Elephant in the Dark

SOME Hindus had brought an elephant for exhibition and placed it in a dark house. Oodles of people were quickly into this dark place to see the beast. Finding that ocular inspection was impossible, each visitor felt it with his palm in the darkness.

The palm of one felt the trunk.

'This creature is like a water-spout,' he said.

The hand of another lighted on the elephant's ear. To him the beast was evidently like a fan.

Another rubbed against its leg.

'I found the elephant's shape is like a pillar,' he said.

Another laid his hand on its back.

'Certainly this elephant was like a throne,' he said.

----------------------------------------------------------------------------------
Jalal-ud-Din Rumi

What is a model?

- Perspectives that explain problems = models
- Also known as paradigms
- Affect the way we “see” the world:
  - Understand events
  - Interpret problems
  - Develop solutions

Models of Psychological Abnormality

Biological Perspective

You are a biological being. Period.
**Biological Perspective**

- **Organic mental disorder**
  - Mental disorders that have clear physical causes
- **Functional mental disorder**
  - Abnormal behavior patterns without clear links to physical abnormalities

**Neurotransmitter and Hormonal Imbalance**

- **Neurotransmitter**
  - Chemical released by one neuron, crosses the synaptic space to be received at receptors on the dendrites of adjacent neurons
  - Electrochemical impulses in the brain help in transmitting information from one nerve cell to another, controlling body functions, movement, emotional response, and physical ability to experience pleasure and pain
  - Each neuron synthesizes its neurotransmitters from materials in the blood

**Examples**

- **Dopamine**
  - Excessive firing, too many messages
  - Schizophrenia

- **Norepinephrine**
  - Low activity

- **Serotonin**
  - Suicide
  - Lower levels

**Hormone Imbalances**

- **Hormones**
  - Chemical messengers secreted by a set of endocrine glands in our bodies
  - They travel through our blood stream and affect various parts of our brain and body
  - Their influence on the developing nervous system also seem to contribute to some of the differences in men and women

**Genetic Defects**

- Genes affect biochemical processes and the structure and physiological functioning of organisms
- Organisms are genetically programmed through biochemical processes to adapt physically and behaviorally to their environments

- **Studies support the claim that heredity is an important predisposing factor in several disorders, especially depression, schizophrenia, alcoholism**
- Genotypes and phenotypes work in mental disorders
  - **Genotype**
    - A person's total genetic endowment
  - **Phenotype**
    - Structural and functional characteristics that result from an interaction of the genotype and the environment
**Brain Dysfunction**
- Significant damage of brain tissue
- Incidence of damage increases notably among the elderly, mostly because of the aging process itself (Alzheimer’s disease)

**Physical Deprivation or Disruption**
- **Homeostasis**
  - Maintaining physiological activity within a range essential to efficient functioning and survival
  - Injuries and diseases strike us all from time to time and upset our equilibrium
- **Depression**
  - Frequently accompanies illnesses
- **Side effects from treatments**
- **Stimulation and Activity**
  - Healthy mental development depends on a child's receiving adequate amounts of stimulation from the environment

<table>
<thead>
<tr>
<th>Positive aspects</th>
<th>Negative aspects</th>
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<tbody>
<tr>
<td>Research produces valuable information</td>
<td>Doesn't explain all abnormality</td>
</tr>
<tr>
<td>Treatments often provide relatively quick relief from symptoms</td>
<td>Side effects from treatments</td>
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<tr>
<td></td>
<td>Still don't know how/why some of them work</td>
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**Psychodynamic Perspective**
- Breuer and Freud
  - The case of “Anna O”
  - Hypnosis
  - Catharsis
  - Later, Freud did away with hypnosis and developed a “conversational approach”

**Psychodynamic school**
- Like the medical model, view mental disorder as an illness
- Blame psychological factors as the cause of malfunction
Behavior determined mostly by unconscious underlying psychological forces.

Abnormality results from conflicts between these forces.

Deterministic: all behavior determined by past experience.

Conflict between them is called intrapsychic conflicts.

