and evolve, shaped by a combination of genetic, environmental, and experiential factors. Personality development refers to the process by which the organized thought and behaviour patterns that make up a person's unique personality emerge over time. Many factors influence personality, including genetics and environment. Personality development is a journey towards self-discovery and personal excellence.
Furthermore, it plays a crucial role in different spheres of life like especially in the professional and personal career:

- Enhanced self-confidence
- Improved communication skills
- Effective leadership abilities
- Increased self-awareness
- Better interpersonal relationships
- Heightened emotional intelligence

American psychoanalyst Erik H. Erikson, integrated psychological, social, and biological factors of personality. Erikson's scheme proposed eight stages of the development of drives, which continue past Freud's five stages of childhood (oral, anal, phallic, latency, and genital) and through three stages of adulthood. The proposed eight stages of Erikson follow an epigenetic process. The term epigenesis, borrowed from embryology, refers to the predetermined developmental sequence of parts of an organism. Each part has a special time for its emergence and for its progressive integration within the functioning whole. Each phase of emergence depends upon the successful completion of the preceding phase.

According to Erikson, environmental forces exercise their greatest effect on development at the earliest stages of growth, because anything that disturbs one stage affects all of the following stages.
The stages of personality development as described by Erikson are as follows:

1. *Stage 1: Trust vs. Mistrust* – In this stage, which occurs during infancy, individuals learn to trust or mistrust the world based on their interactions with caregivers. This stage lays the foundation for developing a sense of security and confidence.
2. *Stage 2: Autonomy vs. Shame and Doubt* – During early childhood, individuals begin seeking independence and exploring their abilities. The successful resolution of this stage leads to the development of a sense of autonomy and self-control.
3. *Stage 3: Initiative vs. Guilt* – In this stage, which occurs during the preschool years, individuals start taking initiative in activities and interacting with others. A healthy resolution of this stage fosters a sense of purpose and the ability to set goals.
4. *Stage 4: Industry vs. Inferiority* – During the school-age years, individuals engage in structured activities and strive for competence. Successfully passing through this stage instils a sense of accomplishment and a belief in one's abilities.
5. *Stage 5: Identity vs. Role Confusion* – Adolescence is a critical period for developing a sense of identity. Individuals explore and experiment with different roles and values, shaping their unique identities.

Personality development also fosters self-improvement by encouraging continuous learning and self-reflection.

1. Consistency: Personality development involves the consistent patterns and traits exhibited by an individual across various situations and contexts.
2. Flexibility: While personality traits tend to be stable, individuals have the capacity to adapt and adjust their behaviours in response to different circumstances.
3. Continuity: Personality development is a lifelong process, characterized by gradual changes and growth that occur as individuals navigate through life's experiences.
4. Individual Differences: Each person's personality development is unique, shaped by their genetic predispositions, upbringing, and personal experiences.
5. Multidimensional: Personality development encompasses multiple dimensions, including cognitive, emotional, social, and moral aspects.

According to Freudian explanation personality development is basically sexual in nature and as termed by Freud Libido is that the life force that permeates all the stages of development. In psychoanalytic theory, "libido" refers to the psychic energy or drive, initially conceived as primarily sexual but later expanded to encompass all life instincts and motivations, including those related to survival, pleasure, and love.

The stages are:

- The oral stage (from birth to 1)
- The anal stage (from 1 to 3)
- The phallic stage (from 3 to 6)
- The latent period (from 6 to puberty)
- The genital stage (puberty to death)

While every child grows at their own pace, there are five main stages of childhood development that they go through namely, newborn, infant, toddler, preschool, and school-age. The development takes place in five major aspects of human life they are physical, emotional, social, moral and sexual.

Several theories have been proposed to explain the process of personality development. Here are a few notable ones:

1. *Psychoanalytic Theory*: This theory, developed by Sigmund Freud, suggests that personality evolves through a series of psychosexual stages, including oral, anal, phallic, latency, and genital stages. Each stage is characterized by different developmental tasks and challenges that shape an individual's personality.
2. *Social Learning Theory*: Albert Bandura's social learning theory emphasizes the role of observation, imitation, and reinforcement in personality development. According to this theory, individuals learn behaviours through observation of others, and the reinforcement or punishment of those behaviours influences the development of their personality.
3. *Trait Theory*: This theory posits that personality consists of a set of stable traits or characteristics that are relatively consistent across different situations. Trait theorists believe that personality can be classified into a hierarchy of traits, such as extraversion, openness, conscientiousness, agreeableness, and neuroticism.
4. *Cognitive Development Theory*: Developed by Jean Piaget, the cognitive development theory suggests that personality development is closely tied to cognitive development. As individuals grow and develop cognitively, their understanding of themselves and the world influences the development of their personality.

These theories provide valuable insights into the complexity of personality development and how it is influenced by various factors. By understanding these theories, individuals can gain a deeper understanding of themselves and others, fostering personal growth and effective interpersonal relationships.

Personality measurement involves using various techniques, including self-report questionnaires, observer ratings, and projective tests, to assess an individual's personality traits and characteristics. Personality testing and assessment refer to techniques designed to measure the characteristic patterns of traits that people exhibit across various situations.

The three basic types of personality tests they are self-report inventories, projective tests and behavioural methods.

Self-Reporting Tests

- Self-Report Inventories like MMPI
- Rating scales
- Personality Tests

Projective Tests

- Rorschach Inkblot Test
- Thematic Apperception Test
- Word Association Test
- Draw-a -Person Test

Behavioural Methods

- Observation Method
- Experimental Method
- Interview

The greatest benefit of self-report inventories is that they can be standardized and use established norms. So, they can be easily and effectively interpreted. They are also relatively easy to administer and have much higher reliability and validity than projective tests. Projective tests, on the other hand, are most often used in psychotherapy settings and allow therapists to gather a great deal of information about a client quickly. The behavioural methods are easy to apply but their reliability is not verifiable.

Self-report inventories are questionnaires consisting of a set of questions or statements that the individual reads and then rates or responds to, based on how well they apply to them. These are used in personality assessment where individuals rate themselves on various traits or characteristics, offering a subjective perspective on themselves.

The most common self-assessed inventories are
16 Personality Factor Questionnaire (16PF), which **m**easures "normal" personality traits, used in clinical settings to identify psychiatric disorders; **NovoPsych Five Factor Personality Scale (NFFPS-30), a**ssessing personality across five major factors such as openness, conscientiousness, extraversion, agreeableness, and neuroticism; **Ten-Item Personality Inventory (TIPI),** which is a A brief scale measuring five personality traits (extraversion, agreeableness, conscientiousness, emotional stability, and openness); **Minnesota Multiphasic Personality Inventory (MMPI),** it is a widely used inventory with a large number of items, used to assess various aspects of personality.
Rating scale is used as a scale of choices to assess personality traits, allowing individuals or observers to rate behaviours or characteristics on a spectrum, rather than simply choosing a single answer. Rating scales can be either 3 point or 5 point or 7 point and the individual assess one's self at the point he or she is best suited on the trait being assessed.

The importance of quickly assessing personality traits in many studies prompted the development of brief scales such as the Ten-Item Personality Inventory (TIPI), a measure of five personality traits, extraversion, agreeableness, conscientiousness, emotional stability, and openness.

Projective tests
Projective tests as the very name suggests explores ways by which the patient projects own thoughts, inner feelings to certain external stimulus. They are intended to uncover feelings, desires, and conflicts that are hidden from conscious awareness. By interpreting responses to ambiguous cues, psychoanalysts hope to uncover unconscious feelings that might be causing problems in a person's life. A projective test is a personality test in which subjects are shown ambiguous images or given situations and asked to interpret them. The subjects are to project their own emotions, attitudes, and impulses onto the stimulus given; and then use these projections to explain an image, tell a story, or finish a sentence.

The **Rorschach Inkblot Test**, named after its creator, Swiss psychologist Hermann Rorschach is a projective test which has 10 cards with ambiguous inkblots in which subjects' perceptions of inkblots are recorded and then analysed using psychological interpretation, complex algorithms, or both. Some psychologists use this test to examine a person's personality characteristics and emotional functioning. It has been employed to detect underlying thought disorders, especially where the patients either consciously or unconsciously are reluctant to describe their thinking processes to the psychologist or psychiatrist.

The **Thematic Apperception Test (TAT)** is a psychological assessment tool that helps clinicians understand personality. It involves showing participants ambiguous pictures and asking them to tell stories about them. The stories are then analysed to understand the individual's personality. The examiner presents a series of cards to the participant, the participant tells stories about the pictures, the examiner records and transcribes the stories. It has multiple scoring systems, including qualitative and quantitative. The TAT has been criticized for not being standardized, also it can be time-consuming and may be influenced by the subjective interpretation of the examiner.

Francis Galton introduced the **Word Association Test (WAT)** in 1879 which was later used by Carl Jung and Sigmund Freud. It is a projective test. It contains a series of words and the patient has to respond by giving the first word that comes to the mind on hearing each word presented by the examiner. These responses reveal the mental conditions of the subject.

The **"Draw-a-Person" test**, also known as the Goodenough-Harris test, is a psychological assessment tool used to evaluate cognitive and emotional development, particularly in children, through analysing their drawings of a person. It is a measure of intellectual maturation in children, to elicit personality type, unconscious materials, thoughts and understanding of the world.

Behavioural Methods

These methods are very easy to apply and can be conducted rapidly. Observation of the individual’s behaviours either in natural settings or in a simulated environment is used to get a general assessment of the personality of an individual. The behaviours are observed and certain conclusions are derived from those observations. However, this is not a very objective method and can be biased or subjective as they can be influenced by the observer’s own thoughts and feelings. Interview is a method where a set of questions are formed and conclusions are drawn from the answers given by the subject. They can be equally subjective and not a very reliable method of scientific assessment.

