**CAUSES OF PSYCHOPATHOLOGY**

Throughout history, the search for explanations of the causes of abnormal behavior dates to ancient times, the ancient records attribute abnormal behavior to the disfavor of the gods or the mischief of demons.

Models for Studying Psychopathology

• Biomedical Model

• Psychoanalytical Model

• Humanistic model

• Behavioral model

• Cognitive Model

These Models try to explain the cause of individual Abnormal Behavior. Each model represents its own individual interpretation of psychopathology and recommends its individual treatment procedures. So all the models try to answer the question that

• Why it is that someone is acting so strange?

• What is the cause of abnormal behavior?

**Biological model and Psychoanalytic Model**

The biological model seems to answer this question with reference to the concepts of genetics and neuroscience. The psychoanalytic model focuses on unconscious, childhood and psychosexual development.

These models have been fully covered in lecture no 11 and12

**Humanistic Model**

Abraham Maslow (1908-1970)

He presented a need theory, in form of a hierarchy. In order to understand his theory, imagine a triangle which has a broad base and a narrow top. The basic survival needs are at the base of the triangle where as the need of self esteem, love and self actualization can only be satisfied when needs at the lower level have been satisfied.

Hierarchy of Needs

1. Self Actualization.

2. Self Esteem

3. Love and belongingness

4. Safety

5. Physiological

Empathy and Unconditional Positive Regard are the central concepts of Roger’s approach.

**Empathy** refers to understand the client’s problem from client’s perspective. Example

Parents and teachers try hard to understand the problems of their children and students by using their children’s and student’s frame of reference.

**Unconditional positive regard** is to give respect and dignity to every individual because he is a human being not because of some reason that he is rich, educated, handsome etc

Example

The sweeper, who cleans your home daily, should get unconditional positive regard from you simply because he is a human being and not because that he works at your home.

**Behavioral Model**

This model emphasizes the overt (observable) behavior of the person and the environmental influences on it.

**Pavlov and Classical Conditioning**

It is a type of learning, where a neutral stimulus is paired with an unconditional stimulus, acquires the status

of conditioned stimulus and leads to the desired response.

• Unconditioned stimulus (UCS) is a naturally occurring stimulus that leads to a response.

Unconditioned means “unlearned” or “naturally occurring.”

• Unconditioned response (UCR) is a response to a naturally occurring or unconditioned stimulus.

Example:

A dangerous situation produces fear in a person without any prior learning or conditioning .The dangerous situation is the unconditioned stimulus (UCS) and the fear reaction is the unconditioned response (UCR) They occurs naturally.

 A neutral stimulus does not produce a response but when neutral stimulus is repeatedly paired with dangerous situation it becomes conditioned stimulus (CS) capable of producing the fear response.

Conditioned stimulus (CS): stimulus that becomes able to produce a learned response by being paired with the original unconditioned stimulus.

– Conditioned means “learned.”

– A neutral stimulus can become a conditioned stimulus when paired with an unconditioned stimulus.--

– Conditioned response (CR) - learned response to a conditioned stimulus.

**UCS Loud Noise**

**UCR Startle**

**(Fear)**

**CS WHITE RAT**

**CS WHITE RAT**

**UCS Loud Noise**

**UCR**

**Startle**

**(Fear)**

**CR Startle (Fear)**

Watson worked on an 11 month old, little Albert to acquire the phobia of white fury objects. Albert was not afraid of white rat and he use to play with white rat. The loud noise was UCS which lead to UCR of being startle (fear), now loud noise was paired with white rat, on repeated trials the pairing of UCS( loud noise) with CS( white rat) lead to new type of learning called conditioning . Now CS (white rat) led to CR (startle or fear)

Example

When some mothers in our culture, create phobia of darkness in children, by saying that ‘a jinn will come out from the darkness and eat them.’

**Operant Conditioning**

It was pioneered by B.F. Skinner. Operant Conditioning is concerned with the consequences of behavior i.e. the probability whether a response will increase or decrease with reinforcement.

