# Akli Mohand Oulhadj University Social and Human Science Faculty Psychology and Education Sciences Department

# A series of lectures on Introduction to Psychology

For first year social science student Semester 1

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#### **Introduction:**

Psychology is a branch of social and behavioral sciences that focuses on the study of the human mind and behavior. It emphasizes understanding the factors that influence the development of personality, thinking, emotions, and human behavior.

The origins of psychology can be traced back to the 19th century, where early studies in this field were connected to philosophy and natural thought. However, the establishment of psychology as an independent field is attributed to the work of William James and Wilhelm Wundt, who are prominent scientists that contributed to its development.

In 1879, William James established the first psychology laboratory at Harvard University, marking the official beginning of psychology as a separate academic discipline. James authored the book "Principles of Psychology," which helped define the fundamental concepts and methodology of psychology.

In the subsequent period, different branches of psychology evolved, such as clinical psychology, experimental psychology, social psychology, applied psychology, and others. Several scientists and researchers contributed to the development of new theories and methods to understand the human mind and behavior.

Since then, psychology has continued to evolve and expand, encompassing new fields such as neuropsychology, social psychology, exploratory psychology, environmental psychology, and others. Psychology has also benefited from technological advancements, such as

functional magnetic resonance imaging (fMRI) and modern brain study techniques, which have helped broaden the scope of research and understanding in this field.

Today, psychology is considered a comprehensive field that studies various aspects of the human psyche. It is utilized in multiple domains, including education, mental health, counseling, organizational work, personal development, and more.

# The Emergence and Evolution of Psychology:

- Psychological Thought in Greek Philosophy
- Emergence of Psychological Thought in Islamic Arab Philosophy
- Views of Some Philosophers and the Emergence of Psychological Thought

# The Emergence and Evolution of Psychology:

#### 1- Psychological Thought in Greek Philosophy:

The writings and contemplations of philosophers throughout various historical eras included numerous psychological concepts and ideas aimed to explain psychological phenomena. This psychological reflection was closely tied to human existence itself. It is ancient, as humans have always sought to understand themselves and comprehend their human nature. They contemplated what emanated from themselves and from others in terms of behaviors and the challenges they faced. Psychological thought was influenced by philosophical conceptions and scientific achievements, which led to the crystallization of this thought as a modern science with its own identity among various scientific systems.( 13 صرح 2010 ، ص

Psychology in the pre-scientific era revolved around multiple concepts that could be categorized as the soul, self, mind, and emotions. These psychological concepts persisted until the late 17th century. However, the interpretation of psychological phenomena through philosophical lenses did not maintain a consistent language and meaning throughout the prescientific stages. Instead, this philosophical interpretation underwent conceptual shifts from time to time, following the progress of philosophical ideas and the level of organization and intellectual efforts of philosophers themselves. (22 ص 2007، محي الدين، 2007)

Socrates introduced a slogan that emphasized the need to return to humanity and the self: "Know yourself." His call represented a shift in the direction of philosophical thought in general and psychology in particular, focusing on precise philosophical self-identification.

Socrates developed a perspective that posited the soul as an immortal part of the divine essence, while the body was composed of material elements: air, water, earth, and fire. Since the soul was a part of the divine, it had the ability to control its natural impulses.

Plato launched a vigorous campaign against natural philosophers, leading him to emphasize the soul, self, and the virtuous city in his writings. He dedicated an important section to the soul to demonstrate its primacy over the body. He believed that the soul was a pure intellect but could be affected by difficulties. Plato divided the soul into three parts: the rational soul (centered in the head), the appetitive soul (centered in the abdomen), and the spirited soul (centered in the heart). He argued that these three parts existed in various forms and degrees among people.

Plato also proposed that society was composed of three classes: rulers and philosophers, who were guided by wisdom; slaves and artisans, driven by desire; and warriors and military leaders, motivated by courage.

Aristotle produced a dedicated work on the soul, comprising three essays. In the first, he critiqued the ancient views on the soul, while in the following two essays, he provided a definition of the soul. The first essay focused on distinguishing between the types of substance, while the second was related to the functions of the soul. Aristotle believed that the

soul and the body were inseparable, and that everything natural consisted of both matter and form, with matter and form being interdependent and complementary. (45 فاخر ، بدون سنة، ص )

Aristotle offered a definition that aimed to specify the functions and powers of the soul. He dedicated his three essays to regulate these vegetative, animal, and rational powers of the soul. He assigned the vegetative powers to growth and reproduction, the animal powers to sensation and movement, and the rational powers to human beings, distinguishing them by their ability to reason and think. ( ص 2010 ، مصر 2010 ، عشو ي 14)

so, he defined his stance on the union of body and soul, asserting that they could only be separated through abstraction. However, he acknowledged that the soul could manifest in various forms and exist at different levels and capacities, such as the ability to nourish, perceive, move, and understand. These capacities collectively contributed to his unique characterization of human beings, forming the basis for his progressive philosophy.(23 ص 2007، محي الدين، 1907)

Aristotle asserted that a human being is a combination of both soul and body, although he would later distinguish between the soul and the body in a subsequent chapter of his mentioned work. This chapter serves as a timeless reminder of their teacher's stance, emphasizing the differentiation between the soul and the body, with the former being eternal and the latter perishable.(45 صافحر ، بدون سنة، ص

The discourse of Socratic and Platonic thought extended into Greek, Islamic, and Middle Eastern philosophy in general. However, this extension was not without its criticisms. One of the prominent

philosophers who opposed Socrates, Plato, and Aristotle was Democritus in the 5th century BC, and Heraclides in the 6th century BC. Both believed that the soul consisted of developing atoms subject to the same laws that govern natural and social phenomena. (16 صرح 2010، عشوي)

Their perspectives on the soul became clear through their views on the relationship between psychological and educational growth. Democritus emphasized that personality traits and cognitive abilities are acquired through learning, and that training is essential for acquiring rules and for human growth as a whole.

Philosopher Heraclides, on the other hand, asserted that psychological phenomena were directly linked to the body. He proposed that the human body was composed of four fluids: blood, yellow bile, phlegm, and black bile, each associated with distinct personality traits. The sanguine temperament was characterized by optimism and cheerfulness, the choleric by quick anger, the phlegmatic by coolness and indifference, and the melancholic by depression and sadness. These temperaments were considered models of human personalities resulting from the secretion of one of these fluids within the body, explaining behavior not in terms of external natural elements like water, earth, and air, but as the interaction of fluids within the human body.(2007 عبد الرحمان، محي الدين،

# 2 Emergence of Psychological Thought in Islamic Arab Philosophy:

During the Islamic Arab civilization, numerous thinkers and scholars played pivotal roles in laying the foundation for psychological thought. Notable among them were Al-Kindi, Al-Farabi, Ibn Khaldoun, Ibn Roushd, and others.

Al-Kindi had a keen interest in the field of psychology and dedicated several of his works to it. He believed that the soul differs from the body in structure, function, and destiny. He considered the soul to be a part of the divine essence that inhabits the body after birth to oversee human actions, both good and bad. Al-Kindi also argued that death affects only the body while the soul, being similar to the divine essence, endures. Al-Kindi's ideas were heavily influenced by ancient Greek philosophers like Plato and Aristotle. (22 مشوي 2010، من 2010.

Al-Kindi emphasized that human interaction with the environment occurs on three levels: sensory perception, imagination (the ability to retain and manipulate mental images of objects), and intellect (the ability to grasp phenomena and their essence on a deeper and broader level).

As for Al-Farabi, his views on humanity and knowledge were similar to those of Al-Kindi. He asserted that the human soul is created through divine emanation and dwells in the body after a person's birth. The soul is immortal and returns to God after death, where it is rewarded or punished for its deeds. Al-Farabi identified five faculties within the soul: the appetitive, sensory, conative, imaginative, and rational. Each of these

faculties comprises a primary power and secondary powers that serve the primary function. For example, the heart is primarily responsible for nourishment, while other bodily organs, such as the stomach and liver, perform secondary nutritive functions. The five senses are engaged in perceiving the external world and conveying information to the heart.

Notably, Al-Farabi was concerned with the emotional and volitional aspects of the soul and their relationship to cognitive aspects in human behavior. He believed that the will is the driving force behind a person's pursuit of knowledge, and it varies in degrees of intensity. Al-Farabi's views were strongly influenced by previous philosophers, especially Aristotle and Plato. He put significant effort into translating and developing their teachings in Arabic, which greatly facilitated the understanding of these philosophers' works by later scholars.

Ibn Sina, also known as Avicenna, departed from his dualistic perspective on the human being and devoted several of his writings to clarify his stance on the soul, its relationship with the body, its origin, and its destiny. He affirmed that the soul fundamentally differs from the body and is a part of the higher world. Ibn Sina believed that the body is composed of the four elements: earth, water, fire, and air, while the soul unites with the body after birth and separates from it after death, returning to God to be held accountable for its actions on Earth. In this view, the soul is the image of the body, but it does not perish with the body's death, and the death of the body does not alter its essence. The soul remains eternal.

Ibn Sina retained the duality that characterized the theories of earlier philosophers like Socrates, Plato, Al-Kindi, and others. Human beings were a central focus for Ibn Sina, and he dedicated a significant portion of his work to understanding humanity, its dimensions, and its psyche. He developed a coherent and systematic psychological theory.

Ibn Sina divided the soul into three levels: the vegetative level, which is responsible for nutrition, growth, and reproduction, common to plants, animals, and humans; the animal level, responsible for sensation, imagination, and movement, found in humans and animals; and the human level, which includes the intellect and is unique to humans.

Ibn Sina's view emphasized the emotional and volitional aspects of the human psyche, as well as its cognitive aspects and their relationship with human behavior. He believed that the will is the driving force that motivates humans to seek knowledge, albeit in varying degrees. Ibn Sina's perspectives were influenced by Aristotle's broad delineation of the soul. Ibn Sina also delved into the emotional aspects of the human psyche, attempting to understand the psychological causes of organic weakness. He conducted experiments that focused on a young boy's response to certain words, measuring changes in heart rate as a physiological response to external stimuli. This experiment can be considered one of the earliest attempts at psychological diagnosis and reflects Ibn Sina's emphasis on the interplay between psychological manifestations and environmental influences. (19 موسف 2008 موسود)

Ibn Sina's teachings had a profound and lasting impact on both Arab and European philosophers who came after him, shaping the development of psychological thought in later centuries.

# 3 Views of Some Philosophers and the Emergence of Psychological Thought:

In the perspective of Ibn Khaldoun, humans hold a distinguished position due to their intellectual capacities, making them unique beings in the chain of creation and development that the universe has witnessed. Ibn Khaldoun's view on the order of creation begins with the emergence of material elements, starting from earth, water, fire, and air. Through the transformations and interactions of these elements, minerals, plants, animals, and eventually humans gradually formed in a well-organized manner.(20 نوسف 2008 ، عن 2008 ،

Based on this evolutionary perspective, Ibn Khaldoun distinguishes several levels of the human soul. In the first level, the soul is closely tied to the body and relies on sensory powers, imagination, memory, and the recollection of sensations to interact with the external world. In the second level, the soul can detach itself from the world of sensations to move towards the realm of intellectual thought. In the third level, the soul is capable of abandoning everything sensory and becoming purely intellectual or spiritual.