➢ UNIT - 5 THEORIES OF PERSONALITY AND PSYCHOPATHOLOGY

STRUCTURE:

5.0 OBJECTIVES

5.1 To understand different theories of Personality and Psychopathology

5.2 To understand Schools of Psychology derived from Psychoanalysis related to counselling

5.3. Theories of:

5.3.1 Sigmund Freud: Founder of Psychoanalysis

5.3.2 Erik Erikson

5.3.3 Schools derived from psychoanalysis and psychology as related to counseling:

5.3.4 A. Adler, F. Alexander, E.L. Thorndike, B.F. Skinner, Carl Rogers, A. Maslow, A. Meyer, K.Z. Lorenz

5.3.1 INTRODUCTION TO FREUD'S THEORIES

Sigmund Freud, a renowned figure in psychology, introduced influential theories that reshaped our understanding of human behaviour and mental processes. He established psychoanalysis, a framework that emphasizes the significance of unconscious thoughts, emotions, and experiences in shaping personality. His work suggests that much of our behaviour is driven by hidden desires and past experiences, many of which originate in childhood.

Freud's theories focus on the inner conflicts within the mind and how they manifest in thoughts and actions. His approach to therapy involved uncovering these unconscious elements through techniques like free association, dream analysis, and talk therapy. While his ideas were groundbreaking, they also sparked debates and criticisms, yet they continue to influence modern psychology, therapy, and even literature and art.

The Structure of Personality

Freud proposed that human personality is composed of three key components: the **id, ego, and superego**. These elements interact to shape thoughts, emotions, and behaviour, often creating internal conflicts that influence decision-making.

- **The Id** represents our most primal instincts and desires. It operates based on the **pleasure principle**, seeking immediate gratification without considering consequences. This part of the personality is entirely unconscious and is present from birth.
- **The Ego** acts as the rational mediator, balancing the demands of the id with the constraints of reality. Functioning under the **reality principle**, it makes practical decisions and ensures that impulsive desires are met in socially acceptable ways.
- **The Superego** embodies moral standards and societal expectations. It develops as a person internalizes rules from parents, culture, and authority figures, striving for perfection and often imposing guilt when moral standards are not met.

Psychosexual Development

Freud believed that personality development occurs through a series of **psychosexual stages**, each characterized by a focus on different erogenous zones. He argued that experiences in these stages shape an individual's future personality and behaviour. If conflicts arise at any stage and remain unresolved, they may lead to psychological issues in adulthood.

Freud's Psychosexual Stages of Development

Sigmund Freud's theory of psychosexual development is one of the most influential and controversial theories in psychology. It explains how personality develops through a series of stages, each characterized by different sources of pleasure and conflict. According to Freud, from infancy to adulthood, individuals pass through five key stages, and the way they navigate these stages significantly influences their personality and behaviour later in life. Freud believed that if conflicts at any stage are not properly resolved, they can lead to psychological fixations, which manifest in adult behaviours. The five stages of psychosexual development are the **Oral Stage, Anal Stage, Phallic Stage, Latency Stage, and Genital Stage**. Each of these stages is associated with specific erogenous zones and developmental challenges.

The Oral Stage (0-1 year)

The first stage of psychosexual development, the **oral stage**, occurs during infancy, from birth to approximately one year of age. At this stage, the infant derives pleasure primarily from activities involving the mouth, such as sucking, chewing, and swallowing. The mouth is the first area through which an infant experiences the world, as feeding, biting, and sucking provide both nourishment and comfort. Freud suggested that this stage is crucial for establishing trust and dependency on caregivers.

The infant's primary relationship is with the mother, as breastfeeding and bottle-feeding satisfy not only hunger but also provide emotional security. If a baby is weaned too early or too late, or if feeding patterns are inconsistent, this can lead to fixation in the oral stage. An individual fixated at this stage may develop behaviours such as excessive eating, smoking, nail-biting, or excessive dependency on others. Freud believed that oral fixation could also lead to personality traits such as passivity, gullibility, or an excessive need for approval.

The Anal Stage (1-3 years)

The second stage, known as the **anal stage**, takes place between the ages of one and three. During this period, the child's primary focus of pleasure shifts to the anus, largely due to the process of toilet training. Children begin to gain a sense of control over their bodily functions, particularly bowel movements. This stage marks the beginning of an awareness of autonomy and personal control, as children learn to regulate an important aspect of their environment.

Toilet training is a crucial event during this stage, and the way parents handle it can shape the child's future personality traits. If parents enforce strict toilet training, demanding absolute cleanliness and order, a child may develop what Freud called an **anal-retentive personality**, characterized by excessive neatness, stubbornness, and a strong need for control. Conversely, if parents are too lenient and fail to impose discipline, the child may develop an **anal-expulsive personality**, leading to tendencies such as messiness, carelessness, and a lack of self-discipline.

The Phallic Stage (3-6 years)

The third stage, the **phallic stage**, occurs between the ages of three and six. At this stage, the focus of pleasure moves to the genitals, and children begin to explore gender roles and identity. This stage is particularly significant in Freud's theory because it introduces the controversial concept of the **Oedipus Complex** in boys and the **Electra Complex** in girls.

Freud suggested that during this stage, boys experience unconscious sexual desires for their mothers and view their fathers as rivals, leading to feelings of jealousy and competition. This is referred to as the **Oedipus Complex**. Similarly, girls experience attraction toward their fathers, which Freud termed the **Electra Complex**. This stage is also when girls may develop what Freud called "penis envy," a concept that has been widely criticized in modern psychology.

To resolve these conflicts, children eventually begin to identify with their same-sex parent, adopting their characteristics, values, and behaviours. This identification is critical for the development of gender identity and moral values. Unresolved conflicts during the phallic stage can lead to problems with authority figures, difficulty in forming close relationships, or an overemphasis on sexuality in adulthood.

The Latency Stage (6-12 years)

Following the intense conflicts of the phallic stage, children enter the **latency stage**, which lasts from around six years old until puberty. During this period, sexual impulses are dormant, allowing children to focus on developing intellectual, social, and athletic skills. This stage is marked by the formation of same-sex friendships, academic growth, and participation in activities that help refine social skills.

Since sexual energy is redirected toward learning and social interactions, Freud believed that this stage plays a crucial role in shaping a well-adjusted adult. Unlike the earlier stages, where conflicts may lead to fixation, Freud suggested that the latency stage is a period of calm where psychological development is relatively stable. Children who successfully navigate this stage tend to develop strong friendships, a sense of industry, and the ability to work well with others. However, if unresolved conflicts from earlier stages resurface, they may experience difficulties in forming close relationships or have trouble socializing.

The Genital Stage (12 years and beyond)

The final stage of psychosexual development is the **genital stage**, which begins at puberty and continues into adulthood. As the body undergoes significant hormonal changes, sexual energy is once again focused on the genitals, but in a more mature and socially appropriate manner. Unlike earlier stages, where sexual urges were directed toward parents or personal pleasure, the genital stage involves developing romantic and intimate relationships with others.

Freud believed that individuals who successfully complete all previous stages enter the genital stage with a balanced sense of self and a capacity for healthy adult relationships. They are capable of love, work, and meaningful social connections. However, if fixations from earlier stages persist, individuals may struggle with intimacy, experience unhealthy relationships, or exhibit excessive dependency or detachment.

Summary of the stages

1. **Oral Stage (0-1 year):** During infancy, pleasure is derived from activities involving the mouth, such as sucking and biting. If a child experiences too much or too little gratification at this stage, they may develop habits like excessive eating, nail-biting, or smoking in adulthood.
2. **Anal Stage (1-3 years):** This phase centers on toilet training and the control of bodily functions. Children who face strict or lenient toilet training may develop personality traits such as excessive orderliness (anal-retentive) or impulsiveness (anal-expulsive).
3. **Phallic Stage (3-6 years):** Children begin to focus on their genitals and may develop an attachment to the opposite-sex parent, a concept Freud referred to as the **Oedipus Complex** in boys and the **Electra Complex** in girls. Successful resolution of this conflict leads to a healthy sense of identity.
4. **Latency Stage (6-12 years):** Sexual impulses are subdued, and children focus on learning, social interactions, and developing friendships.

5. **Genital Stage (12 years and onward):** As individuals enter puberty, sexual energy is directed toward forming mature relationships. A well-adjusted person reaches this stage with a balanced approach to love and relationships.

Psychosexual stages with Erogenous Zone and Activities

Stage	Age	Erogenous Zone	Activities
Oral	Birth- 1.5 year	In Mouth	Sucking , biting, chewing
Anal	1.5- 3 year	Anus	Anus ,Bladder control
Phallic	3 – 6 year	Genital	Genitals , Masturbation
Latency	6- Puberty	Dormant Sexual Feelings	Repressed Sexual feelings
Genital	Puberty- Adult	Maturing Sexual interest	Sexual interest

The Psychosexual Stages of Development

Freud's **topographical model of personality** explains how human thoughts, emotions, and memories are organized and how they influence behaviour. He divided the mind into three levels: the conscious, preconscious, and unconscious. This model describes the mind as an iceberg, with the conscious mind visible above the surface while the much larger unconscious remains hidden beneath. According to Freud, these layers of the mind constantly interact, shaping personality and behaviour.

The **conscious mind** consists of thoughts, perceptions, and experiences that an individual is actively aware of at any given moment. It is responsible for logical thinking, decision-making, and responding to the external world in real-time. This part of the mind allows people to engage with their surroundings, process sensory information, and make judgments. However, Freud believed that the conscious mind was only a small fraction of mental activity, as deeper and more influential processes lie below the surface.

Beneath the conscious mind is the **preconscious**, which serves as a transitional layer between conscious awareness and the hidden unconscious. It contains memories, knowledge, and experiences that are not immediately in awareness but can be retrieved when needed. For example, a person may not always think about childhood experiences, but they can recall them when triggered by a conversation or a familiar setting. The preconscious allows information to move between levels of awareness, influencing decisions and emotions without always being at the forefront of thought.