A result card with good grades is rewarded, so the probability of this response of working hard for a result card with good grades will increase.

• **Operant conditioning** is the learning of behavior through the effects of pleasant and unpleasant consequences to responses.

• **Thorndike’s Law of Effect** - law stating that if a response is followed by a pleasurable consequence, it will tend to be repeated, and if followed by an unpleasant consequence, it will tend not to be repeated.

• Behaviorist wants to study only observable, measurable behavior.

• **Reinforcement** - any event or stimulus that when following a response, increases the probability that the response will occur again.

• **Positive reinforcement** - the reinforcement of a response by the addition or experiencing of a pleasurable stimulus.

• **Negative reinforcement** - the reinforcement of a response by the removal, escape from, or avoidance of an unpleasant stimulus.

• **Punishment** - any event or object that, when following a response, makes that response less likely to happen again.

**Observational Learning or Modeling**

Stanford university professor, Albert Bandura, pioneered the analysis of observational learning or modeling which is process of learning behavior by observing others. It is learning through imitation.

Example

Aggressive behavior can be learned by observing others. Adult models punched and abused “a bobo doll” while children watched and were later permitted to play with the same doll and children imitated aggressive behaviors as observed.Social learning theory by Bandura purposes, that behavior is the product of both external stimulus events and internal cognitive process.

**Cultural, Social and Interpersonal Factors**

In various cultures around the world, people suffer from fear or phobia reactions. The cultural factors influence the form and contents of psychopathology. Many disorders differ within a single culture and within the same country. Fear and phobias are universal occurring across all cultures. For example: Children living in war zones areas of the world are constantly under the fear of potentially life threatening events.

**Social Effect**

A large number of research studies have shown that greater the number of frequency of social relationships, the longer the individual is likely to live. A study was done on healthy volunteers. The authors measured the participation of subjects in social relationships and its relation with other factors such as poor sleep quality and increased likely hood to catch cold. The surprising results were that greater the number of social types lesser the chance of catching the cold. This shows social interpersonal factors influence psychological and neurobiological (immune system). Schizophrenia and major depression occur in all cultures but they look different from one culture to another because, the individual symptoms are strongly influenced by social and interpersonal context. Depression in the western culture is exhibited with a feeling of guilt and inadequacy, whereas in developing countries depression is reflected in physical symptoms such as fatigue, illness, aches and pains in different parts of the body.

**Social Stigma**

Psychological disorders continue to carry stigma in our society. We in a developing society still perceive

schizophrenia, depression, cancer as disorders about which you have to be hush up or to be secretive about it. What will people think about it? How ‘I’ and ‘my family’ will live with this stigma?

**Interpersonal Psychotherapy (IPT)**

This therapy focuses on interpersonal relationships and interpersonal experiences. In IPT, the patient and the therapist identify life stresses that lead to psychological disorder and interpersonal problems in the individual. The important interpersonal issues relate with marital conflict, acquiring a new job, that is job change or change in relationships. This is a brief therapy, like cognitive behavioral therapy and ten to fifteen sessions are effective for problems such as depression.

Gender roles have strong effect on psychopathology. The likely hood of insect phobia or small animal phobia is more prevalent to be among females as compare to 90% of the people with this phobia. Bulimia Nervosa an eating disorder occurs almost entirely in young females. Almost all cultures emphasize on girls to lean and thin. So girls are under the pressure to eat less and appear lean. **Emotions** Charles Darwin some

134 years ago in 1872, suggested that fear emotion is programmed in all animal and humans i.e. if you are caught in a road accident, or you are swimming in a river to save your life, well you are going through fight or flight response where you mobilize all your energy to escape the danger (flight) or to withstands it (fight).

Walter Cannon (1929) gave the concept of physiology of fear. In fear, your cardiovascular system is activated, blood vessels constrict, excess of blood is redirected to muscles and always available to vital organs. You have seen people in emergency to become white with fear, trembling with fear, hairs standings on their ends, breathing becomes faster, heartbeat increases, increased amount of glucose is released into the blood stream, pupils of eyes dilate, the mouth becomes dry, sweat breaks out on the forehead. These are all indicators or physiological responses of an individual going through an emotional state. The anxiety disorders and mood disorders are called emotional disorders.

