

# CHAPTER 1 – THE EVOLUTION OF PSYCHOLOGY

Psychology 100

Many high profile events motivate and energize researchers in psychology to attempt to document and understand such acts in hope of reducing their occurrence.

Psychology has much to offer in the analysis and possible prevention of social problems. E.g. bullying

Psychology is a way of thinking.

Psychology is the science that studies behavior and the physiological and cognitive processes that underlie it, and it is the profession that applies the accumulated knowledge of this science to practical problems.

## Development of Psychology

Psychology's story is one of people groping towards a better understanding of themselves.

Psychology – *psyche*, meaning the soul and *logos* meaning study of a subject (study of the soul)

### **Influences on the course of early psychology:**

#### **Philosophy**

Ancient Greek philosophers such as Socrates, Plato and Aristotle considered and debated issues of relevance to psychology, e.g. separation of mind and body, whether knowledge is inborn (nativism) or gained through experience (empiricism).

Aristotle's theory of memory:

Memories are the result of 3 principles of association: similarity, contrast and contiguity (actually touching). Though proposed hundreds of years ago, is still fundamental to many contemporary theories of memory.

Renaissance:

Rene Descartes – famously argued for the dualism of mind and body. Mind and body were fundamentally different, with the mind being immaterial and the 'province of God'. Processes and functions such as memory, perception, dreaming and emotions were 'properties' of the body, thus being open to being understood in naturalistic terms.

#### **Physiology**

William Harvey's empirical demonstration in 1682 that blood circulation was a function of the heart

Physiologists and physicians such as Robert Whyte, Franz Gall, Paul Broca and Johannes Muller showed important insights could be gained into the workings of the body and brain through the application of systemic, empirical methods.

Hermann von Helmholtz began experimental examinations of human reaction time. Argued for separation of sensation and perception as topics of study.

### **Psychology is born:**

William Wundt (1832-1920) ('Vundt') mounted a campaign to make psychology an independent discipline rather than a stepchild of philosophy or physiology.

Timing was right. German universities were in a period of expansion, resources were available. Intellectual climate favoured the scientific approach that Wundt advocated. Proposals were well received by the academic community.

1879: Wundt established the first formal laboratory for research in psychology at the University of Leipzig. (1879 birth of psychology)

Wundt declared that psychology should be a science modeled after fields such as physics and chemistry. Psychology's focus as consciousness – the awareness of immediate experience.

Psychology became the scientific study of conscious experience. This kept psychology focused on the mind and mental processes. It demanded the methods psychologists used to investigate the mind be scientific.

Scholars came to Leipzig to study under Wundt, who then fanned out across Germany and North America. North America was where psychology grew by leaps and bounds.

G. Stanley Hall (1846-1924)

- Established America's first research laboratory in psychology in 1883
- Launched America's first psychology journal 4 years later
- In 1892, he was the driving force behind the establishment of the American Psychological Association (APA) and elected as first president
- APA is world's largest organization devoted to the advancement of psychology

### **Structuralism vs Functionalism:**

#### **Structuralism**

Led by Edward Titchener.

Structuralism was based on the notion that the task of psychology is to analyze consciousness into its basic elements and investigate how these elements are related.

Wanted to examine to identify and examine the fundamental components of conscious experience, e.g. sensations, feelings and images. Focused on sensation and perception in vision, hearing and touch. Depended on introspection.

Introspection was the careful, systematic self-observation of one's own conscious experience.

Introspection required training to make the person being studied more objective and more aware. Subjects were then exposed to auditory tones, optical illusions and visual stimuli under carefully controlled and systematically varied conditions and were asked to analyze what they experienced.

Limitation: There is no independent objective evaluation of that claim.

### **Functionalism**

Led by William James.

Functionalism was based on the belief that psychology should investigate the function purpose of consciousness, rather than its structure.

James was impressed with Charles Darwin's concept of natural selection.

According to the principle of natural selection, heritable characteristics that provide a survival or reproductive advantage are more likely than alternative characteristics to be passed on to subsequent generations and thus come to be 'selected' over time.

Typical characteristics of a species must serve some purpose. James noted that consciousness obviously is an important characteristic of our species. He contended that psychology should investigate the functions rather than the structure of consciousness.

Consciousness was a flow of thoughts, a stream of consciousness. Structuralists were looking at static points in that flow, which missed the real nature of the conscious experience.