Excessive conflict between ID, EGO and SUPEREGO may lead to signs of dysfunction.

Poorly formulated SUPEREGO may lead to dysfunction.

Contradictory messages from parents/primary care-giver.

**Defense Mechanisms**

- Often, ego can cope with anxiety through rational measures.
- If these don’t suffice, ego resorts to irrational protective measures.
- Example: Repression
  - Preventing painful or dangerous thoughts from entering consciousness.
  - A mother’s occasional murderous impulses toward her hyperactive 2-year old are denied access to awareness.

**Defense Mechanism, which one?**

- **Denial**
  - A reality that causes anxiety is simply not perceived.
  - A mother may unconsciously refuse to see her son’s true character because it is too anxiety-arousing.

- **Intellectualization**
  - Intellectualization is treating an emotionally charged situation in a muted or non-emotional fashion.
  - Someone who accepts the news of a marital breakup passively may be using intellectualization.

- **Projection**
  - Projection is blaming others or other things for one’s problems or failures.
  - Someone might say, “The devil made me do it”, or blame others for being the cause of a problem.
Psychosexual stages of Development

- **Oral stage**
  - Mouth is the principal erogenous zone (area that gives pleasure)

- **Anal stage**
  - Anus provides major source of pleasurable stimulation

- **Phallic stage**
  - Self-manipulation of genitals provides major source of pleasure

- **Latency stage**
  - Sexual motivations recede in importance

- **Genital stage**
  - After puberty, the deepest feelings of pleasure come from heterosexual relations

- Fixation at one or more of these stages may lead to mental dysfunction

Critical Evaluation of Psychodynamic School

<table>
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<th>Negative aspects</th>
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<tr>
<td>Understanding that normal and abnormal behaviors can result from same processes</td>
<td>Difficult to define and research</td>
</tr>
<tr>
<td>First explained existence of psychological conflict</td>
<td>Fail to establish clear guidelines for predicting abnormality</td>
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Learning Perspective

Learning

- “A relatively permanent change in behavior, brought about by experience.”

Classical Conditioning

Pavlov, a physiologist, studied the digestive system of dogs. Specifically, the reflexive response dogs had to food (salivation).

Classical Conditioning

Pavlov noticed the dogs also salivated when they saw the assistant that fed them, which was not a reflexive response. Could they learn to salivate to other neutral stimuli?

Unconditioned Stimulus (UCS):
- A stimulus that automatically triggers a response without any conditioning.

Unconditioned Response (UCR):
- The unlearned, automatic response to the UCS.

UCS | UCR
--- | ---
Food | Salivation
Classical Conditioning

- The dog learns to associate the tone to the food, and salivates—a non-reflexive response!

  CS
  Bell Tone
  CR
  Salivation

- **Conditioned Stimulus (CS)**: A neutral stimulus that, after association with the UCS triggers a Conditioned Response.
- **Conditioned Response (CR)**: The learned response to the Conditioned Stimuli.

### Stage 1
- The dogs are first just sitting in their harnesses, doing nothing, the lab assistant brings in meat powder, and they start drooling.

  UCS— meat powder
  UCR— drool

### Stage 2
- Before bringing in the food, the lab assistant rings a bell.
  - SO the bell rings, and then food comes.

  - UCS— meat powder
    - UCR— drooling
  - CS— tone of bell

### Stage 3
- Eventually, the lab assistant just rings the bell, to see what happens, and if learning has occurred, the dogs will drool to the sound of the bell.