Richard Lazarus (1968, 1991) who proposed that **change in an individual’s environment**, is **perceived as potential change in the person.** The type of appraisal or perception you make determines the emotion you are experiencing.

For example: If you see somebody holding a gun in a dark alley, you will perceive this situation as dangerous and experience fear. But if you perceive that the person who is standing is insane and is holding a toy gun, you will not be afraid and scared, so cognition and emotion interact and form the basis of emotion of fear.

**Cognitive model**

Cognitive model is concerned with human cognition that how human beings perceive recognize, attend, reason and judge. This model includes:

 Rational emotive behavior therapy. (Albert Ellis) 1962.

 Cognitive theory of depression (Aaron Beck - 1967).

**1. Rational emotive behavior therapy. (Albert Ellis) 1962.**

According to Albert Ellis, maladaptive behavior results when people operate on misguided and inaccurate

assumptions. Ellis catalogued 11 irrational believes responsible for maladaptive behavior. The ABC of rational emotive behavior therapy is where: A – Activating event, B – Belief System and C – Emotional behavioral consequences. Activating event A can cause unwanted emotional and behavioral consequences when filter through beliefs that are irrational.

**2. Cognitive Theory of Depression**.

For Beck, depressed people possess a negative cognitive triad.

Beck says depressed individual see themselves as defeated, deprived and diseased and their world as full of

road blocks and their future without hope.

In today’s world psychologists study abnormal behavior not with reference to one single model rather they adopt the integrative approach which respond to all aspects of abnormal behavior.

**CAUSES OF ABNORMAL**

**BEHAVIOR ETIOLOGICAL FACTORS OF ABNORMALITY**

We have talked about the different models of Psychology; each model represents its own unique interpretation of the etiology and treatment of abnormal behavior. After studying each model we extracted (located) some important factors underlying abnormality. From the study of biomedical model we have located the biological factors of abnormality similarly, after going through the Psychoanalytic model, Humanistic Model, Behavioral model and Cognitive model we extracted the psychological factors, emotional and social factors. All these factors, they combine together in Bio-Psycho-Social approach or multidimensional integrative approach. The biological factors focus on genetics, the interaction of genes and environment. This model also focuses on neuron, brain and spinal cord.

**1-Biological Factors**

**a- Genes and its interaction with environment**

• b-The study of neuro-anatomy and neurophysiology is the study n**euroscience***.* **The Neuron** Billions of tiny nerve cells—**neurons**—form the basic building blocks of the brain. Each neuron has four major anatomic components: the soma, or cell body, the dendrites, the axon, and the axon terminal.

• The *dendrites* branch out from the soma; they serve the primary function of receiving messages from other cells. The *axon* is the trunk of the neuron. Messages are transmitted down the axon toward other cells with which a given neuron communicates.

• Scientists have found that disruptions in the functioning of various neurotransmitters are present among some people with mental disorders.

• An oversupply of certain neurotransmitters is found in some mental disorders, an undersupply in other cases, and disturbances in reuptake in other psychological problems. Abnormalities in the dopamine system in the brain may be involved in schizophrenia.

• Other evidence links the availability of various neurotransmitters with depression, hyperactivity, posttraumatic stress disorder, and many other psychological problems.

**c- Major Brain Structures**

• Neuro-anatomists divide the brain into three subdivisions: the hindbrain, the midbrain, and the forebrain.

• Basic bodily functions are regulated by the structures of the **hindbrain***,* which include the medulla, pons, and cerebellum.

• The **medulla** controls various bodily functions involved in sustaining life, including heart rate, blood pressure, and respiration.

• The **pons** serves various functions in regulating stages of sleep.

• The **cerebellum** serves as a control center in helping to coordinate physical movements.

• The **midbrain** also is involved in the control of some motor activities, especially those related to fighting and sex.