Ibn Khaldoun links these soul levels to various forms of sensory activity. The first level corresponds to the sensory activities that common people and even scholars engage in. The second level relates to the activities of priests and seers. The third level is reserved for prophets alone. (45 فاخر ، بدون سنة ، ص 45)

It's evident that Ibn Khaldoun focuses primarily on the cognitive domain, including sensation, perception, attention, imagination, memory, and thought, within his discussions of soul categories and levels. He also emphasizes the influence of environmental factors such as climate and living conditions on a person's physical and psychological attributes, as well as their relationships with others. (25 ص 2010، عشوي)

However, Ibn Khaldoun does not generalize this impact to the cognitive sphere. His attention to the cultural evolution of societies and its effects on individual cognitive development shows his commitment to scientific principles. He connects phenomena causally, adhering to principles of determinism. Ibn Khaldoun played a significant role in shifting perspectives on education and its positive role in the psychological growth of children and their preparation for the future. He advocated for educational and teaching methods, as well as defining the curriculum content to ensure that students comprehend the materials thoroughly. He highlighted the importance of education and the need for a well-thought-out scientific approach that aligns with modern theories.

Ibn Roushd subjected both normal and abnormal human behavior to scientific observation, enabling him to identify many of the factors that lead to various behavioral patterns. He directed harsh criticism at the prevailing views of his time regarding psychological disorders, which he found to be based on false beliefs rooted in superstition and magic. Consequently, he insisted on the necessity of abandoning the methods and approaches used to treat these disorders. (26 ص 2010،

Ibn Roushd advocated for the establishment of specialized centers dedicated to the care and treatment of mentally ill patients. He proposed

using medical drugs, rest, relaxation, and specific exercises as therapeutic interventions. On another note, Ibn Roushd subjected the achievements of physiological psychology to scientific analysis. This led him to assert that the retina, not the lens of the eye, is responsible for visual perception, challenging the prevailing belief of his era.

In light of these contributions, Ibn Roushd can be considered one of the Arab scholars whose works laid the foundation for scientific thinking in later centuries. (27 صدوی، 2010، صفوی)

# **Psychology definition:**

- The importance of psychology
- Objectives of Scientific Research in Psychology
- Fields of Psychology
- Research Methods in Psychology
- Psychological Theories

#### **Definition:**

#### 1 Psychology definition:

The term "Psychology" in English comes from the Greek word "Psyche," which means soul or life, and the second part, "logy," signifies a systematic and scientific discipline. Scientists attribute the origin of the term "Psychology" in English to two different sources: philosophy and physiology. The word "Psychological," in the 16th century, meant "the science that deals with the study of the soul or the study of the mind." It distinguished itself from the study of the body. The usage of this term increased, especially during the 18th century. (2007 عبد الرحمان، محي الدين، 2007)

The aim of psychology is to understand, interpret, predict, regulate, and control behavior.

Psychology can be defined as the science that studies the functioning of the mind, cognitive processes, behaviors, and human experiences. It aims to understand how individuals perceive, think, feel, behave, and interact with their environment. (25 فاخر، دون سنة، ص

Psychology seeks to explore and explain a wide variety of domains, such as cognition, emotion, motivation, human development, mental disorders, learning processes, interpersonal relationships, personality, mental health, social psychology, clinical psychology, and many others.

It uses scientific research methods, including experiments, observational studies, surveys, and psychological tests, to gather

objective data and draw valid conclusions about human behavior and mental processes. (25 ص 2004، على، على)

Psychology has practical applications in various fields, such as mental health, education, counseling, human resources, personal development, sports, advertising, and decision-making, to name just a few. It plays a crucial role in understanding ourselves, others, and society, and contributes to improving the quality of life for individuals.

Psychology is the science that studies verbal and motor behavior, which is observable, objective external activity. It investigates mental cognitive activity as well as emotional affective activity, both of which are self-related (the cognitive and mental aspects). Any emotional activity may be accompanied by conflicts. (2010 ، عشوي)

Psychology studies what emanates from humans, whether it's overt or covert behavior. It explores how this behavior occurs and why it happens. Behavior, as a complex holistic activity, includes three aspects that can be distinguished within it:

<u>Cognitive Aspect</u>: We perceive various aspects and events in our surroundings and interact with specific symbols and meanings. This aspect involves perception, individual differences, development, imagination, thinking, memory, and symbolic linguistic expression. The cognitive aspect is the knowledge aspect of behavior.

<u>Motor Aspect</u>: This refers to the motor response to weak verbal instructions or cues (such as responding to a traffic signal by walking or stopping) and also includes activities like composing poetic verses, which involve understanding the meanings of words.

Affective Aspect of Behavior: This is the emotional state that accompanies behavior. Inclination towards a subject, enthusiasm for it, and attraction to it serve as motivators and stimulants for behavior. Additionally, feelings of comfort or discomfort towards the subject of behavior affect the judgment of behavior or the cessation of its response.

The structure of behavior thus includes three aspects: cognitive, motor, and affective. These three aspects form an integrated unit. One of the most important characteristics of behavior is that it is a dynamic process, meaning it can be adjusted, interpreted, and adapted based on external influences or the consequences perceived from that behavior. (مریم، علي، 2004)

Therefore, from what has been mentioned, it becomes clear that psychologists are concerned with studying various types of human activities or behaviors, such as perception, motives, emotional responses, maturity, learning, reflection, forgetfulness, representation, thinking, personality, individual differences, and more. In other words, psychology is concerned with the study of all types of human behavior in various stages of human life, classifying the general laws and principles that govern this behavior and guide it. It organizes these laws, principles, and facts into an integrated cognitive system. Thus, if we were to formulate a definition for psychology, we would say it is the scientific study of human behavior, where behavior encompasses all types of human activity that result from their interaction with the environment or specific circumstances. Therefore, psychology aims to adjust, develop, and improve these circumstances to align with the requirements of human life. Behavior, then, is a complex, dynamic activity that can be examined from multiple perspectives.

Sigmund Freud definition of Psychology: known as Psychoanalysis, he is considered one of the major theoretical systems in psychology. Freud was an Austrian psychologist who lived in the 20th century and is the founder of this theoretical approach. When we talk about psychology according to Freud, we refer to his theory and fundamental concepts regarding the human mind and behavior. Here is a general definition of psychology according to Freud,

Psychology according to Freud is a theor- etical system that focuses on understanding the human mind and the psychological processes that occur within the human mind. It is influenced by unconscious experiences and deep psychological factors that affect behavior and thinking. Freud's theory evolved through concepts such as consciousness and the unconscious, the psyche's structure, defense mechanisms, transference, and analysis. Freud worked developing on psychotherapeutic methods known as psychoanalysis, which aim to uncover and understand the unconscious factors that influence behavior and emotions.(68 ص 2004، علي، 2004

In general, psychology according to Freud is a profound study of the human mind and the psychological factors that shape personality and influence behavior. It emphasizes understanding internal conflicts and shifts in consciousness and the unconscious and how they impact psychological life and behavior.

# 2 The importance of psychology

Psychology is of great importance in several fields and aspects. Here are some of it's signifiances:

- Understanding human behavior: Psychology helps in understanding the human mind and behavior. It assists in interpreting why individuals behave in certain ways and what influences their behavior, allowing for the design of more effective systems and methods of interaction with others.
- Improving mental health: Psychology contributes to enhancing individuals' mental health. It provides tools and techniques for dealing with psychological, emotional, and social challenges, promoting psychological balance and general well-being.
- Developing human relationships: Psychology can help enhance individuals' understanding of each other and improve human relationships. By understanding the factors that influence social interactions and behavioral tendencies, individuals can improve communication and build healthier relationships based on cooperation.
- Education and training: Psychology is used in the field of education and training to improve teaching methods and develop effective learning strategies. It helps in understanding how knowledge is acquired, developing skills, and improving the performance of students and learners.

- Societal and institutional development: Psychology can contribute to the development of society and institutions by understanding human behavior and improving work environments and organization. The principles of psychology can be used to enhance leadership, team organization, and promote collaboration and creativity. (45 ص ، 2006 عبد الرحمان)
- Public health and healthcare: Psychology can contribute to improving healthcare and public health. It is used to understand the psychological factors that impact physical and mental health, develop awareness and health education programs, and improve health-related behaviors and attitudes towards treatment and prevention. (46 ص ، 2006 عبد الرحمان)

In summary, importance of psychology involve understanding and interpreting behavioral phenomena, regulating and controlling behavior, and making predictions based on a comprehensive understanding of the causes and influences. By achieving these goals, psychology contributes to our understanding of human behavior and facilitates interventions to promote well-being and success.

- Understanding Human Behavior: One of the primary goals of psychology is to understand the foundations and factors that influence human behavior. Psychology seeks to explain and understand the causes and motivators of human behavior, whether it is observable or internal.
- Study of the Mind and Mental Processes: Psychology is concerned with studying the human mind and its mental processes, such as thinking, memory, perception, language, and learning. It aims to understand how information is processed in the mind and how it impacts human behavior and experience.

- Development of Theories and Concepts: Psychology aims to develop theories and concepts that explain and elucidate the nature of the human mind and behavior. Scientists in this field work on building models and theories that help clarify and predict human behavior and enhance understanding.
- Enhancing Psychological Well-being and General Wellness: Psychology is concerned with improving mental health and general well-being for individuals and communities. It works towards improving the quality of psychological life and overall welfare through the application of psychological principles and practices

# 1 Objectives of Scientific Research in Psychology

The objectives of psychological research include describing, explaining, predicting, and controlling behavior. Psychologists aim to gain knowledge about behavior and mental functions, and they are dedicated to theory building and problem-solving applications. Additionally, the objectives of psychological research involve maintaining objectivity, minimizing research bias, and using the principles and practices of scientific methods. Furthermore, in the context of clinical psychology, the objectives include developing an optimum standard of clinical practice, research, and professional training. These objectives are aimed at broadening the scope of clinical psychology and contributing to the overall well-being of individuals.

(https://profilelogin.admissione.online/UploadFiles/Documents/ProfileLg oin/Subtitle/NColge\_1372\_Research%20Methods%20in%20Psychology.pdf)

. **Description**: This answers the question, "What?" It involves creating a coherent framework of facts and information about the researched phenomenon, identifying its dimensions and indicative behaviors. Description relies on direct observation whenever possible and indirect observation through surveys and interviews to gather data on prior experiences or special circumstances that cannot be covered through direct observation.

The first step in understanding anything is to give it a name. Description involves observing a behaviour and noting everything about it, as for example, what is happening, where it happens, to whom it happens, and under what circumstances it happens. For example, a teacher might notice that a young girl in second grade classroom is not behaving properly. She's not turning in her homework, her grades are slipping badly, and she seems to have a very negative attitude toward school. The teacher here describes the student's behaviour, and this description of what she is doing gives a starting place for the next goal: why is she doing it?