The most significant and complex level of the mind is the **unconscious**, which houses repressed desires, instincts, and unresolved conflicts. Freud believed that many aspects of human behaviour stem from unconscious forces that individuals are unaware of. Traumatic memories, forbidden urges, and deep-seated fears are stored in this hidden realm, shaping personality and actions in indirect ways. The unconscious mind expresses itself through dreams, slips of the tongue, and even seemingly irrational behaviours. Freud argued

that psychological distress often arises from unresolved unconscious conflicts, which is why psychoanalysis aims to bring these hidden issues into conscious awareness for resolution.

These three levels of the mind work together continuously. The unconscious influences thoughts and actions without direct awareness, while the preconscious acts as a bridge, allowing certain hidden elements to surface when necessary. The conscious mind then interprets and reacts to this information. Freud believed that mental well-being depended on understanding these inner dynamics and resolving conflicts within the unconscious. His topographical model provided a foundation for psychoanalysis and remains a key concept in understanding human behaviour today.

Defense Mechanisms

Freud suggested that the **ego** employs **defense mechanisms** to manage anxiety and inner conflicts that arise between the id, superego, and external reality. These unconscious strategies help reduce distress but can sometimes distort reality.

1. **Repression:** The mind pushes distressing memories or desires into the unconscious, preventing them from entering awareness. For example, a person who has experienced trauma may have no recollection of the event.
2. **Denial:** A person refuses to acknowledge a painful reality. For instance, someone diagnosed with a serious illness may act as if nothing is wrong.
3. **Projection:** Unacceptable thoughts or emotions are attributed to others. A person who feels hostility toward a coworker might believe that the coworker dislikes them instead.
4. **Displacement:** Negative feelings are redirected from their original source to a less threatening target. An employee frustrated with their boss might take out their anger on a family member.
5. **Regression:** Under stress, a person reverts to behaviours from an earlier developmental stage. For example, an adult may begin biting their nails or seeking comfort from others when anxious.
6. **Sublimation:** Unacceptable impulses are transformed into socially acceptable activities. For example, aggressive tendencies might be channelled into sports or creative work.
7. **Rationalization:** A person justifies their behaviour with logical but false explanations to avoid admitting the real reasons behind their actions.

The Unconscious Mind

Freud believed that much of human behaviour is influenced by the **unconscious mind**, which consists of thoughts, memories, and desires that are not immediately accessible but still shape our actions and emotions. He compared the mind to an **iceberg**, where the conscious part is just the visible tip, while the unconscious remains hidden beneath the surface.

The mind, according to Freud, is divided into three levels:

1. **Conscious Mind:** The part of awareness that includes thoughts and perceptions we actively engage with.
2. **Preconscious Mind:** Contains memories and information that are not currently in awareness but can be recalled when needed.
3. **Unconscious Mind:** Stores repressed thoughts, instinctual drives, and unresolved conflicts that influence behaviour without our awareness.

Freud believed that many psychological issues arise from unresolved conflicts buried in the unconscious. He developed therapeutic techniques such as **free association, dream analysis, and hypnosis** to uncover these hidden thoughts and bring them into awareness, allowing individuals to process and resolve deep-seated issues.

Freud's Contributions and Criticism

Freud's Contributions to Psychology

Freud's theories had a profound impact on psychology, laying the foundation for psychoanalysis and influencing fields such as psychiatry, literature, and philosophy. Some of his key contributions include:

1. **The Concept of the Unconscious:** Freud emphasized that much of human behaviour is influenced by unconscious desires and conflicts, shaping modern psychological thought.
2. **Personality Structure:** His model of the id, ego, and superego provided a framework for understanding internal psychological conflicts.
3. **Psychosexual Development:** He introduced the idea that childhood experiences play a crucial role in shaping personality.
4. **Defense Mechanisms:** Freud's explanation of how the mind protects itself from anxiety has been widely used in psychology and therapy.
5. **Therapeutic Techniques:** His methods, such as free association and dream analysis, paved the way for modern talk therapy.

Criticism of Freud's Theories

Despite his influence, Freud's theories have faced significant criticism:

1. **Lack of Scientific Evidence:** Many of his ideas, such as the Oedipus Complex and psychosexual stages, lack empirical support and cannot be tested scientifically.
2. **Overemphasis on Sexuality:** Critics argue that Freud placed excessive focus on sexual drives, neglecting other important aspects of personality development.
3. **Subjectivity and Bias:** His theories were largely based on case studies rather than controlled experiments, leading to concerns about generalizability.
4. **Gender Bias:** Freud's views on female psychology, particularly the concept of "penis envy," have been widely criticized as sexist and outdated.
5. **Modern Psychological Advances:** Contemporary research in neuroscience and cognitive psychology has challenged many of Freud's assumptions about the unconscious mind and personality development.

INTRODUCTION TO ERIKSON'S THEORY

Erik Erikson, a well-known developmental psychologist, introduced a comprehensive theory of psychosocial development that explains how individuals grow and evolve across their lifespan. Unlike Freud, who emphasized psychosexual stages, Erikson focused on social and emotional development, highlighting the importance of relationships, societal expectations, and identity formation. His theory is built upon the idea that people go through **eight distinct stages**, each characterized by a central conflict that must be resolved for healthy psychological growth.

At every stage, individuals face a crucial challenge that shapes their personality and ability to interact with the world. Successfully overcoming these challenges leads to the development of strengths and virtues, while unresolved conflicts may result in difficulties in later stages. Erikson's model spans from infancy to old age, emphasizing that human development is a lifelong process rather than being limited to early childhood. His work has been widely applied in education, counselling, and personal growth, making it a significant contribution to psychology.

The Eight Stages of Psychosocial Development

Trust vs. Mistrust (Infancy: 0-1 year)

The first stage of Erikson's psychosocial development theory occurs during infancy, where the primary challenge is establishing a sense of trust. Infants are entirely dependent on their caregivers to meet their needs, including food, comfort, and safety. When caregivers respond consistently with love and care, the child develops a sense of security and trust in the world. However, if caregivers are neglectful or unreliable, the infant may develop mistrust, leading to anxiety and insecurity. Successfully resolving this stage results in the virtue of **hope**, allowing the individual to believe that the world is a safe and supportive place.

Autonomy vs. Shame and Doubt (Early Childhood: 1-3 years)

As children begin to gain independence, they face the challenge of developing autonomy while avoiding feelings of doubt. During this stage, toddlers learn basic skills such as walking, talking, and toilet training. Encouraging exploration and allowing children to make small decisions fosters confidence in their abilities. On the other hand, overly restrictive or critical parenting can make a child feel ashamed or doubtful about their skills. A balanced approach helps children develop **willpower**, enabling them to act independently while understanding limits.

Initiative vs. Guilt (Preschool Age: 3-6 years)

During early childhood, children become more curious and eager to take initiative. They begin to explore the world around them, engage in imaginative play, and take on new challenges. If caregivers support their curiosity and encourage problem-solving, children develop a sense of purpose and confidence in their ability to lead. However, if they are constantly criticized or discouraged, they may feel guilty for their actions and hesitate to take initiative in the future. Successfully navigating this stage results in the virtue of **purpose**, allowing children to set goals and take meaningful actions.

Industry vs. Inferiority (School Age: 6-12 years)

As children enter school, they start comparing themselves to others and seeking recognition for their efforts. This stage is crucial for developing a sense of competence through learning, teamwork, and achievement. When children are encouraged to work hard and accomplish tasks, they develop confidence in their abilities. However, if they experience repeated failure, criticism, or a lack of encouragement, they may feel inferior and struggle with self-esteem. Mastering this stage leads to the development of **competence**, which allows individuals to feel capable and effective in their pursuits.

Identity vs. Role Confusion (Adolescence: 12-18 years)

During adolescence, individuals undergo significant physical, emotional, and psychological changes, leading to the critical challenge of developing a strong sense of identity. At this stage, teenagers explore different roles, beliefs, and values, seeking to understand who they are and how they fit into society. They experiment with career aspirations, friendships, and personal ideologies. Successfully resolving this stage results in a stable sense of self and the ability to face future challenges with confidence. However, if an adolescent struggles to establish a clear identity or faces pressure to conform, they may experience confusion and insecurity about their place in the world. A positive outcome of this stage is the development of **fidelity**, which allows individuals to remain true to their values and commitments.

Intimacy vs. Isolation (Young Adulthood: 18-40 years)

As individuals transition into adulthood, they face the challenge of forming deep and meaningful relationships. This stage is characterized by the desire to build close bonds with others, whether in romantic relationships, friendships, or social connections. Those who successfully establish intimate relationships experience

emotional closeness, trust, and mutual support. However, if individuals struggle with commitment or fear vulnerability, they may become isolated, leading to loneliness and emotional detachment. Resolving this stage positively results in the virtue of **love**, which enables individuals to form healthy and lasting relationships.

Generativity vs. Stagnation (Middle Adulthood: 40-65 years)

In middle adulthood, individuals seek to contribute to society and create a meaningful impact. This can be achieved through raising children, excelling in one's career, mentoring younger generations, or engaging in community service. Those who successfully navigate this stage develop a sense of productivity and purpose, feeling that they are leaving a positive legacy. On the other hand, individuals who struggle to find purpose may feel unfulfilled, stagnant, or disconnected from society. A successful resolution of this stage leads to the virtue of **care**, encouraging individuals to nurture and support others.

Integrity vs. Despair (Late Adulthood: 65 years and beyond)

As individuals reach old age, they reflect on their lives and evaluate whether they have lived with purpose and fulfilment. This stage presents the challenge of either developing a sense of integrity or experiencing despair. Those who look back with satisfaction, recognizing their achievements and accepting both successes and failures, develop a sense of peace and wisdom. They feel a deep understanding of life and accept its inevitable end with dignity.

However, individuals who feel they have wasted their years or have unresolved regrets may experience despair, marked by bitterness, depression, or a fear of death. They may struggle with feelings of disappointment, believing they have not lived up to their potential. Successfully resolving this stage leads to the virtue of **wisdom**, allowing individuals to accept their life journey and impart their experiences to younger generations.

