Ministry of Education and Science of Ukraine
Sumy State University

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MEDICAL PSYCHOLOGY AND PROFESSIONAL COMMUNICATION

Lecture notes

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MEDICAL PSYCHOLOGY
AND PROFESSIONAL COMMUNICATION

Lecture notes
for all study programmers
of educational qualification «**Master of Medicine**»,
professional qualification «Phd» and bachelor
of full-time course of studies

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Department of Psychology, Political Science and Socio-Cultural Technologies

Передмова

Цей конспект лекцій призначений для студентів другого курсу денної форми навчання, магістрів, які вивчають навчальну дисципліну «Медична психологія та професійне спілкування». У навчальному виданні викладений матеріал у структурованій формі (дев'ять практичних занять та підсумковий модульний контроль). Для оптимізації навчально-пізнавального процесу основний матеріал викладений у формі тезових положень та основних дефініцій.

Конспект лекцій може бути корисним студентам медичних спеціальностей під час підготовки до поточних практичних занять та підсумкового модуля. Стисле викладення матеріалу дозволить швидко повторити вивчений матеріал, а також доповнити та розширити свої знання з цього предмета.

Навчальний матеріал є доповненням до навчального посібника І. С. Вітенко (I. S. Vitenko), Р. І. Ісакова (R. I. Isakov), В. О. Рудя (V. O. Rud) (Medical Psychology : Textbook / I. S. Vitenko, R. I. Isakov, V. O. Rud. – Poltava : Dyvosvit, 2010. – 146 p.), а також Т. Джей Трулла (Timothy J. Trull. Clinical Psychology. – 7th edition. – Columbia : University of Missouri, 2005. – 639 p.).

Описано психологічні феномени, що спостерігаються за різних психологічних станів здорових та хворих осіб. Наведено характеристику основних психічних станів і функцій та їх особливості за різних захворювань.

Особливу увагу приділено сучасному розумінню психосоматичних розладів, деонтології та деяких аспектів професійної комунікації.

For foreign students with English education's form of Medical Institute.

CHAPTER 1

SUBJECT, TASKS, STRUCTURE AND METHODS OF MEDICAL PSYCHOLOGY

Objectives: to learn the subject and tasks of medical psychology, it's history and place in the structure of psychological sciences, to get acquainted with main methods of medical psychology.

Psychology is a science about the origin, development and regular manifestations of psychic activity of a human being. This term was formed from the Greek words «psyche» (soul) and «logos» (science). The main stages in development of psychology were:

1) Psychology as a science about human soul appeared in the field of philosophy more than 2 000 years ago.

2) In 17th century due to the accelerated development of natural sciences psychology appears as a science about consciousness which supposed to control the thoughts, wills and emotions.

3) In the 70ies of 19 century psychology develops as an independent science. Its task was the observation of human behavior, deeds and reactions without taking into account the motives and subjective factors. Also the experimental branch of psychology begins to develop.

4) Development of modern psychology. The principal tasks of psychology are:

- Study of the regulations of the psychic development of a human in its development.
- Investigations of the reflection of reality in the mind of a human being.
- Study of mechanisms, regulating the actions and activity of a human being.
- Study of the mechanisms creating the psychic traits of a person.
- Determination of a certain dependence of psychic phenomena depending on the way of life and activity of the individual.

Nowadays psychology is a complex system of interdependent psychological sciences. The principal branches of psychology are:

- ✓ *General psychology* – the study of common regularities in the psychic activity of a grown-up.

- ✓ *Child psychology* – the study of regularities of the psychic development of a child.
- ✓ *Teenage psychology* – the study of regularities of the psychic activity of teenagers.
- ✓ Late-age psychology – the study of regularities of psychic activity of elderly people.
- ✓ *Social psychology* – the study of psychic phenomena in groups and collectives.
- ✓ *Pedagogical psychology* – the study of the psychological basis of teaching and upbringing.
- ✓ *Work psychology* – the study of the psychological basis of a man's working activity.
- ✓ *Pathopsychology* – the study of various forms of disorders of psychic activity and their development.
- ✓ *Other* (e.g. medical, military, artistic, space etc.).

Separation of medical psychology and an attempt to determine its importance as a subject of teaching goes back to 1852 with the publication of «Medzinsche Psychologie», a work by R.H. Lotze, a German scientist.

Medical psychology is a branch of psychology which studies the psychology of the patient, the role of psychic factors in the origin and development of the disease, the psychology of relationships between doctor, staff and patient, as well as the use of a psychological approach in medical practice. The field of clinical psychology involves research, teaching, and services relevant to the applications of principles, methods, and procedures for understanding, predicting, and alleviating intellectual, emotional, biological, psychological, social and behavioral maladjustment, disability and discomfort, applied to a wide range of client populations. The field of Clinical Psychology integrates science, theory, and practice to understand and alleviate maladjustment, disability, and discomfort as well as to promote human adaptation, adjustment, and personal development. Clinical Psychology focuses on the intellectual, emotional, biological, psychological, social, and behavioral aspects of human functioning across the life span, in varying cultures, and at all socioeconomic levels.

Medical psychology has two lines of development – *general medical psychology* and *applied medical psychology*.

General medical psychology studies psychological peculiarities of the patient; the criteria of normal, temporarily altered and morbid psychics; the correlations between an individual and a disease; psychology of a doctor in his relations with the hospital staff; psychology of relationships between the doctor, his patient and relatives; teaching on a doctor's duty and ethics; teaching on iatrogeny caused by the carelessness of a doctor's words; peculiarities of ageing and its influence on the disease.

Applied medical psychology studies psychology of patients suffering from nervous-psychic disorders; psychology of psychiatric patients and patients with dependencies; psychology of patients with nervous diseases; psychology of patients prior to and after an operation; psychology of patients with cardio-vascular, gastric infectious, veneric, pulmonary, gynecological diseases; psychohygiene and psychoprophylactics in cases of pregnancy and child-birth; psychology of endocrinological and oncological patients; psychology of patients with physical abnormalities and sensory defects (e.g. blindness, deafness); psychology of the disabled.

The basic points of contact of these sciences are the psychological peculiarities in doctor's conduct, correction of mentality while treating the patient and psychotherapeutic influence. Medical psychology is connected with all medical specialties (therapy, surgery, obstetrics, gynecology, pediatrics, hygiene and others). It has some specific methods and thus it plays an important role in doctor's training in any specialty.

Mental phenomena are determined by the factors of environment (mentality is a form of reflection of the objective reality). However, any outer influence produces one or another psychological effect under inner conditions such as the mood of the individual, his aims, needs and life experience. Due to activity the mentality fulfils the function of orientation of the person in a variety of surrounding events and phenomena (it is manifested in selectivity of the subject regarding outer influence) and the function of regulating behavior (stimulation to the activity which meets needs and interests of the individual). In a definite situation the person's behavior depends on his interpretation and treatment of the situation. On the other hand, the character of treatment of the given situation, extent of knowledge

about the situation will depend on interaction of the person with this situation.

Psychology is defined as a science because its tenets are based on the scientific method, a process that involves collecting data, systematic observation, generating explanatory theories and testable hypotheses, empirically testing the hypotheses, and then using the results of studies to describe, understand, and predict. Along with the scientific method, psychologists employ critical thinking skills to further examine information before making judgments and decisions. Before we examine the nature of clinical psychology, let us briefly review some of the other major professions in the mental health field. Because most confusion lies in contrasting clinical psychology with psychiatry and with counseling psychology, we focus most of our discussion on these fields.

Psychiatrists

The psychiatrist is a physician. Psychiatry is rooted in the medical tradition and exists within the framework of organized medicine. Thus, psychiatrists are often accorded the power and status of the medical profession, even though their intellectual heritage comes from the nonmedical contributions of Freud, Jung, Adler, and others. Although the latter were physicians, they stepped out of the medical tradition to develop a psychoanalytic system of thought that had very little to do with medicine. The psychiatric profession has vocally and effectively pushed for a superior role in the mental health professional hierarchy, and much of the profession's argument has been based on its medical background.

