

BASICS OF PSYCHOLOGY

- A brief history of psychology
 - A. before psychology
 - B. the emergence of psychology
 - C. early schools of psychology
- Theoretical approaches (Disciplines/Schools)
 - Behaviourist
 - Psychodynamic
 - Humanistic
 - Cognitive
 - Physiological
 - Socio-cultural (But now Evolutionary)

A Brief History of Psychology

- 'Psychology has a long past, but its real history is short.'
- Ebbinghaus (1908)

A. Before Psychology

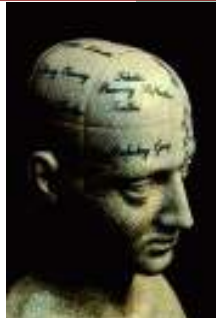
- Does psychology go back to the Ancient Greeks?
- Certainly it was shaped by Enlightenment philosophy (e.g. Descartes, Locke, Hobbes)
- However, others also asked about human nature, for example theologians and educators
- These questions were all forms of *reflexive discourse* (viewing human behavior as lacking in volition or conscious control)
- Psychology emerged as a new kind of reflexive discourse, using science, instead of philosophy, to find answers

B. The Emergence of Psychology

- Psychology is usually described as beginning with the opening of an experimental lab by Wilhelm Wundt in Leipzig in 1879
- However, it's more realistic to see psychology as emerging gradually over the course of the 19th century
- Psychology emerged as a logical progression from attempts to use science to answer questions about human nature

B. The Emergence of Psychology

- Psychology had a number of forerunners
- These included advances in understanding the brain and in experimental physiology
- One forerunner was *phrenology*



B. The Emergence of Psychology

- Scientific psychology became possible with the acceptance of evolutionary thought, particularly Darwin's *The Origin of Species*
- This located humanity within the **animal** kingdom, and hence in the realm of natural science
- Evolutionary thought led particularly to forms of adaptational psychology, individual difference psychology, and comparative psychology



B. The Emergence of Psychology

“On the origin of species by Natural Selection” (1850)



1809-1882

B. The Emergence of Psychology

- **Darwin**
 - **Theory of Evolution**
 - **Natural Selection**
 - **Human Brain**
 - **Genetics**



B. The Emergence of Psychology

Theory of Evolution



• **And the development of Psychology**

B. The Emergence of Psychology

“Old Brain”
to
“New Brain”



B. The Emergence of Psychology

Genetics

Humans have 46 chromalids (23 pair)

Chance involved in Meiosis means....



Gregor Mendel

B. The Emergence of Psychology

Mutations

■ **A change in genetic material that results from an error in replication of DNA. Mutations can be:**

- **beneficial,**
- **harmful, or**
- **neutral.**



B. The Emergence of Psychology

Experimental Psychology

- Most historians believe that experimental psychology began in Germany in the mid- to late 1800s
- Fechner, von Helmholtz, **Weber**, and **Wundt** all played an important role in the birth of psychology.

C. The Early Schools of Psychology

- Psychology quickly diversified from the late 19th century, leading to a number of distinct schools:
 1. **Structuralism**, which investigated the structure of the mind
 2. **Functionalism**, which investigated the adaptive functions of the mind
 3. **Behaviourism**, which emphasised the role of the environment in guiding behaviour
 4. **Gestalt**, which emphasised holistic aspects of mental processing
 5. **Psychoanalysis**, which emphasised the role of unconscious forces in shaping behaviour

History of Psychology (Brief!): Beginnings AFTER DARWIN

- Wilhelm Wundt: “Father” of Psychology
 - 1879: Set up first lab to study **conscious** experience
 - Introspection: Looking inward (i.e., examining and reporting your thoughts, feelings, etc.)
 - Experimental Self-Observation: Incorporates both introspection and objective measurement; **Wundt’s approach**

1. Structuralism

- Wundt’s ideas brought to the U.S. by Tichener and renamed Structuralism
- Structuralists often disagreed, and no way to prove who was correct!
- Structuralists: Introspection was a poor way to answer many questions

2. Functionalism

- William James (American) and Functionalism
 - **How the mind functions to help us adapt and survive**
 - **Functionalists admired Darwin and his Theory of Natural Selection: Animals keep features through evolution that help them adapt to environments**
 - **Educational Psychology: Study of learning, teaching, classroom dynamics, and related topics**

3. Behaviorism

- Behaviorism: Watson and Skinner
 - Psychology must study observable behavior objectively
 - Watson studied Little Albert with Rosalie Raynor; Skinner studied animals almost exclusively
 - Learning - The primary tool for adaptation
 - “The Science of behavior”

4. Gestalt

- Gestalt Psychology: “The whole is greater than the sum of its parts.”
 - Studied thinking, learning, and perception in whole units, not by analyzing experiences into parts (which is what structuralism tried to do)
 - Key names: Wertheimer, Perls



Fig. 1.2 The design you see here is entirely made up of broken circles. However, as the Gestalt psychologists discovered, our perceptions have a powerful tendency to form meaningful patterns. Because of this tendency, you will probably see a triangle in this design, even though it is only an illusion. Your whole perceptual experience exceeds the sum of its parts.