(https://profilelogin.admissione.online/UploadFiles/Documents/ProfileLg oin/Subtitle/NColge\_1372\_Research%20Methods%20in%20Psychology.pdf)

. **Explanation**: This answers the question, "Why?" Explanation is an attempt to understand the researched phenomenon, why it exists in a particular way with specific characteristics. Researchers explain the phenomenon by formulating hypotheses and testing them. A hypothesis is an initial attempt to explain the phenomenon or a proposed answer to the question of "Why?" Explanation may investigate either the correlational relationship between the researched phenomenon and other phenomena or the causal relationship between them. (27 ص 2007).

To find out why the girl is not behaving properly, the teacher would most likely ask the school counselor to administer some tests. Her parents might be asked to take her to a pediatrician to make sure that there is no physical illness, such as an allergy. They might also take here to a psychologist to be assessed. In other words, the teacher and others are looking for an explanation for the young girl's behaviour. Finding explanation for behaviour is a very important step in the process of

forming theories of behaviour. A theory is a general explanation of a set of observations or facts. 1 3 The goal of description provides the observations, and the goal of explanation helps to build the theory. If all the tests seem to indicate that the young girl has a learning problem, such as dyslexia (an inability to read at expected levels for a particular age and degree of intelligence), the next step would be trying to predict what is likely to happen if the situation stays the same.

(https://profilelogin.admissione.online/UploadFiles/Documents/ProfileLg oin/Subtitle/NColge\_1372\_Research%20Methods%20in%20Psychology.pdf)

. **Prediction**: This answers the question, "When?" Prediction is the ability to anticipate the behavior of the researched phenomenon in other similar situations to those in which it originally occurred. Prediction in the natural sciences is more precise than in the social sciences. ( عشوي ، 2010)

Determining what will happen in the future is a prediction. In the example, the psychologist or counselor would predict (based on previous research into similar situations), that this little girl will probably continue to do poorly in her schoolwork and may never to be able to reach her full learning potential. Clearly, something needs to be done to change this prediction, and that is the point of the last of the four goals of psychology: changing or modifying behaviour.

(https://profilelogin.admissione.online/UploadFiles/Documents/ProfileLg oin/Subtitle/NColge\_1372\_Research%20Methods%20in%20Psychology.pdf)

. Control: This answers the question, "How can we benefit from the researched phenomenon?" Control is the application of research findings and the resulting information to specific behavioral situations, ensuring the modification of behavior in the direction desired by the researcher. Human sciences appear to lag somewhat behind their natural science counterparts in terms of practical applications and the improvement of services provided to humans. ( ¿2010 ، عشوي)

Control, or the modification of some behaviour, has been somewhat controversial in the past. Some people hear the word control and think it is brainwashing, but that is not the focus of this goal. The goal is to change a behaviour from an undesirable one (such as failing in school) to a desirable one (such as academic success). Such efforts also include attempts at improving the quality of life. In the example of the young girl, there are certain learning strategies that can be used to help a child (or an adult) who has dyslexia. She can be helped to improve her reading skills.(Aylward etal,2003;Shaywitz,1996). The psychologist and educators would work together to find a training strategy that works best for this particular girl.

(https://profilelogin.admissione.online/UploadFiles/Documents/ProfileLg oin/Subtitle/NColge\_1372\_Research%20Methods%20in%20Psychology.pdf)

Application: Improving the quality of life Psychological research are often conducted to solve various problems faced by the society at different levels such as individual, organisation, or community.
Psychological applications to solve problems in diverse settings, such as

in a classroom in a school, or in an industry, or in a hospital, or even in a military establishment, demand professional help. Applications in the health sector are remarkable. Because of these efforts quality of life becomes a major concern for psychologists. Not all psychological investigations will try to meet all five of these goals. In some cases, the main focus might be on description and prediction, as it would be for a personality theorist who wants to know what people are like (description) and what they might do in certain situation (prediction). Some psychologists are interested in both description and explanation, as is the case with experimental psychologists who design research to find explanations for observed (described) behaviour. Therapists, of course, would be more interested in control, although the other four goals would be important in getting to that goal.

# 2 Fields of Psychology:

Psychology has diversified with the development of other sciences. It has given rise to several branches, including theoretical and applied fields. The theoretical branches specialize in studying the laws governing behavior and formulating principles to explain behavior based on these laws. On the other hand, the applied branches aim to use these principles and apply the laws discovered by psychologists to improve the quality of life and solve societal problems. This division is somewhat arbitrary, as psychologists may often be interested in both theoretical and applied aspects simultaneously, and the boundary between them is not always well-defined. Therefore, the fields of psychology include.

#### 1- Theoretical Fields:

#### Physiological Psychology:

- Focuses on studying the physiological foundations of behavior. Investigates the relationship between biological processes and behavior.
- Examines the correlation between psychological variables and organic variables.
- Studies the impact of drugs on the organic functions of the nervous system and the physical, sensory, and mental changes.
- Explores the connections between the brain, behavior, and the functions of other organs and glands affecting behavior.

- Investigates the influence of hormones, electrical stimuli, and chemicals on behavior.

#### **Animal Psychology:**

Animal psychology, also known as comparative psychology, is the scientific study of the behavior and mental processes of non-human animals, especially as these relate to human behavior and cognition.

Animal psychologists investigate various aspects of animal behavior, such as interactions with competitors, predators, prey, and the environment, as well as their relationships with humans and human development.

Here are some examples of how animal psychology is studied and applied:

**Animal behavior and psychology**: Animal psychologists conduct academic research to investigate how animals interact with one another, their environment, and humans. They often work in zoos, nature reserves, and animal parks to observe and promote animal welfare.( https://ischoolconnect.com/blog/animal-behavior-and-psychology/)

Comparative psychology: This field studies the similarities and differences between human and animal behavior, cognition, and emotional processes. Researchers use various methods, such as experimental studies and observational research, to understand the evolutionary origins of human behavior and cognition.

**Animal cognition**: Animal cognition researchers study the cognitive abilities of animals, such as attention, categorization, concept formation, memory, spatial cognition, and time estimation. These studies often

involve experiments that demonstrate animals' abilities to solve problems, use tools, and exhibit self-awareness.

**Animal welfare**: Animal psychology plays a crucial role in promoting animal welfare by understanding their emotional and social needs. Zoos and animal parks often implement findings from animal psychology to provide enrichment programs, such as toys and problem-solving puzzles, to improve animal well-being.

(https://www.environmentalscience.org/career/animal-psychologist)

**Animal-assisted therapy**: Animal-assisted therapy involves using animals, such as dogs and horses, to help treat various mental health disorders. This approach is based on the understanding of animal behavior and human-animal interactions.

- Includes the study of all living organisms, including humans.
- Psychologists use animals, particularly primates, birds, and rodents, in their research.
- Animal experimentation is essential for studying the effects of drugs on the brain or for removing specific brain parts to determine their functions.
- Research involving animals can provide insights applicable to humans.

In summary, animal psychology is a multifaceted field that studies the behavior and mental processes of non-human animals, with a focus on understanding human behavior and cognition. The insights gained from animal psychology research can be applied in various areas, such as animal welfare, animal-assisted therapy, and the development of treatments for human mental health disorders.

(https://en.wikipedia.org/wiki/Comparative\_psychology)

### **Personality psychology:**

Personality psychology is a branch of psychology that focuses on understanding individual differences in patterns of thinking, feeling, and behaving. It encompasses the study of enduring characteristics that make up a person's unique personality, including major traits, interests, drives, values, self-concept, abilities, and emotional patterns.

The field aims to describe what personality is, document how personalities develop, explain the mental processes of personality, and provide a framework for understanding individuals.

Various theories and approaches exist to explain the structure and development of personality, emphasizing enduring and stable individual differences.

Personality psychology is an essential area of study within psychology, shedding light on the factors that shape an individual's behavior and experiences. (https://www.apa.org/topics/personality)

- studies the methods of categorizing individuals into categories based on their personality traits.
- through which laws and principles of behavior are formulated. It also examines the factors that influence and shape personality traits (عبد الرحمان، محى الدين، 2007، ص 33)

#### **Comparative Psychology:**

Comparative psychology is the scientific study of the similarities and differences in behavioral organization among living beings, from bacteria to plants to humans.

It aims to understand the phylogenetic history, adaptive significance, and development of behavior by comparing the behavior and mental processes of non-human animals, especially as they relate to human behavior and cognition.

The comparative method involves comparing the similarities and differences among species to gain an understanding of evolutionary relationships. (https://www.verywellmind.com/what-is-comparative-psychology-2795056)

Here are some key aspects of comparative psychology:

**Cross-species comparisons**: Comparative psychology includes comparisons between different biological and socio-cultural groups, such as species, sexes, developmental stages, ages, and ethnicities

Research in this area addresses many different issues, uses various methods, and explores the behavior of many different species from insects to primates.

**Animal models**: Studying other species can help researchers understand human behavior, cognition, and emotional processes. For example, the behavior of animals can be used as a model to study human behavior, such as learning, memory, and social interactions.

**Animal training**: Comparative psychology has applications in animal training, where an understanding of animal behavior can help trainers develop effective techniques for various species.

**Medicine and ecology**: Comparative psychology has important applications in fields such as medicine, ecology, and animal training, as it helps researchers understand the adaptive significance of animal behaviors and the evolutionary relationships among species.

**Lloyd Morgan's canon** One of the main principles in comparative psychology is Lloyd Morgan's canon, which states that researchers should not ascribe human attributes and motivations to animals unless there is evidence for them. This principle helps prevent anthropomorphization and ensures that researchers focus on the unique characteristics of each species. (https://www.britannica.com/science/comparative-psychology)

In summary, comparative psychology is a multidisciplinary field that studies the similarities and differences in behavioral organization among living beings, with a focus on understanding human behavior and cognition in the context of evolutionary relationships and adaptive significance.

By comparing the behavior of various species, researchers can gain insights into human behavior, cognition, and emotional processes, and apply these insights to various fields, such as medicine, ecology, and animal training.

- Aims to compare behavior across different species.
- Compares human behavior to the behavior of other animals.
- Examines differences and similarities in behavior across various life stages, between different cultures, and among different social groups.

# **Differential Psychology:**

- Focuses on differences between individuals, groups, and populations.
- Studies differences in behavior, intelligence, aptitude, and personality.
- Investigates the causes of these differences, including genetic and environmental factors.

- Utilizes various psychological tests for analysis.

**Social Psychology**: This branch studies the individual's relationship with the community and the upbringing conditions imposed by this community.

- examines the extent of the cultural influence of the social system and its values on the individual, their attitudes, and inclinations.
- focuses on studying the mutual interaction between the individual and the community in all social situations.
- encompasses the study of public opinion, international relations, and the varying differences among individuals based on social classes.
- Examines the effects of groups on individual behavior.
- Studies individual behavior in social contexts and how group dynamics affect individual actions.
- Investigates socialization processes and methods of social control.
- Analyzes public opinion, media, and conflicts arising from conflicting interests.(35 ص 2007، عبد الرحمان، محى الدين، 2007)

#### **Environnemental Psychology:**

- Focuses on studying the impact of the environment on behavior.
- Examines problems related to noise, pollution, water, air, and soil.
- Concerned with issues like overcrowding and ideal design for work and living spaces.