Because of their medical training, psychiatrists may function as physicians. They may prescribe medication, treat physical ailments, and give physical examinations. In addition to their concentration on psychotherapy and psychiatric diagnosis, psychiatrists make extensive use of a variety of medications in treating their patients' psychological difficulties. Furthermore, their medical training makes them potentially better able to recognize medical problems that may be contributing to the patient's psychological distress. However, even these traditional lines that have served to distinguish psychiatrists from clinical psychologists may become more blurred in the future. Following completion of the medical degree and the general medical internship required of all physicians, the typical psychiatrist-to-be

receives psychiatric training during a 4-year residency. This apprenticeship period involves supervised work with patients in an outpatient or hospital setting, accompanied by seminars, reading, discussion, and related activities. The amount of formal psychiatric coursework varies, but the core training experience is the treatment of patients under the supervision of a more experienced psychiatrist. In contrast to psychiatrists, clinical psychologists typically receive little training in medicine and more extensive training in the psychological principles governing human behavior, in formal assessment of psychological functioning, and in scientific research methods.

Counseling Psychologists

The activities of counseling psychologists overlap with those of clinical psychologists. Traditionally, counseling psychologists work with normal or moderately maladjusted individuals. Their work may involve group counseling or counseling with individuals. Their principal method of assessment is usually the interview, but counseling psychologists also do testing (e.g., assessment of abilities, personality, interests, and vocational aptitude).

Historically, they have done a great deal of educational and occupational counseling. More recently, many counseling psychologists have begun to employ cognitive-behavioral techniques and even biofeedback. Traditionally, the most frequent employment areas for counseling psychologists have been educational settings, especially colleges and universities. However, counseling psychologists (like clinical psychologists) also work in hospitals, rehabilitation centers, mental health clinics, and industry.

In general, counseling psychologists see themselves in the following activities:

a) preventive treatment,
b) consultation,
c) development of outreach programs,
d) vocational counseling,
e) short-term counseling/therapy of from one to fifteen sessions.

Although there are a number of similarities between counseling and clinical psychology, there are several distinguishing features as well.

Psychiatric Social Workers

The professional activities of psychiatric social workers often seem similar to those of psychiatrists and clinical psychologists. In years past, social workers tended to deal with the social forces and external agents that were contributing to the patient's difficulties. The social worker would take the case history, interview employers and relatives, make arrangements for vocational placement, or counsel parents; the psychiatrist conducted psychotherapy with patients; and the clinical psychologist tested them. However, these professional roles have blurred over the years. Perhaps it was the close association with psychiatrists and psychologists that led many social workers to focus less on social or environmental factors and to become, like their colleagues, preoccupied with internal, psychological factors. Now, though, it appears that many social workers are moving away from psychoanalytic influences and returning to their earlier focus on the familial and social determinants of psychopathology. The responsibilities of the social worker are generally not as great as those of the psychiatrist or clinical psychologist. Characteristic of social workers is their intense involvement with the everyday lives and stresses of their patients. They are more likely to visit the places where their patients spend the bulk of their lives. Their role tends to be active, and they are less concerned with the abstract, theoretical generalizations that can be drawn from a particular case than they are with the practical matters of living. Currently, the field of social work appears to be growing tremendously. It is estimated that social workers now provide more than half of all the nation's mental health services, and social workers are likely to gain an even greater foothold in the mental health market in the future because they are a low-cost alternative to psychiatrists and psychologists

School Psychologists

School psychologists work with educators and others to promote the intellectual, social, and emotional growth of school-age children. Toward this end, they may help to plan the learning environment. For example, they may generate programs to assist the development of children with special intellectual, emotional, or social needs. Often, they evaluate such children and recommend special programs, treatment, or placement if necessary. They also consult

with teachers and school officials on issues of school policy or classroom management.

Rehabilitation Psychologists

The focus of rehabilitation psychologists is on people who are physically or cognitively disabled. The disability may result from a birth defect or later illness or injury. Rehabilitation psychologists help individuals adjust to their disabilities and the physical, psychological, social, and environmental barriers that often accompany them. Their most frequent places of employment are in rehabilitation institutes and hospitals.

Health Psychologists

Health psychologists are those who, through their research or practice, contribute to the promotion and maintenance of good health. They are also involved in the prevention and treatment of illness. They may design, execute, and study programs to help people stop smoking, manage stress, lose weight, or stay fit. Because this is an emerging field, those in it come from a variety of backgrounds, including clinical psychology, counseling psychology, social psychology, and others. Many health psychologists are employed in medical centers, but increasingly, they are serving as consultants to business and industry – in any organization that recognizes the importance of keeping its employees or members well. People who are trained to assist professional mental health workers are called paraprofessionals, and their role has expanded greatly in recent years. Volunteers are often provided short training sessions and then become the most visible personnel in crisis centers (both walk-in and telephone). Certain paraprofessional activities have become accepted practice. Research indicates strongly that the efforts of paraprofessionals can effectively supplement the work of professionals. Now that we have briefly examined some of the other helping professions, let us turn to the work of the clinical psychologist.

Clinical Psychologists

A member of a profession devoted to understanding and treating individuals affected by a variety of emotional, behavioral, and/or cognitive difficulties. Clinical psychologists may be involved in numerous activities, including psychotherapy, assessment and

diagnosis, teaching, supervision, research, consultation, and administration.

The Primary Methods of Study in Psychology are:

- Experimental Methods.
- Naturalistic Observation.
- Case Study.
- Survey
- Psychological Testing.
- Introspection.
- Statistical.
- Evidence Based.

Experimental Methods

The scientific method acquires new knowledge to integrate observations. Fundamental to this approach is the formation of a Hypothesis, which is a testable form of an occurrence or phenomenon. Experiments then prove or disprove the proposed hypothesis. A Theory can be defined as a general principle proposed to explain how a number of separate facts are related.

Every Experiment has two types of variables: *Independent Variable* – the variable that is manipulated by the experimenter (input variable) and *Dependent Variable* – the outcome variable (results of the experiment).

An experiment differs from observation because it presupposes the arrangement of a clinical situation which allows carrying out a relatively absolute control of variables which is impossible at observation. A variable is reality that can be changed in an experimental situation. One of the most important advantages of an experimenter over an observer is manipulation of variables. An observer is interested in any interrelation of phenomena, but in an experiment under certain conditions it is possible to introduce a new element and to determine whether this or that change in the situation takes place. An examiner expects this situation as a consequence of the change made by him, but an observer has to wait for the change which may not take place. An experiment can be divided into 4 types: *laboratory, natural, establishing and forming*. The shortcoming of this method is that it is hard to arrange it in order an examined person not to know what is going on. Thus, an examined person can reveal constraint, diffidence, conscious or unrealized anxiety, etc.

Naturalistic Observation

Naturalistic observation is the monitoring of behavior in a natural environment. It often involves counting behaviors, such as number of aggressive acts, number of smiles, etc.

Advantages: This method of study of behavior being observed is naturally occurring, meaning that there is no manipulation by a researcher. Furthermore, it can provide more qualitative data as opposed to merely quantitative information.

Limitations: There are limitations present in naturalistic observation as well. Even the presence of someone observing can cause those being observed to alter their behavior. Researcher's beliefs can also alter their observations; it is very difficult to coordinate multiple observers since observed behaviors must be operationally defined (e.g. what constitutes an aggressive act).

So, one of the most typical ways of examination is ***observation of an object*** (a person, a group of people) pending the phenomena interested by an examiner will show themselves to be recorded and described. By means of this method the mental processes, states and properties of sick and healthy are studied. Mentality is studied under natural living conditions, and this study differs from an experiment because a doctor or a psychologist is a passive observer that has to wait for those phenomena he is interested in. The advantage of this method is that during the observation the natural course of mental phenomena is not broken. The disadvantage of the observation is that it does not allow determining the cause of a certain mental phenomenon precisely, because it is not possible to take into account all interrelations of a mental phenomenon in the process of observation. Observation is carried out under usual living conditions: in families, at work, game, during studies, in a hospital ward. Independent activity, observation, reaction peculiarities of a patient, his relationship with other people are taken into consideration. Observation should be purposeful, following some certain tasks. In medical practice it allows to estimate the patient's sleep, appetite, mood, psychic activity, etc.

Case Study

A Case Study is the observation of a single case, typically over an extended period of time. This method can involve naturalistic observations in addition to psychological testing, interviews with the

subject and others that are related to the experiment, and the application of a treatment.

Advantages: A case study can gather extensive information, both qualitative and quantitative and it can be helpful in better understanding rare cases or very specific interventions.

Limitations: Only one case is involved, severely limiting the generalization to the rest of the population. It can also be very time consuming and can involve other problems specific to the techniques used, including researcher bias.

Survey

Darwin and Galton are credited for the origins of the Survey Method. Survey is a technique for gathering information from a large number of users. This method is a way to investigate ideas, attitudes, and other responses in a large sample population. Survey may be conducted through a short paper-and-pencil feedback form, telephone, mail, or by intensive interviews.