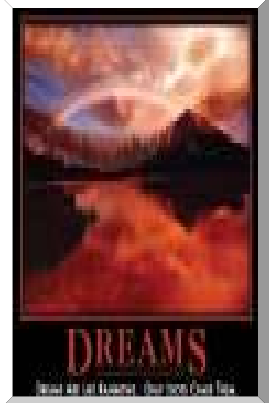
5. Psychoanalytic: Freud

- Our behavior is largely influenced by our unconscious wishes, thoughts, and desires, especially sex and aggression
- Freud performed dream analysis and was an interactionist (combination of our biology and environment makes us who we are)
- Repression: When threatening thoughts are unconsciously held out of awareness
- Recent research has hypothesized that our unconscious mind is partially responsible for our behaviors

5. Psychoanalysis

“Humans function from the same motivations as animals”

- Sigmund Freud
- Jung
- Adler



5. Psychoanalysis

- Id - Primitive Instincts
- Ego - Necessary adaptation to social needs of humans. Mediates b/w Id and Superego.
- Superego - Necessary adaptation to social needs of human. The overly moral aspects of people.



**Enough about
it's
HISTORY**

CURRENT Theoretical Approaches (Disciplines/Schools)

- Since the 1950s, psychologists have adopted a number of diverse approaches to understanding human nature and behaviour
- These **SIX** different approaches include:
 - I. Behaviorist
 - II. Psychodynamic
 - III. Humanistic
 - IV. Cognitive
 - V. Biological (Physiological/Pharmaceutical)
 - VI. Evolutionary (from the ashes of the Socio-cultural school)

Ways of Explaining

- Different approaches exist because there are different ways of explaining phenomena
- For example, emotions can be explained in terms of the thoughts associated with them or the physiological changes they produce (ex: **explain blushing**)
- Psychologists try to explain psychological phenomena from a range of different perspectives, and so use different approaches
- As an example, what are some different ways in which we might explain shaking hands?

I. The Behaviorist Approach Watson, Skinner, Pavlov

Key features:

- Rejects the investigation of internal mental processes
- Emphasises the investigation of observable behaviour
- Emphasises the importance of the environment
- Behaviour is the result of learned associations between stimuli and responses to them
- The main theories are of classical (Pavlov) and operant (Skinner) conditioning

I. The Behaviorist Approach

Evaluation:

- Its practical focus has led to useful applications
- It has influenced theory development, e.g. in the area of learning
- It developed a standard scientific methodology, through the use of hypothesis testing and experimental control
- It's criticized for being mechanistic (ignoring mental processes) and overly environmentally determinist (it ignores biology)

II. The Psychodynamic Approach Sigmund Freud

Key features:

- Mind has 3 parts: conscious, unconscious and preconscious
 - conscious: thoughts and perceptions
 - preconscious: available to consciousness, e.g. memories and stored knowledge
 - unconscious: wishes and desires formed in childhood, biological urges. Determines most of behaviour
- Personality has 3 components - id, ego & superego
 - id: unconscious, urges needing instant gratification
 - ego: develops in childhood, rational. Chooses between id and external demands
 - superego: conscience, places restrictions on behaviour



II. The Psychodynamic Approach

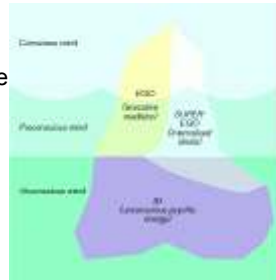
Key features (cont):

- Ego mediates conflict between id, ego, superego
 - defense mechanisms include repression, displacement, denial, reaction formation
 - repression pushes stuff into unconscious, but it exerts influence from there, may cause problems
- Cure neuroses by bringing material from unconscious to conscious
 - free association
 - dream analysis

II. The Psychodynamic Approach

Key features (2):

- Freud's 'mental iceberg' view of the mind



II. The Psychodynamic Approach

Evaluation:

Significant impact:

- theories of personality, motivation, development
- therapeutic techniques in clinical and counselling psychology
- captured the popular imagination, providing an accessible framework for everyday understanding

Unscientific?