#### **Developmental Psychology:**

- focuses on studying human behavior throughout different stages of life and the factors that influence the process of growth.

- addresses the developmental stages from childhood to adolescence, youth, adulthood, and the developmental characteristics of each stage.
- also examines the variations in developmental aspects among individuals at different stages and how individuals acquire various skills and experiences through exposure to different situations.

## **Neuropsychology**:

Neuropsychology is a branch of psychology that focuses on the study of brain-behavior relationships, particularly as they can be applied to the diagnosis of brain disorders, assessment of cognitive and behavioral functioning, and the design of effective treatments. It is concerned with understanding how a person's cognition and behavior are related to the brain and the rest of the nervous system.

Neuropsychologists are experts in how brain injuries and conditions affect behavior, mood, and thinking skills, and they perform neuropsychological evaluations to assess how the brain and mind are functioning.

This field is both an experimental and clinical area of psychology, aiming to understand how behavior and cognition are influenced by brain function. Clinical neuropsychologists often work in research settings, clinical settings, or forensic settings, and they assess and treat patients with neuropsychological problems.

(https://my.clevelandclinic.org/health/articles/24691-neuropsychologist)

- studies the interaction between mental processes, neural balance, and brain activity.

 uses modern techniques such as magnetic resonance imaging to understand how the brain functions and its impact on behavior and mental processes.

### **Educational Psychology:**

Educational psychology is a branch of psychology that focuses on the study of learning processes and how people learn, including teaching methods, instructional processes, and individual differences in learning.

It involves the application of psychological principles and research methods to improve teaching, learning, and the overall educational experience. (https://www.apa.org/education-career/guide/subfields/teaching-learning)

### Some key aspects of educational psychology include:

Cognitive and behavioral perspectives: Educational psychology studies learning processes from both cognitive and behavioral perspectives, allowing researchers to understand individual differences in intelligence, cognitive development, affect, motivation, self-regulation, and self-concept, as well as their role in learning.

**Theories and approaches**: The field of educational psychology is informed by various theories, such as operant conditioning, functionalism, structuralism, constructivism, humanistic psychology, Gestalt psychology, and information processing.

**Quantitative methods**: Educational psychology relies heavily on quantitative methods, including testing and measurement, to enhance educational activities related to instructional design, classroom management, and assessment, which serve to facilitate learning processes in various educational settings across the lifespan.

Relationship with other disciplines: Educational psychology is influenced by and connected to other disciplines, such as psychology of the development, which focuses on the growth and development of children and adolescents.

**Applications**: Educational psychologists apply their knowledge and skills to various settings, including schools, universities, and other educational institutions, to help improve teaching methods, curriculum development, and student outcomes.

(https://www.verywellmind.com/what-is-educational-psychology-2795157)

In summary, educational psychology is a multifaceted field that studies learning processes and the factors that influence learning and teaching. It applies psychological principles and research methods to improve educational experiences and outcomes, drawing on various theories and approaches to understand and enhance learning processes.

- focuses on studying the mental and behavioral processes associated with learning and education. It seeks to understand how to improve the learning process and develop teaching methods and strategies.
- These are just some of the main branches of psychology, and there are also sub-branches and other specializations ( 2010 ، عشوي ، 39 )

## 2- Applied Fields:

## **Clinical Psychology:**

Applies psychological findings and principles to diagnose and treat behavioral, emotional, and psychological disorders and mental illnesses. Clinical psychology is a branch of psychology that focuses on the diagnosis, treatment, and prevention of mental health disorders. The objectives of clinical psychology include:

Developing an optimum standard of clinical practice: Clinical psychologists aim to improve the quality of clinical services and enhance the well-being of individuals receiving treatment

Training and professional development: Clinical psychology programs emphasize the integration of science and practice, training students to become competent and effective professionals.

(https://psychology.gsu.edu/clinical-program-goals-and-objectives/)

#### **Consuling Psychology:**

Aims to assist individuals facing less severe emotional and psychological issues, helping them to cope with challenges in various life areas such as work, education, marriage, and personal relationships.

Counseling psychology is a specialty within professional psychology that focuses on using psychological principles to enhance and promote the well-being of individuals. It addresses a wide range of emotional, social, work, school, and physical health concerns that people may have at different stages in their lives. Counseling psychologists work with individuals, couples, families, groups, organizations, and communities to improve patient function and well-being by addressing maladjustment, crises, and distress-related issues. They utilize a variety of techniques, including individual, family, and group counseling, psychotherapy, crisis intervention, disaster and trauma management, as well as assessment techniques for the diagnosis of psychological disorders. Counseling

psychology also emphasizes normative developmental and mental health issues, with a particular focus on prevention, education, and work and career issues. (https://www.apa.org/ed/graduate/specialize/counseling)

### **Educational Psychology:**

- Examines the educational process using insights from developmental and clinical psychology.
- Addresses issues related to teaching, learning, motivation, and assessment.
- Develops strategies to improve the quality of education and address classroom challenges.

Educational psychology is a field within psychology that focuses on the study of how people learn, including teaching methods, instructional processes, and individual differences in learning. Educational psychologists study learners and learning contexts within and beyond traditional classrooms, and evaluate ways in which factors such as age, culture, gender, and physical and social environments influence human learning. They apply theories of human development to understand individual learning and leverage educational theory and practice based on the latest research related to human cognitive and social aspects of learning. Educational psychology also influences programs, curricula, lesson development, and classroom management approaches. The field involves the study of memory, conceptual processes, and individual differences in learning, drawing from and contributing to cognitive science and learning theory. (https://www.apa.org/educationcareer/guide/subfields/teaching-learning)

## **Industrial Psychology**:

Use psychological principles to enhance worker productivity, job satisfaction, and the effectiveness of organizations. عبد الرحمان، محي الدين ) (37 ص 2007

Industrial psychology, also known as industrial-organizational (I-O) psychology, is a field that applies psychological principles and theories to organizations and the workplace. It focuses on scientifically-based solutions to human problems in work and other organizational settings. The goals of industrial psychology are to better understand and optimize the effectiveness, health, and well-being of both individuals and organizations. Industrial psychologists conduct research on employee attitudes, behaviors, emotions, motivation, and stress, and apply their findings to address issues such as recruitment, selection, training, performance measurement, workplace motivation, and organizational development. The field uses a range of scientific methods, including quantitative and qualitative research, and is concerned with improving the quality of work life and the structure of work and human factors in organizations. (https://www.apa.org/ed/graduate/specialize/industrial)

## **Criminal Psychology:**

Applies psychological insights to the field of criminal behavior, including understanding the motivations behind criminal acts, rehabilitation, and the prevention of criminal behavior.

Criminal psychology, also known as criminological psychology, is the study of the views, thoughts, intentions, actions, and reactions of criminals and suspects, aiming to understand and comprehend the mind of criminals

It is a subfield of psychology that focuses on understanding the psychological aspects of criminal behavior and the factors that influence it.

Criminal psychologists work closely with law enforcement agencies and play a crucial role in various aspects of the criminal justice system.

## Some key aspects of criminal psychology include:

**Understanding criminal behavior:** Criminal psychologists study the motivation behind why a crime was committed, as well as the factors that contribute to criminal behavior, such as mental health issues, social influences, and environmental conditions.

**Crime prevention**: They help develop programs and strategies to prevent crime by identifying potential offenders and understanding the factors that contribute to criminal behavior.

(https://www.studysmarter.co.uk/explanations/psychology/social-context-of-behaviour/criminal-psychology/)

Assessing and treating mental health issues: Criminal psychologists work with offenders who may struggle with various mental health issues, aiming to address the immediate mental illness issues and reduce the likelihood of reoffending.

**Legal proceedings**: They provide expert testimony in legal cases, helping the court understand the psychological aspects of criminal behavior and the defendant's mental state during the commission of the crime.

**Forensic psychology**: Criminal psychology is closely related to forensic psychology, which applies psychological principles and research methods

to the legal arena, such as profiling criminals, predicting criminal behavior, and assessing the effectiveness of interventions.

In summary, criminal psychology is a subfield of psychology that focuses on understanding the psychological aspects of criminal behavior and the factors that influence it. Criminal psychologists work closely with law enforcement agencies and play a crucial role in various aspects of the criminal justice system, such as understanding criminal motivation, assessing and treating mental health issues, and providing expert testimony in legal cases. (https://www.apu.apus.edu/area-of-study/public-safety/resources/what-is-a-criminal-psychologist/)

### Military Psychology:

Focuses on applying psychological principles to enhance the performance and well-being of military personnel and to address psychological aspects of warfare and conflict. (40 ص 2010، عشوي)

Military psychology is a specialization within psychology that applies psychological science to promote the readiness of military members, organizations, and operations

. It covers a wide range of fields throughout the military, including operational, tactical, and occupational psychology. Psychologists play a critical role in assisting military leaders in designing appropriate programs and providing support to military members as they navigate the challenges of military training and their new roles

## Some key aspects of military psychology include:

Direct clinical care: Military psychologists provide mental health services to military personnel and their families Consultation to military commanders: Psychologists offer guidance and support to military leaders in managing their teams and addressing psychological challenges

Teaching and training: Military psychologists contribute to the development and implementation of training programs that help military members develop necessary skills and cope with stress

Research: Military psychologists conduct research relevant to military problems, such as understanding the impact of combat exposure on mental health and developing effective interventions

The Society for Military Psychology is the premier organization for the advancement of the psychological study of military, national defense, and national security organizations.

It encourages research and the application of psychological research to military problems, and its members serve diverse functions in settings such as research activities, management, providing mental health services, teaching, consulting, work with Congressional committees, and advising senior military commands.

(https://www.militarypsych.org/)

## **Environmental Psychology:**

- Investigates how the environment affects behavior, such as the impact of noise pollution on health and the design of spaces to improve well-being.
- These fields illustrate the diverse and comprehensive nature of psychology, encompassing theoretical and practical applications that contribute to our understanding of human behavior and well-being. (40 ص 2010، عشوي)

Environmental psychology is a multidisciplinary field that examines the relationship between humans and their surroundings. It encompasses the study of how the physical environment affects individuals, as well as how human behavior impacts the environment. This subfield of psychology is relatively new but has far-reaching implications, particularly in the context of climate change and sustainability. Environmental psychologists work in various settings, including nonprofit organizations, government agencies, businesses, and nongovernmental organizations, and their research contributes to shaping norms and policies related to the environment.

