Psychopathology

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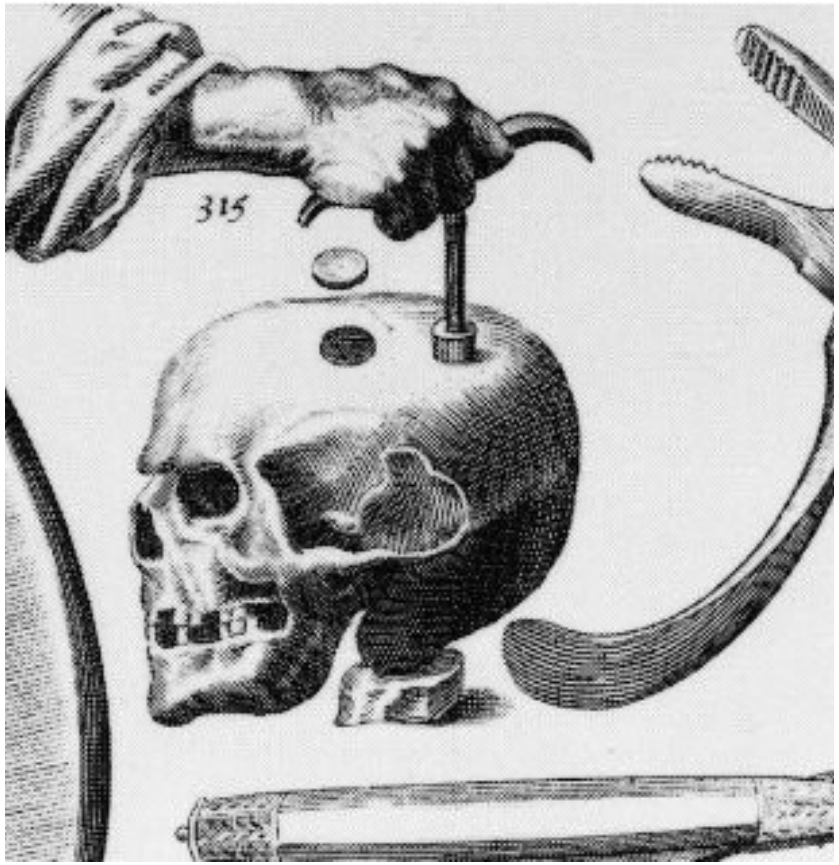
Unit I
A Brief History of Psychopathology

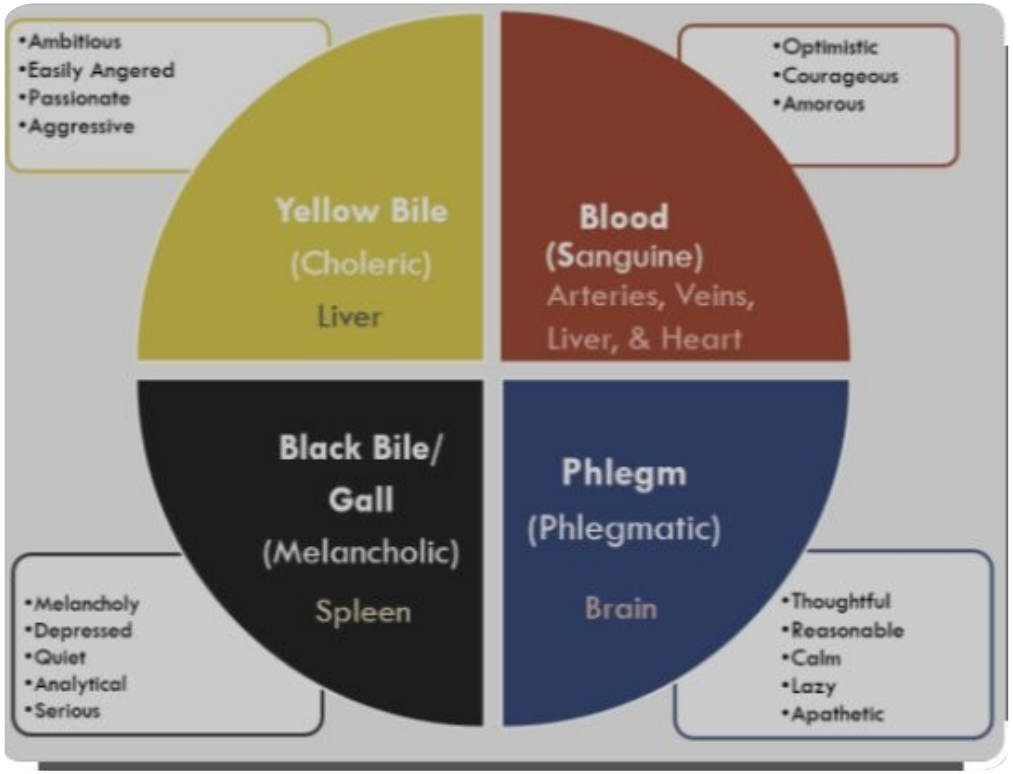
History of Psychopathology

Ancient times

- In early civilizations, such as ancient Egypt, Mesopotamia, and Greece, mental disorders were considered as **Spiritual afflictions and mental illness were caused by evil spirits, supernatural forces such as stars and the moon** etc.
- Treatments were religious based, such as **exorcism and prayer.**

Trephination was a common treatment to release evil spirits out of a person (**drilling into the skull to release spirits)**





- **Classical Greek and Roman Periods:**
- Hippocrates proposed the **"four humors"** theory, where mental illness resulted from imbalances in bodily fluids (blood, phlegm, black bile, and yellow bile).
- This approach was more naturalistic, **treating mental illness through lifestyle changes, diet etc.**

- Hippocrates argued that various types of disorder or psychopathology resulted from either an **excess** or a **deficiency** of one of these four fluids.

- **Galen (129 to about 216 AD), a Greek physician, surgeon expanded upon Hippocratic ideas**, especially the theory of the four humors. (he lived about 500 years later)

- While Hippocrates suggested that illnesses arose from humoral imbalances, **Galen expanded this to a more detailed system, describing how specific illnesses and symptoms related to each humor.**

- He proposed that **restoring balance through diet, exercise, or medicinal interventions could cure or alleviate physical and mental illnesses.**

- **Medieval Period**: During the Middle Ages in Europe, **supernatural explanations regained popularity** and were considered because of **witchcraft or demonic possession.** Treatment included **exorcism or even torture.**

- Mentally ill and mentally retarded, commonly called as the **“lunatics” and “idiots”,** The word is derived from the belief that mental illness was influenced by the phases of the **moon** ("luna" in Latin), with full moons thought to trigger unusual behavior or mental instability.

- During the I**slamic Golden Age (8th to 14th centuries)**, scholars in the Islamic world made remarkable **advancements in medicine**, drawing heavily from Greek and Roman texts.
- They expanded upon the medical knowledge of thinkers like Hippocrates and Galen. This led to the **establishment of hospitals (known as bimaristans)**

- In the late **18th century, Philippe Pinel, a French physician** introduced "moral treatment," treating psychiatric patients with compassion & dignity. He removed mentally ill from the chains and introduced structured routines and therapeutic activities.

Dr. Philippe Pinel at the Salpêtrière, 1795 by Tony Robert-Fleury. Pinel ordering the removal o chains from patients at the Paris Asylum for insa women.

19th Century: establishment of **large asylums** in Europe and the United States.
Sigmund Freud's psychoanalytic theory emerged toward the century's end, emphasizing **unconscious processes and early childhood experiences** as causes of mental illness.

Emil Kraepelin, a German psychiatrist, first introduced his classification of psychological disorders from **a biological and medical perspective** in **1883**.

20th Century: Behaviorism, cognitive theories, and the medical model were developed. Treatments included psychotherapy, medications etc.

Psychiatric medications were discovered in the 1950's.

Modern Era: Psychiatric illness is considered as an interplay of biopsychosocial factors.

The **American Psychiatric Association (APA), then known as the Committee on Statistics**, together with the National Commission on Mental Hygiene, developed a new guide for mental hospitals called the **"Statistical Manual for the Use of Institutions for the Insane"** in 1917, which **included 22 diagnoses**. Diagnostic and Statistical Manual of Mental Disorders-1 (DSM-I) which was approved in 1951 and published in 1952.

The Ancient Supernatural beliefs regarding causes and treatment of Psychopathology (June 2022) (6 marks)

- Psychopathology was often viewed through a **religious or spiritual lens**, and mental disturbances were attributed to forces beyond the individual's control, such as **spirits, gods, or curses.**
- Treatments were **religious based, to cast out evil spirits.** They thought that evil spirits could take control of a person's mind, leading to **erratic behavior, strange voices, or distress.**
- Mental illness was viewed as a **punishment from God** for **committing sins or failing to follow religious rules.**
- Psychopathology was viewed as a form of moral or spiritual failing, and people experiencing these conditions were often **stigmatized as having angered or displeased the gods.**
- Mental illness could be attributed to unfavorable **astrological alignments, which affected the individual's mind and spirit.**
- Treatments such as wearing of **protective amulets and charms to counteract negative planetary influences** were followed.
- Mental illness was viewed as a result **of black magic or curse or evil eye. Treatment focused on reversing the curse through rituals, protective charms, or the intervention of a spiritual healer .**

The Ancient Supernatural beliefs regarding causes and treatment of Psychopatholo gy (June 2022)

Treatment Approaches in Ancient Supernatural Beliefs

- **Exorcism and Rituals:** . Exorcists, shamans, or priests performed elaborate rituals to expel evil spirits or demons. harsh physical measures were taken, including **whipping, fasting, or even trepanation (drilling a hole in the skull) to allow spirits to leave the body.**
- **Pleasing the Gods or Spirits :** mental illness was seen as divine punishment, treatments focused on appeasing the gods through prayer, offerings, sacrifices, or purification rituals. The hope was that by pleasing the gods, the afflicted person would be freed from their suffering.
- **Use of Amulets, Charms, and Herbal Remedies** to protect against evil spirits, curses etc. These items were often blessed by a healer or priest, who empowered them with protective qualities.
- Some societies believed that people with mental illnesses were **spiritually dangerous to others** and **isolated** them from the community.

Discuss the main tenets of Humanistic approach to Psychopathology (Dec 2023, 10 marks)

The **Humanistic approach to psychopathology** focuses on the individual's potential for **personal growth, self-actualization, and fulfillment.**

In this theory, **mental illness is not considered**. It is all about **connecting ourselves to our true selves** and is considered as the most optimal approach to achieving human potential.

It is based on the belief that **people have the capacity and the right to move toward self-actualization**. This approach views the client as their own best authority on their own experience, and **the client is fully capable of fulfilling their growth potential**.

The belief in the **client's capacity for self-healing is the most powerful agent that lead to change**.

People are **born with an innate ability to reach their full potential but early experiences may cause them to lose connection to self.**

Humanistic psychologists emphasize **free will**, the idea that individuals have the power to make choices and control their lives. Unlike deterministic models (e.g., psychoanalysis or behaviorism), humanism suggests that people are not merely products of their past or unconscious drives.

- **Role of the Present Moment:** Humanistic therapy emphasizes the importance of experiencing the present, as opposed to dwelling on past trauma or worrying about the future. Therapists encourage clients to **explore their current thoughts and feelings as a path to self-discovery.**
- This focus on the present moment enables individuals to reconnect with themselves, fostering **self-awareness and mindfulness**.
- **Focus on the Whole Person:** The humanistic approach considers the **person as a whole rather than isolating specific symptoms or behaviors.** It emphasizes that mental health cannot be understood without considering the entirety of an individual's experiences, values, beliefs, and feelings.
- This perspective values **each person’s unique experience,** aiming to help them find meaning, purpose, and alignment in their lives.

- **Self-Actualization and Growth:** concept of **self-actualization**, coined by Abraham Maslow. Self-actualization is the drive toward **realizing one's full potential** and **becoming the best version of oneself.**
- Humanistic therapists believe that when **people are unable to pursue self-actualization, often due to unmet needs, life stressors, or restrictive environments, they may develop psychological symptoms as a result.**
- From a humanistic standpoint, **psychological disorders are not merely the result of biological, unconscious, or environmental factors.** Rather, they can stem from **blocked personal growth, unmet needs, and conditions of worth** (conditions placed on individuals' worthiness by others, such as parents or society).
- When ***individuals feel unable to live authentically or are prevented from pursuing self-actualization, they may experience symptoms of distress, such as anxiety, depression, or low self-esteem.***

Discuss the main tenets of Humanistic approach to Psychopathology (Dec 2023)

The person could work on their personal growth , if a **growth promoting climate** is provided.

Unconditional positive regard

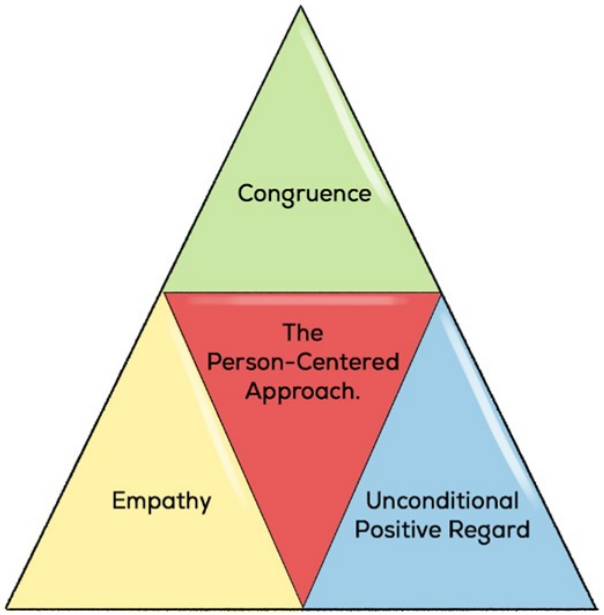
The counselor accepts the client unconditionally and non-judgmentally. The client is free to explore all thoughts and feelings, positive or negative, without danger of rejection or condemnation

Empathic understanding

The counselor accurately understands the client's thoughts, feelings, and meanings from the client's perspective.

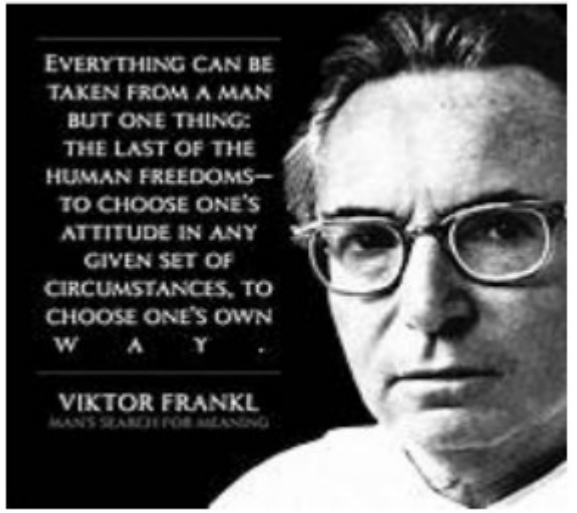
Congruence

The counselor is authentic and genuine and transparent to the client. The client does not have to speculate about what the counsellor is 'really like'.