CONCLUSION

Erikson's theory of psychosocial development highlights the importance of lifelong growth and adaptation. Unlike Freud's emphasis on early childhood, Erikson believed that personal development continues throughout life, with each stage presenting unique challenges that shape an individual's character and relationships. His work has influenced fields such as education, counselling, and social work, providing a valuable framework for understanding human behaviour and personality formation.

Although his theory has been widely accepted, some critics argue that the stages do not apply universally to all cultures or individuals. Nonetheless, Erikson's ideas remain a cornerstone in developmental psychology, offering insight into how individuals navigate the complexities of life from infancy to old age.

ALFRED ADLER'S PERSONALITY THEORY: A COMPREHENSIVE OVERVIEW

Striving for Superiority: The Ultimate Human Motivator

Alfred Adler's personality theory, known as Individual Psychology, is centred around the concept of the striving for superiority. Adler proposed that this fundamental drive is what propels human behaviour and development. Unlike the common misconception of superiority as dominance over others, Adler viewed it as a pursuit of self-improvement and personal growth. This striving can manifest positively, leading to achievements and contributions to society, or negatively, resulting in destructive behaviours and mental health issues. Adler believed that this drive is universal and stems from our innate feelings of inferiority, which we all experience to some degree. These feelings of inferiority act as a catalyst, pushing individuals to strive for a sense of wholeness and fulfilment.

The Creative Self: Shaping Our Own Destinies

A cornerstone of Adler's theory is the concept of the creative self, which highlights our ability to shape our own personalities and destinies. According to Adler, the creative self is like an inner artist, moulding our experiences and perceptions into a unique expression of our individuality. This creative power is present from a very young age, allowing children to interpret their experiences and form beliefs about themselves and the world. Adler emphasized that while heredity and environment play a role in our development, it is ultimately what we do with these factors that defines us. The creative self enables us to set goals, respond to challenges, and actively participate in our own development. This concept empowers individuals by recognizing their agency in shaping their lives.

Social Interest: The Foundation of Healthy Development

Social interest is another vital component of Adler's theory, referring to an individual's innate drive to connect with others and contribute to the welfare of society. Adler believed that social interest is essential for psychological health and that a well-developed sense of social interest allows individuals to compensate for their feelings of inferiority in a constructive manner. In contrast, those with underdeveloped social interest may exhibit neurotic tendencies, characterized by increased feelings of inferiority and an exaggerated, uncooperative goal of superiority. Adler's emphasis on social in terest highlights the interconnectedness of human beings and the importance of cooperation and contribution to the greater good. This perspective aligns with broader philosophical ideas about the interdependence of individuals and society.

Lifestyle: The Unique Expression of Our Goals and Perceptions

Adler described lifestyle as a person's unique way of living, encompassing how they relate to others and approach life's challenges. Lifestyle is not a passive reaction to one's environment but is actively shaped by individual goals and perceptions. It reflects a person's unique style of life, which is developed early in childhood and influenced by factors such as family dynamics and early experiences. Adler believed that understanding an individual's lifestyle is crucial for comprehending their behaviour and addressing any issues that may arise. A healthy lifestyle is characterized by a balance between self -interest and social interest, allowing individuals to pursue their goals while contributing to the well-being of others.

Psychological Types: Understanding Individual Differences

Adler also categorized people into different psychological types based on their energy expenditure in the pursuit of superiority. These types include the ruling type, who seeks power and dominance; the leaning type, who relies heavily on others and may exhibit neurotic tendencies; the avoiding type, who withdraws from interactions; and the socially useful type, who is active, possesses social interest, and is considered healthy. These types provide a framework for understanding the diverse ways in which ind ividuals may approach their striving for superiority and the challenges they may face.

Birth Order: The Influence of Family Dynamics

Adler explored the impact of birth order on personality development, suggesting that the position of a child within the family can influence their experiences and perceptions. He believed that firstborn children, who initially enjoy the full attention of their parents, may struggle when a younger sibling is born and they lose their privileged position. This experience, known as dethroning, can lead to feelings of jealousy and a struggle to regain attention. In contrast, younger children may feel inferior in comparison to their older siblings and develop unique strategies to compensate for this perceived deficiency. Adler's theories on birth order highlight the complex interplay between family dynamics and individual development.

CONCLUSION

Alfred Adler's personality theory, Individual Psychology, offers a holistic and comprehensive framework for understanding human behaviour and motivation. By emphasizing the striving for superiority, the creative self, social interest, lifestyle, psychological types, and the influence of birth order, Adler provides valuable insights into the complexities of human development. His theories challenge traditional deterministic views of personality, placing agency and creativity at the forefront of individual growth. Adler's work continues to influence modern psychology and provides a foundation for understanding the multifaceted nature of human experience.

FREDDIE ALEXANDER'S THEORY

Freddie Alexander is not widely recognized for a specific psychological theory. However, there are individuals with this name who have made contributions in various fields. For example, one Freddie Alexander is known for his work in nutrition and fitness, focusing on promoting healthy lifestyles and community well-being. Another Freddie Alexander is a multi-platinum and Grammy-nominated songwriter, music producer, mixing engineer, and multi-instrumentalist. While these contributions are significant in their respective domains, they do not pertain to a specific psychological theory.

EDWARD LEE THORNDIKE'S THEORY

Edward Lee Thorndike (1874–1949) was a pioneering American psychologist whose work laid the foundation for modern educational psychology. He is best known for his research on animal learning, the development of the Law of Effect, and his contributions to the understanding of human learning and intelligence.

Key Contributions

Law of Effect

Thorndike's Law of Effect states that behaviours followed by satisfying consequences are more likely to be repeated, while those followed by negative consequences are less likely to be repeated. This principle emphasizes the role of reinforcement in learning and has been foundational in the development of behaviourist theories, including B.F. Skinner's operant conditioning.

Trial and Error Learning

Thorndike's research with animals, particularly his famous puzzle box experiments, demonstrated that learning occurs through trial and error. Animals placed in a puzzle box eventually learned to escape by pressing a lever or stepping on a switch, with correct responses being strengthened over time. This process involves the gradual "stamping in" of correct responses and the "stamping out" of incorrect ones. **Laws of Learning**
Thorndike proposed several laws of learning, including:

- **Law of Readiness**: Learning is more effective when the learner is prepared and motivated to learn.
- **Law of Exercise**: Practice strengthens connections, while disuse weakens them.
- **Law of Effect**: Behaviours followed by positive consequences are strengthened, while those followed by negative consequences are weakened.

Theory of Intelligence

Thorndike proposed a multifactor theory of intelligence, suggesting that intelligence is composed of several independent abilities rather than a single general factor.

He identified three main categories of intellectual ability:

- **Abstract intelligence**: The ability to think using words, concepts, and symbols.
- **Mechanical intelligence**: The ability to manipulate physical objects and tools.
- **Social intelligence**: The ability to communicate effectively and handle social interactions.

Contributions to Education

Thorndike's work had a significant impact on educational practices. He emphasized the importance of making learning experiences pleasant to encourage repetition and the use of standardized tests to measure intellectual abilities. His research supported the idea that subjects should be included in the curriculum based on their intrinsic value rather than unproven assertions about transferability.

Applications and Influence

Thorndike's theories and research have been applied in various educational settings to improve teaching methods and student learning. His emphasis on reinforcement, practice, and readiness has influenced modern educational practices, including the use of rewards, drills, and standardized testing. Thorndike's work also laid the foundation for future research in comparative psychology and the development of behaviourist theories.

Criticisms

Despite his significant contributions, Thorndike's theories have faced some criticisms. His behaviourist approach, which focuses on observable stimulus-response bonds, has been criticized for dismissing cognitive events such as thoughts and intentions. Additionally, some of his research on animals has been questioned for its generalizability to human behaviour.

In summary, Edward Lee Thorndike's work on the Law of Effect, trial and error learning, and his contributions to educational psychology have had a lasting impact on the fields of psychology and education. His theories continue to influence modern educational practices and research

B.F. SKINNER'S PERSONALITY THEORY

B.F. Skinner, a prominent American psychologist and behaviourist, is best known for his work on operant conditioning and his contributions to the field of behaviourism. His approach to personality theory is rooted in the principles of behaviourism, which emphasizes observable behaviour and the role of the environment in shaping behaviour.

Key Concepts

Operant Conditioning

Skinner's theory of operant conditioning posits that behaviour is shaped by its consequences. He identified three types of responses:

- **Neutral Operants**: Responses that neither increase nor decrease the likelihood of a behaviour.
- **Reinforcers**: Responses that increase the likelihood of a behaviour.
- **Punishers**: Responses that decrease the likelihood of a behaviour.

Reinforcement Schedules

Skinner also explored different schedules of reinforcement, which influence how quickly and effectively behaviours are learned:

- **Continuous reinforcement**: Every instance of the desired behaviour is reinforced.

- **Partial reinforcement**: Only some instances of the behaviour are reinforced.
- **Fixed-ratio reinforcement**: Reinforcement is provided after a specific number of desired behaviours.
- **Variable-ratio reinforcement**: Reinforcement is provided after a varying number of desired behaviours.

Shaping Behaviour

Skinner believed that complex behaviours could be shaped through a process called "shaping," where successive approximations of the desired behaviour are reinforced. This method allows for the gradual development of complex behaviours.

Personality as Learned Behaviour

Skinner's view of personality is that it is not a fixed entity but rather a collection of learned behaviours. He argued that personality traits are not internal constructs but are instead the result of environmental influences and reinforcement history. According to Skinner, our environment, including social and cultural contexts, determines which behaviours are reinforced and which are punished, thus shaping our personality development.

Free Will and Determinism

Skinner famously argued that free will is an illusion. He believed that all behaviour is determined by past experiences and current environmental factors. This deterministic view suggests that our sense of freedom is a result of not fully understanding the factors influencing our actions. This perspective has significant implications for discussions about accountability and social control.