• The **forebrain** evolved more recently than the hindbrain and midbrain and, therefore, is the site of most sensory, emotional, and cognitive processes. These higher mental processes of the forebrain are linked with the midbrain and hindbrain by the **limbic system.**

• The limbic system is made up of a variety of different brain structures that are central to the regulation of emotion and basic learning processes.

• d- Spinal cord is along bundle of neurons that carries messages to and from the body to the brain that is responsible for a very fast, life saving reflexes.

**2-PSYCHOLOGICAL FACTORS**

• **Human Nature and Temperament**

• The writings of British psychiatrist John Bowlby greatly influenced psychologists’ views about the human need to form close relationships. The heart of Bowlby’s theory was the observation that

children form **attachments** early in life—special and selective bonds with their caregivers.

• Bowlby based his approach, known as *attachment theory,* on findings based on the study of animal behavior.

• Research on the effects of *insecure* or *anxious attachments*—uncertain parent child relationships are a product of inconsistent and unresponsive parenting during the first year of life—is of particular relevance to the development of abnormal behavior.

• The development of attachments, or more generally of *affiliation* with other members of the same species, is one of the two broad categories of social behaviors studied by psychologists.

• One of the most important areas of research on individual differences in personality is the study of **temperament,** characteristic styles of relating to the world.

• Individual differences in temperament may play a role in a number of psychological disorders, especially personality disorders and child behavior problems.

• **Emotions,** internal feeling states, are essential to human experience and to our understanding of mental disorders.

**Learning and Cognition**

Emotions, motivations, and temperamental styles can be modified, at least to some degree, by learning.

• Cognitive theories like Albert Ellis’s REBT and Beck’s Depression theory suggests that distorted perceptions of reality cause people to become depressed.

• A successful treatment based on this theory encourages depressed people to be more scientific and realistic in evaluating conclusions about themselves.

**The Sense of Self**

Maslow’s theory of needs in which self actualization is given importance. **Self-esteem***,* valuing one’s abilities, is another important and much discussed aspect of our sense of self. Evidence indicates that high self-esteem is more of a product of success; similarly low self-esteem may result from psychological problems.

**Life Span Developments**

Life span developmental psychopathologists want to understand how different periods of development influence, how stress and other factors have an impact on mental disorders. Eric Erickson (1982) suggested that we go through eight major crises during our life and each crisis is influenced by biological maturation, social factors and the developmental stages we are passing through. Erickson believe, “we grow and change even beyond 65.” During older adulthood, we look back and view our lives as rewarding or as disappointing. Erickson’s developmental theory is more comprehensive and advanced as compared to Sigmund Freud’s.

|  |  |  |
| --- | --- | --- |
| **Theory** | **Developmental Stages** | **Period of Growth** |
| Freud’s Psychosexual theory | Five | 1st year to 12 years |
| Erick Erickson’s developmentaltheory | Eight | 1st year to 65 years and beyond |

**Equifinality**

Equifinality is a construct which we frequently use in developmental psychopathology to indicate that we must consider a number of paths to a given disorder e.g. if we like to study schizophrenia, we can study it its delusional symptoms, or its difficulty in focusing attention or the state of delirium of the schizophrenics. Researchers are exploring the different pathways to a single disorder.

• **Development**, or how people grow and change, is of basic importance to normal and abnormal psychology.

• A key developmental concept is that psychological growth can be characterized by various **developmental stages**—periods of time marked by age and/or social tasks during which children or adults face common social and emotional challenges.

• Two prominent theories that divided development into stages are Freud’s theory of **psychosexual** development and Erickson’s theory of **psychosocial** development.

**Relationships and Psychopathology**

• Much evidence links abnormal behavior with distressed or conflicted relationships, still it often is impossible to determine if troubled relationships actually cause abnormal behavior.

• Example when an individual enjoys a large number of social relationships

• The findings of this large body of research indicate that marital status (separation, divorce, second marriage) and psychological problems clearly are *correlated.*

**Gender and Gender Roles**

• Gender and **gender roles,** expectations regarding the appropriate behavior of males or females, can dramatically affect social relationships and social interaction.