Existential Approach

- The existential approach can be described as a philosophical approach that is **not designed to cure people** but instead helps the **client reflect and search for value and meaning in life.**
- We can discover this meaning through **our actions and deeds (intentional actions), by experiencing a value (such as love or achievements), and by suffering.**
- **Meaninglessness in life can lead to emptiness and hollowness,** or a condition that Frankl calls the **existential vacuum.**
- This condition is often experienced **when people are not busy themselves with routine or with work.**
- It is to help them become aware of what they are doing and encourage them to act, make life-changing decisions, etc.
- This model stresses building therapy on the **basic conditions of human existence. such as choice. accepting freedom and responsibility to shape one's life, and discovering one's own identity.**



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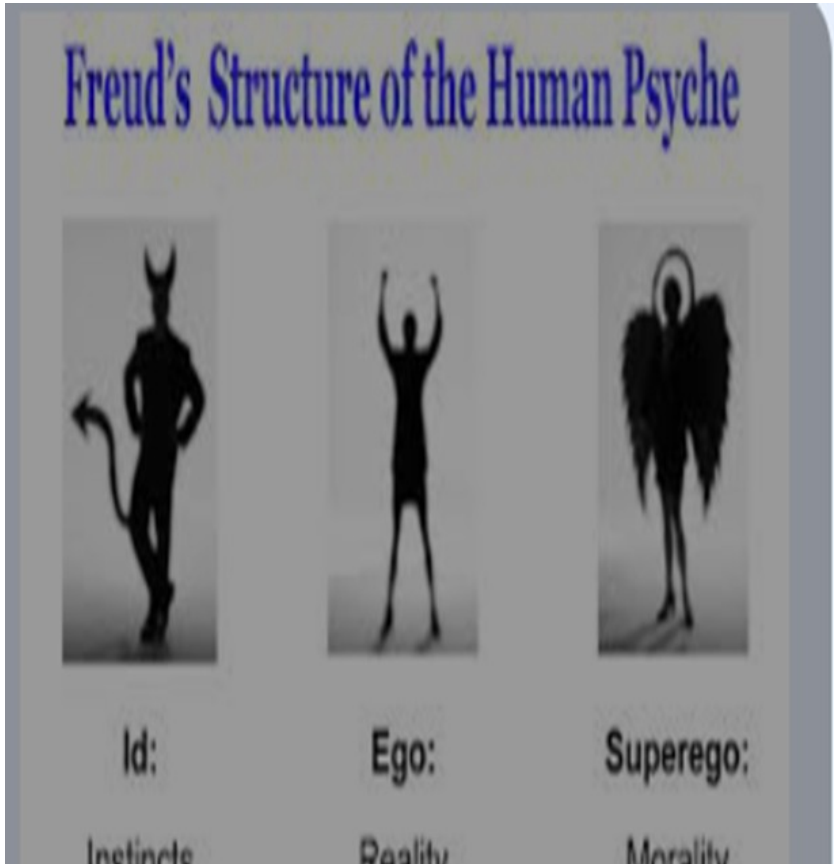
Explain Psychoanalytic Approach to Psychopathology (June 2020) (10 marks)

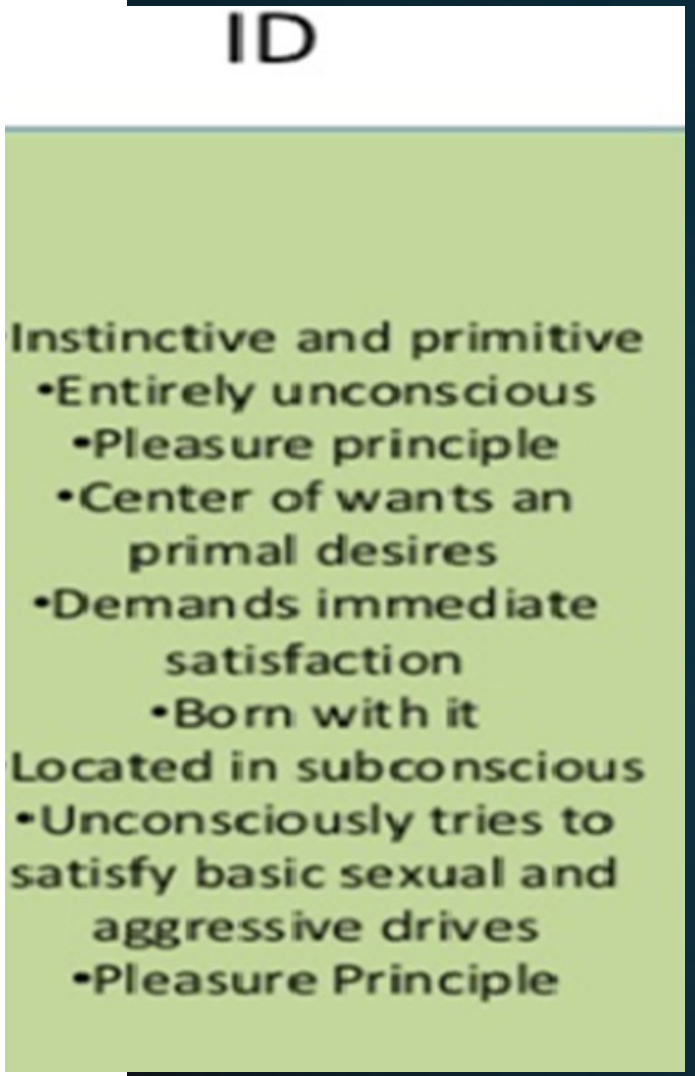
The psychoanalytic approach to psychopathology, founded by Sigmund Freud, views **mental disorders as stemming from unconscious conflicts, desires, and childhood experiences that influence an individual's thoughts, feelings, and behaviors.**

Mental disorders symptoms are seen as a result of repressed emotions and unresolved conflicts.

Structure of Personality: Freud's personality theory (1923) saw the psyche structured into three parts (i.e., tripartite), the id, ego, and superego, all developing at different stages in our lives.



- ***ID:*** first structure to appear in infancy
- It is a concept equivalent to a demanding child and it is ruled by the pleasure principle
- The id engages in primary process thinking, which is primitive, illogical, irrational, and fantasy-oriented.
- When the id achieves its demands, we experience pleasure, and when it is denied, we experience tension.
- Its main goal is to reduce tension created by our primitive drives(based on sensation and urgency) such as hunger, sex, aggression, and irrational impulses.



EGO

- Rationality
- Ensure that Ids wants are acceptable in the "real world"
- Mostly located in the conscious part
- Moderator between ID and SuperEGO
- Logical aspect of personality
- Conscious part of the personality with "executive powers"
- Reality Principle

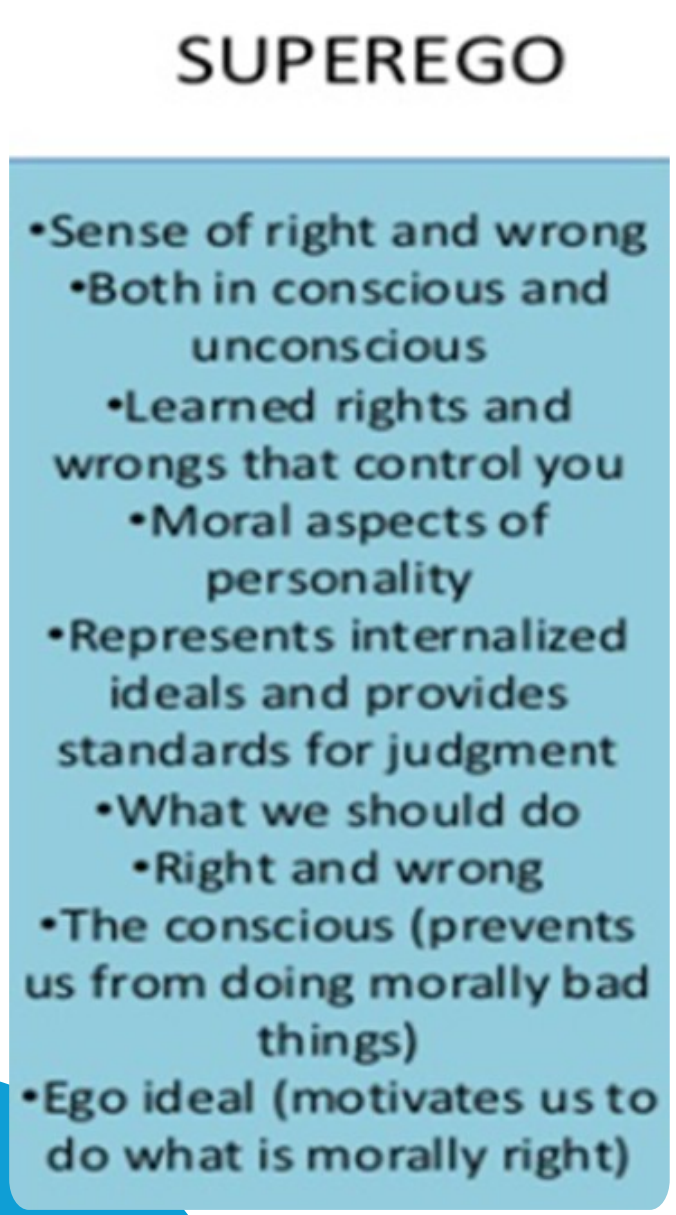
Ego: rational part of the psyche that mediates between the instinctual desires of the id and the moral constraints of the superego, operating primarily at the conscious level.

It is the **decision-making component** of personality.

The e**go's job is to meet the needs of the id while taking into consideration the reality of the situation .**

The ego operates according to the reality principle, working out realistic ways of satisfying the id's demands, often compromising or postponing satisfaction to avoid negative consequences of society (e.g. waiting till the break to get a cup of coffee).

It is responsible for higher cognitive functions such as **intelligence, thoughtfulness, and learning.**



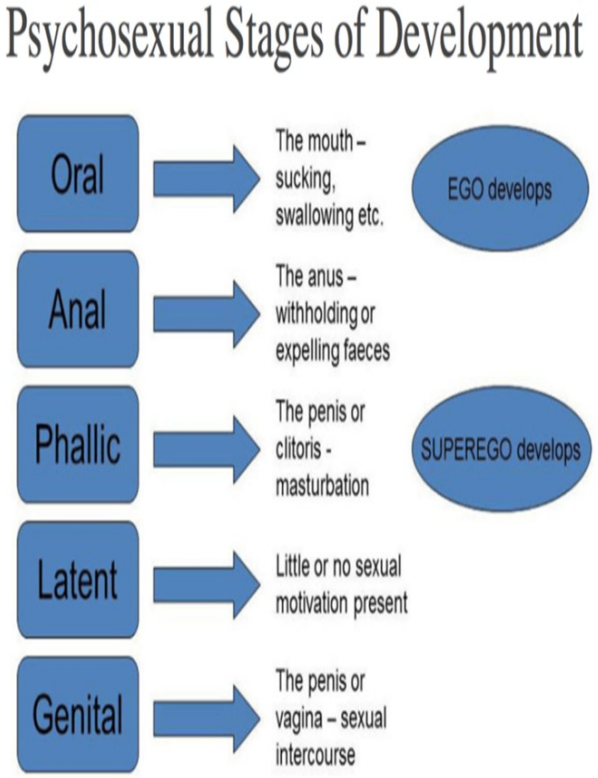
Super Ego

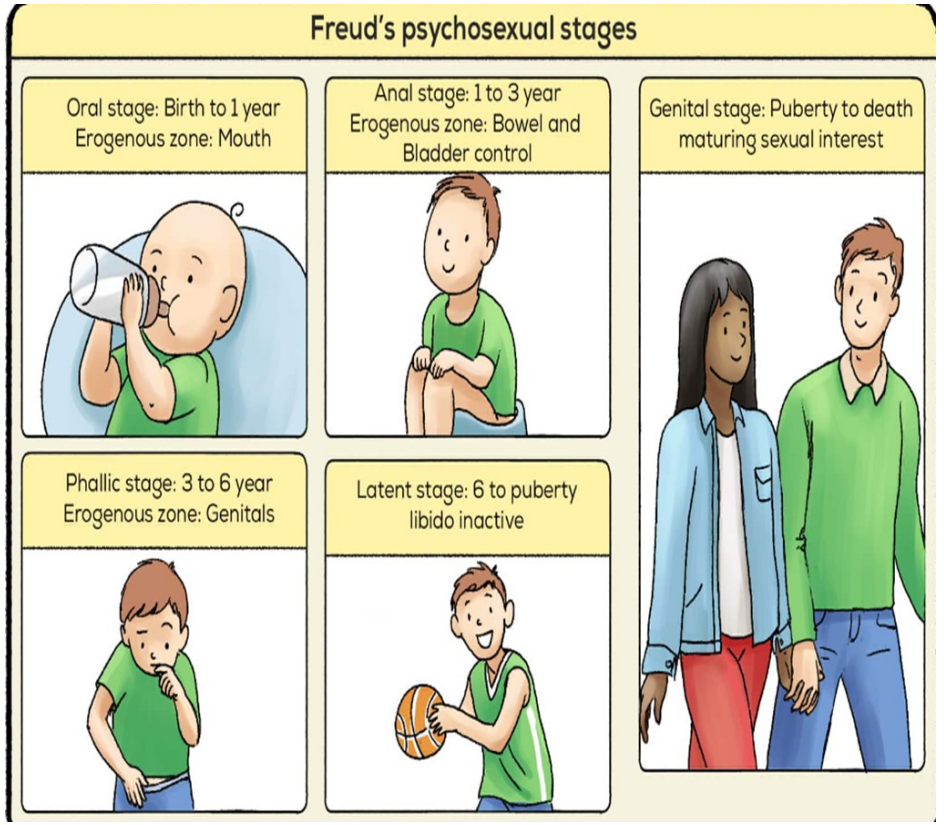
- Freud's superego is the moral component of the psyche, representing internalized societal values and standards. It contrasts with the id's desires, guiding behavior towards moral righteousness and inducing guilt when standards aren't met.
- The superego incorporates the values and morals of society, which are learned from one's parents and others. It develops around 3 – 5 years.
- It has two subparts: **the conscience and the ego-ideal.**
- The c**onscience prevents us from doing morally wrong or bad things and punishes the ego by causing feelings of guilt**
- The **ideal self (or ego-ideal) is an imaginary picture of how you ought to be, and represents career aspirations, how to treat other people, and how to behave as a member of society.**
- Freud called t**he ego-ideal, which arises out of the person's first great love attachment (usually a parent).**

Ego-Defense Mechanisms

- **Defense mechanisms are psychological strategies that are unconsciously used to protect a person from anxiety arising from unacceptable thoughts or feelings**. According to Freudian theory, defense mechanisms involve a distortion of reality in some way so that we are better able to cope with a situation.
- We use defense mechanisms to protect ourselves from feelings of anxiety or guilt, which arise because we feel threatened, or because our id or superego becomes too demanding.
- **It operates at an unconscious level and helps ward off unpleasant feelings (i.e., anxiety) or make good things feel better for the individual.**
- They are natural and normal. When they get out of proportion (i.e., used with frequency), neuroses develop, such as anxiety states, phobias, obsessions, or hysteria.
- **Repression**:
- It is the withdrawal of an unwanted idea, affect, or desire from consciousness by pushing it down, or repressing it, into the unconscious part of the mind. Anna Freud also called “motivated forgetting,” is just that: not being able to recall a threatening situation, person, or event.
- E.g.. People might unconsciously repress traumatic events, such as accidents, abuse, or losses.