Applications and Influence

Skinner's theories have had a profound impact on various fields, including education, psychology, and behaviour therapy. His work on operant conditioning has been applied in educational settings to develop effective teaching methods, such as programmed instruction and behaviour modification techniques. Additionally, Skinner's ideas have influenced the development of behaviour therapy, which focuses on changing maladaptive behaviours through reinforcement and punishment.

Criticisms

Despite his significant contributions, Skinner's theories have faced criticism. Some argue that his focus on observable behaviour neglects the importance of internal mental processes and subjective experiences. Additionally, his deterministic view of behaviour has sparked ethical debates about free will and personal responsibility.

In summary, B.F. Skinner's personality theory, rooted in operant conditioning, emphasizes the role of environmental factors in shaping behaviour. His work has had a lasting impact on the fields of psychology and education, although it has also faced criticism for its deterministic view and neglect of internal mental processes.

CARL ROGERS' PERSONALITY THEORY

Carl Rogers (1902–1987) was a pioneering American psychologist and the founder of humanistic psychology. His personality theory is centered around the concept of the self and the importance of self - actualization. Rogers believed that humans have an inherent drive to grow and develop, and that the environment plays a crucial role in facilitating or hindering this process.

Key Concepts

Self-Concept

Central to Rogers' theory is the notion of self-concept, which is an organized and consistent set of perceptions and beliefs about oneself. The self-concept includes three components:

- **Self-image**: How individuals see themselves, including their physical appearance, personality traits, abilities, values, roles, and goals.
- **Self-esteem**: The value or worth an individual places on themselves, influenced by perceived successes, failures, and how they believe others view them.
- **Ideal self**: The person an individual aspires to be.

Congruence and Incongruence

Rogers believed that the closer one's self-image is to their ideal self, the more congruent they are, leading to a higher sense of self-worth. When there is a discrepancy between the self-image and the ideal self, incongruence occurs, resulting in psychological tension and anxiety.

Phenomenal Field

The phenomenal field refers to an individual's subjective reality, which includes their perceptions, experiences, and interpretations of the world. Rogers emphasized that counselling and therapy should begin with understanding the client's phenomenal field rather than imposing external judgments.

Fully Functioning Person

Rogers described a fully functioning person as someone who is open to experience, lives existentially, trusts their organismic feelings, exercises freedom of choice, is creative, and lives a rich, full life. These individuals are in tune with their inner selves and strive for self-actualization.

Unconditional Positive Regard

Rogers introduced the concept of unconditional positive regard, which means accepting and supporting a person without judgment. This approach fosters a therapeutic environment where clients feel safe to explore their true selves and work towards congruence.

Applications and Influence

Rogers' theories have had a profound impact on various fields, including psychology, education, and counselling. His client-cantered therapy, later known as person-centered therapy, emphasizes the importance of empathy, genuineness, and unconditional positive regard in fostering personal growth. This approach has been widely adopted in therapeutic settings and has influenced modern cou nselling practices.

Criticisms

Despite his significant contributions, Rogers' theories have faced some criticisms. Some argue that his emphasis on subjective experience and self-actualization can be overly idealistic and may not account for the complexities of human behaviour. Additionally, his approach has been criticized for potentially neglecting the role of external factors and social context in shaping personality.

In summary, Carl Rogers' personality theory emphasizes the importance of self-concept, congruence, and the phenomenal field in understanding human behaviour. His work has had a lasting impact on the fields of psychology and counselling, promoting a humanistic approach that values individual potential and growth.

ABRAHAM MASLOW'S THEORY

Abraham Maslow's theory of personality, most famously known as the "Hierarchy of Needs," proposes that humans are motivated by a series of needs, starting with basic physiological needs and progressing to higher-level needs like self-esteem and self-actualization**.** Maslow's Hierarchical Theory maintained that much of human behaviour can be explained by the individual's tendency to seek personal goal that make life rewarding and meaningful.

In fact, motivational processes are the main principles of his personality theory. Maslow (1970) depicted the human being as a "wanting animal" who rarely reaches a state of complete satisfaction. In Maslow's system, as one personal desire is satisfied, other surfaces to take its place. When a person satisfies this one, still another clamours for satisfaction. It is characteristic of human life that people are almost always desiring something.

Fig. 1

Maslow proposed that human desires (i.e., motives) are innate and that they are arranged in an ascending hierarchy of priority or potency. The above figure also given in an earlier Unit, is a schematic representation of this need-hierarchy conception of human motivation.
The needs are, in order of potency:
(1) basic physiological needs;
(2) safety needs;
(3) belongingness and love need;
(4) self-esteem needs; and
(5) self-actualization needs, or the need for personal fulfilment.

Underlying this scheme is the assumption that low-order, prepotent needs must be at least somewhat satisfied before an individual can become aware of or motivated by higher-order needs. Gratification of needs lower in the hierarchy allows for awareness of and motivation by needs higher in the hierarchy, for example, physiological needs must be met before safety needs become salient; both physiological and safety needs must be satisfied to some extent before the needs for belongingness and love emerge and press for satisfaction, and so forth.

However, Maslow acknowledged that there may be exceptions to this hierarchical arrangement of motives. For instance, he noted that some creative people have pursued the development and expression of their special talents despite serious hardships and social ridicule. There are also people whose values and ideals

are so strong that they are willing to suffer hunger or thirst or even die rather than renounce them. For example, social reformers have continued their struggles despite harassment, jail sentences, physical deprivation, and, often, certain death. In general, however, the lower the need in the hierarchy, the greater its strength or priority tends to be. Maslow's Hierarchy of Needs, while widely reads and referred to, has faced criticism for its lack of empirical support, ethnocentric bias, and the assumption of a rigid, linear progression of needs.

ADOLF MEYER'S THEORY

Adolf Meyer's theory, known as psychobiology, emphasized understanding mental health through a holistic, integrated approach encompassing biological, social, and psychological factors, viewing mental illness as a result of personality dysfunction rather than solely brain pathology.

Meyer emigrated to the United States in 1892, he was already exceptionally well trained in neuroanatomy and neurophysiology, having studied at the University of Zürich, he earned his medical degree. In the US he became acquainted with the thought of the psychologist William James, the philosopher-educator John Dewey, and others who were moulding sociological and philosophical tradition in the United States. He fused these various influences into a concept of human behaviour that he called ergasiology (from the Greek for "work" or "doing") or psychobiology, which seeks a complete integration of the psychological and biological study of human beings.

Here's a more detailed explanation of Adolf Meyer's **Psychobiological Theory**:
Holistic Approach: Meyer believed that individuals should be understood through their daily activities and experiences, emphasizing the interconnectedness of mind and body.
Psychobiology: Meyer coined the term "ergasiology" to describe his psychobiological approach, which considered all aspects of a person's life, including their social and biological factors, as crucial to understanding and treating mental illness.
Personality Dysfunction: Meyer argued that mental illness stemmed from dysfunctional personality rather than solely from brain pathology.
Early Support for Occupational Therapy: Meyer was an early supporter of occupational therapy, recognizing the importance of activities and daily living skills in promoting mental health.
Community-Based Approach: He advocated for incorporating community-based activities and services into treatment to help people develop everyday living skills.
Focus on Social Adaptation: Meyer emphasized the importance of social interaction and interpersonal relationships as tools for understanding and treating mental illness.
Influence on Psychiatry: Meyer's work significantly influenced the development of psychiatry in the early 20th century, particularly his emphasis on a holistic and integrated approach to understanding and treating mental illness.
Neuroplasticity: Meyer recognized the importance of the brain's ability to change and adapt, a concept now known as neuroplasticity, and he translated this concept into a framework for clinical psychiatry.

Adolf Meyer, a prominent figure in early 20th-century psychiatry, faced criticism for his psychobiological approach, including its perceived lack of empirical rigor, oversimplification of mental disorders, and difficulty in translating his complex ideas into practical diagnostic and treatment approaches. His theories of psychobiology are complex in nature and challenging to understand. Meyer's theory lacked empirical evidence and was not based on rigorous scientific research.

KONRAD LORENZ'S THEORY

Konrad Lorenz, Austrian psychologist and a pioneer in ethology, is well-known for his research on imprinting and its implications on early development, suggesting that newborn animals form strong bonds with the first moving object they see, which influenced the understanding of human attachment and development of human personality. Ethology emphasizes the role of objective and quantifiable observations of behaviour and the need to integrate the study of its multiple aspects: physiological or cognitive mechanisms regulating it, changes related to age, its contribution to an individual's survival and reproduction, and its evolutionary history. Although ethology is often equated with the study of animal behaviour, it has made many important contributions to understandings of human behaviour and development.

Sensitive periods have also been recognized for language learning and other aspects of cognitive development. Lorenz's research on imprinting led to the hypothesis that human infants need to be in close physical contact with their mothers early in life during a critical period in order to develop a strong bond with them, and that disruption of the bonding process might have a negative impact on the mother's behaviour, the relationship between mother and child, and the child's psychological and social development.

Here's a more detailed explanation:

- **Imprinting:** Lorenz's research, particularly with geese, demonstrated that newborn animals imprint on the first moving object they see after hatching, forming a strong attachment.
- **Critical Period:** This imprinting occurs during a specific, sensitive period shortly after birth, highlighting the importance of early experiences in shaping development.
- **Influence on Attachment Theory:** Lorenz's work on imprinting was instrumental in the development of attachment theory, which posits that humans, like animals, have a biologically based need for close relationships with caregivers.
- **Nature vs. Nurture:** Lorenz's research emphasized the role of both innate (biological) and environmental factors in shaping behaviour, arguing that human behaviour is a result of both nature and nurture.
- **Fixed Action Patterns:** Lorenz also coined the term "fixed action patterns," which refers to instinctive behaviours that animals automatically exhibit under certain environmental conditions.
- **Baby Schema:** Lorenz introduced the concept of a 'baby schema', suggesting that infants have specific physical features, such as a relatively large head, large eyes and protruding cheeks, which function as an innate releaser to promote caretaking motivation from perceivers.

