PSYCHOLOGY AS A SCIENSE AND APPLIED DISCIPLINE

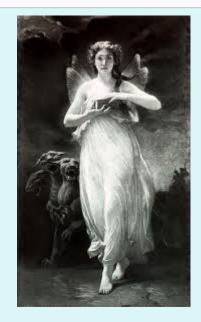
Psychology as a science. Central terms.
Basic methods of psychology.
Main branches of psychology.
Principal stages of psychology formation.
Main points of development of Ukrainian psychology.

1. Psychology as a science. Central terms

Psychology (from Greek, ψυχή, "psyche", soul, mind and λόγος, "logos") is both an academic and applied discipline involving the scientific study of all forms of human behaviour, psychological processes and states, relationships in social groups.

Central concept of psychology is psyche

Psyche (psychic) is considered as subjectively perceived, functional entity, based ultimately upon physical processes but with complex processes of its own: it governs the total organism and its interactions with the environment.



"Psyche" by Paul Alfred de Curzon

The term *psyche* takes its meaning from ancient myth. In Roman mythology, Psyche represented the human spirit and was portrayed as a beautiful girl with butterfly wings. She, after undergoing many hardships due to Venus' jealousy of her beauty, is reunited with Cupid and made immortal by Jupiter.

Psychological processes and states are important concepts of psychology

Psychological processes are processes they consider in the integral system of human psyche (sensation, perception, learning, memory, emotion, volition, thinking, cognition, imagination).

Psychological states mental conditions in which the qualities of a state are relatively constant even though the state itself may be dynamic (depression, apathy, euphoria, irritation, trance, attention).

Society as a object of psychology

In addition to dissecting the brain's implementation of elementary mental functions, psychology also attempts to understand the role these functions play in social behavior and in social dynamics.



2. Basic methods of psychology

- Observation;
- Experimental (laboratory and field experiment);
- Case studies;
- Correlational methods;
- Self-report;
- Questionnaire studies;
- Projective techniques;
- Interviews and surveys.

Observation

Observations must be truly representative of the behavior that is of interest. Observation as a psychological method has concrete tasks and aim, is based on the clear plan. Its results has to be documented.

Laboratory experiments

A hypothesis derived from a theory is tested under controlled conditions which are intended to reduce bias in both the selection of subjects used and in the measurement of the variables being studied. Findings should be replicable but may not generalize to more real-life settings.

Field experiments

Hypotheses are tested outside laboratories, in more natural conditions, but these experiments may be less well controlled, harder to replicate, or may not generalize to other settings.

Case studies

Are particularly useful as a source of ideas for future research, and for measuring the same behavior repeatedly under different conditions.

Correlational methods

They assess the strength of the relationship between two or more variables (such as reading level and attention span). This is a method of data analysis, rather than data collection.

Self-report

It provides subjective data, based on self-knowledge (or introspection); needs concrete tasks and aim, is based on the clear plan.

Questionnaire studies

They are based on obtaining information by means of questioning. Their reliability can be ensured through good test design and by standardizing the tests on large representative samples.

Projective techniques

Projective methods involve asking subjects to interpret or fill in visual stimuli, complete sentences, or report what associations particular words bring to mind.

Interviews and surveys

They are useful for collecting new ideas, and for sampling the responses of the population in which the psychologist is interested.

3. Main branches of psychology

- Cognitive (focuses on finding out how information is collected, processed, understood, and used);
- **Behavioral** (emphasizes behavior, learning, and the collection of data which can be directly observed);
- Abnormal (the study of psychological dysfunctions and of ways of overcoming them);
- Developmental (the study of systematic psychological changes, emotional changes, and perception changes that occur in human beings over the course of their life span);

(Main branches of psychology)

- Biological (the study of the psychology of different species, inheritance patterns, and determinants of behavior);
- Individual differences (studying large groups of people so as to identify and understand typical variations);
- Physiological (focuses on the influence of physiological state on psychology, and on the workings of the senses, nervous system, and brain);
- Social (studying social behavior, and interactions between individuals and groups).

4. Principal stages of psychology formation

The **history of psychology** as a scholarly study of the mind and behavior dates back to the Middle Ages. It was widely regarded to a branch of philosophy until the middle of the 19th-century when psychology developed as an independent scientific discipline in Germany.

The first laboratory

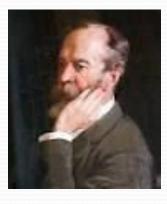
Psychology as an independent experimental field of study began in 1879, when Wilhelm Wundt (1832-1920) founded the first laboratory dedicated exclusively to psychological research at Leipzig University in Germany, for which Wundt is known as the "father of psychology".

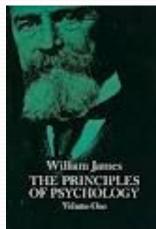
1879 is thus sometimes regarded as the "birthdate" of psychology.