(https://online.sunderland.ac.uk/what-is-environmental-psychology/

. The Journal of Environmental Psychology is a premier publication in this field, covering a wide range of interdisciplinary work from scholars

# **Lecture 8**

## 3 -research topics in psychology:

There are many topics that researchers in the field of psychology, and the selection of the topic depends on their interests and research goals. Here are some common topics in psychology:

- The Impact of Parenting on Child Development: Studying how parenting factors affect the growth and development of children, including their impact on behavior and mentality.
- Mental Health and Psychopathology: Researching the causes and treatments of psychological disorders such as depression and anxiety disorders.
- Developmental Psychology: Understanding the development of behavior and mentality across the lifespan from childhood to old age.
- Cognition and Mental Processes: Studying mental processes such as thinking, memory, and decision-making.
- Social Interactions: Investigating how social factors influence individual behavior and relationships between people.
- Emotions and Mood: Understanding the formation of emotions and their impact on behavior and thinking.
- Personality and Personal Development: Studying individual personality traits and how they develop over time.
- Family Relationships and Marriage: Researching dynamics in family relationships, marriage, and their impact on happiness and well-being.

- Neuroscience and Brain Science: Studying brain function and how it affects behavior and mental processes. (65 ص 1990، ص )
- Educational Psychology: Researching learning processes, developing educational programs, and evaluating educational performance.
- Mental Health and psychological health: Studying the psychological factors affecting physical health and developing methods to promote mental and physical health.
- Industrial and Organizational Psychology: Studying individual behavior in the workplace, improving performance, and managing teams.
- Forensic Psychology: Investigating the assessment of individuals and psychological testimonies in legal cases.
- Environmental Psychology: Studying the impact of the environment and location on human behavior.
- Sports Psychology: Researching the psychological effects on sports performance and developing training strategies.
- (عبد الحليم، 1990، ص 66)

These are just a sample of the topics that researchers can choose in the field of psychology. These topics can be further specialized and detailed according to the researcher's interests and research objectives.

# Lecture 9

## 4 Research Methods in Psychology:

There are several research methods in psychology, including:

## - Experimental Method:

The experimental method is the most precise method in psychology in terms of the results obtained. It offers researchers several important advantages. Firstly, it allows for the control of variables during research and the observation of the impact on the subjects under experimentation. For example, it can involve changing aspects of sound, light, or behaviors experienced by humans or animals in the experimental setting. This method also allows researchers to repeat experiments as often as needed, with different approaches. However, researchers may encounter some challenges when applying this method in scientific research, such as the inability to conduct experiments on humans when there is a risk, or the inability to create artificial conditions that perfectly replicate natural conditions. These factors need to be considered when presenting experiment results. (33 ص ب2006 عبد الرحمان)

## . Lab Experiment

A laboratory experiment in psychology is a research method in which the experimenter manipulates one or more independent variables and measures the effects on the dependent variable under controlled conditions.

A laboratory experiment is conducted under highly controlled conditions (not necessarily a laboratory) where accurate measurements are possible. The researcher uses a standardized procedure to determine where the experiment will take place, at what time, with which participants, and in what circumstances.

Participants are randomly allocated to each independent variable group.

## 2. Field Experiment

A field experiment is a research method in psychology that takes place in a natural, real-world setting. It is similar to a laboratory experiment in that the experimenter manipulates one or more independent variables and measures the effects on the dependent variable.

However, in a field experiment, the participants are unaware they are being studied, and the experimenter has less control over the extraneous variables.

Field experiments are often used to study social phenomena, such as altruism, obedience, and persuasion. They are also used to test the effectiveness of interventions in real-world settings, such as educational programs and public health campaigns.

## 3. Natural Experiment

A natural experiment in psychology is a research method in which the experimenter observes the effects of a naturally occurring event or situation on the dependent variable without manipulating any variables.

Natural experiments are conducted in the day (i.e., real life) environment of the participants, but here, the experimenter has no control over the independent variable as it occurs naturally in real life. Natural experiments are often used to study psychological phenomena that would be difficult or unethical to study in a laboratory setting, such as the effects of natural disasters, policy changes, or social movements.

(https://www.simplypsychology.org/experimental-method.html)

### - descriptive Method:

This method differs from the experimental method by providing the researcher with a larger scope of testing that cannot be achieved in the experimental method. Observation and experimentation in this method occur entirely within natural conditions. In this method, the researcher places the individual under study under observation for a period of time, which can vary depending on the nature of the research. Longitudinal studies in developmental psychology, for example, may be relatively long to track changes in children. Multiple researchers can conduct observations to avoid bias. Additionally, researchers can present sets of questions and surveys for the individuals under study to answer.

The descriptive method in psychology is a research approach used to gather information and describe specific aspects of human behavior and psychological phenomena. It focuses on the who, what, and where of human behavior, rather than the why or how it happens. There are three main types of descriptive research methods used in psychology: case studies, naturalistic observation, and surveys.

Case studies: These provide detailed information about a single person or a small group of people, often exploring their thoughts, feelings, and behaviors in depth.

**Naturalistic observation**: This method involves observing and recording the behavior of people or animals in their natural environment, without manipulating any variables or conditions

**Surveys**: Surveys are a popular tool for collecting data from a sample of individuals, focusing on their thoughts, feelings, or behaviors. They can be conducted in various formats, such as in-person interviews, phone interviews, or online surveys.

Descriptive research is often conducted in natural settings and can be the precursor to other types of research, such as experimental or correlational studies. It is used to define certain behaviors or traits that are observed and can provide a relatively complete understanding of what is happening in a given group of people.

(https://open.lib.umn.edu/intropsyc/chapter/2-2-psychologists-use-descriptive-correlational-and-experimental-research-designs-to-understand-behavior/)

#### - Clinical Method:

This method is closely related to the entire field of clinical psychology. It is used to study cases that regularly visit psychological clinics. The researcher collects detailed information about the individual, either through direct questions or psychological tests. The problem is then diagnosed by studying the collected data. However, this method has drawbacks, such as subjectivity and a lack of information about the case, leading to occasional inaccuracies. Nevertheless, these drawbacks can be mitigated during the work .(35 ص 2006) من أوكان من المحافية والمحافية وال

With the advancement of psychology and its fields through topics and research tools used, more precise methodologies have emerged. There are several different research methodologies and approaches that can be used in psychology. The clinical method is an orderly process or sequence of actions that doctors have developed to generate their knowledge since the beginning of the scientific era. It is the scientific method applied to clinical practice, aiming to study and understand the health-disease process of a subject in all its social, biological, and psychological integrity

#### The clinical method can be analyzed as follows:

Studying and understanding the health and/or disease process: The clinical method involves the diagnostic process or diagnostic method, which is the method of explanatory scientific medicine

Biomedical and clinical explanatory medicine: The experimental method is the method of biomedical and clinical explanatory medicine, which is used to understand the health and disease process of a patient

Diagnostic process: The clinical method is often used as an equivalent of the clinical method, referring to the method of the diagnostic process

Clinical judgment: The clinical judgment of individual physicians is a component of the clinical method, and the health and well-being of patients are directly dependent on it

The clinical method is essential in medical education and practice, as it provides the foundation for understanding and managing health and disease processes. It is also used in various therapeutic contexts, such as psychology, where the clinical method represents the fundamental tool and protocol for obtaining information and addressing patient needs.

(https://homework.study.com/explanation/what-is-the-clinical-method-in-psychology.html)

Here are some common methodologies in psychological research:

#### - Correlational Methodology:

This methodology is used to study relationships between two or more variables without intervening in the resulting changes.

Correlation analysis is used to measure the strength and direction of relationships between variables.

### - Descriptive-Analytical Methodology:

This methodology aims to describe psychological phenomena and analyze them to better understand them.

Various methods such as case studies and content analysis can be used.

## - Survey Methodology:

This methodology involves collecting data from a broad sample of individuals using surveys or interviews.

It allows the study of trends, beliefs, and psychological feelings of individuals.

## - Theoretical Methodology:

This methodology relies on applying psychological theories and theoretical concepts to study psychological phenomena.

It requires a deep understanding of psychological theories and may involve the development of new theories. (67 ص 2005، ص)

## - Qualitative Methodology:

This methodology is used to understand psychological phenomena by focusing on qualitative and in-depth aspects such as thoughts, emotions, and experiences.

It includes the use of in-depth interviews, content analysis, and other relevant methods.

These are just an overview of some research methodologies in psychology. Researchers can choose the most suitable methodology based on the nature of the research topic and the objectives they aim to achieve.  $(68 \ \omega \ 2005)$ 

# Lecture 10

## 4 Psychological Theories:

Psychological theories are comprehensive frameworks or models that attempt to explain various aspects of human behavior, cognition, and emotion. These theories are developed based on empirical research and observations and serve as the foundation for understanding and studying psychological phenomena. There are numerous psychological theories that cover a wide range of topics within the field of psychology. Here are some well-known psychological theories:

- Psychoanalytic Theory (Sigmund Freud): Freud's theory assums that human behavior is driven by unconscious processes and conflicts. It is divided into three components: the id (instinctual desires), the ego (conscious self), and the superego (morality and conscience).
- Behaviorism (John B. Watson, B.F. Skinner): Behaviorism focuses on observable behaviors and how they are shaped through conditioning and reinforcement. It emphasizes the role of the environment in shaping behavior.(45 ص 1999، محد، 1999)
- Cognitive Theory (Jean Piaget): Piaget's theory focuses on cognitive development in children, describing how they develop through distinct stages of thinking, from infancy to adulthood.
- Humanistic Psychology (Abraham Maslow, Carl Rogers):
  Humanistic psychology emphasizes human potential, selfactualization, and personal growth. It suggests that people have
  inherent goodness and strive for personal fulfillment.

- Social Cognitive Theory (Albert Bandura): This theory emphasizes the interaction between personal, behavioral, and environmental factors in shaping human behavior. It introduces concepts like self-efficacy and observational learning.
- Biopsychosocial Model (George Engel): This model considers the biological, psychological, and social factors that influence a person's overall health and well-being. It is often used in the context of understanding physical and mental health. (1999 أحمد) (46 ص
- Attachment Theory (John Bowlby): Attachment theory explores the bonds and emotional connections formed between infants and their primary caregivers. It has implications for understanding relationships and emotional development throughout life.
- Trait Theory (Gordon Allport): Trait theory suggests that personality can be understood by identifying and measuring stable traits or characteristics that individuals possess. Traits are relatively consistent across different situations.
- Erikson's Psychosocial Development Theory (Erik Erikson): This theory describes eight stages of psychosocial development that individuals go through across their lifespan, each associated with specific challenges and crises.
- Social Identity Theory (Henri Tajfel): Social identity theory explores how individuals categorize themselves and others into social groups and how this impacts their behavior and attitudes. ) (63 ص 1990، مصد)

These are just a few examples of the many psychological theories that exist. Each theory provides a unique perspective and framework for understanding human behavior and mental processes, and they are often used to guide research, clinical practice, and the study of various aspects of psychology.

# **Psychology Schools:**

- Structuralism
- Functionalism
- Behaviorism
- Gestalt
- Psychoanalytic School
- Humanistic Psychology School
- Other Contemporary Trends

# Lecture 11

# **Psychology Schools**

## **Structuralism school:**

Initially, it didn't focus on mental illness, animal behavior, the unconscious, dreams, intelligence, personality, or childhood stages.