This research of Lorenz, was instrumental in the formulation of attachment theory, according to which human infants and children possess a biologically based motivational system that urges them to maintain proximity to their caregivers and solicit help and protection at times of need.

Although this hypothesis remains controversial, the importance of extended contact and interaction between an infant and her caregivers is generally appreciated by paediatricians and developmental psychologists. Konrad Lorenz, a pioneer in ethology, faced criticism for his theories, particularly regarding human aggression as an innate, evolutionary mechanism and for his views on human degeneration and social decline, some of which were perceived as aligning with Nazi ideology. However, he deserves credit for launching the biological study of behaviour as a legitimate scientific discipline and providing the conceptual and methodological tools that allowed for its growth and success.

FULFILMENT AND FRUSTRATION

OBJECTIVES:

By the end of this unit, learners will be able to:

1. Comprehend the idea of adjustment, recognize the attributes of a well-adjusted individual, and identify the reasons for maladjustment.
2. Understand frustration, its origins, reactions to it, as well as the concept, types, and sources of conflict.
3. Learn about defence mechanisms and the frequently used defence mechanisms in human psychology.

INTRODUCTION:

Humans are distinguished from other species by their unique ability to reflect upon themselves and comprehend their own actions. Living in a society introduces psychological challenges that are absent in solitary existence. These challenges include concerns about personal fulfilment, social interactions, and psychological stability. As Lazarus pointed out, people have increasingly sought to understand psychological adaptation and personality development.

The concept of adjustment was initially a biological notion, serving as a foundation for Darwin's evolutionary theory (1859). In biological terms, adaptation refers to an organism's ability to adjust to environmental conditions for survival. Scientists have continued to study adaptation, recognizing that many human ailments stem from the body's responses to life's stresses.

As psychological adaptation has gained attention, a specialized field has emerged, often referred to as "psychology of adjustment," "mental hygiene," or "personality adjustment." Despite being relatively new, this field has rapidly expanded, offering insights into how individuals can cope with life's challenges and maintain psychological stability.

MEANING OF ADJUSTMENT:

In psychological terms, adjustment is the process through which individuals and animals strive to maintain harmony between their needs and the constraints posed by their environment. The cycle of adjustment begins when a need is felt and concludes once it is satisfied. For example, when a person experiences hunger, they seek food, eat, and consequently restore balance.

The process of adjustment follows four key stages:

1. A powerful and persistent need or motive.
2. The obstruction or failure to fulfil this need.
3. Problem-solving behaviours and exploratory actions to resolve the issue.
4. A final response that alleviates the original tension and restores balance.

Similar to physiological needs, people must also adapt socially and culturally. Social interactions help individuals achieve psychological satisfaction by fulfilling emotional needs such as love, acceptance, and validation. When people struggle to adapt to new or changing environments, they may experience emotional distress, anxiety, or depression.

Symonds defines adjustment as an individual's ability to establish a favourable relationship with their surroundings, which consist of various factors that shape their experiences. Traxler argued that the ideal state of adjustment is one in which a person finds happiness and contentment in all aspects of life.

McKinneys described adjustment as the process of forming attitudes or modifying surroundings to fulfil unmet needs. Shaffer considered adjustment to be a relationship formed between an individual's biological traits, environment, and personality. According to Skinner, adjustment involves the structuring of personality to ensure stability, enabling an individual to integrate effectively into social and physical surroundings.
Adjustment can be perceived in two ways:

1. As a continuous process in which individuals strive to cope with new situations and challenges.
2. As a state or level of adaptation that a person has achieved, demonstrating their ability to manage life's complexities effectively.

Adjustment is both an individual and social process. On an individual level, it involves overcoming personal conflicts and developing coping strategies to handle new situations effectively. Socially, it requires establishing harmonious relationships with others while balancing personal aspirations with societal expectations.

Process of Adjustment:

Adjustment as a process includes:

1. A motivating factor—A pressing need or stimulus that drives behaviour, such as a biological urge, an ambition, or a goal.
2. A conflicting environmental or psychological factor that creates tension or disrupts the fulfilment of the need (e.g., scarcity of resources, fear, or societal constraints).
3. Experimentation with different behaviours to address the obstacle, which may involve trial-and-error methods.
4. Identification of a solution that alleviates the distress and fulfils the initial need (e.g., acquiring food, overcoming fear, achieving personal success).
5. Learning and adaptation—Developing new coping mechanisms to deal with future challenges effectively and maintaining psychological balance.

CHARACTERISTICS OF A WELL-ADJUSTED PERSON:

A well-adjusted individual exhibits certain characteristic that contributes to psychological resilience and successful social interactions.
These traits include:

1. Mature thinking—Demonstrating logical reasoning and an ability to approach challenges thoughtfully.
2. Emotional stability—Effectively managing emotions without being overwhelmed by stress or anxiety.
3. Empathy and warmth—Showing kindness, compassion, and an understanding attitude toward others.
4. Freedom from unnecessary stress—Handling daily activities with ease and maintaining a sense of calm.
5. Independent decision-making—Having confidence in one's judgments and taking responsibility for personal choices.

MALADJUSTMENT AND ITS CAUSES:

Maladjustment occurs when an individual struggles to satisfy their biological, psychological, or social needs, leading to emotional distress and social difficulties. Maladjustment often results in behaviours that hinder a person's ability to function effectively within their environment.

Traits of a Maladjusted Person:

1. Withdrawal and shyness—Avoiding challenges due to fear of failure or rejection.
2. Low self-esteem—Feeling overly self-conscious and doubting one's abilities.
3. Persistent fearfulness—Excessive anxiety regarding new or difficult situations.

4. Chronic anxiety—Struggling with emotional regulation due to unresolved internal conflicts.
5. Delusional thinking—Holding irrational beliefs that distort reality.
6. Aggressiveness—Displaying hostile behaviour as a means of self-protection.
7. Constant tension—Experiencing ongoing stress that affects both mental and physical well-being.
8. Unrealistic expectations—Setting unachievable goals that result in disappointment.
9. Inferiority complex—Feeling inadequate compared to others, leading to social withdrawal.

CAUSES OF MALADJUSTMENT:

The causes of maladjustment can be categorized into several key areas:

1. Family-related causes—Issues within the family, such as instability, financial struggles, or lack of emotional support, can lead to maladaptive behaviours.
2. Personal factors—Physical disabilities, cognitive impairments, or psychological challenges can hinder an individual's ability to adjust.
3. School-related causes—Lack of engagement in academic or extracurricular activities can contribute to feelings of isolation and frustration.
4. Teacher-related influences—Educators who are indifferent or overly critical can negatively impact a student's confidence and motivation.
5. Peer group dynamics—Social rejection, bullying, or difficulty gaining peer acceptance can result in maladjustment and emotional distress.

Addressing these underlying causes is essential in fostering a supportive environment that promotes psychological well-being and social harmony.

FRUSTRATION:

Frustration is an emotional state experienced when an individual encounters obstacles preventing them from achieving their goals, fulfilling their desires, or satisfying their needs. While minor frustrations are a normal part of life, persistent frustration can lead to emotional distress, decreased motivation, and maladaptive behaviours.

Frustration occurs when:

1. A need or desire is strongly felt but remains unfulfilled.
2. External or internal barriers hinder the achievement of a goal.
3. A person repeatedly fails despite their efforts, leading to feelings of helplessness.

A classic example of frustration is a person lost in a forest without access to food and water. As hunger intensifies, frustration escalates, leading to anxiety and distress. The inability to satisfy basic needs results in an increasing level of psychological discomfort.

According to Otto Rank (1932), the experience of birth itself is the first major frustration in human life. A newborn is separated from the comfort of the womb and suddenly exposed to unfamiliar sensations. This marks the beginning of a lifelong struggle with various frustrations, from minor setbacks to significant life challenges.

Frustration should not always be perceived negatively. It plays a crucial role in personal growth and resilience. Some frustration is necessary for learning, adaptation, and achievement, as individuals strive to overcome obstacles and develop problem-solving skills. However, excessive frustration can have adverse psychological effects, leading to anxiety, depression, and reduced self-esteem.

SOURCES OF FRUSTRATION:

Frustration arises due to various factors, which can be categorized into four major types:

1. Environmental barriers—External obstacles, such as physical limitations, social restrictions, or lack of resources, that prevent goal attainment.
2. Biological limitations—Physical disabilities or health conditions that hinder an individual's ability to perform tasks effectively.
3. Psychological conflicts—Internal struggles between desires, values, or expectations that make decision-making difficult.
4. Social constraints—Rules, traditions, and societal expectations that restrict individual freedoms or prevent people from pursuing their goals.

TYPES OF FRUSTRATION:

Psychologists have identified different types of frustration based on the nature of the obstacles encountered:

1. Personal frustration—Arises from an individual's limitations, such as lack of skill, intelligence, or physical ability, preventing goal achievement.
2. External frustration—Results from environmental factors, such as economic hardship, discrimination, or lack of opportunities.
3. Conflict-based frustration—Occurs when an individual faces conflicting choices, such as a career decision that requires sacrificing personal desires.

REACTIONS TO FRUSTRATION:

People react to frustration in various ways, depending on their coping mechanisms, personality traits, and level of emotional resilience. Common reactions include:

1. Problem-solving—Attempting to identify alternative solutions or strategies to overcome obstacles.
2. Aggression—Expressing anger or hostility toward people, objects, or situations perceived as sources of frustration.
3. Withdrawal—Avoiding challenges or responsibilities to escape frustrating experiences.
4. Regression—Reverting to earlier behaviours as a coping mechanism (e.g., an adult acting childishly when frustrated).
5. Defence mechanisms—Using psychological strategies, such as denial or rationalization, to reduce emotional distress.

Understanding frustration and developing effective coping strategies can help individuals navigate challenges, maintain emotional balance, and foster resilience in the face of adversity.

CONFLICT:

Conflict is a natural part of human interaction and occurs when two or more individuals, groups, or nations experience differences in opinions, goals, or values. It can emerge in various social settings, including personal relationships, workplaces, and communities. While conflict can be disruptive, it can also lead to growth, creativity, and constructive change when managed effectively.

