# THEME 1. Psychology as Science

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

## 1.1. Psychology as Science

The word psychology comes from two Greek words: «psyche» meaning «mind» or «soul» and «logos» meaning «study of». Therefore, psychology means «study of the mind». There are many modern definitions of the term. One of them belongs to Atkinson, who defined psychology as «the scientific study of behavior and mental processes».

So, Psychology is the science that studies the behavior of organisms. Three words in the definition merit special attention: (1) science, (2) behavior, and (3) organisms. Modern psychology is considered a science because it bases its conclusions on data, information obtained by systematic observations. The research methods used by psychology are covered next unit.

**The notion of a soul, a psyche and psychic activity**

The word «soul» is mostly used in every day life, in works of art, in philosophy, whereas the term «psyche» is used in medico-biological and psychological literature.

There is no generally acknowledged definition of psyche, because of its extraordinary complication and variety, individuality of personality’s psyche and discrepancy of methodological approaches.

*Psychic activity* is a complicated adaptive activity of the body by means of functioning of the united system in the brain of a man.

## 1.2. The Classical Schools of Psychology

Modern psychology arose in the context of what are known as **schools of psychology**.

1) From a historical perspective, the first school of psychology to be established was *Structuralism*. It was described by Wundt who thought the object of psychological investigation should be the conscious mind.

2) The second school of psychology is *Functionalism*, which was developed by William James who thought that the workings of the mind are functional. The mind works to survive and adapt. James speculated that thinking, feeling, learning, and remembering – all activities of the mind – serve one major function: to help us survive as a species. So we should investigate what behavior and thoughts are for. Functionalists study how animals and people adapt to their environments.

3) *Gestalt Psychology*. A group of German psychologists, including Max Wertheimer (1880–1943), Wolfgang Kohler (1887–1967), and Kurt Koffka (1886–1941), disagreed with the principles of structuralism. They argued that perception is more than the sum of its parts – it involves a «whole pattern» or, in German, a Gestalt.

4) *Behaviorism* is a fourth classical school of psychology. Behaviorism introduced by John Watson, was the most important of all approaches that investigated «mind» and proposed that psychology should investigate only observable behavior if it wanted to be an objective science.

5) In order to identify a fifth classical school of psychology, it is necessary to return to the European continent, specifically to Austria; the school is *Psychoanalysis*. The father of psychoanalysis is Sigmund Freud. Freud was a medical doctor with a specialty in neurology. Freud wrote that the proper object of psychological investigation should be the unconscious mind and that our behavior is determined by processes that we are not aware of.

## 1.3. Basic Branches of Psychology and Fields of Psychology

Psychology studies peculiarities of the psychic activities of a man. There exist various **branches of psychological science**: general psychology, psychology of development, social psychology, medical (clinical) psychology and so on.

*Social psychology* has arisen as a junction between psychology and sociology.

The subject of *medical psychology* is various peculiarities of patient’s psyche and their influence on health and disease as well as providing optimal psychological climate for making a diagnosis and treatment of a patient.

The term clinical psychology, which has arisen recently, is a close synonym to medical psychology. Clinical psychology means examination, making a diagnosis and treatment of people who experience some psychological problems.

Medical psychology can be general and particular.

General medical psychology deals with:

1. Psychology of a patient, medical stuff, medical institutions;
2. Psychosomatic and somatopsychic interactions;
3. Study of an individual;
4. Medical deontology and ethics;
5. Psychohygiene, psychoprophylaxis and psychotherapy.

Particular psychology deals with the main aspects of medical practice in certain diseases (in surgery, cardiology, venerology and so on) and in some definite situations.

Psychology as a profession expresses itself in different **fields**, or domains of interest. There are a number of fields of psychology, such as clinical, experimental, counseling, developmental, physiological, human factors, and industrial.

*Clinical psychology* is the field associated with psychotherapy and psychological testing.

Clinical psychology is the largest single field of psychology. About 40 percent of psychologists are clinical psychologists in the USA.

*Experimental psychology* is the field associated with research.

A *counseling psychologist* provides advice and guidance, often in a school setting

A *developmental psychologist* is concerned with maturational and learning processes in both children and adults.

A *physiological psychologist*, like an experimental psychologist, does research.

A *human factors psychologist* combines a knowledge of engineering with a knowledge of psychology.

An *industrial psychologist* usually works for a corporation.

## 1.4. Research Methods in Psychology

**Naturalistic observation** requires a researcher to study behavior as it is happening in its own setting.

The **clinical method** is a research technique associated primarily with the treatment of individuals with mental or behavioral disorders. It arose within the associated frameworks of psychiatry and clinical psychology.

The **case study method** involves the study of one individual over a span of time. It is similar to the clinical method. The difference between that two methods is that the subject in the case study method is not necessarily troubled.

**The Survey Method**. A survey attempts to take a large, general look at an aspect of behavior. Examples of topics include sexual behavior, eating behavior, how people raise children, spending habits, and so forth.

**The testing method** explores human behavior by using psychological tests of attributes such as intelligence, personality, and creativity.

**The Correlational Method: When X Is Associated with Y**

The word ***correlation*** refers to the relationship between two variables. These are usually designated as X and Y on a graph.

**The Experimental Method**. The experimental method is a research tool characterized by a control over variables, the identification of a cause (or causes), and a well-defined measure of behavior. These aspects of the experimental method give it great power.

**Analysis of creative activity of a client** (letters, diaries, drawings, pictures).

**Psychological anamnesis**. Medical anamnesis includes life history and case report, whereas the aim of a psychological anamnesis is to determine the system of patient’s relations, especially his attitude to these disease, to estimate the changes in his system caused by the disease, to reveal the reflection of the disease in the subjective patient’s world, the influence of the disease on patient’s behavior and on the whole system of his personal relations.

## 1.5. The Importance of Psychological Knowledge for Medical Practice

Very often there exist a close connection between the exacerbation of the disease and psychological problems. Though when manifestations of the disease are sharply expressed (e.g. a patient is unconscious), psychological peculiarities are not so much expressed. However, when the pathology decreases, the role of psychological factors increases greatly and becomes very important for a successful treatment (e.g. following a diet, accepting a supporting therapy or some additional examination); and it’s evident that chronic diseases with light or moderate manifestations are typical for the contemporary medicine.

Nowadays application of complicated techniques results in some certain dehumanization of medicine, as the time of indirect communication between the doctor and the patient has been reduced. It means that this communication must be of a higher quality, it should be more effective and this requires some definite psychological knowledge.

The specific character of medical practice is in the fact that a doctor deals not only with disorders of the human organs and biological systems, but with an individual personality, with a unique soul which has a variety of social connections and with changing of all these because of illness. At the same time medicine is very good at analyzing the parts of human being and treatment each part separately. Very often the man as a whole is forgotten in the treatment process. So one of the main aims of teaching in a Medical University should be forming an attitude to a patient as to a unique personality possessing not only a physical body, but a soul as well. Such attitude of a doctor determines belief of a patient in him and as a result the success of the treatment.

NB! One should keep in mind that the division of a soul into psychic components and functions made in these instructions is very conditional and has been done in order to give medical students some definite psychological knowledge necessary for their future medical practice.