- **Reaction formation:**
- Anna Freud called **"believing the opposite,"** is a psychological defense mechanism in which a person goes beyond denial and behaves in the opposite way to which he or she thinks or feels. It is the fixation of an idea, affect, or desire in consciousness that is opposite to a feared unconscious impulse. A reaction formation is marked by exaggerated behavior, such as showiness and compulsiveness.
- E.g.. **treating someone you strongly dislike in an excessively friendly manner to hide your true feelings.**
- **Regression:**
- When confronted by stressful events, people sometimes abandon coping strategies and revert to patterns of behavior used earlier in development. It enables a person to psychologically go back in time to a period when the person felt safer.
- E.g. **When we are troubled or frightened, our behaviors often become more childish or primitive. A child may begin to suck their thumb again or wet the bed when a sibling is born**





Psychosexual Development

- During each stage, children encounter specific conflicts that must be resolved to develop a healthy personality.
- Unresolved conflicts or fixation at any stage can lead to specific personality traits or psychological issues later in life. **For example, fixation at the oral stage might result in dependency or issues with trust, while fixation at the anal stage might contribute to obsessiveness or control issues.**
- **Psychopathology often arises from repressed emotions or unresolved conflicts, especially those stemming from early relationships and traumatic experiences**. Symptoms are seen as symbolic expressions of these hidden conflicts; for example, a person's compulsive behaviors might reflect repressed desires or guilt.

Critical evaluation to behavioral approach to psychopathology (10 marks)

Behaviorism, also known as behavioral psychology, is a systematic approach to understanding the behavior of humans and animals.

It emerged in the early 20th century **as a reaction against introspection** and **focuses on observable behaviors rather than internal mental states.**

According to this approach , all behaviors both adaptive and maladaptive are learned through interactions with the environment, often via conditioning processes such as classical conditioning (associative learning) and operant conditioning (learning based on rewards and punishments) and thus it can be unlearned.

Behavior therapy involves changing the behavior of clients to reduce dysfunction and to improve quality of life.

History of Behavioral Approach

- The behavioral approach was developed primarily by **John B. Watson**, **Ivan Pavlov**, and **B.F. Skinner.**
- **John B. Watson (1878-1958)** ,founder of behaviorism, promoted the focus on observable behaviors rather than mental states. His "Little Albert" demonstrated how emotions like fear could be classically conditioned in humans.
- Ivan Pavlov**(1849-1936)** , a Russian physiologist, discovered classical conditioning through his experiments with dogs. showing how a neutral stimulus (like a bell) could be associated with a reflexive response (salivation).
- **B.F. Skinner (1904-1990),** Skinner expanded behaviorism by introducing **operant conditioning**, which focuses on how behavior is influenced by its consequences (reinforcement or punishment).
- Thorndike's **Law of Effect** (which states that behaviors followed by positive outcomes are more likely to be repeated) heavily influenced Skinner and the development of operant conditioning.

Strengths of Behavioral approach

- **Scientific Basis**: based on observable behaviors and measurable outcomes, making it highly testable and research-driven. The availability of empirical evidence supporting behavioral techniques in therapy, such as exposure therapy for phobias.
- **Focus on Present Behavior**: offers practical strategies to address maladaptive behaviors without requiring in-depth analysis of past experiences.
- Behavioral interventions can be applied across diverse populations and are often adapted for different age groups, cultures, and contexts.
- Behavioral therapies, such as exposure therapy for anxiety disorders, systematic desensitization, and behavior modification techniques, have been shown to be effective for certain mental health conditions.
- **Duration**: Often short-term, with treatment lasting from **5 to 20 sessions** on average.
- **Focus**: Targets specific behaviors and symptoms, making it more goal-oriented and structured.
- **Intervention Style**: Uses techniques like exposure therapy, reinforcement, and desensitization, which often produce observable changes in behavior relatively quickly.

Limitations of Behavioral Approach

- **Reductionism**: The behavioral approach tends to **reduce complex psychological phenomena to simple stimulus-response patterns.**
- **Limited Insight into Underlying Causes:** Focusing only on observable behavior, not addressing the root cause of psychopathology. Thus it results only in symptom reduction and not addressing the causes of maladaptive behavior.
- **Ignores Biological Influences**: Behavioral theories often disregard genetic, neurological, and biochemical factors that contribute to psychopathology. Research increasingly shows that biological factors interact with environmental factors and can influence the precipitation of psychopathology.
- **Ethical Concerns in Some Techniques**: Some behavioral methods, such as aversion therapy, raise ethical concerns, especially when unpleasant stimuli are used to reduce undesirable behavior. Such techniques may cause discomfort or harm to the individual.
- The behavioral approach does not adequately address cognitive factors, which are integral to understanding many disorders, such as depression and anxiety, where irrational beliefs and maladaptive thought patterns play a key role.
- Role of Contextual factors , such as Biological, psychological , social and cultural causes were neglected.

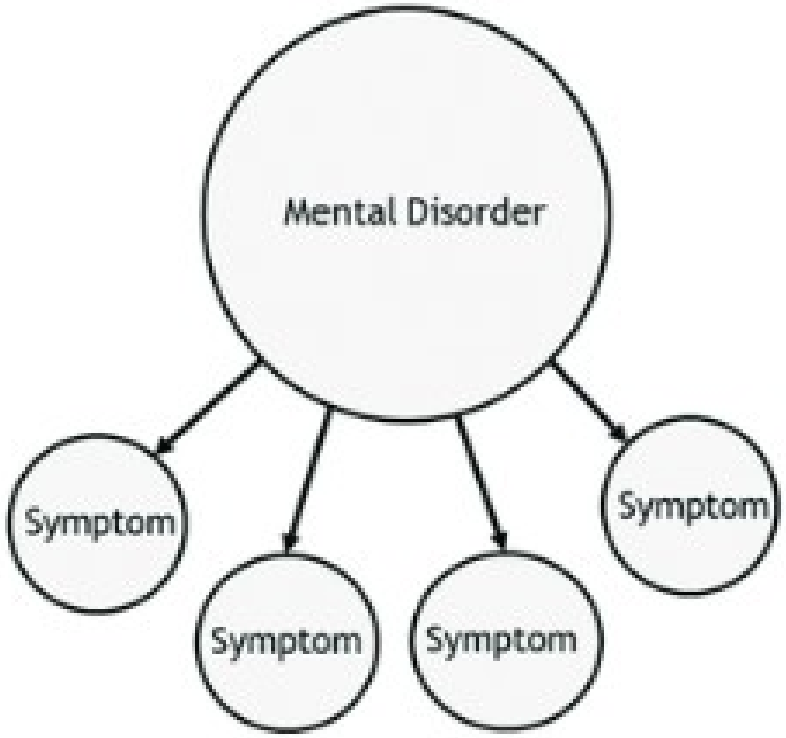
Classification of Psychopathology Unit II

MEANING AND PURPOSE OF CLASSIFICATION OF PSYCHOPATHOLOGY

The term **classification** refers to the process of **constructing categories** and assigning individuals to these categories based on their **attributes**.

Classification in a scientific context refers to taxonomy (the science of classification, derived from the Greek taxis (“arrangement”) and nomos (“law”).

It provides us with a nomenclature(a Naming system), which gives clinicians and researchers a ***common language*** and ***shorthand*** terms for complex conditions.



Approaches to the Classification of Psychopathology

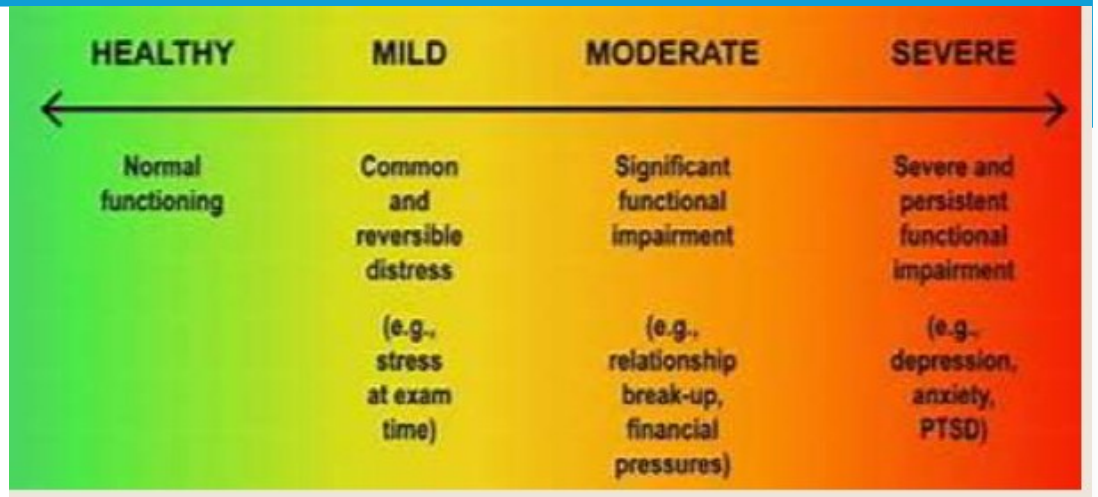
Categorical approach

- **Emil Kraepelin** was the first psychiatrist to **classify psychological disorders from a biological or medical point of view**.
- Organizes and describes mental disorders into different categories, each with symptoms and characteristics typical of specific mental disorders.
- Yes / No ' approach to Classification (Considers illness as being either present or absent, allowing for Clear cut diagnosis)

Approaches to the Classification of Psychopathology

Dimensional approach

- To rank or grade the person's symptoms in terms of their intensity, degree, or severity. E.g.: The person's depression is ranked on a dimension but not given a confirmed diagnosis.
- Ranked on a continuous quantitative dimension. e.g.: How anxious are you on a scale of 1 to 10?
- This approach is unsatisfactory as there is uncertainty as to when to treat or provide intervention ,when symptoms are on a continuum.



Prototypical approach

- A third approach, for organizing and classifying behavioral disorders which is an alternative to the first two. It is called a prototypical approach.
- It identifies some essential characteristics of a disorder .
- With this approach classifying the disorder by different possible features or properties any candidate must meet (but not all) of them to fall in that category.
- In depression, there are five important symptoms such as depressed mood all day, weight loss, insomnia, fatigue, and feeling of worthlessness.
- A person might have three or four of the characteristics of depression but not all five of them. Yet we still diagnose the person as depressed.

HISTORY OF CLASSIFICATION OF PSYCHOPATHOLOGY

- The Greek philosopher Hippocrates (460 370 B.C.) classified mental illness into delirium, mania, paranoia, hysteria, and melancholia resulting from 4 temperaments.
- Philippe Pinel's (1745 1826) father of modern psychiatry, classification system was based on functional disorders of the nervous system. He described four disorders: dementia, mania, melancholia, and idiotism.
- Karl Ludwig Kahlbaum (1828 1899) distinguished organic and non-organic mental disorders.
- Emil Kraepelin's (1856 1926) classification system was based on clinical features of disorders: cause, course, and outcomes.
- His primary classifications were manic depressive psychosis and dementia praecox.
- Eugen Bleuler combined Kraepelin and Meyerian approaches and classified mental disorders based on psychopathological processes.

Development of ICD

The **International Classification of Diseases (ICD)** is a standardized system developed by the **World Health Organization (WHO) for classifying diseases and health conditions.**

Early Beginnings (1893 - ICD-1)

- In 1893 ,the **Bertillon Classification of Causes of Death ,** by French statistician Jacques Bertillon for public health tracking and was adopted internationally.
- First version of the ICD published, based on the Bertillon Classification (ICD-1) in 1900.
- ICD-6 published including morbidity (diseases) and mortality (causes of death) and with a separate section on mental disorders in 1949.
- ICD-8 published in 1972 with comprehensive glossary of mental disorders (offering more detailed definitions and diagnostic criteria than previous editions.)
- ICD-9 published in 1977 with diagnostic codes for medical research, billing etc.
- **ICD-10**, released in **1994**, expanded the codes and categories substantially, increasing from roughly 13,000 to over 68,000 diagnostic codes and chapter V (F), pertained to classification of mental disorders with inclusion & exclusion terms.

A brief description of the classification of mental disorders as per ICD-10 is given below:

F00-F09: Organic, including symptomatic, mental disorders: Dementia, delirium, Organic.

F10-F19: Mental and Behavioral disorders due to the use of psychoactive substances: Alcohol, cocaine, and tobacco.

F20-F29: Schizophrenia, schizotypal and delusional disorders.

F30-F39: Mood (affective) disorders: Manic, bipolar, depressive.

F40-F48: Neurotic, stress-related, and somatoform disorders: Phobia, OCD,

adjustment, dissociative.

F50-F59: Behavioural syndromes associated with physiological disturbances and physical factors: Eating, sleep, sexual disorders.

F60-F69: Disorders of personality and behavior in adult persons: Specific, impulse disorder, gender identity.

F70-F79: Mental retardation

F80-F89: Disorders of psychological development: Speech and language, pervasive development.

F90-F98: Behavioural and emotional disorders with onset usually occurring in childhood and adolescence: Hyperkinetic, conduct, tic.

F-99: Unspecified mental disorders.

Development of DSM

The Diagnostic and Statistical Manual of Mental Disorders (DSM) was developed by the American Psychiatric Association (APA)

Origins and Early Development (1952 - DSM-I)

- Committee on statistics (now APA) developed a guide for mental hospitals called as the "statistical manual for the use of institutions for the insane in 1917" which includes 22 diagnoses.
- DSM-I (1952): The **first edition of the DSM** was published in **1952** by the **American Psychiatric Association (APA)**. It had a **psychoanalytic orientation, it used the term " Unconscious**," , included **106 disorders** and was largely used by clinicians in the United States.
- DSM-II (1968) : APA published a revision with 185 disorders but still had a psychoanalytic orientation.
- DSM-II also began to recognize the importance of sociocultural factors in understanding mental illness

DSM-III (1980): A multiaxial classification, 494 pages long, 265 diagnostic categories.

The psychodynamic view was abandoned and a more **scientific and empirical approach** to mental disorders, emphasizing a clear and **objective classification system** based on **observable symptoms**.

DSM-III included **specific diagnostic criteria** for each disorder, which made it easier to apply in clinical practice and research.