• Gender roles may influence the development, expression, or consequences of psychopathology.--

**Prejudice and Poverty**

• An increased risk for psychological disorders is associated with prejudice and poverty, the conditions of poverty effect a large number of people in many ways.

**Societal Values**

• Broad social values also may influence the nature and development of abnormal behavior.

• The broad practices, beliefs, and values of our society play a role in defining abnormal behavior and in shaping the scientific enterprise that attempts to uncover the roots of psychopathology.

**SYSTEM THEORY**

• **Systems theory** is an approach to integrating evidence on different contributions to abnormal behavior.

• You can think of systems theory as similar to the bio-psychosocial model or the multidimensional integrative approach but systems theory also embraces several key concepts that deserve some elaboration.

**Holism**

• A central principle of systems theory is **holism**, the idea that the whole is more than the sum of its parts. A human being is more than the sum of a nervous system, an organ system, a circulatory system, and so on.

• We can appreciate the principle of holism if we contrast it with its scientific counterpoint, reductionism.

• **Reductionism** attempts to understand problems by focusing on smaller and smaller units, viewing the smallest possible unit as the true or ultimate cause.

• One approach is not right, while the others are wrong. The lenses are just different, and each has value for different purposes.

• **Causality** The cause of any one case of abnormal behavior occasionally can be located in one area of biological, psychological, or social functioning.

• More commonly, however, understanding the causes of psychological problems involves a multitude of causal influences, not in one single area of biological or psychological or social.

• The cause of any one case of abnormal behavior occasionally can be located in one area of biological, psychological, or social functioning.

**Developmental Psychopathology**

• **Developmental psychopathology** is a new approach to abnormal psychology that emphasizes the importance of *developmental norms* which include *a*ge-graded averages—to determine what constitutes abnormal behavior.

**CLASSIFICATION AND ASSESSMENT**

**Assessment** is the process of gathering information from a new patient. It is the systematic collection and analysis of information about a person’s characteristics and behaviors.

A **classification system** consists of a list of various types of problems and their associated symptoms. In Diagnosis we identify or recognize a disorder on the basis of its **characteristic symptoms**.

A **classification system** is used to subdivide or organize a set of objects. Classification system can be based on various principles, and its value will depend primarily on the purpose for which they were developed. Different classification systems are not necessarily right or wrong; they are simply more or less useful. Clinical assessment and diagnosis are centered to the study of the psychopathology. Clinical assessment refers to systematic evaluation and measurement and psychological, biological and social factors in an individual presenting with a possible psychological disorder. Diagnosis is the process of determining whether the particular problem that the individual has needs all the criteria as given in DSM-IV-R in the classification of disorders.

Example A

Suppose your class fellow experiences sensations that make her believe she is having a heart attack. Difficulty in breathing, rapid heart beat and burden on her chest. She is taken to the emergency of a hospital and she is told that the problem is psychological and physically she is al right.

Example B

Your aunt is depressed, she has lost her husband. She does not eat, does not sleep, and does not go to her work. You are worried. You want her to return to normal.

Example C

A teacher observes that one of her students is disruptive, unpopular with the class. What should be done and how the problem should be treated.

When we frequently come across medical problems, psychological problems, social problems or a combination of either of the two, we frequently ask **how can we decide**? **How can we be sure**, **what treatment is needed?** How can we differentiate between **different types** of **psychological disorders?**

In the mental health field, we describe, classify, explain, select, predict, plan and evaluate to do all these tasks; we need procedures and methods to measure and define psychological disorders.