- methodologically poor
- untestable (e.g. concept of denial)

Limited impact on scientific psychology

III. The Humanistic Approach Carl Rogers

Key features:

- Rejects determinism, and emphasises free will
- Rejects the positivism of science (investigating others as detached objective observers)
- Investigates phenomena from the subjective experience of individuals
- An emphasis on *holism*: the need to study the whole person

III. The Humanistic Approach

Key features (Cont):

- People strive for 'actualization'
 - Rogers: the self-concept consists of a perceived self and an ideal self. Psychological health is achieved when the two match
 - Maslow: people have a hierarchy of needs. The goal of psychological growth is to meet the need to achieve self-actualisation

2 possible interpretations
Of Zidane's behavior



Now for a few ideas
that Humanists would

NEVER agree with

III. The Humanistic Approach

Evaluation:

- Considerable influence on counselling
 - development of client-centred therapy
 - helped establish counselling as an independent profession
 - development of research techniques to evaluate the effectiveness of treatment
- Unscientific
- Limited impact on mainstream psychology
- Limited evidence for theories

IV. The Cognitive Approach Jean Piaget

Key features:

- The main approach to experimental psychology
 - cognitive psychology investigates **memory, language, perception, problem solving**
 - but also used for other areas, e.g. social, developmental
- Emphasises active mental processes
 - the brain is seen as an information processor, using the analogy of mind to computers
 - mental processes are based on discrete modules
- Uses experimental methods, but also computer modelling and neuropsychology

IV. The Cognitive Approach

Evaluation:

- Has had a significant impact across experimental psychology
- Has led to useful applications, e.g. cognitive therapy
- Has introduced a range of rigorous research methods
 - can compare results from different methods, and so have more faith in research findings

IV. The Cognitive Approach

Evaluation (Cont):

- Lacks 'ecological validity'
 - based on artificial laboratory research
 - but do the results apply to the 'real world'?
- Has no overall framework
 - there are separate theories in different areas, but there is no one framework for explaining cognition
- Doubts about the underlying metaphor
 - is the mind really like a computer?

V. The Biological Approach neuroscientist Wilder G. Penfield

Key features:

- Investigates:
 - brain function in healthy and impaired individuals
 - brain chemistry and psychology, e.g. serotonin & mood
 - genes and psychology, e.g. twin studies & intelligence
- The common assumption is that biology underlies behaviour
- Works closely with Evolutionary School
- Reductionist and deterministic
 - reductionist: explanations at a more basic level
 - deterministic: behaviour directly determined by biology

V. The Biological Approach

Evaluation:

- Productive
 - has provided explanations in a range of areas of psychology, e.g. mental health, individual differences, social behaviour
 - has provided therapeutic interventions, e.g. drug treatments for depression
- Popular
 - has caught the public imagination
 - Its EASY. Just take this and...



VI. Evolutionary Psychology: Richard Dawkins (Cosmides & Tooby)

- Our neural circuits were designed by natural selection to solve problems. Different neural circuits are specialized for solving different adaptive problems; they are **domain-specific**.
- Consciousness is just the tip of the iceberg; most of what goes on in your mind is **hidden**.
- Our modern skulls house a **stone age mind**, adapted to the environment of evolutionary ancestry (EEA).

VI. EP – Case Study I ABSTRACT:

If a person has a D rating, then his files must be marked 3.
Which TWO do you check out?

D F 3 7

Case Study
Social

Case Study
Social
ANSWER

Case Study
Abstract
Answer

VI. EP – Case Study I Social

If a person is drinking vodka, then he must be over 20 years old.
Which TWO do you check out?

drinking vodka drinking coke 75 years old 16 years old

Case study
abstract

Case Study
Social
ANSWER

Case Study
Abstract
Answer

VI. EP – Case Study I: Abstract Problem Continued

If a person has a D rating, then his files must be marked 3.

If P then Q
D F 3 7
P ~P Q ~Q

Case study
abstract

Case Study
Social

Case Study
Social
ANSWER

VI. EP – Case Study I: Familiar Social Contract

If a person is drinking vodka, then he must be over 20 years old.

If P then Q
drinking vodka drinking coke 25 years old 16 years old
P ~P Q ~Q

Case study
abstract

Case Study
Social

Case Study
Abstract
Answer

VI. The Evolutionary Approach

Humans are social creations

- Survival through ever larger groups (130)
- Individuals MUST be able to keep track of who they can trust and who they can't
- Individuals must form networks of other people for mutual support
- Grooming others (as chimps do) takes too long (30% of available time to be effective)
- Language is the only solution
- Language sparks growth of a larger more complex brain.
- This allows larger groups to form, etc., etc.

VI. The Evolutionary Approach

Evaluation:

- Overly reductionist
 - It works backward: If this behavior exists it must have been caused by _____
- Problems with evolutionary explanations
 - they may underplay the effects of the environment
 - they may 'naturalize' behaviours that should be discouraged, e.g. sexual violence
 - Explains behavior w/o fixing it