The interview reveals the associations interesting to the examiner on the basis of the empiric data which were received during real two-side contact with the patient. This method is needed for receiving information about the individual psychological peculiarities of the personality, psychological phenomena and psychopathological symptoms, inner picture of the disease and the structure of the patient's problem. It is also the way of psychological influence of the person, which is worked out directly on the basis of a personal contact between the doctor, the psychologist and the patient. The principles of clinical interview are unambiguousness, exactness and simplicity of formulations, adequacy, sequence, flexibility and impartiality of interrogation, verity of the information received. The success of the interview depends on the examiner qualification that presupposes the capability to establish the contact with an examined person, to give him an opportunity to express himself as freely as it is possible.

In the process of clinical interview, the patient's history and his complaints are taken. History taking permits to form an opinion about the character of the disease, its causes and development, peculiarities of its course and clinical manifestations. Taking a case history the doctor can reveal the mental state of the patient before the disease. He can also find out whether the patient was treated

before and if so in what departments he was treated and how effective the treatment was. The case history allows the doctor to determine the attitude of the patient to his disease, the peculiarities of the psychological reactions to the disease. Interviewing the patient, the doctor both estimates the facts and has the opportunity to determine the psychological peculiarities of the patient. It is necessary to afford an opportunity for the patient to speak on his own about his life and disease. However, the interview with the patient should he guided by the doctor. It is very important to ask questions to the patient correctly and in the certain order and form. It is not recommended to inspire the patient these or other sensations asking him questions (for example, it is sometimes enough to ask the patient whether he has pains in the heart region and he begins to feel them). Intimate questions about the patient's life should be asked with special delicacy. The doctor should take into account how attentively and thoughtfully the patient listens to his questions. Sometimes patients underestimate the severity of their disease and either they don't complain at all or alleviate the degree of its manifestations.

The steps in designing and conducting a survey can be listed as follows:

1. *Set the Goals* – What do you want to capture?
2. *Decide the target population and sample size* – Who will you ask?
3. *Determine the questions* – What will you ask?
4. *Pre-test the Survey* – Test the questions.
5. *Conduct the Survey* – Ask the questions.
6. *Analyze the data collected* – Produce the report (to analyze the data in order to make conclusions, it is very important to compare results with norms. Norms are set by a large number of subjects and vary from population to population. What is considered to be a normal behavior in one society may be very different in another).

Advantages: A survey can gather large amounts of information in a relatively short period of time, especially with many surveys now being conducted on the internet.

Limitations: Survey data is based solely on subjects' responses, which can be inaccurate due to outright lying,

misunderstanding of the question, the placebo effect, or even the manner in which the question is asked.

Psychological Testing

Psychological testing is the acquisition of data regarding a subject's behavior to learn about the mental state of the individual.

On the basis of ***the psycho-diagnostic examination*** the hypotheses about the dependences between different psychological descriptions are checked. When their peculiarities are revealed in the sufficient number of the examined, it is possible to determine their interrelation on the basis of the proper mathematical procedures. The demands to both the psycho-diagnostic examination and the experiment are the same –variable control. Psycho-diagnosis as a field of psychology deals with the estimation of personality psychological characteristics. The main methods of psycho-diagnosis are *testing and interviewing*. Their systematic expression is tests and questionnaires which are also called methods. The methods make it possible to collect the diagnostic information in the relatively short time, they give the general information about the person, about these or those of his peculiarities in particular (his intellect, anxiety, etc.), and they allow the making a quantitative and qualitative comparison of an individual with other people. The information received with the help of psycho-diagnostic methods is useful with regard to the selection of interference means, the prognosis of its efficiency, development, contact, effect of this or that individual activity.

A test is a try-out, a task or a task system which helps to estimate the mental state or maturity of the examined. Psycho-diagnosis uses a number of experimental psychological methods or tests which help to estimate the functioning of both separate areas of mental activity and integrative formation such as temperament types, personality peculiarities and personal traits. There are verbal (language) and non-verbal (picture) tests. Two groups of tests – standard and project – are usually distinguished. The test directed toward estimation is called a standard test (maturity, creativity, aptitude tests). However, there are tests that are directed not toward the estimation indices, but toward the qualitative personality peculiarities. Project methods belong to this group of tests. They are based on the fact that the personality is realized through various manifestations of an individual including some hidden unconscious

needs, conflicts, feelings. Thus the main thing is subjective contents and attitude that a test can cause in an examined person and it allows making conclusions about the personality peculiarities.

Following tests could make a good example of big variety of these methods.

✓ *For the perception examination* such methods are used: «Sensory excitability», «Aschaffenburg's test», «Reichardt's test», «Liepmann's test».

✓ *For the memory examination*: «Ten words test», «Memorizing numbers», «Story reproduction».

✓ *For the attention examination*: «Schulte's tables», «Proof test», «Anfimov's tables», «Counting by Kraepelin».

✓ *For the thinking examination*: «Classification», «Exception of notions», «Syllogisms», «Analogies», «Generalization tests», «Association experiment», «Pictogram».

✓ *For the intellect examination*: «Raven's matrices», «Wechsler's test». *For the emotions examination*: «Spielberg's test», «Luscher's methods of color choices».

✓ And finally, *for complex examination of the personality* «Rorschach's test», «MMPI» and «Topical apperceptive test (TAT)» are used.

Questionnaires are the methods containing a number of questions to be answered by an examined person in order to find out whether he agrees with them or not. There are questionnaires of an «open» type (answers are given arbitrarily) and of a «closed» type (answers are chosen from the variants given in the questionnaire). Besides, there are questionnaires-surveys and personality questionnaires. Questionnaires-surveys give an opportunity to get such information about the examined person that doesn't show directly his personality characteristics. They are biography, interests, aims questionnaires, for example.

Personality questionnaires used for the evaluation of personality characteristics are divided into several groups:

a) typological questionnaires worked out on the basis of personality type determination allow referring the examined to this or that type which differs in its peculiar manifestations;
b) personality traits questionnaires which determine the expression of traits, i.e. stable personality signs;

c) motives questionnaires;
d) importance questionnaires;
e) aims questionnaires;
f) interests questionnaires.

Advantages: Most tests are normalized and standardized, which means they provide reliable and valid results. Psychological test provide information to compliment therapy or enhance employment opportunities.

Limitations: Tests which are not reliable and valid produce inaccurate results.

Types of Psychological Testing:

Intelligence and Achievement Tests. These tests are designed to measure specific cognitive functioning such as Intelligence, often referred as Intelligence Quotient (IQ) and the extent of learning (Achievement test). Tests, such as the Wexler Adult Intelligence Scale IV edition (WAIS-IV), measures general knowledge, verbal skill, memory, attention span, logical reasoning, and visual/spatial perception. Many tests have been developed to identify academic competence.

Personality Test. Personality tests describe patterns of behavior, thoughts, and feelings that are not directly available during clinical interview or evaluation. They generally fall within two categories: objective and projective. Objective Measures, such as the Minnesota Multiphasic Personality Inventory (MMPI), are based on restricted answers – such as yes/no, true/false, or a rating scale-which allow for the computation of scores that can then be compared to a normative group. Projective tests, such as the Rorschach Inkblot Test allow for open-ended answers, based on ambiguous stimuli, revealing unconscious psychological dynamics.

Neuropsychological Tests. These tests measure psychological functions linked to a particular brain structure. The instruments are used to assess impairment due to injury, or illness which affect neurocognitive functioning.

Introspection

Introspection is the self-observation and reporting of conscious inner thoughts, desires, and sensations. It is a conscious mental and usually purposive process relying on thinking, reasoning, and examining one's own thoughts, feelings, and in more spiritual cases,

one's soul. Introspection may be used synonymously with self-reflection and used in a similar way. This was a central component to the early days of psychology during the Structuralist period. Wundt and other psychologists had people introspect and then report on their feelings, thoughts, etc.

Statistical

When conducting research, psychologist need statistics to analyze data to support the hypothesis.

Research Biases

To ensure that what is being observed in an experiment is indeed what is occurring, certain precautions must be taken in an attempt to minimize the effects of research biases. Research Biases are aspects of research that can alter or contaminate the results.