New Disorders and Expanding Categories: It introduced many new disorders, such as **Attention Deficit Hyperactivity Disorder (ADHD)** and **Post-Traumatic Stress Disorder (PTSD)**, and redefined others, including **depression** and **schizophrenia**.

DSM-III-R (1987): It included adjustments to some definitions, the addition of new disorders, and the refinement of diagnostic criteria, but the overall approach continued to be symptom-based and categorical.

It included adjustments to some definitions, the addition of new disorders, and the refinement of diagnostic criteria, but the overall approach continued to be symptom-based and categorical.

DSM-IV (1994): refined diagnostic criteria and included new disorders such as Bipolar Disorder and Obsessive-Compulsive Disorder (OCD).

Incorporation of Cultural Context in DSM –IV

DSM-IV-TR (2000): It updated the manual with more recent research findings and provided clearer diagnostic guidelines, with no major changes to the classification of disorders.

DSM-5 (2013): eliminated the **multiaxial system** that had been a hallmark of previous editions. Instead, it moved to a **non-axial system**, which combined medical and psychological disorders into a single diagnostic category.

Changes in Disorders and Categories: Several disorders were reclassified or renamed. For example, **Autism Spectrum Disorder** replaced earlier subtypes like **Asperger's Syndrome**. The criteria for **Post-Traumatic Stress Disorder (PTSD)** were also revised.

Future Directions: greater emphasis on understanding mental health through a **biopsychosocial model**, integrating genetic, environmental, and psychological factors.

The **multiaxial classification system** (2013, 5 marks)

- The **multiaxial system** was a diagnostic approach used in the **DSM-III**, **DSM-III-R**, **DSM-IV**, and **DSM-IV-TR** editions of the **Diagnostic and Statistical Manual of Mental Disorders (DSM)**.

- It provide a more comprehensive understanding of a patient's mental health by **considering multiple dimensions (or axes) of diagnosis**.

- The multiaxial system recognized that mental disorders should not be assessed solely based on the primary symptoms but also in the context of broader factors that may influence diagnosis, treatment, and prognosis.

- **Axis I**: **Clinical Disorders:** included most mental health disorders, such as depression, anxiety disorders, schizophrenia, and other mood or anxiety disorders.
- **Example**: Major Depressive Disorder, Generalized Anxiety Disorder.

Axis II: **Personality Disorders and Mental Retardation**

This axis focused on chronic or enduring personality disorders and developmental disorders, such as **Borderline Personality Disorder**, **Antisocial Personality Disorder**, and **Intellectual Disabilities** (previously termed **Mental Retardation**).
E.g. Narcissistic Personality Disorder, Autism Spectrum Disorder.

Axis III: **General Medical Conditions**
This axis noted any **medical conditions** that might be relevant to the individual's mental health.
E.g. Diabetes, Hypothyroidism, Multiple Sclerosis.

Axis IV: **Psychosocial and Environmental Problems:** included significant **stressors** or **external factors** that may contribute to or exacerbate the individual's mental health condition.
E.g. Trauma, poverty, Marital discord

Axis V: **Global Assessment of Functioning (GAF) :** an assessment of the individual's overall **level of functioning**, using a scale from **0 to 100**. This scale helped clinicians evaluate how well the person was able to perform daily activities in social, occupational, and interpersonal domains.
Example: A GAF score of 60 might indicate moderate symptoms or difficulties in functioning.

Why was the Multiaxial classification removed?

- **DSM-5** (published in 2013), the **multiaxial system was removed, as it was too rigid, and an integrated approach is considered to be best.**
- **Axis I and Axis II disorders** were no longer distinguished as separate categories. Both were simply included under a single diagnostic category for **mental disorders**.
- **Axis III** (medical conditions) was retained but was integrated into the overall diagnostic process rather than being treated separately.
- **Axis lV** (psychosocial and environmental factors) is now addressed within the overall description of the diagnosis and in treatment planning.
- **Axis V** (Global Assessment of Functioning) was also removed, and clinicians are now encouraged to use other assessments or tools to measure a patient’s functioning, such as **WHO Disability Assessment Schedule 2.0**.

DEVELOPMENTAL PATHOGENESIS

Unit III

What is Pathogenesis?

- The word comes from the Ancient Greek (pathos) 'suffering, disease', and (genesis) ' creation.
- **Psychopathology** refers to the study of mental disorders, including their symptoms, causes, and effects on individuals' thoughts, emotions, behaviors, and overall functioning.
- Psychopathology examines various factors that contribute to mental disorders, including: biological, psychological, social, and cultural factors contributing to psychopathology.

DEVELOPMENTAL CAUSES OF PSYCHOPATHOLOGIES

The major viewpoints of developmental pathogenesis are as follows:	Biological
	Psychodynamic
	Behavioral
	Psycho- Social
	Socio Cultural

Discuss Biological and Socio- Cultural causes of Psychopathology (Jun 2019,2020, 2022) 10 marks

- The biological viewpoint believes that Cognitive, Emotional, and Behavioral symptoms of psychological disorders originate from disorders of the nervous system and endocrine systems or are inherited.
- These Causes are operated during pre-natal and post-natal developmental stages.
- causes include genetic vulnerabilities, constitutional liabilities (refers to the biological makeup of individuals resulting from a combination of genetic and environmental influences e.g... Physical disabilities, vulnerability to stress), and physical deprivation.
- The disorders first recognized as organic or biological were associated with the gross destruction of brain tissues. For example, damage to the left hemisphere that occurs during a stroke can cause depression.
- Most mental disorders are not caused by neurological damage, example neurotransmitter imbalance could cause depression without causing brain damage.

Biological Factors for Pathogenesis

1. Genetic Vulnerabilities
2. The Neuro-Endocrine System
3. Physical Handicaps
4. Early Physical Deprivation

Genetic Vulnerabilities

Genetics is what we inherit from our parents/ancestors suggesting how we look like, feel, and behave.

A **gene** is the basic physical and functional unit of **heredity**. Genes are the carriers of information that we inherit from our parents (individuals have two copies of genes- one from each of our parents).

Genes do not fully determine whether a person shall develop a mental disorder, however, there is substantial evidence that most mental disorders show at least some genetic influence (Plomin et al., 2013; Rutter, 2006)

For example, some children are naturally shy or anxious (Kegan & Fox, 2006), however some genetic sources of vulnerability do not manifest until adolescence or adulthood, when most mental disorders appear for the first time.

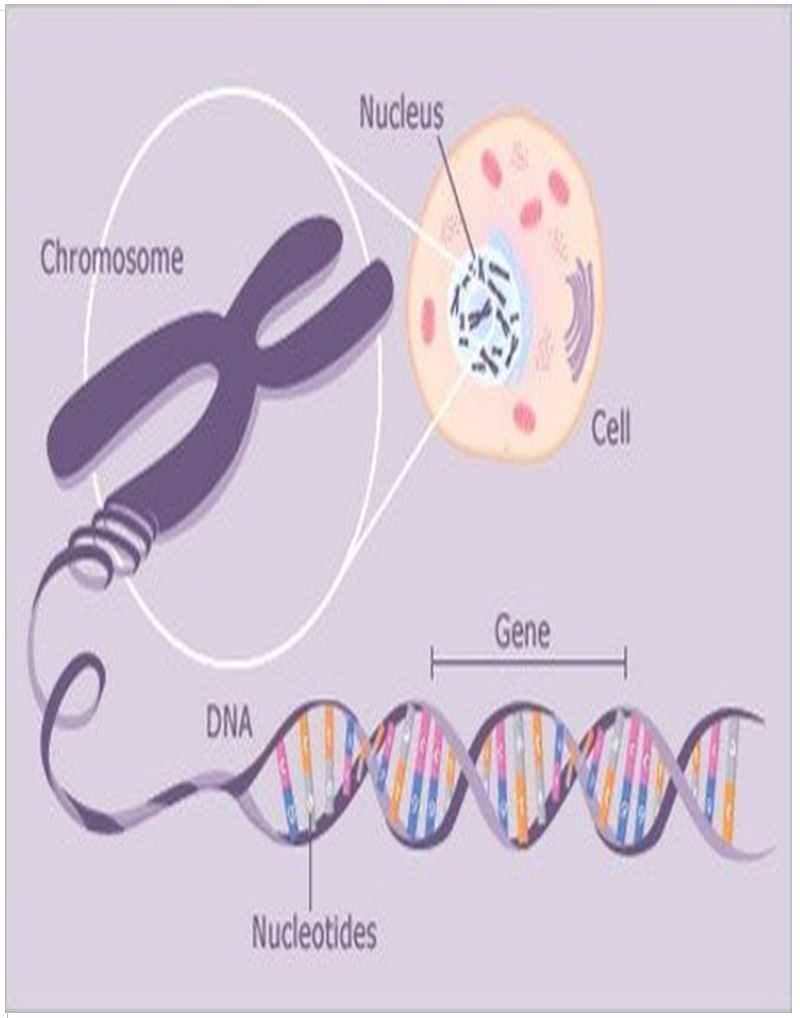
Except for identical twins, every person has a unique set of genes unlike those of anyone else in the world.

Fyi..

Genes are long molecules of deoxyribonucleic acid (DNA) at various locations on chromosomes.

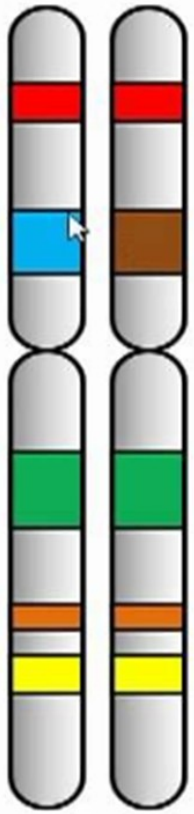
(Deoxyribonucleic acid, more commonly known as DNA, is a complex molecule that contains all of the information necessary to build and maintain an organism, It contains the biological instructions that make each species unique

Chromosomes are the chain-like structures within a cell nucleus that contain genes. Each chromosome is made of protein and a single molecule of deoxyribonucleic acid (DNA). Passed from parents to offspring, DNA contains the specific instructions that make each type of living creature unique. Each human cell has 23 pairs of chromosomes (46 total) containing genetic material, one copy of each chromosome comes from the mother and one copy from the father. 22 of these chromosome pairs are determined by their biochemical action, anatomical features, and physiological characteristics and the remaining pair are sex chromosomes. If both are X chromosomes, the offspring is female (XX), and if inherited from the father is a Y, then it's a male (XY).



Above is a couple of paired up Chromosomes, they are homologous (the same) as they have all the same genes in all the same places along their length.

To make the structure of chromosomes easier to understand we draw them like this →



Gene – portion of a chromosome that serves as the basic unit of heredity. Genes control the characteristics that an offspring will have.

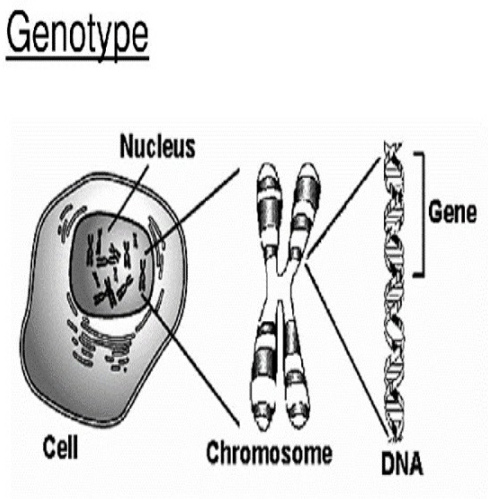
As you can see here, while both chromosomes have the same genes they can have different forms of these genes.
For example in the chromosomes above one form of the gene for eye colour will give you blue eyes and the other form will give you brown eyes.
When we have these different forms for the same gene we call these forms **alleles.**

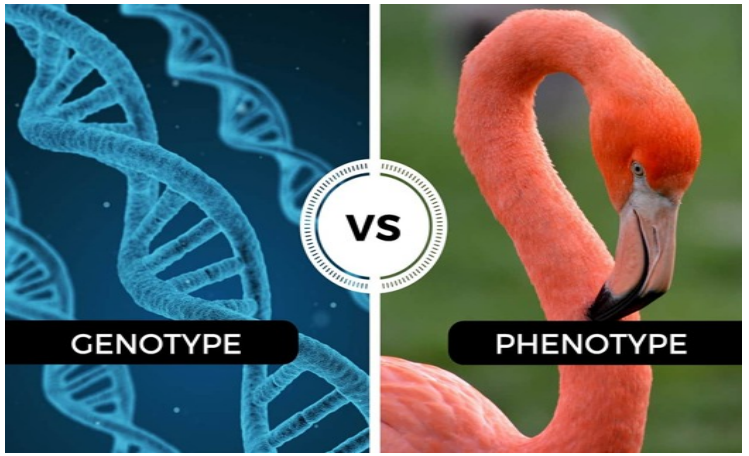
Genotype & Phenotype (June 2020, 3marks)

The total genetic makeup of an individual, consisting of inherited genes, is referred to as the genotype (physical sequence of DNA), which is an individual's unobservable genetic constitution, usually fixed at birth.

The observed structural and functional characteristics that result from an interaction of the genotype and environment is called as Phenotype.

The **phenotype refers to the observable traits or characteristics of an organism, such as physical appearance, behavior, and physiological traits**. These traits are the result of the interaction between the organism's genotype and environmental factors.





In the eye color example, the phenotype is the actual **blue or brown eyes** that you can see, which is the result of how the genotype (the alleles inherited) is expressed, possibly influenced by other environmental factors.

Key Differences

Aspect	Genotype	Phenotype
Definition	The genetic makeup of an organism	The observable physical and behavioral traits of an organism
Nature	Inherited genetic material (DNA)	Expression of the genotype + environmental factors
Example	The alleles an individual carries for a trait (e.g., **BB** or **Bb** for eye color)	The actual eye color (e.g., brown eyes or blue eyes)
Invariance	Remains the same throughout the organism's life	Can change due to environmental factors (e.g., sun exposure affecting skin color)

GENOTYPE- ENVIRONMENT INTERACTIONS

- The phenotype changes over time and is generally viewed as the product of an interaction between the genotype and the environment.
- For example, an individual may be born with the capacity for high intellectual achievement, but whether he or she develops this genetically given potential depends on such environmental factors as upbringing and education.
- Genetic factors may not be necessary or sufficient to cause a mental disorder but instead contribute to a vulnerability to develop a disorder if there is a significant stressor in a person's life.
- This is known as the **Genotype-Environment interaction**.
- Whether these genotypes will eventually give rise to the phenotypic behavior disorders will depend on environment and experience; a predisposition, also known as a **diathesis**, may be inherited, but not the disorder itself.