It was founded by "William Wundt" who is considered the father of modern psychology. Wundt was fascinated by studying the effects of a metronome (a pendulum device that can produce regular beats according to the researcher's timing). From his laboratory in Germany, he started systematically analyzing the structure of feelings in adults by dividing feelings into elementary components and exploring how these emotional experiences interact with each other. He was primarily a physiologist. He attempted to create a research system similar to chemistry and natural sciences. He arrived at introspection, which is the best way to analyze emotional experiences, i.e., the principle of "self-observation."

This type of study came to be known as structuralism. It was adopted in the United States by "Titchener," who had studied in Wundt's lab. ( عشوي ، 2010 ، عشوي )

## **Criticisms of introspection:**

- The process of introspection interrupts the process of feeling.
- Introspection causes a change in the emotional state.
- Researchers' results from introspection vary and are inconsistent.
- Introspection is not an objective process; it is subjective.

- Researchers cannot detect whether what the subject says is true or false.
- Language does not accurately convey thoughts.
- Individuals differ in their abilities to express their feelings.

In 1930, the scientific community rejected structuralism.

#### **Benefits of Structuralism:**

- It provided a strong scientific system and research in psychology.
- It introduced the method of introspection as a scientific approach.
- Structuralism is considered a scientific foundation that contributed to the emergence of other psychological schools.

## **Functionalism Schools**

Originated in the United States. Founded by "William James" who initially studied medicine. Authored a two-volume book titled "Principles of Psychology" in 1800. Had the ability to infer and construct psychological principles for complex problems.

- Functionalism was a reaction to structuralism, which was seen as narrowly focused, artificial, and meaningless.
- Introduced a new term: "stream of consciousness."
- Influenced by Darwin's idea that various instincts and all parts of the body can only exist because they serve a function for the survival of the organism, known as the principle of "an organ dies with its function."
- Argued that human consciousness must have a functional purpose, so why do we experience it?
- Proposed that consciousness evolved to guide the nervous system and regulate its activities. ( 42 ص 2010 ، عشوى )
- Those who followed functionalism were concerned with how thinking or behavior occurs.
- Emphasized "why" more than "what happens" or "what behavior" or "the incident of thought," which is the key difference between the two schools and the reason for expanding research.
- Stanley Hall, the first person to earn a Ph.D. in psychology, played a significant role in this school.
- Stanley founded the American Psychological Association.

- He was interested in psychological development during childhood and adolescence, and his research marked the beginning of developmental psychology.
- John Dewey, a functionalist psychologist, focused on problemsolving ability as a mental and emotional factor for human survival, leading to the emergence of educational psychology.
- The study of animal behavior in learning issues gave rise to the field of comparative psychology, viewed as a functional science.
- Industrial psychology also emerged.
- "Developmental psychology," "educational psychology,"
   "industrial psychology," and "comparative psychology" are all rooted in functionalism.
- The philosophy behind these sciences is that every behavior and every organ of the human body serves a function. ( 2010 ، عشوي ، 42 ص

# Lecture 12

## **Behaviorism School:**

Behaviorism is a school of psychology that focuses on the idea that all behaviors are learned through interaction with the environment

This learning theory states that behaviors are learned from the environment, and innate or inherited factors have very little influence on behavior

- . Behaviorism can be applied in the classroom through techniques such as positive reinforcement, negative reinforcement, and modeling to encourage desired behaviors and promote a positive learning environment
- . Behaviorism offers advantages like structured teaching methods, enhanced student engagement, and effective behavior management, which can contribute to a more conducive learning environment
- . However, critics argue that behaviorism focuses solely on external behavior and overlooks the influence of internal factors on behavior
- . Behaviorism started as a reaction against introspective psychology in the 19th century, which relied heavily on first-person accounts
- . J.B. Watson and B.F. Skinner rejected introspective methods as being subjective and unquantifiable

Behaviorism has made significant contributions by providing insights into language development, human learning, and moral and gender development, all of which can be explained by conditioning. (https://www.wgu.edu/blog/what-behavioral-learning-theory2005.html)

John Watson established a scientific system for psychology called Behaviorism. One of the most powerful and controversial schools of psychology.

Watson was initially a functionalist psychologist but believed there was a fundamental flaw in studying human psychology, which was the lack of an objective means to study feelings or conscious thought. He argued that there were no real differences between structuralism and functionalism as long as the approach lacked objectivity. ( '2010 'عشوي '2010 '2010')

Watson emphasized the need for a completely objective experimental psychology. He urged all psychologists to reject introspective methods and rely on what they could observe and record. Watson stressed the importance of observing environmental stimuli (e.g., loud noise, a gift from a friend) and the accompanying behavior (the response).

- Behaviorism is often known as "Stimulus-Response Psychology" (S-R Psychology) or "The Black Box Psychology".
- It claimed that most of our behavior is a product of our immediate environment.
- Behaviorists emphasized the need for precise definitions and controlled experiments.
- They were criticized for neglecting important aspects of behavior that couldn't be observed, such as emotions, thoughts, and unconscious processes.
- They were also criticized for denying feelings and thoughts.

- Behaviorists focused on experimental methods and viewed humans as passive creatures whose behavior was entirely determined by their environment. This denial of human agency was seen as dehumanizing. (36 ص 1999، من 1999)

## **Gestalt Psychology Schools:**

Gestalt psychology was a reaction against structuralism and originated in Germany. The term "Gestalt" means "total experience" or "whole form."

Gestalt psychology is associated with the emergence of motion pictures using projectors. The behaviorists had difficulty explaining the perception of still pictures as moving images when watching a film. They called this misperception the "phi phenomenon." ( $46 \, \omega \, 2010 \, \omega \, 2010 \, \omega$ )

The founders of the Gestalt school were Max Wertheimer and Köhler.

They argued that the phi phenomenon should not be reduced to simpler elements but should be seen as a genuine phenomenon. They believed that the whole experience is greater than the sum of its parts. For example, they argued that the color white results from the equal blending of three colors, red, green, and blue. They saw the experience of the color white as more significant than the individual colors. They believed that sensory experiences could be studied through the total experience, eliminating the need for trained observers. Gestalt psychology made significant contributions to the fields of perception and learning.

The Gestalt theory, also known as Gestalt psychology, is a psychological and philosophical theory developed in the early 20th century in Germany, aiming to explain how we perceive the world that surrounds us. (https://fr.wikipedia.org/wiki/Psychologie\_de\_la\_forme)

The theory is based on several key principles, including:

**Law of good form**: Our brain seeks to recognize simple and stable forms that are familiar to us. Our perception of elements is global, rather than focusing on numerous details. (https://www.ux-republic.com/theorie-de-gestalt-psychologie-de-forme/)

**Law of good continuity**: Points that are close together tend to represent forms when perceived, and we perceive them initially within a continuity. (https://blocnotes.iergo.fr/breve/motsetphrases/theorie-de-lagestalt/)

**Holism**: Gestalt psychology takes into account the entirety of the elements of a subject rather than focusing on individual parts. (https://www.ux-republic.com/theorie-de-gestalt-psychologie-de-forme/)

Gestalt theory has been influenced by ideas from Goethe and has evolved over time to become one of the main sources of the structuralist current in the mid-20th century

The methodological principles of Gestalt theory, such as holism and interest in the relationships between elementary units, are shared by other scientific currents, such as Saussurian linguistics and structuralism. (https://fr.wikipedia.org/wiki/Psychologie\_de\_la\_forme)

Gestalt theory has been applied to various fields, including user experience (UX) and design, where it is used to understand how people perceive and interact with the elements of a design For example, the law of good form can be used to create user-friendly interfaces and aesthetically pleasing, by avoiding presenting too many details or decorative elements that could disrupt the reading of the main content. (https://blocnotes.iergo.fr/breve/motsetphrases/theorie-de-la-gestalt/)

## Some real-world examples of Gestalt psychology in action include:

**Jigsaw Puzzles**: When people complete jigsaw puzzles, they don't focus on each piece individually but instead form meaningful relationships between the pieces to see the big picture more quickly and efficiently. (https://dovetail.com/ux/gestalt-principles/)

**Design**: Designers organize elements to create a whole. For instance, they can group words into text with careful consideration about spacing, so readers can easily recognize the main theme without focusing on each word separately. (https://dovetail.com/ux/gestalt-principles/)

Christmas Light Displays and Flipbook Animations: These are examples of Gestalt psychology at work. Even though the viewer is presented with many individual elements, such as flashing lights or static images, the brain perceives the "whole" - the moving animation or the complete light display. (https://www.superside.com/blog/gestalt-principles-of-design)

These examples demonstrate how the principles of Gestalt psychology, such as perceiving the whole instead of individual parts, are applied in various real-world contexts.

# Lecture 13

## **Psychoanalytic School:**

One of the most famous and influential schools of psychology. Founded by Sigmund Freud. It was not a reaction to behaviorism. It has its roots in neuroscience and medicine. Its goal was to understand and treat behavior.

Freud introduced the concept of the unconscious mind and compared it to an iceberg, with most of it submerged below the surface. ( عشوي ، 48 عشوي ، 2010)

Psychoanalysis is a school of psychology founded by Sigmund Freud in the late 19th century. It emphasizes the role of unconscious thoughts and feelings in shaping behavior and personality. Over time, several psychoanalytic schools have emerged, each with its own theoretical and clinical approach. These include the object relations school, ego psychology, self psychology, and relational psychoanalysis. The first training institute in America to educate non-medical psychoanalysts was The National, founded by the analyst Theodor Reik. Other psychoanalytic institutes may not be directly associated with universities. After World War I, with the expansion of psychoanalysis in the United Kingdom, the Society was reconstituted and named the British Psychoanalytical Society in 1919. Soon after, the Institute of Psychoanalysis was established to administer the Society's activities. These include the training of psychoanalysts, the development of the theory and practice.(https://positivepsychology.com/psychoanalysis/)

here are three important aspects of the Freudian scheme. First, his scheme is based on biology and anatomy. For instance, the instinctual drives and the discharge of psychic energy to release the bodily tensions are both biological concepts. The idea of the unconscious itself seems quite opposite to traditional rationalism, but the framework Freud employed to explain the function of the unconscious is highly materialistic. This biological aspect is a source of dispute with most Neo-Freudians. Second, the individual is depicted as a more or less self-sufficient entity per se.

This is because man is basically taken as a biological entity rather than a social entity. Although Freud did not ignore the role of society, society is considered as secondary for its affect on individual. In Civilization and Its Discontents, Freud claims that the role of society is to suppress the harmful impulses like incestuous and destructive desires, which are inherent in human beings, to keep order (Standard Edition, 21, 59-145). This aspect is another source of dispute with so-called culturalists and also with the School of Object Relations. Finally, the Freudian model is deterministic. The crucial event in the early childhood works as a cause, and determines the actions in the future. Thus, there is a clear cause-effect relationship in human behaviors, and the goal of - 136 - psychoanalytic therapy is to identify the cause of pathological behaviors which is often suppressed in the unconscious.