Types of Research Bias:

- *Selection Bias.* Occurs when differences between groups are present at the beginning of the experiment.
- *Placebo Effect.* Involves the influencing of performance due to the subject's belief regarding the results. In other words, if a subject were to believe that a certain medication is effective, any medication given could result in the subject claiming to feel better, even if only a sugar pill is given. This demonstrates the power of the mind to change a person's perceptions of reality.
- *Experimenter Bias.* The same way a subject's beliefs can influence his/her perception, so can the beliefs of the experimenter. If an experimenter is convinced of his/her treatment, or if the treatment may result in a positive outcome for the experimenter if found to have a certain outcome (i.e., monetary reward, fame) then one must be cautious of this bias, which may influence the outcome of the experiment.
- *Controlling for Biases.* After carefully reviewing a study and determining what factors may unintentionally affect the results, these biases must be controlled for. To control for selection bias, most experiments use what's called Random Assignment, which means assigning the subjects to each group based on chance rather than human decision. To control for the placebo effect, subjects are often not informed of the purpose of the experiment. This is called a *Blind study* because the subjects are not aware of the expected results. To control for experimenter biases, a Double-Blind study can be utilized,

which means that both the experimenter and the subjects are blind to the purpose and anticipated results of the study.

The different methods of psychological examination can be used in combination, thus creating a full picture of a person's mental condition. The last stage of experimental psychological examination necessarily contains a written conclusion based on the received data.

Video to view

1/ Intro to Psychology: Crash Course Psychology #1
https://www.youtube.com/watch?v=vo4pMVb0R6M
2/ Psychological Research: Crash Course Psychology #2
https://www.youtube.com/watch?v=hFV71QPvX2I
3/ Introducing Clinical Psychology
https://www.youtube.com/watch?v=lnfPAgJZHU4
4/ Essentials of Clinical Psychology
https://www.youtube.com/watch?v=eazt3vpCJ2k
5/ The Difference Between Counselling & Clinical Psychology
https://www.youtube.com/watch?v=GDE8ygpTY8g

Control questions

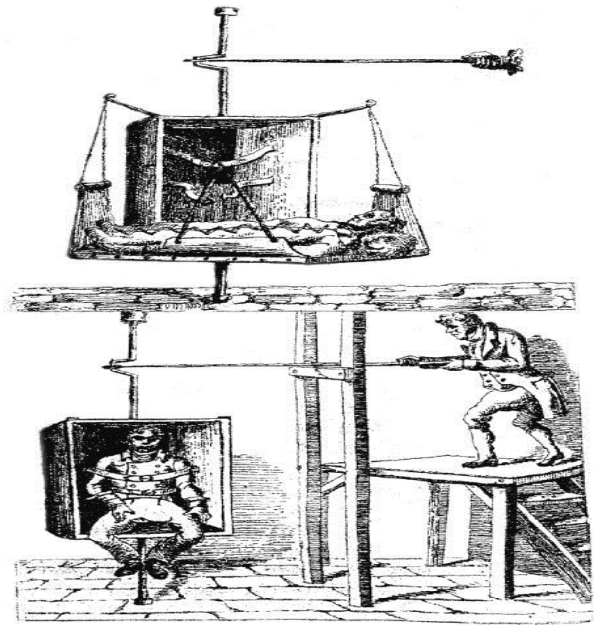
1. Medical psychology, purpose, tasks, place among other disciplines?
2. The role of a medical psychologist in diagnostic, treatment and rehabilitation processes?
3. Theoretical and methodological foundations of medical psychology?
4. Stages of formation and development of medical psychology in the world?
5. Methods of psychological research: observation, introspection, purposeful psychological conversation?
6. Experimental psychological methods, their role in the psychological diagnosis of patients?
7. Principles of constructing a comprehensive psychological study taking into account the age and cultural characteristics of the patient?
8. Determination of mental health and levels of psychological adaptation.
9. What important ethical principles guide clinical psychologist?
10. Why is a psychological science important for future clinical psychologists?

CHAPTER 2
DIAGNOSIS AND CLASSIFICATION OF PSYCHOLOGICAL PROBLEMS

Objectives: to learn the problem of norm and pathology; models of mental disorders; the norm as a real stable phenomenon; boundaries between norm and pathology: psychopathology of everyday life, marginal and transient disorders; norm as a statistical concept; adaptive concepts of the norm; the norm as an ideal; medical and biological model of mental disorders; the concept of the disease; psychosocial model: the role of society and intrapersonal factors; biopsychosocial model; development of the disease: predispositional factors.

Clinical psychology is usually thought of as an applied field. Clinicians attempt to apply empirically supported psychological principles to problems of adjustment and abnormal behavior. Typically, this involves finding successful ways of changing the behavior, thoughts, and feelings of clients. In this way, clinical psychologists reduce their clients' maladjustment or dysfunction or increase their levels of adjustment. Before clinicians can formulate and administer interventions, however, they must first assess their clients' symptoms of psychopathology and levels of maladjustment. Interestingly, the precise definitions of these and related terms can be elusive. Further, the manner in which the terms are applied to clients is sometimes quite unsystematic.

Clinical psychology has moved beyond the primitive views that defined mental illness as possession by demons or spirits. Maladjustment is no longer considered a state of sin. The 18th and 19th centuries ushered in the notion that «insane» individuals are sick and require humane treatment. Even then, however, mental health practices could be bizarre, to say the least. Clearly, clinical psychologists' contemporary views are considerably more sophisticated than those of their forebears. Yet many view current treatments such as electroconvulsive therapy (ECT) with some skepticism and



concern. Still others may see the popularity of treatments using psychotropic medications (e.g., antipsychotic, antidepressant, antimanic, or antianxiety medications) as less than enlightened. Finally, many forms of «psychological treatment» (e.g., primal scream therapy, age regression therapy) are questionable at best. All of these treatment approaches and views are linked to the ways clinical psychologists decide who needs assessment, treatment, or intervention as well as the rationale for providing these services. These judgments are influenced by the labels or diagnoses often applied to people.

What Is Abnormal Behavior?

Ask 10 different people for a definition of abnormal behavior and you may get 10 different answers. Some of the reasons that abnormal behavior is so difficult to define are (a) no single descriptive feature is shared by all forms of abnormal behavior, and no one criterion for «abnormality» is sufficient; and (b) no discrete boundary exists between normal and abnormal behavior. Many myths about abnormal behavior survive and flourish even in this age of enlightenment. For example, many individuals still equate abnormal behavior with (a) bizarre behavior, (b) dangerous behavior, or (c) shameful behavior.

Psychology worked with the disease model for over 60 years, from about the late 1800s into the middle part of the 19th century. The focus was simple – curing mental disorders – and included such pioneers as Freud, Adler, Klein, Jung, and Erickson. These names are synonymous with the psychoanalytical school of thought. In the 1930s, behaviorism, under B.F. Skinner, presented a new view of human behavior. Simply, human behavior could be modified if the correct combination of reinforcements and punishments were used. This view point espoused the dominant worldview still present at the time – mechanism – and that the world could be seen as a great machine and explained through the principles of physics and chemistry. In it, human beings were smaller machines in the larger machine of the universe.

Moving into the mid to late 1900s, we developed a more scientific investigation of mental illness which allowed us to examine the roles of both nature and nurture and to develop drug and psychological treatments to «make miserable people less miserable».

Though this was good, there were three consequences as pointed out by Martin Seligman in his 2008 TED Talk entitled, «The new era of positive psychology». These are:

- «The first was moral; that psychologists and psychiatrists became victimologists, pathologizers; that our view of human nature was that if you were in trouble, bricks fell on you. And we forgot that people made choices and decisions. We forgot responsibility. That was the first cost».
- «The second cost was that we forgot about you people. We forgot about improving normal lives. We forgot about a mission to make relatively untroubled people happier, more fulfilled, more productive. And «genius», «high-talent», became a dirty word. No one works on that».
- «And the third problem about the disease model is, in our rush to do something about people in trouble, in our rush to do something about repairing damage, it never occurred to us to develop interventions to make people happier – positive interventions».

One attempt to address the limitations of both psychoanalysis and behaviorism came from 3rd force psychology – humanistic psychology – under such figures as Abraham Maslow and Carl Rogers starting in the 1960s. As Maslow, said, «The science of psychology has been far more successful on the negative than on the positive side; it has revealed to us much about man's shortcomings, his illnesses, his sins, but little about his potentialities, his virtues, his achievable aspirations, or his full psychological height. It is as if psychology had voluntarily restricted itself to only half its rightful jurisdiction, and that the darker, meaner half (Maslow, 1954, p. 354)». Humanistic psychology instead addressed the full range of human functioning and focused on personal fulfillment, valuing feelings over intellect, hedonism, a belief in human perfectibility, emphasis on the present, self-disclosure, self-actualization, positive regard, client centered therapy, and the hierarchy of needs. Again, these topics were in stark contrast to much of the work being done in the field of psychology up to and at this time.