The first book

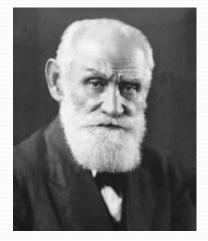
The American philosopher William James (1842-1910) published his book, "Principles of Psychology", in 1890, while laying the foundations for many of the questions that psychologists would focus on for years to come.





Russian investigators

 The Russian phisiologist Ivan Pavlov (1849-1936) investigated the learning process now referred to as classical conditioning.

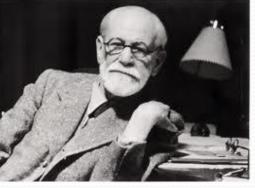


 The Russian physiologist and biologist Ivan Sechenov (1829-1905) found out that nervous activity consisted of interaction of excitation and inhibition.



Psychoanalysis

During the 1890s, the Austrian Physician **Sigmund Freud (1856-1939** who was trained as a neurologist, had developed a method of psychotherapy known as **psychoanalysis**.



Freud's theories tackled subjects such as sexuality, repression, and the unconscious mind as general aspects of psychological development.

Structuralism

Edward B. Titchener (1867-1927) employed introspection more heavily than Wundt. Titchener felt that sensations, images, and feelings were the basic elements of thought.



Structuralism is the view that all mental experience can be understood as a combination of simple elements or events. This approach focuses on the contents of the mind (contrasting with functionalism).

Behaviorism

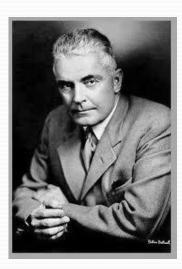
John B. Watson (1870-1958) publishes "Psychology as Behavior" (1913) launching behaviorism.

Behaviorism proposed limiting psychological study to overt behavior, since that could be quantified and easily measured.

B.F. Skinner (1904-1990) publishes "The Behavior of Organisms" (1938).

The work draws widespread attention to behaviorism and inspires laboratory research on conditioning.





5. Main points of development of Ukrainian psychology

Psychology both benefited and suffered in the Ukraine in XX cent., as it did in other regions of the Soviet Union. It was prominent as the practical and scientific component of pedagogics, but in the 1930s, pedagogics was abolished in one of Stalin's famous decrees, so that teaching materials and textbooks were confiscated from departments and subsequently destroyed.

Oleksandr Lazurs'kyj

Oleksandr Lazurs'kyj (1874-1917) – an Ukrainian psychologist. Worked as a professor of the Psychoneurological Institute in Saint Petersburg (Russia).

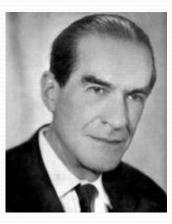


Developed personality doctrine and a theory of types of a character ("the New Classification of Personality").

Kharkiv School of Psychology

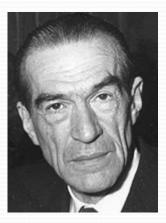
Kharkiv School of Psychology is a tradition of developmental psychological research conducted in the paradigm of Lev Vyhots'kyj's "sociocultural theory of mind" and Leontjev's psychological activity theory.

The school was founded by Olexij Leontjev (1903-1979) who moved from Moscow to Kharkiv, the capital of Soviet Ukraine at that time.



Olexij Leontjev (1903-1979) – Soviet developmental psychologist, the founder of activity theory.

For Leont'ev, 'activity' consisted of those processes "that realise a person's actual life in the objective world by which he is surrounded, his social being in all the richness and variety of its forms".



He emphasized three levels of human processes analysis:

- 1. Level of *activity* and *motives* that drive it.
- 2. Actions and their associated goals.
- 3. Analysis of *operations* that serve as *means* for the achievement of the higher-order goals.

Scientific activity of the Kharkiv School

The group conducted a wide range of psychological studies on concept formation in children, voluntary and involuntary memory, development of visual-operational thinking, voluntary behaviour, and reasoning, the role of orientation in thought and activity, etc. that laid the foundation for the psychological theory of activity.

Members: O.Zaporozhets, P.Zinchenko, L.Bozhovytch, P.Gal'perin, G.Lukov, K.Khomenko, O.Kontsevaya etc.

Olexandr Zaporozhets

Olexander Zaporozhets (1905-1981) was an Ukrainian developmental psychologist of the Soviet period, a student of Lev Vyhots'kyj. Zaporozhets studied psychological mechanisms of voluntary movements, perception and action, as well as the development of thought in children. One of the major representatives of the Kharkiv School of psychology.

Petro Zinchenko

Petro Zinchenko (1903 - 1969) – a developmental psychologist, a follower of Lev Vyhots'kyj, representative of Kharkiv School of psychology.



In the **research of involuntary memory** Zinchenko demonstrated that recall of the material to be remembered strongly depends on the kind of activity directed on the material, the motivation to perform the activity, the level of interest in the material and the degree of involvement in the activity.