TYPES OF CONFLICT:

Conflicts can be classified into four main categories:

1. Interpersonal conflict—Occurs between two individuals due to differences in personalities, values, or opinions.
2. Intrapersonal conflict—Takes place within an individual when they struggle with opposing thoughts, emotions, or desires.

3. Intragroup conflict—Happens within a team or group when members disagree over ideas, strategies, or leadership styles.
4. Intergroup conflict—Arises between different groups, organizations, or communities due to competition, differing interests, or misunderstandings.

SOURCES OF CONFLICT:

Conflicts emerge from multiple sources, including:

1. Economic factors—Competition over resources, financial disagreements, or disparities in wealth distribution.
2. Value differences—Clashes in ideologies, beliefs, or cultural practices.
3. Power struggles—Disputes over authority, leadership, or decision-making control.
4. Communication breakdown—Misunderstandings or lack of clear communication leading to disputes.

MANAGING CONFLICT:

Effective conflict resolution involves open communication, mutual understanding, and problem-solving. Strategies for managing conflict include:

1. Negotiation—Engaging in discussions to reach a mutually acceptable agreement.
2. Mediation—Involving a neutral third party to facilitate conflict resolution.
3. Compromise—Finding a middle ground where both parties make concessions.
4. Collaboration—Working together to create solutions that satisfy all involved parties.

Understanding the nature of conflict and adopting constructive approaches to resolution can promote harmony in personal and professional relationships.

DEFENSE MECHANISMS:

Defence mechanisms are unconscious psychological strategies individuals use to manage anxiety, stress, or emotional discomfort. These mechanisms help protect the ego from distressing thoughts and feelings, allowing individuals to cope with challenges more effectively.

TYPES OF DEFENSE MECHANISMS:

1. Repression—Suppressing distressing memories or thoughts into the unconscious mind.
2. Projection—Attributing one's negative traits or emotions to others.
3. Denial—Refusing to acknowledge an unpleasant reality.
4. Rationalization—Justifying behaviours with logical but false explanations.
5. Regression—Reverting to childlike behaviours in response to stress.
6. Sublimation—Redirecting negative impulses into socially acceptable activities, such as art or sports.
7. Displacement—Shifting emotions from the actual source of stress to a less threatening target.

Defence mechanisms are a natural part of human psychology, but excessive reliance on them can hinder personal growth and emotional well-being. Recognizing and managing these mechanisms can lead to healthier coping strategies and improved mental resilience.

SUMMARY

In summary, this unit has explored the concepts of adjustment, frustration, conflict, and defence mechanisms. Adjustment refers to the ability to balance personal needs with environmental constraints, while frustration arises when obstacles prevent goal achievement. Conflict, though often viewed negatively, can be an opportunity for growth if managed constructively. Defence mechanisms serve as psychological tools to cope with stress but must be used in moderation for healthy emotional functioning.

QUESTIONS

Unit-1

MCQs with 4 options

1. The first Psychological Laboratory was established in
   a) University of Stanford
   b) University of Oxford
   c) University of Leipzig
   d) City of Chicago
   Answer: C

2. Structuralism view mind as
   a) An accumulated experience of a lifetime
   b) A field where emotions are experienced
   c) Process of perception
   d) Relational thinking
   Answer: A

3. The Stimulus Response Theory was proposed by
   a) Gestalt Psychologists
   b) Psychoanalysts
   c) The Functional psychologists
   d) The psychologists who believe in Behaviourism
   Answer: D

4. The Figure -Ground Relationship was
   a) Used by the Structural School of Psychology
   b) By the Field Psychologists
   c) By the Behaviourists
   d) By the Psychoanalysts
   Answer: B

5. The Law of Continuity states that
   a) Human brain has a to visually close gaps in forms
   b) We tend to group shapes
   c) Perceptually group the elements perceived
   d) Group the elements together for a continuous image
   Answer: D

6. Psychoanalysis has its root
   a) Recording the physical, psychological, social and economic conditions of a client
   b) Interpretation of perception of accumulated experiences
   c) In clinical practices for curing patients
   d) Interpretation of patterns of perception
   Answer: C

7. One of the steps of Experimental Method is
   a) Formulation of hypothesis
   b) Writing the Case History
   c) Controlling the ever-changing environment
   d) Conduct survey
   Answer: A

8. The Genetic Method of psychology is used in
   a) Testing hypotheses
   b) Longitudinal studies
   c) Subjective interpretation of reports
   d) Follow-up of cases
   Answer: B

9. Statistical Analysis Method in psychology
   a) Interprets data in quantitative
   b) Designs an experiment
   c) Provides treatment to the patients
   d) Forms Control groups for research
   Answer: A

10. The 'psychological field' of Field Psychology contains
    a) Statistically collected data
    b) Experiences obtained through self-observation
    c) Forces and factors that impact a person's behaviour
    d) Information about social and political opinion
    Answer: C

Unit – 1 - Short Answer Questions

1. What is the basic principle of Gestalt Psychology?
2. Write a short note on the concept of Vectors in Field Psychology.
3. What is an Independent Variable in Experimental Methods?
4. Explain Hypothesis Testing.
5. What is the major problem of Introspection Method in Psychology?

➢ UNIT – 2 STRUCTURE AND FUNCTIONS OF BRAIN

10 MCQs with 4 options

1. Which part of the brain is responsible for regulating balance and coordination?
   a) Medulla oblongata
   b) Cerebrum
   c) Cerebellum
   d) Thalamus
   Answer: C

2. The largest part of the human brain is the:
   a) Cerebellum
   b) Brainstem
   c) Cerebrum
   d) Pons
   Answer: C

3. The peripheral nervous system (PNS) consists of:
   a) Brain and spinal cord
   b) Cranial nerves and spinal nerves
   c) Only the cranial nerves
   d) Only the spinal cord
   Answer: B

4. Which lobe of the brain is primarily associated with visual processing?
   a) Frontal lobe
   b) Temporal lobe
   c) Parietal lobe
   d) Occipital lobe
   Answer: D

5. The autonomic nervous system controls:
   a) Voluntary muscle movements
   b) Skeletal muscle contractions
   c) Involuntary functions like heartbeat and digestion
   d) Thinking and reasoning
   Answer: C

6. The two major divisions of the nervous system are:
   a) Brain and spinal cord
   b) Autonomic and somatic systems
   c) Central and peripheral systems
   d) Sympathetic and parasympathetic systems
   Answer: C

7. Which division of the autonomic nervous system prepares the body for “fight or flight”?
   a) Somatic
   b) Parasympathetic
   c) Sympathetic
   d) Enteric
   Answer: C

8. The HPA axis involves which three major components?
   a) Hippocampus → Pituitary → Kidney
   b) Hypothalamus → Pituitary → Adrenal cortex
   c) Hypothalamus → Parathyroid → Adrenal medulla
   d) Hippocampus → Pineal → Adrenal medulla
   Answer: B

9. Cortisol is known as a “stress hormone.” Where is it synthesized?
   a) Hypothalamus
   b) Anterior pituitary
   c) Adrenal cortex
   d) Adrenal medulla
   Answer: C

10. The SAM pathway refers to
   a) Sympathetic-Adrenal-Medullary activation
   b) Serotonin-Adrenal-Modulation
   c) Somatic-Autonomic-Mesencephalon route
   d) Subcortical-Amygdala-Medial integration
   Answer: A

Unit 2 - Short Answer Question

1. Name the four main lobes of the human brain and give one function of each lobe
2. Briefly explain two key roles of the cerebellum in motor control.
3. Differentiate between the central nervous system (CNS) and peripheral nervous system (PNS).
4. List the two main divisions of the autonomic nervous system and the general effect of each on the body.
5. Compare the time course and function of the SAM pathway versus the HPA axis when responding to stress.

➢ UNIT – 3 BASIC MENTAL PROCESSES - SENSATION, PERCEPTION, EMOTION, MOTIVATION, MEMORY, INTELLIGENCE

10 MCQs with 4 options

1. Sensation is the simple experience that arises from the
   a) Stimulation of the sense organs
   a) Feeling aspect of our mind
   b) Interpretation of the environment
   c) Perception of behaviours
   Answer: A

2. Perception is the process by which
   a) Individual maintains absolute threshold
   b) The individual selects, organizes and interprets stimuli
   c) The individual maintains balance
   d) Organises the affective state of the mind
   Answer: B

3. According to the **James-Lange theory** of emotion
   a) Emotions are evoked only when person perceive danger
   b) There is no connection between body and mind
   c) Physiological responses precede the emotional reactions
   d) Our thoughts are actually responsible for emotional reactions
   Answer: C

4. Motivation is the driving force that
   a) Maintains equilibrium between body and mind
   b) Initiates, guides and sustains behaviour of the organism
   c) Restores balance in our physique
   d) Is totally a cognitive process
   Answer: B

5. The Cannon-Bard theory of emotion maintains that
   a) External stimulation solely causes emotions
   b) Emotions result from the interplay between physiological and cognitive processes
   c) Emotions are the result of physiological reactions of the body
   d) Emotions are purely instinctive in nature
   Answer: B

6. Encoding in memory theory is where
   a) Information is learned and interpreted
   b) Learnt experiences are stored
   c) Learnt behaviours are recalled
   d) Senses are rehearsed
   Answer: A

7. Purposeful Forgetting happens
   a) Because of the 'Decay Process'
   b) When there is interference from subsequent experiences
   c) When an experience is suppressed and forgotten
   d) In case of mental illness
   Answer: C

8. Recall happens when we
   a) Perceive a situation and acknowledge the same
   b) Retrieve the image or the matter or event without any cue
   c) Pay attention to an object or event
   d) Repeat the stored information
   Answer: B

9. Abstract thinking is an expression of
   a) Motivation
   b) Inner drive of the person
   c) Intelligence
   d) Ability to perform different skills
   Answer: C

10. Thurstone in the field of Intelligence proposed a
   a) Theory of Hierarchical Abilities
   b) Theory of Multifactor
   c) Theory of Two-factors
   d) Theory of acquisition of intelligence
   Answer: B

Unit 3 - Short Answer Questions

1. How do one Perceive Space, Depth & Three Dimension
2. What is Muller-Lyer Illusion?
3. State in brief the Cognitive appraisal theory of emotion given by Richard Lazarus
4. Explain the concept of Long-Term memory and it helps in remembering.
5. What is the Basic Principle of Eysenck's Structural Theory of Intelligence?