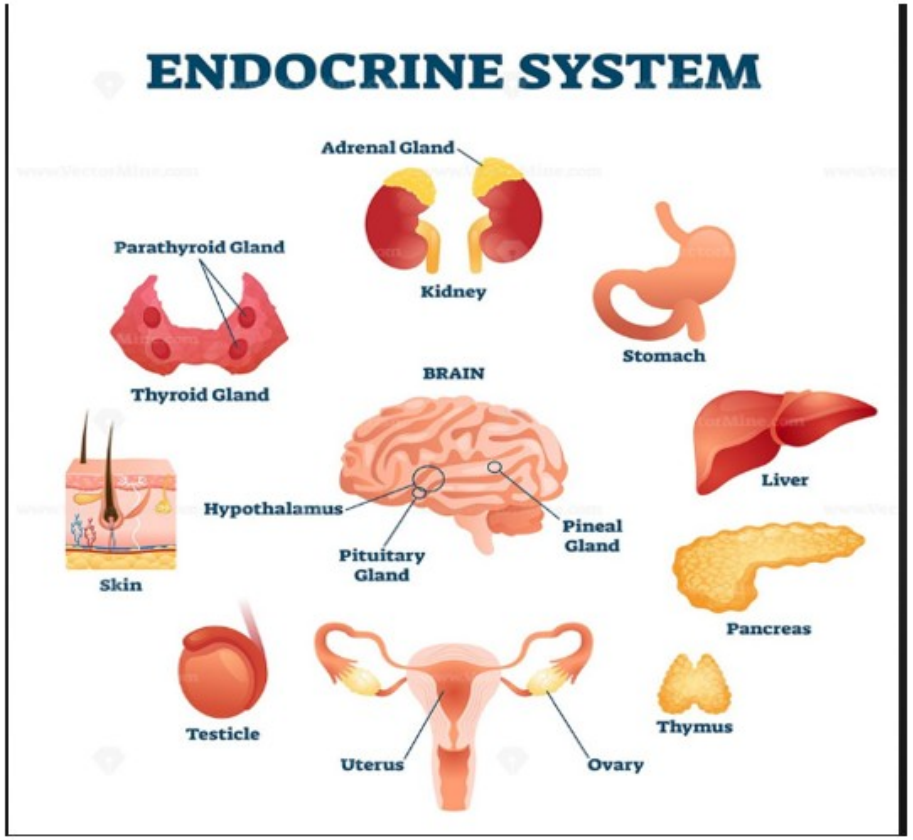
Neuro-Endocrine System

Neuroendocrinology studies the interaction between the nervous system and the endocrine system.

The nervous and endocrine systems often act together in a process called neuroendocrine integration, to regulate the physiological processes of the human body.

- Sends messages to control & Co-ordinate body's environment such as body temperature, metabolism, reproduction etc.
- Hormones: Chemical signals that travels via blood.
- Glands : Organs that secrete hormones.

Major Structures in Endocrine System- Hypothalamus, Pituitary & other endocrine glands



The neuroendocrine system, specifically the hypothalamic–pituitary–adrenal (HPA) axis represents the key communication highway between the gut environment and the central nervous system (CNS) .

The neuroendocrine system consists of neurons (nerve cells) that produce hormones and communicate with endocrine glands to control physiological processes like metabolism, stress response, growth, reproduction, and mood.

When under stress or faced with a threat, the hypothalamus causes corticotrophin-releasing hormone (CRF) to be released, which then communicates with the pituitary gland. The pituitary then releases adreno-corticotropic hormone (ACTH), which induces the adrenal cortex(the outer portion of the adrenal gland) to produce a stress hormone called Cortisol.

it takes about 20 to 40 minutes for cortisol release to peak. After the stress or threat has remitted, it can take up to an hour for cortisol to return to baseline (i.e., before the stress) levels (Dickerson & Kemeny, 2004).

If the stressor remains, the HPA Axis stays active and cortisol release continues creating chronic stress. Thus, chronic stress and its effects on the HPA axis are linked to disorders as diverse as schizophrenia, depression, and posttraumatic stress disorder.

Physical Handicaps

- Pre- or post-natal abnormalities or environmental conditions may result in physical defects
- Eg. low birth weight in Premature births.
- Nutritional deficiencies, disease, exposure to radiation, drugs, severe emotional stress, or the mother's excessive use of alcohol or tobacco are some common causes of low birth weight.
- Socio-economic status is related to fetal and birth difficulties, the incidence of which is several times greater among mothers of lower socio-economic levels (Kopp & Kaler, 1989).
- Children with low birth weight may experience difficulties most frequently involving attentional control, anxiety-related problems, and social interaction problems, including social withdrawal (Mathewson et al., 2017).

Early Physical Deprivation

- **Deprivation of Basic Physiological Need**
- The most basic human requirements are those for food, oxygen, water, sleep, and the elimination of wastes.
- It is recognized that chronic but even relatively mild sleep deprivation can have adverse emotional consequences in children and adolescents.
- Prolonged food deprivation also affects psychological functioning.
- Severe malnutrition is associated with a host of other potentially damaging variables such as parental neglect and limited access to health care impairs physical development and lowers disease resistance.
- It also blocks brain growth resulting in markedly lowered intelligence and enhanced risk for disorders such as attention-deficit disorder.

Early Physical Deprivation

- **Stimulation and Activity:**
- Healthy mental development depends on a child's receiving adequate amounts of stimulation from the environment.
- In addition to psychological vulnerabilities that can be induced by too little stimulation the physical development of the brain is adversely affected by a lesser environmental stimulation.
- Biological development is enhanced by an enriched and complex environment. These include changes in brain chemistry and structure.
- There are limits to how much stimulation is beneficial to a developing organism eg. sensory overload can impair adult functioning.

PSYCHOSOCIAL CAUSES (June 2019)

Parental Deprivation and Separation

Children who do not have the resources that are typically provided by the parents or caregivers are often left with long-lasting psychological scars. The resources range from basic needs (food/shelter) to **love** and **attention**.

Deprivation is usually seen among abandoned or institutionalized children and also may occur in intact families where for some reason (e.g.. Owing to mental disorder), parents are unable or unwilling to provide close and frequent human attention & and nurturing.

INSTITUTIONALIZATION

Some children are raised in an institution where, compared with an ordinary home, there is less warmth and physical contact; less intellectual, emotional, and social stimulation and a lack of encouragement and help in positive learning.

Children deprived of normal parenting in infancy and early childhood show maladaptive personality development and are at risk for psychopathology.

A protective factor found to influence was whether the child went from the institution into a harmonious family or a discordant one (Rutter, 1990). Other protective factors are having good experiences at school, either in the form of social relationships, academic or athletic success, or having a supportive marital partner to a better sense of self-esteem or self-efficacy.

NEGLECT AND ABUSE IN THE HOME

Most infants subjected to parental deprivation are not separated from their parents or placed in institutions, but rather suffer from inadequate care or maltreatment at home.

Parents typically neglect or devote little attention to their children and generally reject them.

Parental rejection of a child may be demonstrated in various ways physical neglect, denial of love and affection, lack of interest in the child's activities and achievements, failure to spend time with the child, and lack of respect for the child's rights and feeling.

Abused children often tend to be overly aggressive (both physically and verbally), even to the extent of bullying.

Abused and maltreated infants and toddlers are also quite likely to develop atypical patterns of attachment (Cicchetti & Toth, 1995) characterized by bizarre, disorganized, and inconsistent behavior with the caregiver.

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SEPARATION

Bowlby (1973) summarized the traumatic effects for children from 2 to 5 years old of being separated from their parents during prolonged periods of hospitalization.

First, there are the short-term or acute effects of the separation, which can include significant despair during the separation and detachment from the parents upon reunion.

Bowlby considered this to be a normal response to prolonged separation, even in securely attached infants.

Children who undergo such separation may develop an insecure attachment.

Separation can cause an increased vulnerability to stressors in adulthood making it more likely that the person will become depressed (Bowlby, 1980) or show other psychiatric symptoms (Carlson et al., 2003)

Childhood Traumas

Traumatic experiences in early childhood, especially those that involve abuse, neglect, or significant disruptions, can disrupt normal development, affect emotional regulation, and impact cognitive and social functioning.
Psychiatric Disorders Linked to Childhood Trauma: Post-Traumatic Stress Disorder (PTSD), Anxiety disorder, Depression, Borderline Personality Disorder (BPD),Dissociative Disorders, Conduct Disorder and Antisocial Personality Disorder (ASPD),eating disorders, substance use etc.

Types of Childhood Trauma

- **Physical abuse**: Hitting, beating, or inflicting physical harm.
- **Emotional abuse**: Verbal abuse, humiliation, or emotional manipulation.
- **Sexual abuse**: Any form of sexual contact or behaviour with a child.
- **Neglect**: Failure to provide for a child's basic physical, emotional, and developmental needs.
- **Witnessing violence**: Observing domestic violence or other violent events can be traumatic.
- **Loss of a caregiver**: Death, separation, or abandonment by a parent or close caregiver.
- **Chronic stress or adversity**: Living in an environment of poverty, substance abuse, or parental mental illness.

Parental Psychopathology & Parenting Styles (Feb 2021, 6 marks)

Parents who have various forms of psychopathology, including **schizophrenia, depression, anti-social personality disorder, and alcoholism**, tend to have children who are at **heightened risk for a wide range of developmental difficulties (unless protective factors are also present).**

For example, the children of seriously depressed parents are at enhanced risk for the disorder themselves (Cicchetti & Toth, 1995), at least partly because depression makes for **unskillful parenting**, notably including **inattentiveness to a child's many needs and being ineffective in managing and disciplining the child.**

Children of alcoholics have elevated rates of **truancy and substance abuse** and a greater likelihood of dropping out of school, as well as higher levels of anxiety and depression and lower levels of self-esteem (Chassin, Rogosch, & Barrera, 1991).

Parenting Styles

- A parental style reflects ***an attitude and values that are expressed towards a child across a wide range of settings.***
- **Responsiveness** and **demandingness** are two key dimensions that help define different parenting styles.
- **Responsiveness** refers to the degree to which parents are attuned to their child's emotional needs, provide support, and foster a nurturing environment. It is characterized by emotional support, open communication and validating child's feelings and experiences.
- **Demandingness** refers to the expectations parents have for their children's behavior and the level of control they exert over their child's actions. ***This dimension includes: discipline, setting expectations, setting limits and fostering responsibility***.
- The Interaction of Responsiveness and Demandingness resulted in 4 different parenting styles.

Parenting Styles

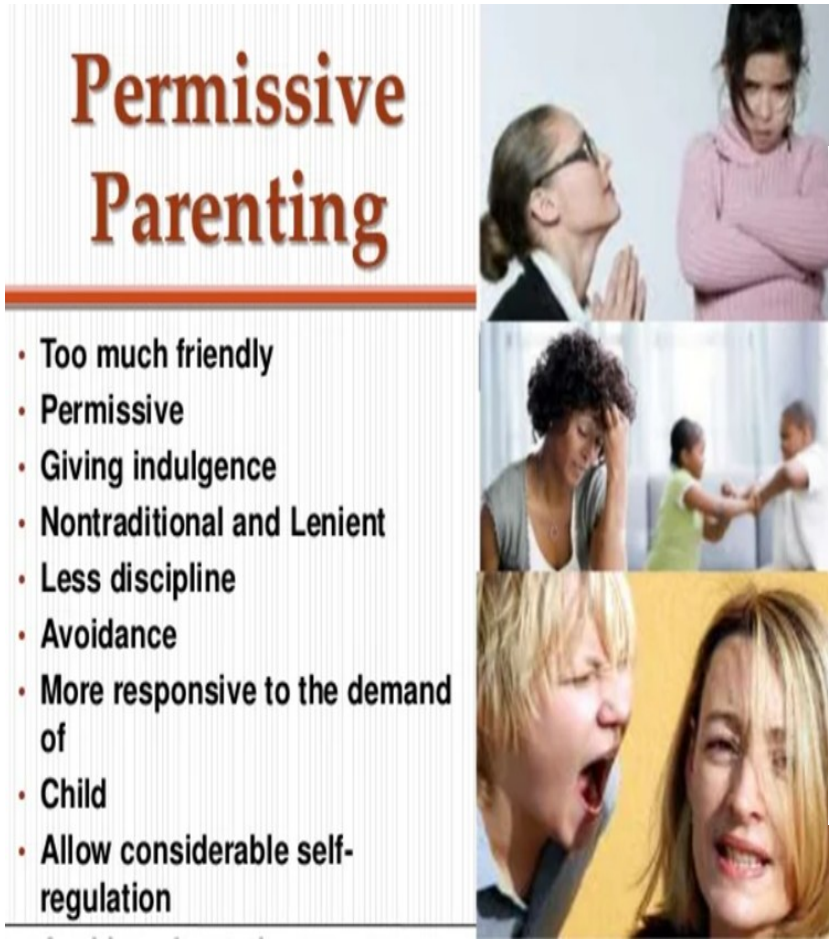
- Diana Baumrind , a developmental psychologist categorized parenting into four main styles based on two key dimensions: **responsiveness** (the degree of warmth and support provided by parents) and **demandingness** (the level of control and expectations parents have for their children).

Authoritative Parenting:

- High on warmth & support and moderate on control
- Parents set clear limits and restrictions regarding certain kind of behaviors.
- They encourage independence and open communication, involving children in decision-making processes.
- Characterized by the most positive early social development, have secured attachment relationships and high levels of overall well-being.
- Children are friendly and shows the development of general competencies for dealing with others and their environments.

Authoritarian Parenting

- Low on warmth (responsiveness) & high on control (demandingness)
- Parents enforce strict rules and expectations, emphasizing obedience and discipline without much emotional support.
- parents may use punitive measures to control behavior.
- Children tend to be irritable, and moody.
- They may exhibit higher levels of anxiety or rebellion against authority figures.