The one truth is that no matter what behavior we display, if taken to the extreme, it can become disordered – whether trying to control others through social influence or helping people in an altruistic fashion. As such, we can consider abnormal behavior to be

a combination of personal distress, psychological dysfunction, deviance from social norms, dangerousness to self and others, and costliness to society.

In this section, we examine in some detail three proposed definitions of abnormal behavior: (a) conformity to norms, (b) the experience of subjective distress, and (c) disability or dysfunction. We discuss the pros and cons of each definition. Although each of these three definitions highlights an important part of our understanding of abnormal behavior, each definition by itself is incomplete.

a) Conformity to Norms: Statistical Infrequency or Violation of Social Norms

When a person's behavior tends to conform to prevailing social norms or when this particular behavior is frequently observed in other people, the individual is not likely to come to the attention of mental health professionals. However, when a person's behavior becomes patently deviant, outrageous, or otherwise nonconforming, then he or she is more likely to be categorized as «abnormal».

The definition of abnormality in terms of statistical infrequency or violation of social norms is attractive for at least two reasons.

1. ***Cutoff Points***. The statistical infrequency approach is appealing because it establishes cutoff points that are quantitative in nature. If the cutoff point on a scale is 80 and an individual scores 75, the decision to label that individual's behavior as abnormal is relatively straightforward. This principle of statistical deviance is frequently used in the interpretation of psychological test scores. The test authors designate a cutoff point in the test manual, often based on statistical deviance from the mean score obtained by a «normal» sample of test-takers, and scores at or beyond the cutoff are considered «clinically significant» (i.e., abnormal or deviant).

2. ***Intuitive Appeal***. It may seem obvious that those behaviors we ourselves consider abnormal would be evaluated similarly by others. The struggle to define exactly what abnormal behavior is does not tend to bother us because, as a U.S. Supreme Court justice once said about pornography, we believe that we know it when we see it.

Conformity criteria seem to play a subtle yet important role in our judgments of others. However, although we must systematically seek the determinants of the individual's nonconformity or deviance,

we should resist the reflexive tendency to categorize every nonconformist behavior as evidence of mental health problems. Conformity criteria in fact have a number of problems.

1. Choice of Cutoff Points. Conformity-oriented definitions are limited by the difficulty of establishing agreed-upon cutoff points. As noted previously, a cutoff is very easy to use once it is established. However, very few guidelines are available for choosing the cutoff point.

2. *The Number of Deviations*. Another difficulty with nonconformity standards is the number of behaviors that one must evidence to earn the label «deviant».

3. Cultural Relativity. In short, what is deviant for one group is not necessarily so for another. Thus, the notion of cultural relativity is important. Likewise, judgments can vary depending on whether family, school authorities, or peers are making them. Such variability may contribute to considerable diagnostic unreliability because even clinicians' judgments may be relative to those of the group or groups to which they belong.

Figure 1. Appearance or dress may violate social norms but does not necessarily indicate abnormality or psychopathology

Two other points about cultural relativity are also relevant. First, carrying cultural relativity notions to the extreme can place nearly every reference group beyond reproach. Cultures can be reduced to subcultures and subcultures to minicultures. If we are not careful, this reduction process can result in our judging nearly every behavior as healthy. Second, the elevation of conformity to a position of preeminence can be alarming. One is reminded that so-

called nonconformists have made some of the most beneficial social contributions. It can also become very easy to remove those whose different or unusual behavior bothers society. Some years ago in Russia, political dissidents were often placed in mental hospitals. In America, it sometimes happens that 70-year-old Uncle Arthur's family is successful in hospitalizing him largely to obtain his power of attorney. His deviation is that, at age 70, he is spending too much of the money that otherwise will be eventually inherited by the family. Finally, if all these points are not enough, excessive conformity has itself sometimes been the basis for judging persons abnormal.

b) Subjective Distress

We now shift the focus from the perceptions of the observer to the perceptions of the affected individual. Here the basic data are not observable deviations of behavior, but the subjective feelings and sense of well-being of the individual. Whether a person feels happy or sad, tranquil or troubled, and fulfilled or barren are the crucial considerations. If the person is anxiety ridden, then he or she is maladjusted regardless of whether the anxiety seems to produce overt behaviors that are deviant in some way.

Defining abnormal behavior in terms of subjective distress has some appeal. It seems reasonable to expect that individuals can assess whether they are experiencing emotional or behavioral problems and can share this information when asked to do so. Indeed, many methods of clinical assessment (e.g., self-report inventories, clinical interviews) assume that the respondent is aware of his or her internal state and will respond to inquiries about personal distress in an honest manner. In some ways, this relieves the clinician of the burden of making an absolute judgment as to the respondent's degree of maladjustment.

This example suggests that labeling someone maladjusted is not very meaningful unless the basis for the judgment is specified and the behavioral manifestations are stated. Not everyone whom we consider to be «disordered» reports subjective distress. For example, clinicians sometimes encounter individuals who may have little contact with reality yet profess inner tranquility. Nonetheless, these individuals are institutionalized. Such examples remind us that subjective reports must yield at times to other criteria. Another problem concerns the amount of subjective distress necessary to be

considered abnormal. All of us become aware of our own anxieties from time to time, so the total absence of such feelings cannot be the sole criterion of adjustment. How much anxiety is allowed, and for how long, before we acquire a label? Many would assert that the very fact of being alive and in an environment that can never wholly satisfy us will inevitably bring anxieties. Thus, as in the case of other criteria, using phenomenological reports is subject to limitations. There is a certain charm to the idea that if we want to know whether a person is maladjusted, we should ask that person, but there are obvious pitfalls in doing so.

c) Disability or Dysfunction

A third definition of abnormal behavior invokes the concept of disability or dysfunction. For behavior to be considered abnormal, it must create some degree of social (interpersonal) or occupational problems for the individual. Dysfunction in these two spheres is often quite apparent to both the individual and the clinician. For example, a lack of friendships or of relationships because of a lack of interpersonal contact would be considered indicative of social dysfunction, whereas the loss of one's job because of emotional problems (e.g., depression) would suggest occupational dysfunction.

Perhaps the greatest advantage to adopting this definition of abnormal behavior is that relatively little inference is required. Problems in both the social and occupational sphere often prompt individuals to seek out treatment. It is often the case that individuals come to realize the extent of their emotional problems when these problems affect their family or social relationships as well as significantly affect their performance at either work or school. Who should establish the standards for social or occupational dysfunction?

The patient, the therapist, friends, or the employer? In some ways, judgments regarding both social and occupational functioning are relative-not absolute-and involve a value-oriented standard. Although most of us may agree that having relationships and contributing to society as an employee or student are valuable characteristics, it is harder to agree on what specifically constitutes an adequate level of functioning in these spheres. In short, achieving a reliable consensus about the nature of an individual's social relationships and contributions as a worker or student may be

difficult. Recognizing this problem, psychopathologists have developed self-report inventories and special interviews to assess social and occupational functioning in a systematic and reliable way. To summarize, several criteria are used to define abnormal behavior. Each criterion has its advantages and disadvantages, and no one criterion can be used as a gold standard. Some subjectivity is involved in applying any of these criteria.

Where Does This Leave Us?

As the previous discussion points out, all definitions of abnormal behavior have their strengths and weaknesses. These definitions can readily incorporate certain examples of abnormal behavior, but exceptions that do not fit these definitions are easy to provide. For example, all of us can think of an «abnormal behavior» that would not be classified as such if we adopted the subjective distress criterion (e.g., spending sprees in mania), and we can think of a behavior that might be classified incorrectly as abnormal if we adopted the violation of norms definition (e.g., an NFL all-star's athletic prowess). It is also important to note that abnormal behavior does not necessarily indicate mental illness.

Rather, the term mental illness refers to a large class of frequently observed syndromes that are comprised of certain abnormal behaviors or features. These abnormal behaviors/features tend to covary or occur together such that they often are present in the same individual. For example, major depression is a widely recognized mental illness whose features (e.g., depressed mood, sleep disturbance, appetite disturbance, and suicidal ideation) tend to co-occur in the same individual.

However, an individual who manifested only one or two of these features of major depression would not receive this diagnosis and might not be considered mentally ill. One can exhibit a wide variety of abnormal behaviors (as judged by any definition) and yet not receive a mental disorder diagnosis.