  CS— tone of bell
  · CR— drool

UCS----------------->UCR
(food powder) --------------> (salivating)
NS------------>UCS------------>UCR
(bell)--> (food powder) ----> (salivating)
CS---------------------------------------->CR
(bell)----------------------- >(salivating)
Classical Conditioning in Human Beings

Classical Conditioning

- UCS → UCR
  - (onion juice) → (crying)
- NS → UCS → UCR
  - (whistle) → (onion juice) → (crying)
- CS → CR
  - (whistle) → (crying)

Conditioned Emotional Responses (CERs)

- CERs – learned fears – Phobia
- Phobia – a fear that persists even when no realistic danger exists
- CERs are learned emotional reactions to a previously neutral stimulus through stimulus generalization

Vicarious or Secondhand Conditioning

- conditioning occurs when we observe another person’s emotional reaction to a stimulus
- in doing so, we learn to respond to it emotionally ourselves
- such ‘secondhand’ learning probably affects feelings in many situations
  - for example, horror movies probably add to fear of snakes, caves and other terrors
  - like movies, emotions of parents, friends and relatives can have more impact
Stimulus Generalization in Human Beings

- Hovland (1937)
  - Human classical study
  - Conditioned GSR
  - Galvanic Skin Response
    - A physiological measure of emotion
  - To a pure tone of specific frequency, using mild shock as UCS
  - Frequency of the pitch of shock were varied, and galvanometer detected mild response

Semantic conditioning

- stimulus generalization is not confined to a single sense of modality
- example
  - human subjects
  - a GSR conditioned to sound of bell may also appear by the word "bell"

Volkova (1953)

- Russian physiologist
- Used a modified salivary-conditioning method with children
  - UCS – candy delivered to subject’s mouth
  - UCR – salivation
  - CS – Russian word for "good" spoken aloud
  - Children also salivated to
    - "Bonn is a wonderful city."
    - "Pioneer helps his comrade."

Operant Conditioning

Introduction

“A type of learning in which behavior is strengthened if followed by reinforcement or diminished if followed by punishment.”

David G. Myers

Shaping

- A procedure in which reinforcers, such as food, gradually guide an animal’s behavior toward a desired behavior
Reinforcement
- Any event that increases the frequency of a preceding response

Punishment
- Any event that follows a response and decreases the likelihood of it recurring
  - **Severe Punishment:**
    - Intense punishment, capable of suppressing a response for a long period
  - **Mild Punishment:**
    - Weak punishment; usually slows responses temporarily

Behaviorism and Pathology
- It wasn't until 1970s that behaviorism established itself
- 1950s
  - Dollard and Miller
    - "Personality and Psychotherapy"
    - Reinterpreted psychoanalysis along the principles of learning

Looking at Behaviorism critically
- Positive aspects of the learning perspective:
  - Behaviors can be observed and measured
  - Research supports effectiveness of techniques
- Negative aspects of the learning perspective:
  - Represents human beings as a product of conditioning only
  - Improvements may not last long-term

Cognitive Perspective
- Abnormal behaviors can be explained by maladaptive or irrational thoughts, attitudes, and assumptions

Cognitive School
- "You are what you think"
Global Assumptions

According to Beck and Ellis:
- We have broad beliefs about how things work
  - Can be positive and helpful
  - Can be negative and destructive

Maladaptive assumptions

- **Albert Ellis**
  - We hold assumptions about ourselves and our world
  - to help us determine our reactions to the various situations we encounter
  - assumptions that are largely irrational
  - Guide people to act and react in ways that affect their chances of happiness and success
  - Ellis calls these **basic irrational assumptions**

Specific Upsetting Thoughts

- **Aaron Beck**
  - different thoughts come into our minds under different situations
  - some comforting, others upsetting.
  - These are called **automatic thoughts**
  - When a person's stream of automatic thoughts is too negative, Beck would expect that person to become depressed.

Illogical Thinking Processes

- Cognitive theorists believe that the cognitive sphere is the key to abnormal functioning
- Most abnormal behavior is caused not by illness but by incorrect and counterproductive thinking

Critically evaluating Cognitive School

- **Positive aspects of the cognitive school:**
  - Therapies show good results
  - Depression, Sexual dysfunctions
- **Negative aspects of the cognitive school:**
  - Therapies don’t work for all people or all problems
Humanistic and Existential Perspective

Abnormality results from lack of:
- Care and support (Humanistic)
- Meaning in life and anxiety (Existential)

Humanistic and Existential

Humanists

- Believe that human beings are born with a natural inclination to be:
  - Friendly
  - Cooperative
  - Constructive
  - Driven to self-actualize
    - That is to fulfill this potential for goodness and growth
- This can only be done if they can honestly appraise and accept their weakness as well as their strengths