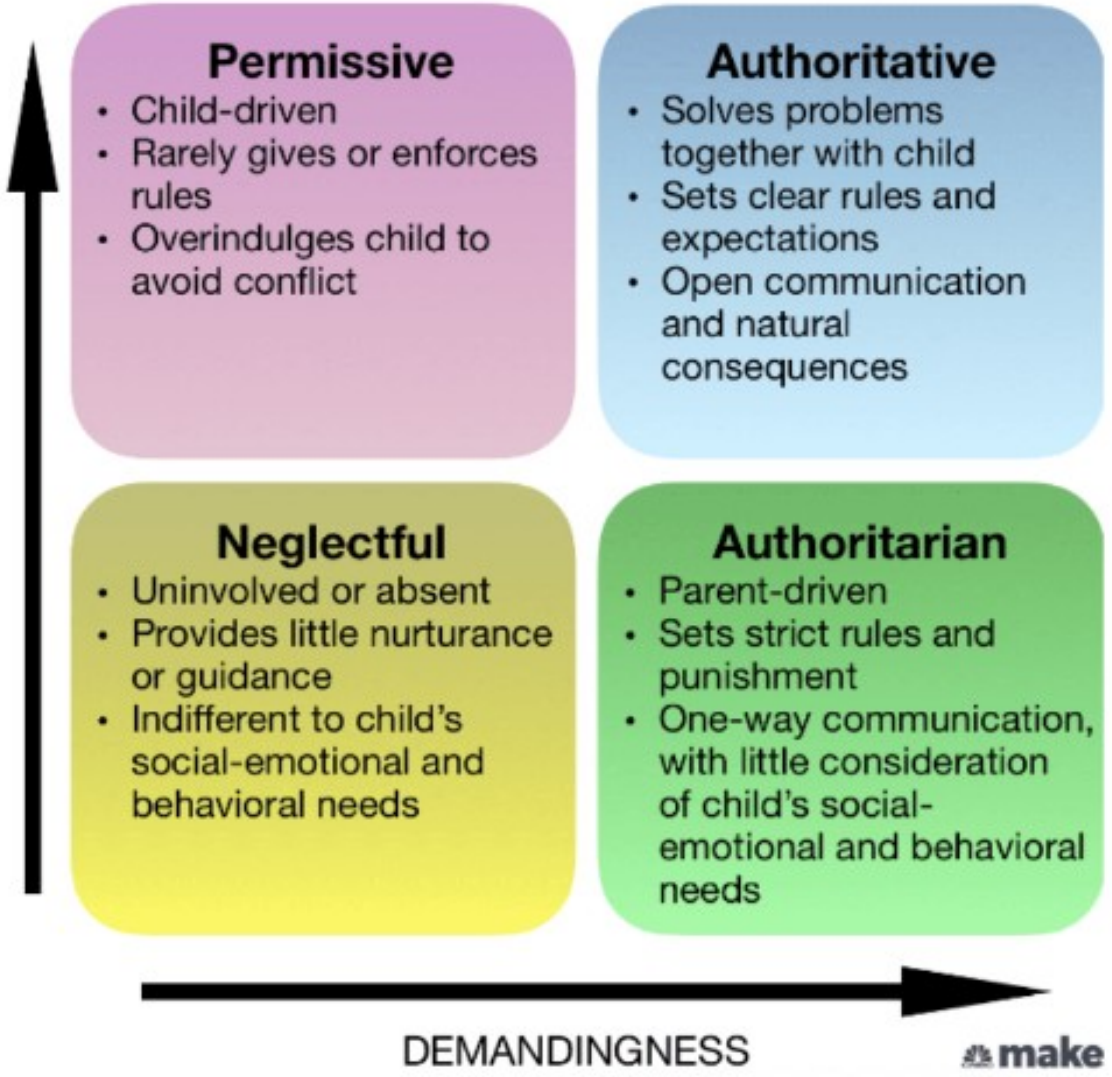
Permissive /Indulgent

- High on Warmth /responsiveness and low on control /discipline.
- Overly indulged children are characteristically spoiled, selfish , impatient, inconsiderate and demanding.
- Parents tend to avoid confrontation and allow children significant freedom in making choices.
- Children may struggle with self-discipline and authority, exhibiting impulsive behavior.
- They may have difficulty adhering to rules and managing responsibilities.

Neglect/Uninvolved

- Low on warmth and low on control
- Children tend to be moody , have low self- esteem and conduct problems in childhood.
- Poor academic performance and peer problems are common.
- Children may experience feelings of neglect and insecurity.
- Baumrind's research demonstrated that the authoritative style is generally associated with the most positive outcomes for children, while the authoritarian and neglectful styles can lead to various challenges in development.

The 4 Parenting Styles



Inadequate Communication

- Inadequate communication may take several forms.
- Some parents are too busy or preoccupied with their own concerns to listen to their children and to try to understand the conflicts and pressures they are facing.
- As a consequence, these parents often fail to give needed support and assistance, particularly when there is a crisis.
- ***The Double Bind Theory, proposed by Gregory Bateson and his colleagues in the 1950s, is a concept in communication theory that describes a situation in which a person is confronted with two or more conflicting messages, where one message contradicts the other, and the individual is unable to resolve the conflict.***
- ***Bateson's theory was particularly influential in understanding the dynamics of family relationships, especially in the context of schizophrenia.***
- Example: A child is told, **"I love you, but you're not allowed to play with your toys."** The child is receiving two contradictory messages: **"I love you"** (a nurturing message) and **"you're not allowed to do something"** (a controlling message).

Disrupted Family Relationships

The **disturbed family structure** is an overarching risk factor that increases an individual's vulnerability to particular stressors.

In some cases of marital discord or conflict, one or both of the parents is not gaining satisfaction from the relationship. Seriously discordant relationships of long standing are likely to be frustrating, harmful, and generally damaging in their effects on adults and their children (Emery & Kitzman, 1995).

Severe cases of **marital discord may expose children to one or more of the stressors: child abuse or neglect, the effects of living with a parent with a serious mental disorder, authoritarian or neglectful/uninvolved parenting, and spouse abuse.**

Children of parents with high levels of overt conflict show a **greater disposition to behave aggressively towards both their peers and their parents** than children from less conflictual marriages

(Cummings et al., 2004)

Effects of Divorce on Children: Divorce can have traumatic effects on children. **Feelings of insecurity and rejection** may be aggravated by conflicting parents and by the **spoiling the children receive while staying with one of the parents.**

Delinquency and a wide range of other psychological problems are much more frequent among children whose parents are divorced.

The long-term effects of divorce on adaptive functioning into adulthood, such as **lower educational attainment**, **lower income, and lower life satisfaction.**

The **offspring's own marriages are likely to be marked by discord** (whether or not the parents are divorced). Some of this intergenerational transmission of marital discord may be the result of the offspring having learned negative interaction styles by observing their own parent's marital interactions (Amato, 2006)

SOCIO-CULTURAL CAUSES

- **Socio-Cultural Environment**
- Each **group fosters its cultural patterns by systematically teaching its offspring**, all its members tend to be somewhat alike to conform to certain basic personality types..
- Children in societies that do not sanction violence learn to settle their differences in nonviolent ways.
- Subgroups within a general socio-cultural environment, such as **family, sex, age, class, an occupational, ethnic, and religious group foster beliefs and norms of their own, largely using social roles that their members learn to adopt** (Expected role behaviors exist for a student, a teacher, an army officer, priest, etc.)
- When **social roles are conflicting, unclear, or uncomfortable, or when an individual is unable to achieve a satisfactory role in a group**, **healthy personality development may be impaired—just** as it is when a **child is rejected by a juvenile peer group**.

Pathogenic Societal Influences

Low Socioeconomic Status

In our society the **lower the socio-economic class, the higher the incidence of mental and physical disorders** (Conger & Donnellan, 2007)

The strength of this correlation exists between socioeconomic status (SES) and the prevalence of abnormal behavior—the lower the socio-economic class, the higher the incidence of abnormal behavior.

For example, **antisocial personality disorder is strongly related to social class, occurring at three times the rate in the lowest income category** as in the highest income category.

Disorder Engendering Social Roles

An organized society, even an “advanced” one sometimes asks its members to perform roles in which the prescribed behaviors either are deviant themselves or may produce maladaptive reactions.

Soldiers who are called upon by their superiors (and ultimately by their society) to deliberately kill and hurt another human being may subsequently develop serious feelings of guilt. They may also have latent emotional problems resulting from the horrors commonly experienced in combat and hence be vulnerable to disorder.

Social Change and Uncertainty

The rate and pervasiveness of change today are different from anything our ancestors ever experienced. All aspects of our lives are affected—our education, our jobs, our families, our leisure pursuits, our finances, and our beliefs and values. Adjustments demanded by these changes are a source of constant and considerable stress (e.g.., dealing with issues of drugs and crime, environmental changes, pollution, heavy traffic, etc)

our attempts to cope with existing problems increasingly seem to create new problems that are as bad or worse. The resulting despair, demoralization, and sense of helplessness are well-established predisposing conditions for abnormal reactions to stressful events (Seligman, 1998).

Unit IV
Childhood Mental Disorders

PERVASIVE DEVELOPMENTAL DISORDERS(2021,2022)

The term "**pervasive development disorders**," also called PDDs, refers to a group of conditions that involve **delays in the development of many basic skills**, such as the ability to ***socialize***, ***Communicate*** and use ***imagination***.

These conditions are identified **in early childhood**, a **critical period of development** and hence called as **developmental disorders**.

General symptoms : Difficulty with **verbal communication**, including problems using and understanding language & Difficulty with **non-verbal communication**, such as gestures and facial expressions etc.

Other Symptoms of PDD

- Difficulty with social interaction, including relating to people and to his or her surroundings
- Unusual ways of playing with toys and other objects
- Difficulty adjusting to changes in routine or familiar surroundings
- Repetitive body movements or patterns of behavior, such as hand flapping, spinning, and head banging (Self Stimulation)
- Changing response to sound (The child may be very sensitive to some noises and seem to not hear others)
- Temper tantrums
- Difficulty sleeping
- Aggressive behavior
- Fearfulness or anxiety

Autistic Disorder (2012,2014,2015,2019- 10 & 6 marks)

- Autism is a developmental disorder characterized by impaired development in **communication, social interaction, and behavior**.
- In the past, autism has been confused with childhood schizophrenia or childhood psychosis.
- Autism is **a pervasive developmental disorder (PDD**), within the broad spectrum of developmental disorders referred to as **Autism Spectrum Disorder (ASD)**
- The degree of autism can range from mild to severe.
- Autism was first described by Leo Kenner in 1943.
- It affects one out of every 100 to 166 children.
- It tends to affect about five boys to every one girl (First, 2008).

Autism Spectrum Disorder

High Functioning Autism

Mild symptoms.
Needs limited support
Able to function at school or work

Autism

Symptoms are noticeable to the casual observer
Needs support from others
Communication skills impaired

Severe Autism

Severe emotional and behavioral symptoms
Needs full-time support
Little to no communication skills

Features of Autism

- usually identified before 30 months of age
- Early ***signs of problems with social communication can be detected in the first 6 months of an infant***
- During the infancy period of 2-6 months, infants focus increasingly on the **face and especially the eyes** facilitating social interaction with their caregivers,•, but in the case of autism, show a decline in their focus on the eyes from **2 to 6 months and this continues to decline until 24 months.**
- significant increase in their **focus on inanimate objects** which is double the level of typically developing children.

Symptoms of autism

Diagnosis and Statistical Manual of Mental Disorders, DSM-IV-TR identifies three features that are associated with autism.

1) Impairment in social interaction

- Children are **emotionally flat.**
- Affected behaviors can include eye contact, facial expressions, and body postures.
- Inability to develop normal peer and sibling relationships.
- Affected children or adults do not seek out peers for play or other social interactions.
- In severe cases, they may not even be aware of the presence of other individuals.

2) Communication

- Absence of speech is a hallmark symptom of Autism, both receptive and expressive language.
- Deficits in language comprehension include the inability to understand simple directions, questions, or commands.
- Absence of dramatic or pretend play, inability to engage in simple age-appropriate childhood games.

3) Behaviors

- repetitive, abnormal behaviors.
- hypersensitivity to sensory input through vision, hearing, or touch (tactile).
- In some cases, there may be hyposensitivity, may use abnormal means to experience visual, auditory, or tactile (touch) input. (e.g. . Banging head, scratch until blood is drawn, scream instead of speaking in a normal tone etc.

Diagnostic Criteria for Autistic Disorder From DSM IV

A total of six (or more) items from (1), (2), and (3), with at least two from (1) and one each from (2) and (3):

1. qualitative impairments in social interaction
2. qualitative impairments in communication
3. restricted repetitive and stereotyped patterns of behavior, interests, and activities

Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years:

1) social interaction
2) language as used in social communication
3) symbolic or imaginative play.

The disturbance is not better accounted for by Rhett's Disorder of Childhood Disintegrative Disorder.

Causal Factors in Autism

- Twin studies have supported the presence of a **strong hereditary component.**
- **Genetic mutations** have been reported to occur at higher rates in **older men**, and there is now converging evidence that older father age at childbirth is associated with an increased risk for autism (D' onfrio et al.,2014)
- A combination of **environmental (toxins, infections) and genetic factors** contribute to the development of autism.

In support of a biological theory of autism, **several known neurological disorders are associated with autistic features**.

Autism is one of the symptoms of these disorders.

These conditions include:

•**Tuberous sclerosis** (non-cancerous Tumors in the brain and other organs

•**Cerebral dysgenesis** (abnormal development of the brain)

•**Rett's syndrome** (a mutation of a single gene) fragile X syndrome (an inherited genetic disorder causing intellectual disability)

•Some of the **inborn errors of metabolism** (biochemical defects, breakdown of nutrients)

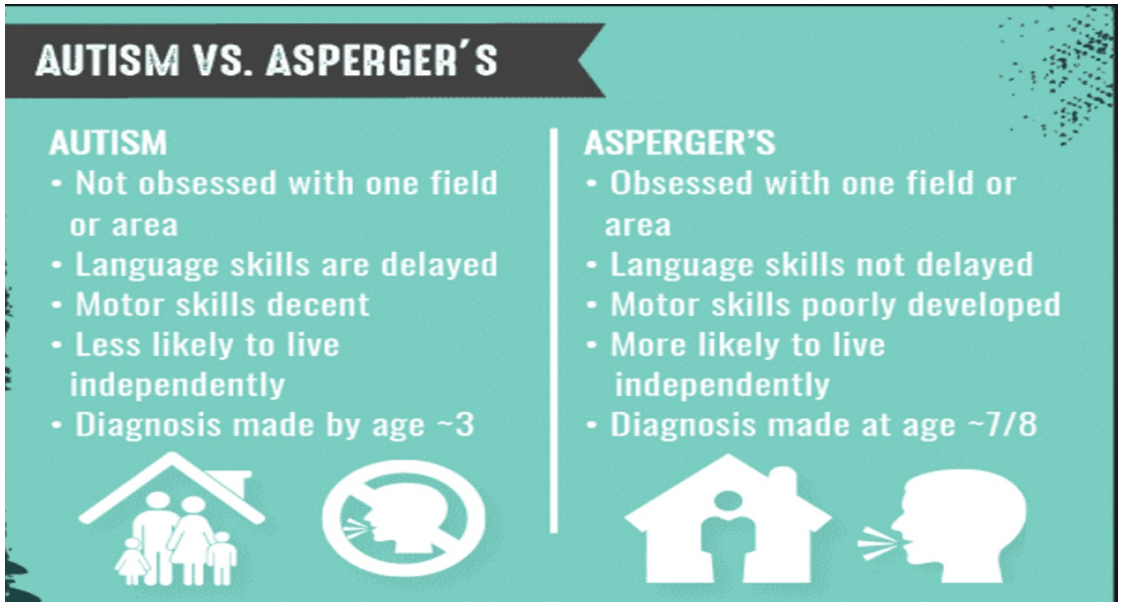
Asperger Syndrome (Dec 2021, 3 Marks)

- Asperger syndrome is one of the neuro-developmental disorders that have effects on an **individual's behavior, use of language and communication, and pattern of social interactions.**
- People with Asperger syndrome have **normal to above-average intelligence** but typically have **difficulties with social interactions and often have pervasive, absorbing interests in special topics.**
- Asperger syndrome is **5 times more common in boys than in girls** and has been estimated to affect **2.5 out of every 1000 children.**
- Named after **Dr. Hans Asperger,** an Austrian pediatrician who first described this condition in 1944 (he observed boys **who lacked empathy, intense interest in special topics, little ability to form friendships, one –sided conversations, etc.**

Social-Behavioral symptoms of Asperger

1) Lack of social awareness
2) Lack of interest in socializing/making friends
3) Difficulty making and sustaining friendships
4) Inability to infer the thoughts, feelings, or emotions of others
5) Either gazing too intently or avoiding eye contact
6) Lack of changing facial expressions, or use of exaggerated facial expressions
7) Lack of use or comprehension of gestures
8) Failure to respect interpersonal boundaries
9) Unusually sensitive to noises, touch, smell, tastes, or visual stimuli
10) Inflexibility and over-adherence to or dependence on routines
11) Stereotypes and repetitive motor patterns such as hand flapping or arm waving.