Tools for Assessment

Assessment is the systematic collection and analysis of information about a person’s characteristics and behaviors. There are several assessment procedures, such as:

1. Interviews

2. Questionnaires

3. Psychological tests

4. Rating Scales

5. Observation

6. Behavior samples

Each assessment procedure is to judge according to the following criteria which includes

1. Reliability

2. Validity

3. Standardization

4. Utility

**1. Reliability**

Reliability refers to consistency or repeatability of the results. Reliability is computed by several statistical

procedures. Reliability is expressed as a matter of degree. Usually, on a continuum of 0 to 1 where one means perfect reliability, this is a rare thing. There are three types of reliability.

a. Test Retest

b. Internal consistency

c. Inter rater reliability

**Test retest:** is the consistency of a test results over time. The same test questionnaire or an interview should yield the same results, when used on the same person twice (tested on two different occasions). This type of reliability is important when compulsive behavior is being measured or anxiety is being measured.

**Split Half (Internal consistency) A** type of reliability is internal consistency or correspondence (correlation) between test items. A questionnaire intended to measure potential for child abuse so we focus on the concept of child abuse, now every item of the questionnaire should relate and measure the concept of child abuse. If all the items on the questionnaire contribute to identify this concept then individual item- item correlation will be high and individual item to total item score will be high.

**Inter rater reliability** A type, of reliability is Inter rater reliability or consistency among scorers or observers. Independent judges, who are observing a person’s behavior, come to the same conclusion. This kind of reliability evaluates the agreement between two raters administering the same interview, rating the same video of a person’s behavior or observing a person’s behavior in a particular setting. High inter rater reliability increases the confidence that the procedure is measuring, what it is suppose to measure. It is clear that an instrument measuring a behavior should be high in reliability if we want to draw conclusions from it. For example: an intelligence test demonstrates low test retest reliability. It clearly shows that it is not measuring intelligence.

While two observers, observe the same child in the classroom and agree in their ratings that his intelligence should be high.

**2. Validity**

Validity is a method, which means does the test measure, what it has been designed to measure i.e. an intelligence should measure intelligence, a personality test should measure personality then it is a valid measure and it will give valid and accurate results. Suppose that a bag of sugar when put on the scale should read its weight, every time the same bag of sugar is put on the scale should give the same reading. Then the weighing scale is valid.

Kinds of Validity:

a. Face validity

b. Criterion (Predictive validity and Concurrent validity)

c. Content validity

d. Construct validity

**Face validity** does not by itself establish the test’s trust worthiness. It simply conveys that the test and its items should appear making sense to the test taker. This is not validity in the real sense. It’s simply means that a test on depression should include questions about how often a depressed individual cry or weeps. So face validity is the apparent sense the test makes to the person who is taking it.

**Predictive validity** is a test ability to predict a person’s future characteristics or behavior. We could establish predictive validity by administering a test to a group of school students and predict their performance for the future senior school i.e. predictive validity makes prediction about the individual’s future behavior based on his present behavior. When we ask questions like, Is an individual likely to become anxious or depress in future? We are dealing with the concept of predictive validity.

**Concurrent Validity:** A test designed to measure student’s present or current anxiety state e.g. should produce anxiety scores that agree with school counseling records and parent’s reports.

**Content validity:** A test that displays high content validity reflects that it measures all important aspects of the behavior, skill or quality that it is measuring. All achievements test and intelligence test and all teacher made classroom test should have high content validity. All entrance exams and admission tests should have high content validity (THEY SHOULD BE CONTENT BASED).

**Construct validity:** Construct validity measures what they are intended to measure and not something else. Do achievement tests measure ability in a given subject area or do they measure something else? Some students do very well on an achievement test and others do very poorly on multiple choice tests. Before any test can be useful, it must meet the requirements of standardization and utility criteria as well.

3. **Standardization**

Standardization is process by which a certain set of standards or norms is determined for a technique in order to make its use consistent across different measurements, e.g. the assessment might be given to a large number of people who differ on important factors, such as age, race, gender, socio economic status and diagnosis, where scores would then be used as a standard or norm for comparison purposes, e.g. if you are a Pakistani, 19 years old male from a middle class background on your score on a psychological test should be compared to the scores others like you.

**4. Utility**

A final criterion for deciding that an assessment procedure is worth employing is its utility or usefulness. To be useful, the assessment procedure should be valid, reliable, standardized and useful.