Structuralists: laboratory

Functionalists: how people adapted their behaviour to the demands of the real world around them. → practical slant

Investigated mental testing, patterns of development in children, the effectiveness of educational practices and the behavioural differences between the sexes. → attracted the first women in psychology

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Although both ideas faded away, functionalism was more prominent. It gave birth to behaviorism and applied psychology, which dominate modern psychology.

### **Behaviourism:**

Founded by John B. Watson.

Behaviourism is a theoretical orientation based on the premise that scientific psychology should study only observable behaviour.

Behaviour refers to any overt (observable) response or activity by an organism

Watson proposed that psychologists abandon the study of consciousness altogether and focus exclusively on behaviours that they could observe directly. → redefined what scientific psychology should be about.

Power of scientific method rests on verifiability. Scientific claims can always be verified (or disproved) by anyone who is able and willing to make the required observations. → depends on things that can be observed objectively. Mental processes not a proper subject for scientific study

Nature vs nurture: Watson argued that each is made, not born → downplayed importance of heredity, behavior is governed primarily by the environment

Behaviourists eventually viewed psychology as an attempt to relate overt behaviours ('responses') to observable events in the environment ('stimuli').

A stimulus is any detectable input from the environment.

E.g. light, sound... to words on a page, remarks by a friend, ads

Behavioural approach is often referred to as *stimulus-response (S-R) psychology*.

Led to rise of animal research. Experimental research is often more productive if experimenters can exert considerable control over their subjects. → too many complicating factors may enter into the picture and contaminate the experiment

Watson left his job in 1920 due to a divorce scandal and watched psychology's growth from the sidelines. He joined the advertising industry and became a 'pop' psychologist.

### **Freud and Unconsciousness:**

Led by Sigmund Freud.

Approach grew from effort to treat mental disorders → Freud treated people troubled by psychological problems such as irrational fears, obsessions, and anxieties with psychoanalysis

The unconscious contains thoughts, memories, and desires that are well below the surface of conscious awareness but that nonetheless exert great influence on behavior.

Based on a variety of observations

- Slips of tongue
- Dreams that express important feelings

Concluded that that psychological disturbances are largely caused by personal conflicts existing at an unconscious level.

Psychoanalytic theory attempts to explain personality, motivation, and mental disorders by focusing on unconscious determinants of behavior.

Freud suggested that people are not masters of their own minds. He also proposed that behavior is greatly influenced by how people cope with their sexual urges. The people at that time were not comfortable discussing sexual issues. → Freud was soon engulfed in controversy.

Ideas gained traction slowly, but made impact when was noticed.

- Attracted followers like Carl Jung and Alfred Adler
- Gain recognition when G. Stanley Hall invited Freud to give lectures at Clark University in Massachusetts

By 1920s, psychoanalytic theory was well known, but still met with resistance. → conflict with behaviourism → ideas are still used in modern psychology

### **Skinner questions free will:**

B. F. Skinner led the philosophy of radical behaviourism. → felt little need to study internal, mental events

Organisms tend to repeat responses that lead to positive outcomes, and they tend not to repeat responses that lead to neutral or negative outcomes. → able to train laboratory animals to perform unnatural behaviours.

Skinner asserts that all behavior is fully governed by external stimuli → behavior is predictable by lawful principles → free will is an illusion

Published books and became a household name. → ideas were however condemned

### **Humanists:**

By 1950s, behaviourism and psychoanalytic theory was most influential → some psychologists found it unappealing as it was 'dehumanizing'. → people were not

masters of their own destiny → failed to recognize the unique qualities of human behavior.

Psychoanalysis: behavior is dominated by sexual urges

Behaviourism: preoccupied with studying simple animal behavior

Humanism is a theoretical orientation that emphasizes the unique qualities of humans, especially their freedom and their potential for personal growth.

Humanists take an optimistic view of human nature → human behavior is governed primarily by each individual's sense of self, which animals lack. People have a basic need to continue to evolve as human beings and to fulfill their potential.

Many psychological disturbances are the result of thwarting these uniquely human needs.

### **Psychology as a profession:**

1950s saw the practical side of psychology develop. → applied psychology.

Applied psychology is the branch of psychology concerned with everyday, practical problems.

First applied arm of psychology → clinical psychology → academic psychologists were pressed into service as clinicians due to world war 2.

Clinical psychology is the branch of psychology concerned with the diagnosis and treatment of psychological problems and disorders.

Traditional research psychologists were alarmed by the professionalization → argued that resources previously devote to research would be diluted → tensions between research and professional arms grew

### **Renewed interest in Cognition and Physiology:**

Renewed interest in consciousness and physiological bases of behavior.

Cognition refers to the mental processes involved in acquiring knowledge.