Like abnormal behavior, the term mental illness or mental disorder is difficult to define. Nevertheless, it seems important to actually define mental illness rather. The text revision of the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2000), known as DSM-IV-TR, is the official diagnostic system for mental disorders in the United

States. It states that a ***mental disorder*** is conceptualized as a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (e.g., a painful symptom) or disability (i.e., impairment in one or more important areas of functioning) or with a significantly increased risk of suffering, death, pain, disability, or an important loss of freedom. In addition, this syndrome or pattern must not be merely an expectable and culturally sanctioned response to a particular event, for example, the death of a loved one. Whatever its original cause, it must currently be considered a manifestation of a behavioral, psychological, or biological dysfunction in the individual. Neither deviant behavior (e.g., religious, political, or sexual) nor conflicts that are primarily between the individual and society are mental disorders unless the deviance or conflict is a symptom of the dysfunction in the individual as described above.

Several aspects of this definition are important to note: (a) *The syndrome (cluster of abnormal behaviors)* must be associated with distress, disability, or increased risk of problems; (b) *a mental disorder* is considered to represent a dysfunction within an individual; and *(c) not all deviant behaviors or conflicts with society* are signs of mental disorder.

On the one hand, the DSM-IV-TR definition is more comprehensive than any one of the three individual definitions of abnormal behavior presented earlier. On the other hand, the DSM-IV-TR definition is more restrictive because it focuses on syndromes, or clusters of abnormal behaviors, that are associated with distress, disability, or an increased risk for problems.

Consensus regarding positive mental health is far from unanimous. Some identify the mentally ill as anyone who seeks psychological care; at the other end of the spectrum are those who view the mentally ill as those who hallucinate, lose or distort contact with reality, or have suicidal ideation (Bentall, 2003). The criterion for positive mental health is the absence of mental illness. Evaluation of actions as sick, or normal, or extraordinary in a positive sense often depends on accepted social conventions. When normality is used as a criterion for mental health then it is usually defined either as statistical frequency or normality in terms of the way a person ought to behave (Bartlett, 2011).

Mental health or normality is virtually impossible to define. We generally think of normal people as average or those individuals who do not deviate from what is considered normal in their social living groups. Rosenhan (1973) conducted an experiment in normality and mental health. He had five men and three women disguise the fact that they were normal and claim that they were hallucinating so that they could be admitted as mental patients. Once they were admitted, they behaved as their usual normal selves. Rather than the authorities seeing these pseudo patients as the healthy people they were, they continued to perceive them in terms of their diagnosis at the time of admission. The only individuals who could identify them as normal were the in-patients. This experiment was somewhat embarrassing, as individuals who were in charge of mental health facilities believed that they had the training and experience to recognize mental illness, when in fact this experiment cast a shadow of doubt upon the way we classify mental illness and the fact that trained professionals could not distinguish mentally ill individuals from the mentally well.

A medical classification of abnormal behavior describes the characterization by the presence of specific symptoms that define abnormality. Certain symptoms are the basis of determining whether an individual is experiencing an underlying disorder. There are two basic variations of the medical definition that can be distinguished as either organically based or psychologically based. The organic based definition characterizes a group of disorders that have a biological foundation. Many abnormal behaviors are known to have a biological foundation and the medical classifications are sufficient to clearly identify these disorders. The second variation of the medical definition of abnormal behaviors is more difficult to define in terms of parameters. The psychological element to mental disorders without the presence of a biological determinant can be difficult to classify. These disorders are referred to as functional disorders. Examples of psychological symptoms that can be underlying a mental illness are mood, attitudes and traits. Symptoms such as delusions, hallucinations and depression would be signs of a mental disease (Kutchins & Kirk, 2003).

The medical classification of defining abnormal behavior is that it departs from the norm and harms the affected individual. This

definition does allow for the various criteria and perspectives concerning mental illness as well as implying that there is no specific designation from normal to abnormal but is based soley on harm. A mental disorder under this classification implies recognizable pattern behavior (Kutchins & Kirk, 2003).

One of the major problems with the medical definition of abnormal behavior is that mental illness differs from physical disease and the medical approach is difficult to apply. Many mental illnesses cannot be detected in the early stages and often appear difficult to distinguish from normal behavior. Often the precipiting cause is difficult to identify and the identification and etiology are often debated. In addition, the classification is defined by the presence of symptoms as the sole basis for identifying abnormality. Physiological disorders can be easily detected; fever, swelling, skin rashes are symptomatic of many physical disorders and can be measured and evaluated. A change in mood cannot be evaluated so easily. Another significant difference in the two types of medical classification is that the psychological categorization is also related to the reactions of others and is relative to social norms and desired behaviors (Kutchins & Kirk, 2003). Many social factors can contribute to abnormal behavior with the individual struggling to cope before they are diagnosed with a mental illness. It is only when the individual becomes harmful to themselves or others that the abnormal behaviors shift to mental illness.

A further complexity in the medical definition of functional disorders is the designation of what symptoms are related to which disorders. Currently, there is a commonly used system of psychiatric classification describing a wide range of psychological disorders that is often utilized to overcome the complexity of determining psychological dysfunction. This system is published as a manual by the American Psychiatric Association and is referred to as the Diagnostic and Statistical Manual (Kutchins & Kirk, 2003).

Guidelines based on research and clinical practice have been collected and documented to provide a basis for what constitutes mental disorders, normal and abnormal psychological development and psychological dysfunction. Although this classification system appears to be a reliable way to classify mental disorders, the reality is much more complicated. If we were to take one of the cultural

based disorders such as Ghost sickness, the classification system would quickly evaluate the individual as having some type of psychotic disorder. When culture is taken into consideration this classification would be inadequate; clearly the classification has some significant drawbacks.

Without a systematic structure each abnormal behavior would have to be evaluated as a separate and distinct element, a decision would have to be reached whether or not the behavior is abnormal and then whether it is problematic. Without a classification system patterns could not be established, treatment could not be standardized and researchers would not understand each other's categories. Classification systems allow decisions to be made in terms of the treatment and progression of the illness.

The Importance of Diagnosis

Before uncritically accepting this definition or taking for granted the utility of diagnosing and classifying individuals, we need to answer a basic question: Why should we use mental disorder diagnoses? Diagnosis is a type of expert-level categorization.

Categorization is essential to our survival because it allows us to make important distinctions (e.g., a mild cold vs. viral pneumonia, a malignant vs. a benign tumor). The diagnosis of mental disorders is an expert level of categorization used by mental health professionals that enables us to make important distinctions (e.g., schizophrenia vs. bipolar disorder with psychotic features).

There are at least four major advantages of diagnosis. First, and perhaps most important, a primary function of diagnosis is communication. A wealth of information can be conveyed in a single diagnostic term. For example, a patient with a diagnosis of paranoid schizophrenia was referred to the author by a colleague in New York City. Immediately, without knowing anything else about the patient, a symptom pattern came to mind (delusions, auditory hallucinations, severe social/occupational dysfunction, continuous signs of the illness for at least 6 months). Diagnosis can be thought of as «verbal shorthand» for representing features of a particular mental disorder. Using standardized diagnostic criteria (e.g., those that appear in the DSM-IV) ensures some degree of comparability with regard to mental disorder features among patients diagnosed in California, Missouri, Manhattan (New York), or Manhattan, Kansas.

Diagnostic systems for mental disorders are especially useful for communication because these classificatory systems are largely descriptive. That is, behaviors and symptoms that are characteristic of the various disorders are presented without any reference to theories regarding their causes. As a result, a diagnostician of nearly any theoretical persuasion can use them. If every psychologist used a different, theoretically based system of classification, a great number of communication problems would likely result.

Second, the use of diagnoses enables and promotes empirical research in psychopathology. Clinical psychologists define experimental groups in terms of individuals' diagnostic features, thus allowing comparisons between groups with regard to personality features, psychological test performance, or performance on an experimental task. Further, the way diagnostic constructs are defined and described will stimulate research on the disorders' individual criteria, on alternative criteria sets, and on the comorbidity (co-occurrence) between disorders.

Third, and in a related vein, research into the etiology, or causes, of abnormal behavior would be almost impossible to conduct without a standardized diagnostic system. To investigate the importance of potential etiological factors for a given psychopathological syndrome, we must first assign subjects to groups whose members share diagnostic features. For example, several years ago, it was hypothesized that the experience of childhood sexual abuse may predispose individuals to develop features of borderline personality disorder (BPD). The first empirical attempts to evaluate the veracity of this hypothesis involved assessing the prevalence of childhood sexual abuse in well-defined groups of subjects with borderline personality disorder as well as in non-borderline psychiatric controls. These initial studies indicated that childhood sexual abuse does occur quite frequently in BPD individuals and that these rates are significantly higher than those found in patients with other (non-BPD) mental disorder diagnoses. Thus, it is worth investigating whether it is an important etiological factor in BPD. Before we could reach these types of conclusions, there had to be a reliable and systematic method of assigning subjects to the BPD category.