Carl Rogers
Pioneer of Humanistic perspective

- Developed ideas about psychotherapy that contrasted sharply with the influential psychodynamic principles of the day
- His therapy focused on clients’ unique subjective perspective

Client-centered therapy

- Said clients would respond better if therapists were particularly warm, genuine, and understanding.
- Concluded that if people respond to a therapist’s warmth with greater honesty about themselves and a reduction of symptoms, then the human personality must be rooted in more than the irrational instincts and conflicts emphasized in the psychodynamic model

Humanistic Explanation of Abnormal behavior

- Road to dysfunction begins in infancy
- Positive regard
  - Unconditional positive regard
  - Unconditional self-regard
  - Conditions of worth
Humanistic Explanation of Abnormal behavior
- To maintain positive self-regard, these people have to look at themselves in a very selective fashion, denying or distorting thoughts and actions.

Humanistic Explanation of Abnormal behavior
- Constant self-deception makes it impossible for these people to self-actualize.
- Problems in functioning are then inevitable.

Existential Explanation of Abnormal Behavior
- Self-deception
  - people hide from life’s responsibilities
  - fail to recognize that it is up to them to give meaning to their lives
  - they have the capacity and freedom to do so
- Resentment to social standards
- Overlook their personal freedom of choice and avoid responsibility for their lives and decisions
- Inauthentic lives
  - Their prevailing emotions are anxiety, frustration, alienation and depression.

Critical Evaluation
- Positive aspects of this school:
  - More spiritual, appealing view of abnormality and human condition
  - Optimistic
  - Emphasizes personal responsibility
- Negative aspects of this school:
  - May emphasize personal responsibility too much
  - Difficult to define and research concepts (like psychodynamic theories)
  - Serious disorders?

Sociocultural Viewpoint
- Abnormalities can be influenced by social experiences and cultural values
- Behavior is shaped by social forces
- Abnormalities are a result of a dysfunctional social system, not just an individual’s pathology
Family structure and Communication

- Family is a system of interacting parts
- The parts interact in ways that enable the system to maintain itself and survive
- The structure, rules and communication patterns of some families actually force individual members to behave in a way that the society at large may define as abnormal

- double-bind communications
  - Simultaneous messages that are mutually contradictory
  - Mom saying: “I love you” while frowning
- Such individuals who are repeatedly subjected to communication like this cannot win
- nothing they do will earn their parents’ approval
- Result: overly suspicious of other people’s actions and statements

Cross-cultural studies

- Malinowski, 1927
  - “Sex and Repression in Savage Societies”
  - Studied “savages” of Trobriand island
    - Said they have no oedipal complex
    - Psychoanalytic theory is specific to patriarchal family structure in the West

- Butcher and Pancheri, 1976
  - Psychiatric patients from Italy, Switzerland and USA
  - Showed the same personality pattern on MMPI
  - But the Italians repeatedly showed exaggerated patterns of physical pain

- Research says
  - Most psychological disturbances are universal
    - Schizophrenic patterns
  - But cultural factors DO matter
    - Anorexia Nervosa (WEST)
    - TKS (Japan)
    - Fear of offending people because of an imagined physical defect
Pathogenic Societal Influences
- Low socioeconomic Status
- Prejudice and Discrimination
- Employment problems
- Social change
  - Everything is changing too dramatically
    - Jobs/education/family/leisure

Integration of Models

Biopsychosocial Perspective
- Integration of:
  - Biological
  - Social
  - Psychological (Esp. cognitive & behavioral)
- Abnormality caused by:
  - Interaction of these factors – no one cause
  - Relative importance of each factor depends on individual and environment

Biopsychosocial perspective
- Positive aspects of the biopsychosocial perspective:
  - Takes into account interactions between forces affecting psychological functioning
  - Combines treatment methods – better tailored for individual
- Negative aspects of the biopsychosocial perspective:
  - Hard to find one specific cause of problems

THANK YOU!