(https://catalog.lib.kyushuu.ac.jp/opac\_download\_md/941/KJ0000005059 2-00001.pdf)

- He believed that humans were driven by hidden motives and unconscious desires.

- It is said that three major shocks influenced human thought significantly: Copernicus's idea that the Earth is not the center of the universe, Darwin's theory of human descent from lower animal species, and Freud's idea that feelings don't control our behavior, but the unconscious does.
- Freud believed that pathological behavior and human personality could be explained by unconscious motives and repressed desires.
- He used various methods to access the unconscious, including hypnosis, free association, dream interpretation, slips of the tongue, and handwriting analysis.
- Freud claimed that psychoanalysis helps resolve unconscious conflicts, correct personality issues, and treat pathological behavior.
- Criticisms of this school include a lack of scientific rigor, the generality of the statements, the inability to explain the occurrence of behavior, and the reliance on difficult-to-prove methods, such as dream interpretation.
- Freud's work drew attention to previously neglected areas of psychology, such as the unconscious mind, sexual instincts, emotions, and childhood development.( 2004 ، علي )

People like Adler and Horney explicitly disagreed with Freud about his determinism. Having reviewed the Freudian drive model and its characteristics, we will now proceed to early criticism against Freud by Adler and Jung.

## Alfred Adler and his Individual Psychology:

er's Individual Psychology has three major characteristics (Adler 1929, 1931; Ansbacher and Ansbacher 1956). First, Adler rejected the

biological aspect and the libido theory of Freud, and placed feelings of inferiority as the basic driving force of human mind. Second, he rejected the tripartite psychic structure, and treated the human mind as an indivisible entity. Third, he rejected the determinism, and insisted that human behaviors are oriented toward future goals instead of being determined by the past event.

#### Carl Gustav Jung and his Analytic Psychology:

ung's Analytic Psychology has three major characteristics. First, he denied the sexual nature of libido, and redefined it as general psychic energy. Second, he proposed his own tripartite psychic structure: conscious, personal unconscious, and collective unconscious. Third, he combined psychoanalysis with religious mysticism to explain the function of the collective unconscious.

(https://catalog.lib.kyushuu.ac.jp/opac\_download\_md/941/KJ0000005059 2-00001.pdf)

# **Humanistic Psychology School:**

It is often referred to as the "third force" in psychology, following behaviorism and psychoanalysis. Key figures in this school include Abraham Maslow and Carl Rogers.

Carl Rogers was a humanistic psychologist who believed that everyone had the potential to heal themselves. He developed his famous client-centered therapy, which he used to treat patients suffering from depression, anxiety, and phobias. His work continues to influence psychologists today. According to his humanistic theory of personality development, all humans exist in a world which is loaded with experiences. Their life experiences create their reactions involving external people and objects, as well as internal emotions and thoughts. Rogers believed that there are four basic needs that drive human behavior: safety, belongingness, self-esteem, and freedom. His emphasis on empathy, unconditional positive regard, and active listening has shaped person-centered therapy and other therapeutic approaches. Rogers' ideas have also influenced student-centered learning, fostering a more supportive and individualized approach to teaching.

(https://www.structural-learning.com/post/carl-rogers-theory)

#### Personality development and self-concept:

Rogers' theory of personality development was based on humanistic psychology. According to his approach, everyone exists in a world full of experiences. These experiences shape our reactions that include external objects and people. Also, internal thoughts and emotions. This is known as their phenomenal field. Phenomenal field means a person's reality, objects, behaviour, thoughts and people.

Roger believed that a person's behaviour is a factor motivated by self-actualisation tendencies to work and achieve the highest level of their potential and achievement. During this process, a person forms a structure of self or self-concept. A positive self-concept is associated with feeling good and safe. If they have a negative self-concept they may feel unhappy with who they are.( https://www.eln.co.uk/blog/humanistic-theory-by-psychologist-carl-rogers)

- Humanistic psychologists believe that humans are free, possess willpower, consciousness, and the capacity for creativity.
- They also believe that individuals are born with the ability to pursue their potentials, a concept that Maslow referred to as "self-actualization."
- Self-actualization is an ongoing process throughout life and it is not a final goal that individuals can achieve.
- Humanistic psychologists argue that human behavior can only be understood by studying an individual's unique self-awareness, and as a result, they assert that there is no single reality for all individuals.
- Carl Rogers contributed to the development of a therapeutic approach based on this humanistic perspective. His primary goal was to assist individuals in developing their potentials.

# **Other Contemporary Trends:**

Psychology has been influenced by philosophical ideas since its inception, evolving and renewing itself as a result of different opinions and ideas from various fields.

- Advances in physiology and biochemistry have enabled psychologists to study the brain and sensory systems.
- Research into genetics has supported psychological studies on heredity and its impact on behavior.
- The rapid growth in the field of computers has drawn attention to the study of human capabilities and how they differ from computer-based thinking.
- Many therapeutic systems have evolved, with behaviorists playing a role in psychological therapy.
- New theories of learning and social theories have emerged.
- Psychoanalysis has undergone significant modifications that differ from Freud's original ideas.
- Cognitive psychology, focusing on thinking and cognitive processes, emerged due to the efforts of intelligent clinicians like Jean Piaget, a Swiss psychologist . (57 صبد الرحمان، 2006، صبد الرحمان)

# Relationship Between Psychology and other sciences:

- Relationship Between Psychology and sociology
- Relationship Between Psychology and medicine
- Relationship Between Psychology and education
- Relationship Between Psychology and philosophy
- Relationship Between Psychology and computer science
- Relationship Between Psychology and history

# Lecture 14

# Relationship between Psychology and other sciences

#### 1- The Relationship Between Psychology and Sociology

Psychology is closely related to sociology, as they complement each other in several aspects when it comes to understanding and interpreting human phenomena. We will elucidate some important points about the relationship between psychology and sociology:

Interests of Sociology and Psychology While psychology studies everything related to the individual, including their psychological nature, the factors that influence them, the problems the individual faces, and the construction and components of the self, sociology delves into the study of societies, social systems, collective behavior, how societies influence each other, and the things or events that cause social changes, such as political, economic, wars, or disasters.(33 ص 2006، عبد الرحمان)

## Points of Similarity Between Psychology and Sociology:

Both psychology and sociology are considered social sciences, and they share the study of humans and human phenomena, including how individuals affect society and how society influences individuals. For example, through this shared focus, we can explain why some introverted individuals start changing their behaviors when their environment changes, such as becoming more social and less introverted when they engage with friends. Another example is when a child's speech development is delayed, and they cannot speak comprehensibly due to the environment they are exposed to. For instance, they may not speak due to

fear of their surroundings. However, as they start school, their speech may improve and become faster. The study and interpretation of such issues are attributed to the collaboration between psychology and sociology.

#### Points of difference between Psychology and Sociology:

Sociology differs from psychology in that sociology does not concern itself with the neurological and psychological aspects. Instead, it focuses on finding solutions to societal problems, attempting to make changes at a collective level rather than an individual one. Sociology studies social factors and their impact on personality. Conversely, psychology is concerned with an individual's psychological and neurological state and aims to find solutions to their specific problems, helping them become better both psychologically and socially.(36 ص ،2006 عبد الرحمان)

### Benefits of Linking Sociology and Psychology:

As mentioned earlier, these two disciplines complement each other. While psychology provides theories and hypotheses to explain human behavior as individuals in society and how this behavior affects society and social changes, sociology, in return, offers its theories and knowledge to assist psychology in solving some psychological problems or explaining certain psychological phenomena. For example, it can address issues like treating social anxiety and psychological introversion by integrating individuals more with their communities and organizations.

# Results of the Relationship Between Psychology and Sociology:

The strength and depth of the connection, and perhaps even the overlap, between psychology and sociology have led to the emergence of

social psychology as a significant branch or subfield of both disciplines. This field focuses on studying psychological phenomena that have social origins and vice versa. For instance, an individual is influenced by the culture of their society, its customs, which shape their personal traits, some of their thoughts, beliefs, values, and consequently their reactions and behaviors. This influence is at the core of the study of social psychology.

# Lecture 15

### 2- Relationship Between Psychology and Medicine:

Psychology used to be seen as merely a theoretical science with uncertain results and not highly dependable for treating human health problems. However, over time and with the development of psychological concepts, it has become known that one cannot separate a patient's psychological state from their physical state, and both fields are deeply interconnected.

Psychology and the Treatment of Diseases Psychology studies the impact of physical injuries and illnesses on the psychological state and behaviors of individuals. Examples include patients with cancer, AIDS, or long-term disabilities, all of which are physical illnesses that affect the psychological well-being of patients, and vice versa. They play a role in the improvement or deterioration of a patient's condition.

Likewise, medicine addresses some diseases with psychological origins, such as eating disorders, substance abuse, alcoholism, depression, schizophrenia, and mental disabilities. All of these are physical illnesses with primarily psychological origins that have developed as a result of underlying psychological disturbances. Hence, it is impossible to completely separate physical illnesses from a patient's psychological state. (87 ص 2012، ص 2012)

## Points of Similarity Between Psychology and Medicine:

Psychology shares common ground with medicine in that both seek ways to understand human illness and its physical and psychological nature, as well as methods for treating these illnesses. While psychology deals with the components of the human psyche, its problems, and ways to treat them, medicine strives to understand the human body, its nature, illnesses, and treatment methods.

#### Points of Difference Between Psychology and Medicine:

from Medicine Psychology is considered a theoretical science that explains psychological phenomena in humans through hypotheses and theories, observing the results to confirm these theories. On the other hand, medicine relies on experimentation, making it more practical and allowing for more precise results. These results can be translated into discoveries that medicine relies on for the treatment of illnesses.

Benefits of Linking Psychology and Medicine Both psychology and medicine offer numerous benefits for treating human problems and understanding both physical and psychological phenomena. When the knowledge, discoveries, and theories of both disciplines are combined, better results can be achieved in understanding these phenomena and treating any issues that arise.( 2012 'Éléi')

## Results of the Relationship Between Psychology and Medicine:

The emergence of psychiatric medicine as a branch of human medicine is the culmination of the relationship between these two disciplines. Psychiatric medicine explores methods for treating psychological diseases and disorders using medical tools and approaches. Psychological disorders with physical origins, such as certain hormonal imbalances, can be addressed by psychiatric medicine, which can prescribe appropriate medication to alleviate the psychological symptoms. Additionally, physical illnesses can result from psychological conditions, such as fatigue, weakness, and loss of appetite, stemming from feelings of

depression. In such cases, psychiatric medicine addresses the psychological issue with the aim of alleviating the accompanying physical symptoms.(89 ص 2012، ص)

#### 3- The Relationship Between Psychology and Education:

Psychology is connected to the field of education by seeking the best methods to deliver educational information to a child's mind in a simplified manner and understanding their psychological nature to teach them the correct information in a way they prefer.