Cognitive theorists argue that psychology must study internal mental events to full understand behavior.

Advocates of the cognitive perspective point out that people's manipulations of mental images surely influence how they behave → focus on overt behavior yields an incomplete picture of why individuals behave as they do.

Donald Hebb emphasized on the importance of the brain in behavior. He argued that the locus of behavior should be sought in the brain. → biological basis for behaviour

e.g. cell assembly → repeated stimulation leads to the development of cell assemblies that work in concert with other cell assemblies to facilitate behavior → neuronal level

Interest in the neuroscience approach increased dramatically in the past few years. → led to concern for how information concerning our brain and its connection to behavior is used → neuroethics

### **Cultural Diversity:**

Researchers wanted to identify general principles of behavior that would be applicable to all of humanity.

Most psychological research had been however, conducted by mostly middle and upper class white psychologists who used middle and upper class white males as participants.

Why so narrow?

- Cross cultural research was expensive
- Easier and cheaper to study middle class white students in universities
- Cultural comparisons may foster stereotypes
- Ethnocentrism → lack of interest in other cultures

Ethnocentrism is the tendency to view one's own group as superior to others and as the standard for judging the worth of foreign ways.

Why now?

- Globalization has shrunk the world, bringing more North Americans and Europeans into contact with other countries
- Ethnic makeup of the western world has become increasingly diverse

More psychologists are incorporating cultural factors into their theories and research.

- They strive to study previously underrepresented groups to test the generality of earlier findings
- And catalogue differences and similarities within cultural groups.

### **Evolutionary psychology:**

Evolutionary psychology examines behavioural processes in terms of their adaptive value for members of a species over the course of many generations.

Natural selection favours behaviours that enhance and organisms' reproductive success → not bashful about analyzing the evolutionary bases of human behavior, personality and development

e.g. difference in males and female's visual-spatial ability.

Evolutionary approach was not new, but were piecemeal up till now.

Limitation: Many evolutionary hypotheses are untestable, human behavior is the result of learning and socialization, not evolution. Evolutionary explanations are post hoc, speculative counts for obvious behavioural phenomena.

### **Positive psychology movement:**

Current approach was excessively negative. Launched positive psychology movement.

Focused on building positive qualities.

Positive psychology uses theory and research to better understand the positive, adaptive, creative and fulfilling aspects of human existence.

3 Areas of interest:

- Positive subjective experiences, or positive emotions e.g. happiness, love, gratitude
- Positive individual traits, or personal strengths and values e.g. courage, perseverance
- Positive institutions and communities, e.g. how societies can foster civil discourse, strong families

Limitations: dividing human experience into positive and negative is oversimplification.

## **Psychology Today**



## 7 Themes of Psychology

### 1) Psychology is Empirical

Empiricism is the premise that knowledge should be acquired through observation

Psychologists find a way to make direct, objective and precise observations to answer questions. → Requires a healthy brand of skepticism → demands data and documentation

### 2) Psychology is Theoretically Diverse

A theory is a system of interrelated ideas used to explain a set of observations

In other words, a theory links apparently unrelated observations and tries to explain them. E.g. Freud's observations about slips of tongue and dreams led to psychoanalysis.

Why theoretical diversity? No single theory can adequately explain everything that is known about behavior. Sometimes there is simply more than one way to look at something. E.g. story of the blind men and elephant...

Provides a more complete understanding of behavior.

### 3) Psychology Evolves in a Sociohistorical Context

Social trends have left their imprint on psychology

#### **4) Behaviour is Determined by Multiple Causes**

Behaviour is exceedingly complex → Multifactorial causation of behavior.

#### **5) Behaviour is shaped by cultural heritage.**

Culture refers to the widely shared customs, beliefs, values, norms, institutions, and other products of a community that are transmitted socially across generations.

Among the multiple determinants of human behavior, cultural factors are particularly prominent.

Because a cultural background is widely shared, members feel little need to discuss it with others and often take it for granted.

Although the influence of culture is everywhere, generalizations about cultural groups must be tempered with the realization that great diversity also exists within any society of ethnic group.

#### **6) Heredity and Environment Jointly Influence Behaviour**

Nature vs nurture – historically was framed as all-or-none proposition

Today, most agree is a combination of both.

#### **7) People's experience of the world is highly subjective**

Perception is not a passive process. People actively process incoming stimulation. These tendencies make perception personalized and subjective.

People sometimes see what they want to see.

Motives and expectations colour people's experiences.

Human subjectivity is what the scientific method is designed to counteract.