Finally, diagnoses are important because, at least in theory, they may suggest which mode of treatment is most likely to be effective. Indeed, this is a general goal of a classification system for mental disorders (Blashfield & Draguns, 1976). As Blashfield and Draguns (1976) stated, «The final decision on the value of a psychiatric classification for prediction rests on an empirical evaluation of the utility of classification for treatment decisions». For example, a diagnosis of schizophrenia suggests to us that the administration of an antipsychotic medication is more likely to be effective than is a course of psychoanalytic psychotherapy. However, it is important to note one thing in passing. Although, in theory, the linkage between diagnosis and treatment would seem to justify the time involved in diagnostic assessment, often several treatments appear to be equally effective for an individual disorder.

Some of the etiological models are quite different in their perspective on abnormal behavior. These differences certainly have implications for how a clinician adhering to one of these viewpoints will conduct assessment and treatment. For example, a clinical psychologist subscribing to a cognitive theory of depression will probably use cognitively based assessment instruments to identify maladaptive cognitions as well as cognitive-behavioral interventions to treat depression.

A more general model of etiology that can accommodate a variety of theoretical viewpoints is **the diathesis-stress model of psychopathology**. The diathesis-stress model is not wedded to one school of thought and can incorporate biological, psychological, and environmental factors. A diathesis refers to a vulnerability or predisposition to possibly develop the disorder in question. A diathesis can be biological (e.g., a genetic predisposition, a deficit or excess in neurotransmitter functioning) or psychological (e.g., maladaptive cognitive schema, maladaptive personality style). A diathesis is necessary but not sufficient to produce a mental disorder. What is required in addition to a diathesis is sufficient environmental stress. Stressors can be biological in nature (e.g., poor nutrition) or psychological (e.g., malignant family environment, traumatic life event). Both the diathesis and the stress are necessary to produce the disorder in question. Possessing the diathesis increases the likelihood of developing the disorder but does not

guarantee this outcome. Moreover, as may be apparent, the exact nature of the diathesis and stress necessary for developing a specific disorder is likely to vary from disorder to disorder. Finally, the interaction between the diathesis and stress is also likely to be disorder-specific.

In summary, diagnosis and classification of psychopathology serve many useful functions. Whether they are researchers or practitioners, contemporary clinical psychologists use some form of diagnostic system in their work. At this point, we turn to a brief description of classification systems that have been used to diagnose mental disorders over the years, and then we examine in more detail the features of the diagnostic classification system used most frequently in the United States, the DSM-IV-TR.

A Condensed Version of the DSM-IV-TR

Axis I: ***Clinical disorders or other conditions that may be a focus of clinical attention***

- Disorders usually first diagnosed in infancy, childhood, or adolescence (e.g., Pervasive Developmental Disorders)
- Delirium, Dementia, and Amnestic and Other Cognitive Disorders
- Mental Disorders Due to a General Medical Condition
- Substance-related Disorders (e.g., alcohol abuse; cocaine dependence)
- Schizophrenia and Other Psychotic Disorders
- Mood Disorders (e.g., Major Depression, Bipolar Disorder)
- Anxiety Disorders (e.g., Agoraphobia; Post-Traumatic Stress Disorder)
- Somatoform Disorders (e.g., Hypochondriasis)
- Factitious Disorders
- Dissociative Disorders (e.g., Dissociative Identity Disorder)
- Sexual and Gender Identity Disorders (e.g., Vaginismus; Fetishism)
- Eating Disorders (e.g., Anorexia Nervosa)
- Sleep Disorders (e.g., Narcolepsy)
- Impulse Control Disorders (e.g., Kleptomania)
- Adjustment Disorders
- Other conditions that may be a focus of clinical attention (e.g., Bereavement)

Axis II: ***Personality Disorders and Mental Retardation***

- Personality Disorders (e.g., Borderline, Antisocial, Dependent, Paranoid)
- Mental Retardation

Axis III: ***General medical conditions that are potentially relevant to the understanding or management of the individual's mental disorder***

Axis IV: ***Psychosocial and environmental problems***

- Problems with primary support group
- Problems related to the social environment
- Educational problems
- Occupational problems
- Housing problems
- Economic problems
- Problems with access to health care services

■ Problems related to interaction with the legal system/crime
■ Other psychosocial and environmental problems

Axis V: Global assessment of functioning (GAF) scale a code description 100 to 91 Superior functioning in a wide range of activities.

81 to 90 Absent or minimal symptoms (e.g., mild anxiety before an exam), good functioning in all areas, interested and involved in a wide range of activities, socially effective, generally satisfied with life, no more than everyday problems or concerns (e.g., occasional argument).

71 to 80 If symptoms are present they are transient, expectable reactions to psychosocial stressors.

61 to 70 Some mild symptoms.

51 to 60 Moderate symptoms.

41 to 50 Serious symptoms (e.g., suicidal ideation, severe obsessional rituals, frequent shoplifting) or any serious impairment in social, occupational, or school functioning (e.g., no friends, unable to keep a job).

31 to 40 Some impairment in reality testing or communication.

21 to 30 Behavior is considerably influenced by delusions or hallucinations.

11 to 20 Some danger of hurting self or others.

1 to 10 Persistent danger of severely hurting self or others (e.g., recurrent violence) or persistent inability to maintain minimal personal hygiene or serious suicidal act with clear expectation of death.

0 Inadequate information.

*Full descriptions are provided here only for Codes 81–90, 41–50, and 1–10.

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Key terms

Axis I The diagnostic axis of the DSM-IV-TR that identifies all of the clinical disorders that are present, except for the personality disorders and mental retardation.

Axis II The diagnostic axis of the DSM-IV that indicates the presence of personality disorders or mental retardation.

Axis III The diagnostic axis of the DSM-IV that identifies current medical conditions that may be relevant to the conceptualization or treatment of the disorders diagnosed on Axes I and II.

Axis IV The diagnostic axis of the DSM-IV that specifies any psychosocial or environmental problems relevant to diagnosis, treatment, and prognosis.

Axis V The diagnostic axis of the DSM-IV that provides a numerical index of the individual's overall level of functioning.

Categories Discrete classifications. Many of the mental disorders in the current diagnostic system are presented as categorical in nature, meaning that people are judged either to have the disorder or not have it.

Conformity to norms One of the three major definitions of abnormal behavior, this definition labels behavior as abnormal if it violates cultural norms.

Cultural relativity In the context of conformityoriented definitions of abnormal behavior, the fact that judgments about the abnormality of a particular behavior may vary from culture to culture or subculture to subculture.

Cutoff points In the context of conformity-oriented definitions of abnormal behavior, the numerical values on a test or inventory that differentiate normal from abnormal performance.

Diathesis In the diathesis-stress model of psychopathology, a vulnerability (e.g., genetic, psychological) to develop a particular disorder.

Dimensions Continua. In a dimensional classification system, individuals may be seen as falling on any point of a continuum ranging from total absence of a disorder to its most severe manifestation.

Disability or dysfunction One of the three major definitions of abnormal behavior, this definition labels behavior as abnormal if it creates social or occupational problems for the individual.

Dysfunction – includes clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Abnormal behavior, therefore, has the capacity to make our well-being difficult to obtain and can be assessed by looking at an individual's current performance and comparing it to what is expected in general or how the person has performed in the past. As such, a good employee who suddenly demonstrates poor performance may be experiencing an environmental demand leading to stress and ineffective coping mechanisms. Once the demand resolves itself the person's performance should return to normal according to this principle.

Distress – When the person experiences a disabling condition in social, occupational, or other important activities. Distress can take the form of psychological or physical pain, or both concurrently. Alone though, distress is not sufficient enough to describe behavior as abnormal. Why is that? The loss of a loved one would cause even the most «normally» functioning individual pain. An athlete who experiences a career ending injury would display distress as well. Suffering is part of life and cannot be avoided. And some people who display abnormal behavior are generally positive while doing so.