➢ UNIT - 4 DEVELOPMENTAL PSYCHOLOGY

10 MCQs with 4 options

1. Processes of Cognitive development are
   a) Thinking, learning, decision making, memory
   b) Swimming, cycling, walking
   c) Anger, fear, jealousy
   d) activities related to sports
   Answer: A

2. **Readiness** is the quality of being able to
   a) See the environment in its real context
   b) State to perform a particular behaviour
   c) Feel for others
   d) Complete activities for others
   Answer: B

3. 'Moro reflex' in infants is
   a) The ability to move the eyes to focus on an object
   b) The ability to perform crawling movements
   c) Involuntary protective motor response against abrupt disruption of body balance
   d) A fine motor skill
   Answer: C

4. Preoperational Stage as stated by Jean Piaget is the stage
   a) Of understanding the world through the senses
   b) Of developing the ability to walk
   c) Where we encounter different environmental factors
   d) Of symbolic play
   Answer: D

5. What theory proposes that motivation is aroused when physiological needs
   a) Drive theory
   b) Expectancy Theory
   c) Goal-Setting theory
   d) Excitement theory
   Answer: A

6. One of the measures needed to ensure healthy emotional development in adolescents is
   a) Build Self-esteem and Confidence in them
   b) Externally set strict rules and regulations
   c) Allow them total freedom
   d) Parenting that guarantees that they follow family rules
   Answer: A

7. **Katherine Bridges** believed that at birth the child has
   a) No feeling at all
   b) Only a state of consciousness that emerges from the environment
   c) Only a sense of happiness
   d) Only one affective state of excitement
   Answer: D

8. What is the striking developmental feature of the adolescence period
   a) Behaviours
   b) Identity options
   c) Anger
   d) Discipline
   Answer: B

9. **Puberty** is the phase when one
   a) develops sexual maturity
   b) develops the ability to reason
   c) develops skills of dynamicity
   d) develops ability of decision-making
   Answer: A

10. What is assertive communication?
   a) Respecting opinions of others
   b) Learn to express oneself with confidence
   c) Feel for others
   d) Argue with others
   Answer: B

Unit 5 - Short Answer Questions

1. Write a note on the gross motor skills as a milestone in physical development
2. What are the five stages of sexual development in children as stated by Sigmund Freud.
3. Describe the Concrete Operational Stage in Cognitive development as mentioned by Jean Piaget.
4. Discuss 'Social Diversity' in the context of social development
5. Mention some important social skills for children

➢ UNIT - 5 PERSONALITY CONCEPT, STRUCTURE, DEVELOPMENT & MEASUREMENT

10 MCQs with 4 options

1. The Morphological theories of Personality were proposed by
   a) Sigmund Freud
   b) W. Watson
   c) Ernst Kretschmer
   d) Maslow
   Answer: C

2. The Psychoanalytic theory maintains that personality
   a) Develops through behaviours taught by parents
   b) Is the result of the interaction of the unconscious, the conscious and the superego
   c) Is enhanced self-confidence
   d) What others perceive in others
   Answer: B

3. A dynamic but stable and organized set of characteristic behaviours
   a) Signify personality of an individual
   b) Suggest emotional status
   c) Characterise thought processes of a person
   d) Nothing but some sensory experiences
   Answer: A

4. Trait theories of Personality
   a) Define that traits are activities that individuals learn
   b) Define that traits predict the behaviours of an individual
   c) Suggest that personality is acquired through experiences
   d) Express that traits grow with physical and mental stability
   Answer: B

5. Adlerian psychology on personality
   a) Maintains that personality is shaped by social experiences
   b) Is the outcome of sexual experiences that underly human development
   c) Is nothing but the leadership qualities that the individual develop
   d) Is influenced by the individual's efforts to excel in personal life
   Answer: A

6. Carl Gustav Jung emphasised that personality is
   a) Shaped by social norms and rules
   b) Dependent on the sexual drives and urges
   c) Shaped by conscious and unconscious forces including archetypes
   d) The outcome of different traits that are inherited by the individual

   Answer: C

7. Theory of Personality of Jean Piaget
   a) Maintains that cognitive development is closely related to personality development
   b) Traits are the primary components of personality growth
   c) Self-reflection underlies personality development of an individual
   d) Identity development through skills and behaviours lead the development of personality

   Answer: A

8. What is the third stage of Freudian explanation of personality development
   a) Genital stage
   b) Oral erotic stage
   c) Phallic stage
   d) Anal erotic stage

   Answer: C

9. One of the Projective tests of Personality is
   a) Rating scale
   b) Draw-a-Person
   c) Questionnaire
   d) Case study

   Answer: B

10. Self-Reporting Tests of Personality are
    a) Easy to apply and can be interpreted effectively
    b) Mostly used in Clinical settings
    c) Too much biased and subjective in nature
    d) Unreliable as the information given cannot be verified

    Answer: A

Unit 4 - Short Answer Questions

1. 'Personality is the dynamic organisation within the individual of those psycho-physical systems that determine his characteristic behaviour and thought' – explain in this context what is 'dynamic organisation'.
2. Discuss in short, the personality development as described by Erik H. Erikson.
3. Describe the Social Learning Theory of Personality development of Albert Bandura.
4. How Rating Scales of Personality are applied?
5. Describe any one Projective test of personality measurement.

➢ UNIT - 6 THEORIES OF PERSONALITY & PSYCHOPATHOLOGY

10 MCQs with 4 options

1 According to Freud, the *id* operates on which principle?

a) Morality principle
b) Reality principle
c) Pleasure principle
d) Social principle

Answer: C

2. Erikson's stage of "Identity vs. Role Confusion" occurs during

a) Infancy
b) Adolescence
c) Middle adulthood
d) Late adulthood

Answer: B

3. According to Adler, feelings of inferiority lead individuals to

a) Withdraw socially
b) Develop phobias
c) Strive for superiority
d) Experience neurosis

Answer: C

4. The Superego in Freud's theory is responsible for

a) Survival instincts
b) Moral judgment
c) Logical reasoning
d) Impulse control

Answer: B

5. Carl Rogers emphasized the importance of

a) Unconscious motives
b) Operant conditioning
c) Unconditional positive reward
d) Cognitive restructuring

Answer: C

6. In Erikson's theory, the virtue gained after resolving "Trust vs. Mistrust" is

a) Hope
b) Will
c) Love
d) Fidelity

Answer: A

7. Skinner believed that personality is shaped by
   a) Free will
   b) Heredity
   c) Reinforcement history
   d) Early sexual conflicts
   Answer: C

8. 'Fixed Action Patterns' concept of Lorenz in Personality theory
   a) Means 'baby schema'
   b) Personality Dysfunction
   c) Self-esteem needs
   d) Social Adaptation
   Answer: B

9. The creative self, according to Adler, refers to
   a) Imagination
   b) Artistic talent
   c) Personal agency
   d) Social conformity
   Answer: C

10. One of the key concepts Carl Rogers' Personality Theory is
   a) Reinforcers
   b) Self-concept
   c) Continuous reinforcement
   d) Shaping Behaviour
   Answer: B

Unit - 6 - Short Answer Questions

1. What are the Eight Stages of Psychosocial Development Erikson's Theory
2. According to Adler, what is the "striving for superiority"?
3. In Erikson's theory, what is the main conflict faced during adolescence?
4. What does Carl Rogers mean by 'Unconditional Positive Regard' in his Personality theory?
5. According to Skinner, how is personality shaped?

➢ UNIT - 7 FRUSTRATION

10 MCQs with 4 options

1. In psychology, "adjustment" refers to
   a) Mental illness treatment
   b) Emotional repression
   c) Balancing needs with the environment
   d) Conflict resolution only
   Answer: C

2. Which of the following is **not** a characteristic of a well-adjusted person?
   a) Emotional stability
   b) Aggressiveness
   c) Independent decision-making
   d) Empathy
   Answer: B

3. Maladjustment often results from
   a) Overachievement
   b) Well-developed coping skills
   c) Social and emotional difficulties
   d) Creative problem-solving
   Answer: C

4. Frustration occurs when
   a) Emotions are regulated well
   b) Desires are immediately satisfied
   c) Goals are blocked
   d) One is praised
   Answer: C

5. Which of the following is **a type** of conflict?
   a) Environmental conflict
   b) Internal metabolism
   c) Intrapersonal conflict
   d) Biological variance
   Answer: C

6. Défense mechanisms are primarily used to
   a) Develop friendships
   b) Increase intelligence
   c) Reduce anxiety
   d) Cause frustration
   Answer: C

7. What is **displacement** in psychological terms?
   a) Blocking a thought from memory
   b) Attributing thoughts to someone else
   c) Redirecting feelings to a safer target
   d) Ignoring problems
   Answer: C

8. A person biting nails when anxious is showing
   a) Regression
   b) Projection
   c) Repression
   d) Sublimation
   Answer: A

9. A common **source** of frustration is
   a) High self-esteem
   b) Supportive relationships
   c) Biological limitations
   d) Self-actualization
   Answer: C

10. According to the text, which is **not** a common reaction to frustration?
   a) Aggression
   b) Problem-solving
   c) Withdrawal
   d) Transcendence
   Answer: D

Unit - 7 - Short Answer Questions

1. Define psychological adjustment in your own words.
2. Name two traits of a well-adjusted individual.
3. What are two common sources of frustration?
4. List any two types of defence mechanisms.
5. What is interpersonal conflict? Give one example.

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