- Positive characteristics of people with Asperger syndrome have been described as beneficial in many professions including:
- Increased ability to focus on details
- Capacity to persevere in specific interests without being influenced by others' opinions
- Ability to work independently
- Recognition of patterns that may be missed by others
- An original way of thinking (individuals often have strong points of view, and they have trouble seeing other points of view as equally valid. Most see themselves as extremely logical and therefore right in their conclusions; for them, the points of view of others can seem illogical.)



AUTISM
VERSUS
ASPERGER'S SYNDROME

Autism is a mental condition, present from early childhood, characterized by great difficulty in communicating and forming relationships with other people and in using language and abstract concepts

Asperger's Syndrome is a developmental disorder related to autism and characterized by awkwardness in social interaction, pedantry in speech, and preoccupation with very narrow interests

Childhood Disintegrative Disorder (CDD)

(2017, 2020,2021) 3 marks

CDD, also known as Heller's syndrome, with a late onset in which **children develop normally until ages 2 to 4** followed by a **severe loss of social, communication, and other skills.**

. It is also known as **low-functioning autism** and is a rare condition, with only 1.7 cases per 100,000.

It is similar to autism and involves normal development followed by significant loss of language (severe and sudden reversals in language receptive & and expressive, social, play, and motor skills.

A period of fairly normal development is often noted before a regression in skills.

Symptoms

Dramatic loss of previously acquired skills in two or more of the following areas:

•Language, including a severe decline in the ability to speak and have a conversation (Expressive & Receptive)

•Social skills, including significant difficulty relating to and interacting with others and Self-care Skills

•Play, including a loss of interest in imaginary play and a variety of games and activities

•Motor skills, including a dramatic decline in the ability to walk, climb, grasp objects, and other movements

•Bowel or bladder control, including frequent accidents in a child who was previously toilet-trained

Lack of normal function or impairment also occurs in at least two of the following three areas:

•Social Interaction

•Communication

•Repetitive behavior & and interest patterns

Causative Factors of Childhood Disintegrative Disorder

- **Genetic basis for autism spectrum disorders an abnormal gene** is switched on in the early stages of development, before birth, and this gene affects other genes that coordinate a child's brain development.

CDD, especially in cases of later age of onset, has also been associated with certain other conditions:

Lipid storage diseases: In this condition, a toxic build-up of excess fats (lipids) takes place in the brain & and nervous system.

Sub-acute sclerosis panencephalitis chronic infection of the brain caused by a form of the measles virus that results in brain inflammation and the death of nerve cells.

Tuberous sclerosis: In this condition, noncancerous (benign) tumors grow in the brain.

Leukodystrophy: In this condition, the myelin Sheath does not develop normally, causing white matter in the brain to eventually fail and disintegrate.

Rett's Disorder

- Rett's disorder is an **X-linked dominant progressive genetic disorder** that affects only girls and typically becomes apparent after **6–18 months of age** and is one of the most common causes **of Intellectual disability in females.**
- The condition affects about **1 in 8,500 females.** The hallmark of Rett's syndrome is **the loss of purposeful hand use and its replacement with stereotyped hand wringing** (a type of repetitive, purposeless movement where a person continuously twists, rubs, or wrings their hand).
- Causes- Attributes to mutations in the gene MECP2 located on the X chromosome , In at least 95% of Rett syndrome cases, the cause is a de novo mutation in a child whose parents are genotypically normal.
- **Screaming fits and inconsolable crying** are common.
- ***Other key features include***:

•loss of speech

•Behavior reminiscent of autism

• Panic-like attacks

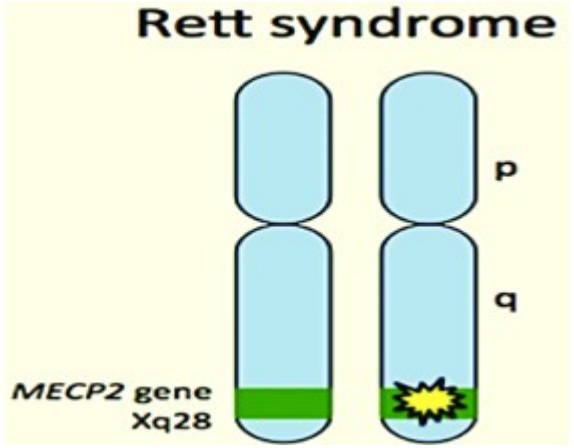
•grinding of teeth

•Tremors

•intermittent hyperventilation

•microcephaly (small head).

•Seizures occur in about half of cases



Four stages of Rett Sydrome:

- Stage I
  - 6-18 months
  - Subtle symptoms, including lack of eye contact
- Stage II
  - 1-4 years
  - Loss of speech and hand movements, difficulty breathing
- Stage III
  - 2-10 years
  - Problems with move movement continue, but see improvements in behaviour
- Stage IV
  - 10-50 years
  - Reduced mobility

Intellectual disability (ID) (formerly Mental Retardation) (2019,2020,2018,2021)

- It is defined as an **intellectual functioning level** (as measured by standard tests for intelligence quotient) that is **well below average and has significant limitations in daily living skills** (adaptive functioning).
- Intellectual Disability **begins in childhood or adolescence before the age of 18** and mostly **persists throughout adulthood.**
- A diagnosis of Intellectual Disability is made if an individual has an **intellectual functioning level well below average and significant limitations in two or more adaptive skill areas.**
- **Adaptive skills are the skills needed for daily life**. Such skills include the ability to produce and understand Language (communication); home-living skills; use of community resources; health, safety, leisure, self-care, and social skills; self-direction; functional academic skills (reading, writing, and arithmetic); and work skills.
- The term "**Intellectual Disability**" is used to describe individuals with an **IQ score below 70-75.**
- Children with ID reach **developmental milestones such as walking and talking much later than the general population. Symptoms of Intellectual Disability may appear at birth or later in childhood**
- Some cases of mild Intellectual Disability are not diagnosed before the child enters preschool. These children typically have **difficulties with social, communication, and functional academic skills.**

Common presentations of intellectual disability by age

Newborn	• Dysmorphic syndromes, (multiple congenital anomalies), microcephaly • Major organ system dysfunction (e.g., feeding and breathing)
Early infancy (2-4 mo)	• Failure to interact with the environment • Concerns about vision and hearing impairments
Later infancy (6-18 mo)	• Gross motor delay
Toddlers (2-3 yr)	• Language delays or difficulties
Preschool (3-5 yr)	• Language difficulties or delays • Behavior difficulties, including play • Delays in fine motor skills: cutting, coloring, drawing
School age (>5 yr)	• Academic underachievement • Behavior difficulties (attention, anxiety, mood, conduct, etc.)

The *DSM-IV* classifies four different degrees of Intellectual Disability: *mild, moderate, severe*, and *profound*

Mild Intellectual Disability:

- Approximately 85%
- IQ score ranges from 50-75
- often acquire academic skills up to the 6th-grade level
- They can become self-sufficient and in some cases live independently, with community and social support.

Moderate mental retardation:

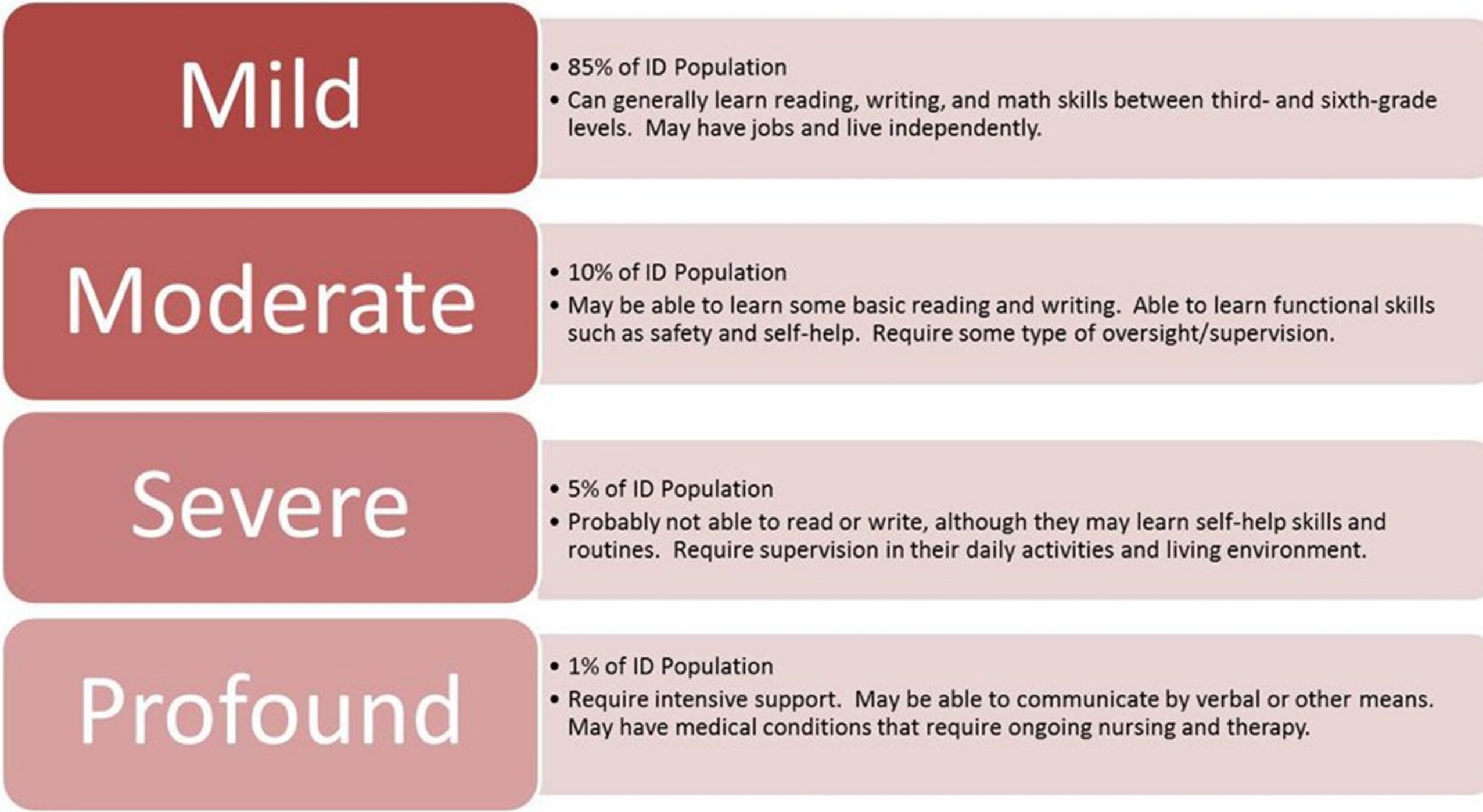
- Approximately 10%
- IQ scores ranging from 35-55
- They can do self-care tasks with moderate supervision.
- They can acquire communication skills in childhood and can live and function successfully within the community in a supervised environment such as a group home.

Severe mental retardation:

- Approximately 3-4%
- IQ scores of 20-40
- They may master very basic self-care skills and some communication skills.

Profound mental retardation:

- Approximately 1-2%
- IQ scores of 20-25.
- often caused by an accompanying neurological disorder
- develop basic self-care and communication skills with appropriate support and training
- Needs high-level support and supervision


Mild
• 85% of ID Population
• Can generally learn reading, writing, and math skills between third- and sixth-grade levels. May have jobs and live independently.
Moderate
• 10% of ID Population
• May be able to learn some basic reading and writing. Able to learn functional skills such as safety and self-help. Require some type of oversight/supervision.
Severe
• 5% of ID Population
• Probably not able to read or write, although they may learn self-help skills and routines. Require supervision in their daily activities and living environment.
Profound
• 1% of ID Population
• Require intensive support. May be able to communicate by verbal or other means. May have medical conditions that require ongoing nursing and therapy.

Causes of Intellectual Disability

- ***Genetic- Chromosomal factors:*** •Mental retardation may be caused by an **inherited abnormality of the genes, such as fragile X syndrome**. Fragile X, a defect in the chromosome that determines sex, is the most common inherited cause of ID
- Single gene defects such as phenylketonuria (PKU) and other inborn errors of metabolism
- **Mutation in genetic development**: Down syndrome, also called mongolism or trisomy 21, is caused by an **abnormality in the development of chromosome 21**.

Prenatal illnesses and infections

• **Fetal alcohol syndrome** affects one in 600 children in the U.S., caused by e**xcessive and even moderate alcohol intake in the first twelve weeks** (trimester) of pregnancy.

• **Drug abuse** and cigarette smoking during pregnancy

• **Maternal infections** and illnesses such as glandular disorders, rubella, toxoplasmosis, and cytomegalovirus infection

• High blood pressure (hypertension) or blood poisoning (toxemia), the flow of oxygen to the fetus may be reduced, causing brain damage and ID.

• **Birth defects** that cause physical deformities of the head, brain, and central nervous system

- •**Neural tube defect, for example, is a birth defect** in which the neural tube that forms the spinal cord does not close completely resulting in Hydrocephalus leading to learning impairment causing excessive pressure on the brain.
- Childhood illnesses, infections, and injuries: Hyperthyroidism, whooping cough, chickenpox, measles, Haemophilus influenza type (Hib) bacterial infections.
- An infection of the membrane covering the brain (**meningitis)** or an inflammation of the brain itself (encephalitis) causes swelling that in turn may cause brain damage and ID.
- **Traumatic brain injury caused by a blow or a violent shake to the head** may also cause brain damage and ID in children.
- **Environmental factors**
- Children who live in poverty and suffer from malnutrition, Physical injury at birth, and **Hypoxia** at birth.
- Exposure to **lead and Carbon monoxide** can also cause ID due to brain damage during prenatal & afterbirth.
- **Difficulties in labor due to malposition of the fetus** may cause irreparable brain damage. Eg. Bleeding within the brain may be a result of birth trauma.

Diagnosis

• If mental retardation is suspected, a comprehensive physical examination and medical history should be done immediately to discover any organic cause of symptoms.

• Conditions such as **hyperthyroidism and PKU are treatable if detected early.**

• Children are given intelligence tests to measure their learning abilities and intellectual functioning. Such tests include the Stanford-Binet Intelligence Scale, the Wechsler Intelligence Scale, the Wechsler Preschool and Primary Scale of Intelligence, and the Kaufmann Assessment Battery for Children.