Educational Focus on Psychological Concepts Educators apply psychological concepts when teaching children because through psychology, the needs and thoughts of a child can be understood. A child may not be able to express what they want, but by understanding their requirements, a proper method can be developed to convey ideas and clarify educational concepts. (44 ص ،2012 ، محمد )

#### **Benefits of the Link Between Psychology and Education:**

The connection between psychology and education has yielded clear positive results. It has led to the development of more effective educational methods compared to traditional approaches. These methods not only educate children but also raise their awareness, stimulate their interest in learning, nurture their talents, identify their academic preferences, and assist them in setting goals for their lives. Additionally, this approach helps them build a well-rounded and independent personality rather than just providing them with information to memorize.

#### **Results of the Relationship between Psychology and Education:**

The connection between these two fields has given rise to what is known as educational psychology. This field contributes to shaping the social behavior of children, raising their awareness, and guiding each individual towards learning what they enjoy to achieve their goals. It also encourages children to desire learning and not be averse to the learning environment.(45 صحد 2012 ، محمد )

#### Points of Similarity Between Psychology and Education:

Psychological research into individual behavior has led to similarities with the field of education, which aims to have a positive impact on children's behavior. By linking these two disciplines, they achieve proper education and good behavior. This connection has given rise to the concepts of educational psychology and child psychology.

The Necessity of Linking Psychology and Education After achieving positive results through the collaboration of these two disciplines, it has become necessary to move away from traditional teaching methods and focus on the child's psychology before assessing their ability to grasp presented information. When teachers work on making children enjoy the learning process and love the school environment, it automatically leads to an improvement in their learning abilities and increases their motivation for success.(2012 ' محمد )

# Lecture 16

### 4- The Relationship Between Psychology and neuroscience:

Psychology and neuroscience have a close and interrelated relationship in the study of human mind and behavior, collaborating to understand how the brain functions and interacts with behavior and mental processes. Here are some points that illustrate this relationship:

- <u>Understanding the Biological Basis of Human Behavior</u>:

  Neuroscience provides a deep understanding of the structure and function of the brain and the nervous system. Since the human mind and behavior originate from the brain, psychology can rely on this knowledge to understand mental processes and behavior.
- Biological Basis of Psychological Disorders: Neuroscience studies shed light on the biological changes that may be associated with psychological disorders such as mood disorders and anxiety. This knowledge is essential for understanding the causes and treatments of these disorders.
- <u>Interaction Between Mind and Body</u>: Neuroscience enhances the understanding of the interaction between the brain and the body, which affects both mental and physical health. Psychology can contribute to understanding how psychological states impact physical health and vice versa.
- <u>Therapeutic Applications</u>: Fields such as clinical psychology and the treatment of psychological disorders benefit from research in neuroscience to develop effective treatments. For example,

- pharmacological treatments for psychological disorders rely on an understanding of brain function.
- Research in Neuropsychology: There is a specialized field known as "neuropsychology" that studies how brain damage or changes in the brain impact behavior and mental processes. This field bridges psychology and neuroscience.
- Research on Consciousness and Thinking: Neuroscience helps in understanding the emergence of consciousness and mental processes such as thinking and decision-making. Psychology works to interpret these processes and the psychological factors that influence them.(63 ص 2012)

Overall, neuroscience and psychology collaborate to comprehensively understand human beings, with the former providing the biological and structural foundations of the mind and behavior, while the latter seeks to interpret and understand the psychological and social factors that shape individuals and influence their behavior and thinking. (64 ص 2012)

## 5- The Relationship Between Psychology and Philosophy:

Psychology is connected to philosophy through scientific inquiry into the essence of things and ideas to reach a general understanding of reality and the nature of the self. This connection can be understood through:

Psychology and Philosophy Interests Philosophy is a human thought process that involves forming assumptions and theories related to all types of human sciences. It relies on analysis and contemplation of phenomena and an issue, generally serving as a way of thinking that seeks answers to life's questions in search of truth.

Psychology, on the other hand, consists of scientific studies aimed at explaining human behavior and individual personalities to understand the motives behind behavior, interpret it, and exert control over it.

## Points of Similarity Between Psychology and Philosophy:

Despite psychology's independence as a separate science from philosophy, it has maintained a similar style of thinking and research into the cosmic aspects of simplifying deep concepts that influence the human psyche and behavior. Both disciplines, after studying numerous phenomena, have produced significant results that explain human existence, helping individuals understand their lives and development, as well as how this affects their personal identities.(30 فاخر، بدون سنة، ص

## Points of Difference Between Psychology and Philosophy:

Philosophy differs from psychology in terms of the questions it seeks to address and the concepts it explores. Philosophy examines the purpose of human existence and seeks to answer questions such as "Who am I?" and "Why do I exist?" while contemplating the stages of human development and how one can secure a good life. It also investigates how the universe, in general, influences personal development and what lies beyond death.

On the other hand, psychology delves into the depths of the human psyche and attempts to explain individual human matters and the impact of the environment on the individual, affecting their personality traits and behavior. It also explains how the environment in which a person grew up shapes their personality.(33 ص فاخر، بدون سنة ، ص

### Benefits of Linking Psychology and Philosophy:

Philosophy is considered the mother of all sciences, and psychology later branched off from it. The connection between psychology and philosophy has led to the completion of what philosophy initially began to explain in a more realistic manner. Philosophy, which means "the love of wisdom" in Greek, explores fundamental abstract concepts related to values, existence, knowledge, and the mind. Psychology, also a Greek word, means "the study of the human soul," and it assists philosophy in interpreting non-tangible mental concepts such as perception, attention, personality, behavior, and emotion.

## Results of the Relationship Between Psychology and Philosophy:

As mentioned, philosophy is a contemplative and speculative science that relies on forming hypotheses and theories to explain any phenomenon. Using this method in psychology has resulted in significant advancements in the tools and methodologies of this field.

#### 6- Psychology and computer science:

they are closely related, as they both aim to understand and predict human behavior and mental processes. The connection between these two disciplines has led to the development of technologies that are more intuitive, user-friendly, and engaging. Here are some ways psychology relates to computer science. (https://thesassway.com/why-do-we-study-psychology-in-computer-science/)

**Human-Computer Interaction** (HCI): HCI is a field that combines psychology and computer science to design technologies that are easy to use and efficient. Psychological insights help computer scientists understand how people interact with technology and how to improve user interfaces and virtual reality systems.

Artificial Intelligence (AI) and Cognitive Psychology: AI systems are designed to mimic human thought and behavior, which requires an understanding of cognitive psychology. Cognitive psychology provides the theoretical framework for developing AI systems that can adapt to user needs and preferences, making technology more personalized and effective. (https://eduinput.com/relationship-between-computer-science-and-psychology/)

**User Experience Design**: Psychology plays a crucial role in designing user-friendly and engaging technologies. By understanding human behavior and mental processes, computer scientists can create interfaces that are more intuitive and enjoyable for users.

Social Media and Mental Health: The overlap of computer science and psychology helps researchers and designers create technologies that

promote mental health and well-being, such as using AI to identify signs of distress and providing appropriate interventions.

**Software Engineering**: Software engineering is another field that relies on formal psychology, as it involves designing and implementing algorithms that cater to human needs and preferences.

In summary, psychology and computer science are interconnected disciplines that work together to create technologies and interfaces that are more intuitive, user-friendly, and engaging. By combining insights from psychology with computer science, researchers and designers can develop innovative solutions to various challenges, such as improving user experience, promoting mental health, and enhancing the overall functionality of technology.

(https://www.forbes.com/sites/quora/2017/10/27/how-are-psychology-and-computer-science-related/?sh=23d7895f11c0)

### 7- Psychology and history:

They are closely related disciplines that share a primary concern with the human condition. The relationship between the two fields has been explored in various ways, including the use of psychological insights in historical analysis and the application of historical perspectives to psychological research. Psychology can help historians understand the motives and behaviors of historical figures, while history can provide context and insight into the development of psychological theories and practices. For example, the study of the history of psychology can help researchers understand how cultural and social factors have influenced the development of psychological theories and practices over time.

Additionally, the interdisciplinary dialogue between psychology and history can lead to new insights and approaches to understanding the human experience. (https://www.thefreshanswers.com/history-and-psychology/)

Overall, the relationship between psychology and history is complex and multifaceted, with each field offering unique perspectives and insights into the human condition.

Psychology is used in historical research in various ways, such as understanding the psychology of the past, analyzing motives and behaviors of historical figures, and providing insights into the development of psychological theories and practices over time. This interdisciplinary approach, known as historical psychology, involves using psychological insights in historical analysis and applying historical perspectives to psychological research. For example, historical psychology can help in understanding the psychology of the past, which

is crucial for understanding the psychology of the present and its crosscultural variations.

Additionally, studying the history of psychology benefits from a multidisciplinary approach, combining archival research, biographical investigation, and historiographical analysis to develop a more comprehensive and accurate understanding of historical events and figures.

Therefore, the integration of psychology into historical research provides unique perspectives and insights into the human condition, contributing to a more holistic understanding of historical events and figures.

(<a href="https://henrich.fas.harvard.edu/files/henrich/files/historical\_psychologyv">https://henrich.fas.harvard.edu/files/henrich/files/historical\_psychologyv</a>
20.pdf)

While psychological methods can be useful in historical research, there are also some limitations to their application. Here are some examples:

Lack of data: Historical research often relies on incomplete or biased data, which can limit the accuracy and reliability of psychological analyses.

**Interpretation challenges**: Historical materials may be misinterpreted or misunderstood over time, leading to inaccurate conclusions.

**Ethical considerations**: Psychological research involves ethical considerations, such as privacy and confidentiality, which can be challenging to apply to historical research.

Limited collaboration: Collaboration between psychologists and historians is not always easy, as humanities scholars may be unused to

working in research teams and may have little professional incentive to take part in scientific studies.

**Methodological differences**: Psychologists and historians use different methods and approaches to studying behavior and mental processes, which can make it challenging to integrate psychological insights into historical research.

In summary, while psychological methods can be useful in historical research, there are also limitations to their application. Researchers should approach historical materials with caution, recognize potential limitations, and combine multiple approaches for a more comprehensive understanding of historical events and figures. (https://psychology.iresearchnet.com/history-of-psychology/conducting-research/methods-research/)

#### **Conclusion:**

A conclusion about psychology could be that it is a multifaceted and dynamic field that plays a crucial role in understanding and exploring the complexities of human behavior, cognition, and emotions. It encompasses a wide range of subfields, from clinical psychology that focuses on mental health and therapy to cognitive psychology that studies mental processes like memory and decision-making.

Psychology not only helps us understand individual and collective behavior but also contributes to various aspects of our lives, including education, healthcare, business, and social policies. It emphasizes the significance of empirical research, experimentation, and data analysis to validate theories and make informed decisions.

Furthermore, psychology underscores the importance of considering both nature and nurture in shaping human development and behavior, recognizing that our biology interacts with our environment to create the individuals we become. It also highlights the role of individual differences, cultural diversity, and social influences in understanding human behavior.

In conclusion, psychology is a dynamic and evolving field that continues to advance our understanding of the human mind and behavior. Its applications are widespread, impacting various aspects of our lives and contributing to the improvement of individual well-being and society as a whole.

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