• For infants, the **Bayley Scales of Infant Development may be used to assess motor, language, and problem-solving skills.**

•Interviews with parents or other caregivers are used to assess the child's daily living, muscle control, communication, and social skills.

- **Phenylketonuria (PKU)** is a **rare inherited metabolic disorder** in which the body cannot properly break down an amino acid called **phenylalanine**. If untreated, it can lead to **intellectual disability**, **brain damage**, and other serious health problems.

Childhood Depression (2020,2019) (6marks)

- Childhood depression is characterized by *persistent symptoms of sadness, withdrawal, crying, poor sleep and appetite, and in some cases thoughts of suicide or suicide attempts*.
- Irritability is often seen as a major symptom and can be substituted for depressed mood in adults.
- Early medical studies focused on "masked" depression, where a child's depressed mood is evidenced by acting out or angry behavior.
- In younger children, many children display **sadness or low mood** similar to adults who are depressed.
- The primary symptoms of depression revolve around sadness, a feeling of hopelessness, and mood changes.
- Depression in children occurs with high frequency.
- Approximately 12% of children and adolescents may meet the criteria for major depression at some point in their lives, with higher rates in girls (16%) than boys (8%) (Merikangas et al., 2010)

Causative factors

- Parental depression , parental conflict, overly critical parenting, Neglect and abuse
- Biological changes in the neonates because of alcohol intake by the mother during pregnancy.
- Mothers with depression
- Children who were exposed to negative parental behavior or negative emotional states .
- Children with a family history of depression
- Low levels of serotonin, dopamine, or norepinephrine can contribute to depression.
- Experiences of loss (like the death of a loved one), traumatic experiences, or abuse
- Children who face bullying, social isolation, or rejection from peers are at greater risk.
- Experiences such as poverty, parental mental health issues, or lack of emotional support during formative years may pose a risk.
- Major life changes like moving to a new city, starting a new school, or parental divorce can trigger depression.
- Academic and Social Pressure

IS YOUR CHILD DEPRESSED?

Common signs of depression among kids include:

- Sadness or hopelessness
- Irritability, anger, or hostility
- Tearfulness or frequent crying
- Withdrawal from friends and family
- Loss of interest in activities
- Changes in eating and sleeping habits
- Restlessness and agitation
- Feelings of worthlessness and guilt
- Lack of enthusiasm and motivation
- Fatigue or lack of energy
- Difficulty concentrating
- Thoughts of death or suicide

Tic Disorders (2016, 5 marks)

- A tic is a persistent, intermittent muscle twitch or spasm usually limited to a localized muscle group.

- It includes blinking the eye, licking lips, clearing throat, grimacing (expression of pain), and other actions. Sounds that are made involuntarily (such as throat clearing) are called **vocal tics.**

- It is a problem in which a part of the body moves repeatedly, quickly, suddenly, and uncontrollably.

- It can occur in any body part, such as the face, shoulders, hands, or legs.

- They can be stopped voluntarily for brief periods. •The most common tic disorder is called "transient tic disorder" and may affect up to 10 percent of children during the early school years.

•Teachers or others may notice the tics and wonder if the child is under stress or "nervous."

- Tic disorders are classified under motor disorders in DSM -5 and occur most frequently between the **ages of 2 and 14.**
- Tics that last one year or more are called **“chronic tics.”**
- Chronic tics affect **less than one percent of children and may be related to a special, more unusual tic disorder called Tourette’s Disorder (extreme tic disorder involving both motor and vocal problems)**
- Some tics disappear by early adulthood, and some continue.
- **Children with Tourette’s Disorder may also have problems with attention, and learning disabilities. They may act impulsively, and/or develop obsessions and compulsions.**
- Punishment by parents, teasing by classmates, and scolding by teachers will not help the child to control the tics but will hurt the child’s self-esteem and increase their distress.
- A pediatrician and/or neurologist can determine whether a youngster has Tourette’s Disorder or another tic disorder.
- Treatment for a child with a tic disorder may include medication to help control the symptoms.

ATTENTION DEFICIT HYPERACTIVE DISORDERS (ADHD)(2016,2018,2013,2023,2014) 10 marks

- Attention deficit hyperactivity disorder (ADHD) is a **neurodevelopmental disorder and one of the most common childhood disorders and can continue through adolescence and adulthood**.
- ADHD was first diagnosed in 1798 by a Scottish doctor, Sir Alexander Crichton, who noticed some people were easily distracted and unable to focus.
- It is characterized by **a persistent pattern of difficulties sustaining attention and/ or impulsiveness and excessive or exaggerated motor activity. Inattention, hyperactivity, and impulsivity are the key behaviors of ADHD.**
- ADHD is also characterized by other **externalized behaviors, such as interrupting others during conversations, physical restlessness, and anger reactivity.**
- Children may have **lapses in attention and may have excess energy during their childhood.**
- To meet the criteria of ADHD these problems have to be numerous, persistent, and causing impairment at home, school, or the workplace.
- ADHD is fairly prevalent, occurring in approximately **9% of children and adolescents.**
- It is **higher in boys** (13%) than in girls (4%) .

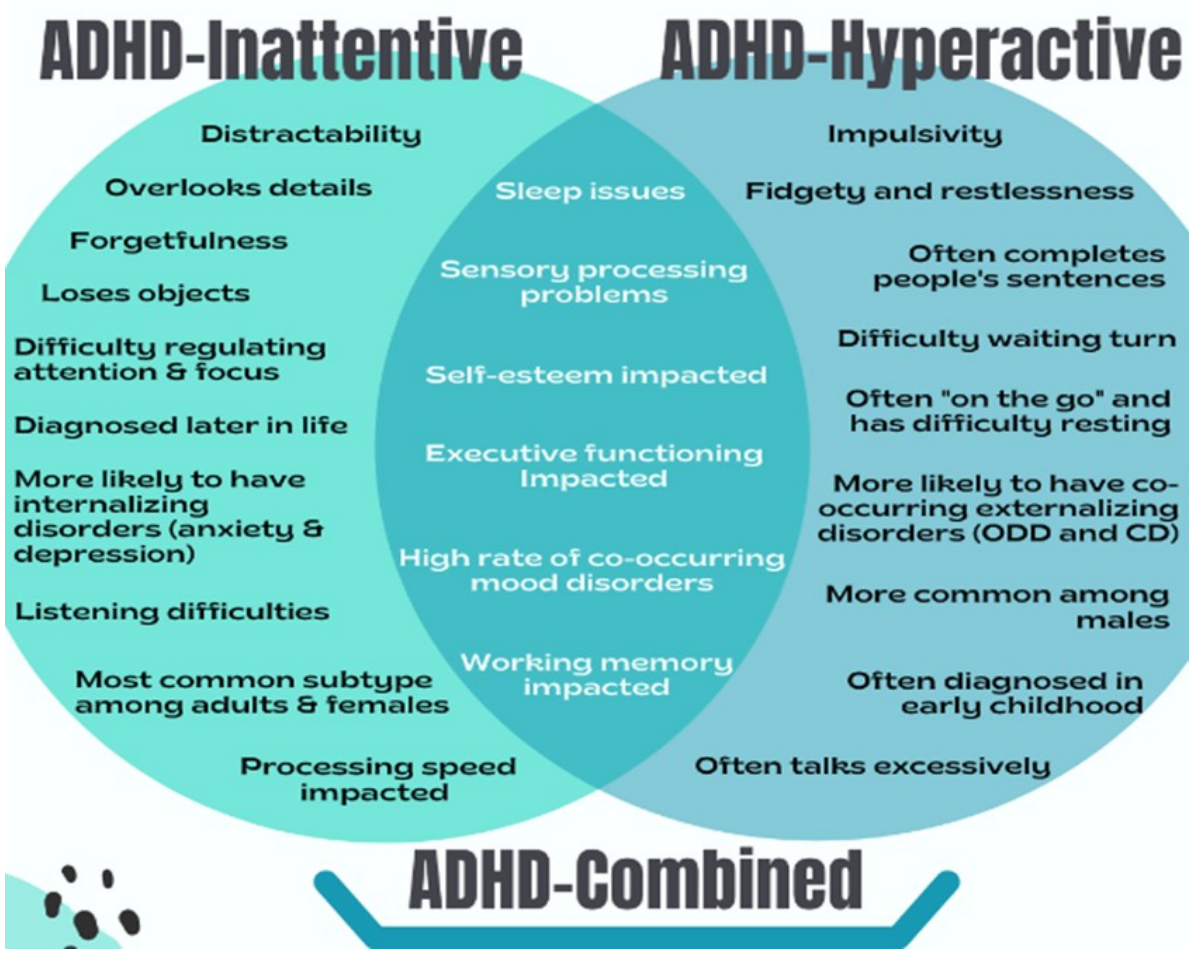
- ***Symptoms are expressed differently and more subtly as the individual ages***
- **Hyperactivity** tends to become **less overt with age and turns into inner restlessness**, **difficulty relaxing or remaining still, talkativeness, or constant mental activity in teens and adults with ADHD.**
- **Impulsivity** in adulthood may appear as thoughtless behavior, impatience, irresponsible spending, and sensation-seeking behaviors.
- **Inattention** may appear as becoming easily bored, difficulty with organization, remaining on task and making decisions, and sensitivity to stress.

Types of ADHD

1. **ADHD without hyperactivity** (symptoms and signs of attention deficit only)

2. **ADHD hyperactive-impulse type** (symptoms and signs of hyperactivity-impulsiveness only)

3. **Combined type**
   (symptoms and signs of both attention deficit and hyperactivity- impulsiveness)



Presentations of ADHD

Inattentive

Easily distracted

Unorganized

Difficulty listening

Hyperactive/Impulsive

Difficulty sitting still

Rush through tasks

Make rash decisions

Combined

Symptoms of both presentations

- To be diagnosed with the disorder, a child must have symptoms for six or more months and to a degree that is greater than other children of the same age.

Presentations	DSM-5 and DSM-5-TR symptoms[3][4]
Inattention	Six or more of the following symptoms in children, and five or more in adults, excluding situations where these symptoms are better explained by another psychiatric or medical condition: • Frequently overlooks details or makes careless mistakes • Often has difficulty maintaining focus on one task or play activity • Often appears not to be listening when spoken to, including when there is no obvious distraction • Frequently does not finish following instructions, failing to complete tasks • Often struggles to organise tasks and activities, to meet deadlines, and to keep belongings in order • Is frequently reluctant to engage in tasks which require sustained attention • Frequently loses items required for tasks and activities • Is frequently easily distracted by extraneous stimuli, including thoughts in adults and older teenagers • Often forgets daily activities, or is forgetful while completing them.

Hyperactivity-Impulsivity	Six or more of the following symptoms in children, and five or more in adults, excluding situations where these symptoms are better explained by another psychiatric or medical condition: • Is often fidgeting or squirming in seat • Frequently has trouble sitting still during dinner, class, in meetings, etc. • Frequently runs around or climbs in inappropriate situations. In adults and teenagers, this may be present only as restlessness. • Often cannot quietly engage in leisure activities or play • Frequently seems to be "on the go" or appears uncomfortable when not in motion • Often talks excessively • Often answers a question before it is finished, or finishes people's sentences • Often struggles to wait their turn, including waiting in lines • Frequently interrupts or intrudes, including into others' conversations or activities, or by using people's things without asking.

Causes for ADHD

- ***Genetic factors***
- ADHD probably results from a combination of factors, evidence points to **both genetic** (Sharp et al., 2009) **and social-environmental factors** (e.g. Parental alcohol exposure; Ware et al., 2012)
- Children with ADHD have **smaller total brain volumes** than those without ADHD (Castellanos et al., 2002), and their **brains appear to mature approximately 3 years more slowly** than those without ADHD (Shaw et al., 2007). These **maturational delays are more prominent in prefrontal brain regions involved in attention and impulsiveness.**
- Children with ADHD who carry a particular version of a certain gene have **thinner brain tissue in the areas of the brain associated with attention** (Shaw et al, 2007).
- ***Environmental exposure***
- There is a potential link between **cigarette smoking and alcohol use during pregnancy and ADHD in children**.
- Pre-schoolers who are exposed to **high levels of lead**, which can sometimes be found in plumbing fixtures or paint in old buildings, may have a higher risk of developing ADHD (Braun et al, 2006).

- ***Brain injuries- Children*** who have suffered a **brain injury** may show some behavior similar to those of ADHD. However, only a small percentage of children with ADHD have suffered a traumatic brain injury. **MRI shows that parts of the base of the brain associated with attention are smaller on the right** in people with ADHD.
- **Decreased activity is noted in the front parts of the brain in ADHD.**
- ***Food additives:*** Recent British research indicates a possible link between the **consumption of certain food additives like artificial colors or preservatives, and an increase in activity** (McCann et al, 2007). Research is underway to confirm the findings and to learn more about how food additives may affect hyperactivity.
- ***Sugar and ADHD***
- There is no clear evidence that sugar causes ADHD. In one study, researchers gave children foods containing either sugar or a sugar substitute every other day.
- The children who received sugar showed no different behavior or learning capabilities than those who received the sugar substitute (Wolraich et al, 1985).

Oppositional Defiant Disorder

- DSM IV defines oppositional defiant disorder (ODD) as a **recurrent pattern of negativistic, defiant, disobedient, and hostile behavior toward authority figures that persists for at least 6 months.**
- ***Behaviors included in the definition include the following:***
- losing one's temper; arguing with adults; actively defying requests; refusing to follow rules; deliberately annoying other people; blaming others for one's own mistakes or misbehavior; and being touchy, easily annoyed or angered, resentful, spiteful, or vindictive (Strong desire for revenge).
- **Features of ODD**

• ODD is usually diagnosed when a child has a persistent or consistent pattern of disobedience and hostility toward parents, teachers, or other adults.

• A consistent pattern of refusing to follow commands or requests by adults.

• Easily annoyed, lose their temper easily, argue with adults, refuse to comply with rules and directions, and blame others for their mistakes and stubbornness.

• The criteria for ODD are met only when the problem behaviors occur more frequently in the child than in other children of the same age and developmental level.

Conduct Disorder

Conduct disorder refers to a group of **Behavioral and Emotional problems in youngsters**.

Children and adolescents with this disorder have great difficulty following rules and behaving in a socially acceptable way.

It is defined as a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate

Societal norms or rules are violated.

- Aggression to people and animals.
- Destruction of property
- Deceitfulness or theft
- Serious violations of rules
- **Many factors may contribute to a child developing conduct disorder, including brain damage, child abuse, genetic vulnerability, school failure, and traumatic life experiences**
- Children or adolescents with conduct disorder may exhibit aggression toward people and animals, destruction of property, deceitfulness, lying, or stealing, and serious violations of rules.
- Many children with a conduct disorder may have coexisting conditions such as mood disorders, anxiety, PTSD, substance abuse, ADHD, learning problems, or thought disorders.