Deviance – closer examination of the word abnormal shows that it indicates a move away from what is normal, or the mean (i.e. what would be considered average and in this case in relation to behavior), and so is behavior that occurs infrequently (sort of an outlier in our data). Our culture, or the totality of socially transmitted behaviors, customs, values, technology, attitudes, beliefs, art, and other products that are particular to a group, determines what is normal and so a person is said to be deviant when he or she fails to follow the stated and unstated rules of society, called social norms. What is considered «normal» by society can change over time due to shifts in accepted values and expectations. For instance, homosexuality was considered taboo in the U.S. just a few decades ago but today, it is generally accepted. Likewise, PDAs, or public displays of affection, do not cause a second look by most people unlike the past

when these outward expressions of love were restricted to the privacy of one's own house or bedroom. In the U.S., crying is generally seen as a weakness for males but if the behavior occurs in the context of a tragedy, then it is appropriate and understandable. Finally, consider that statistically deviant behavior is not necessarily negative. Genius is an example of behavior that is not the norm.

DSM-IV-TR The current edition of the Diagnostic and Statistical Manual for Mental Disorders, published in 2000.

Environmental stress In the diathesis-stress model of psychopathology, a stressor (e.g., biological, psychological) that acts together with a diathesis to produce a given mental disorder.

Etiological factors Causal factors.

Etiological models of psychopathology Causal models of abnormal behavior and mental illness that also have implications for assessment and treatment. Major etiological models of psychopathology include the biological, psychodynamic, learning, and cognitive models.

Global Assessment of Functioning The score provided on Axis V that serves as an index of the person's overall level of functioning.

Mental disorder A syndrome (cluster of abnormal behaviors) occurring within an individual that is associated with distress, disability, or increased risk of problems.

Mental illness A large class of frequently observed syndromes that comprise certain abnormal behaviors or features.

Multiaxial assessment The evaluation of patients along multiple domains of information. The DSMIV-TR calls for diagnosis along five separate axes, each of which aids in treatment planning and the prediction of outcome.

Principal diagnosis The diagnosis that is chiefly responsible for a person's distress or disability and should be considered the focus of treatment.

Psychopathologist A scientist who studies the causes of mental disorders as well as the factors that influence their development.

Reliability In the context of diagnostic classification, the consistency of diagnostic judgments across raters.

Sex bias In the context of diagnostic classification, sex bias would be demonstrated if the same cluster of behaviors resulted in a diagnosis for members of one sex but not for the other. Although the current diagnostic criteria are not biased in and of themselves, clinicians may be biased in the way they apply these diagnoses to males and females.

Structured diagnostic interviews A class of interviews that assesses for the specific criteria appearing in the diagnostic manual.

Subjective distress One of the three major definitions of abnormal behavior, this definition labels as psychologically abnormal those people with a poor sense of well-being and/or a high level of subjective distress.

Syndrome A group of symptoms that tends to occur together.

Validity In the context of diagnostic classification, the extent to which diagnoses correlate with meaningful variables such as etiology, prognosis, and treatment outcome.

Video to view

https://slideplayer.com/slide/8488983/
https://slideplayer.com/slide/1673168/
https://www.youtube.com/watch?v=j_jddJbOguk
https://www.youtube.com/watch?v=prUFZIcgZiQ
https://www.youtube.com/watch?v=-4fKYWNC6_o
https://www.youtube.com/watch?v=6vl8LvDxIdg

Control questions

1. What are the advantages and disadvantages of the three major definitions of abnormal behavior?
2. What is mental illness or mental disorder?
3. Why are mental disorder diagnoses important?
4. How was DSM-IV developed?
5. Describe the five diagnostic axes used for a DSM-IV diagnostic formulation.
6. How are diagnostic classification systems evaluated?
7. What is the diathesis-stress model of psychopathology?

CHAPTER 3
COGNITIVE PROCESSES OF THE PERSONALITY

For easy learning and investigation entire mental activity is conventionally divided into three spheres: cognitive, emotional and motor. Without this it is impossible to understand separate links of mental processes and symptoms of mental disturbances. But it is necessary to remember that mental processes and states and their unity with the personality constitute a whole. All mental processes are not isolated; they take place as a unity with the personality and are its expression. Cognition and evaluation of the reality are carried out through gnostic processes: perception, memory and thinking.

SENSATION AND PERCEPTION

Objectives: to learn the definition and structure of sensation and perception, the notion of analyzers.

Sensation and perception which represent the sensory sphere are the initial stage of cognitive activity. Together with representation, perception and sensation are the basis of direct active and concrete-image thinking and belong to the level of perceptive cognition. The process of perceptive cognition is inherent for both humans and animals, yet they are not identical. Sensation and perception as a mental act are formed as a result of individual development under the influence of training, education and experience. The process of their acquisition takes place from perception of simple signs and details of the surrounding objects to perception of more complicated phenomena as well as the inner state of the organism (more interesting information you can found in https://onlinelibrary.wiley.com/doi/10.1002/ijop.12348).

The study of sensation and perception is exceedingly important for our everyday lives because the knowledge generated by psychologists is used in so many ways to help so many people. Psychologists work closely with mechanical and electrical engineers, with experts in defense and military contractors, and with clinical, health, and sports psychologists to help them apply this knowledge to their everyday practices. The research is used to help us understand and better prepare people to cope with such diverse events as driving cars, flying planes, creating robots, and managing pain. Humans possess powerful sensory capacities that allow us to

sense the kaleidoscope of sights, sounds, smells, and tastes that surround us. Our eyes detect light energy and our ears pick up sound waves. Our skin senses touch, pressure, hot, and cold. Our tongues react to the molecules of the foods we eat, and our noses detect scents in the air. The human perceptual system is wired for accuracy, and people are exceedingly good at making use of the wide variety of information available to them.

Sensation is the simplest mental act; it reflects some properties of the objects and phenomena of the environment as well as inner state of the organism which influence the analyzers of the person.

Psychophysics is the branch of psychology that studies the effects of physical stimuli on sensory perceptions and mental states. The field of psychophysics was founded by the German psychologist Gustav Fechner (1801–1887), who was the first to study the relationship between the strength of a stimulus and a person's ability to detect the stimulus. The measurement techniques developed by Fechner and his colleagues are designed in part to help determine the limits of human sensation. One important criterion is the ability to detect very faint stimuli. The absolute threshold of a sensation is defined as the intensity of a stimulus that allows an organism to just barely detect it.

Sensations permit us to tell the taste, color, weight, temperature of surrounding objects, as well as properties of their surface – (roughness, smoothness) and the sounds they emit. We also feel the changes taking place in our body, the position and movement of its separate parts, the state of internal organs (pain, unpleasant feelings, discomfort etc.).

The measurement techniques developed by Fechner and his colleagues are designed in part to help determine the limits of human sensation. One important criterion is the ability to detect very faint stimuli. The absolute threshold of a sensation is defined as the intensity of a stimulus that allows an organism to just barely detect it. Our ability to accurately detect stimuli is measured using a signal detection analysis. Two of the possible decisions (hits and correct rejections) are accurate; the other two (misses and false alarms) are errors.

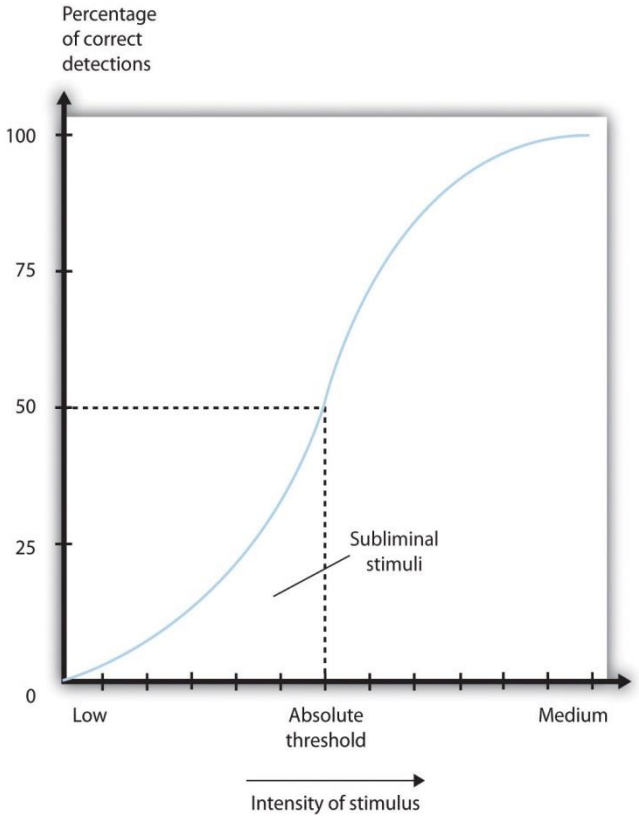
The physiological basis of sensation is a complicated activity of sense organs. I.P. Pavlov called this activity «analyzer activity»; the

systems of organized cells, which perform the analysis, were termed «analyzers». *The analyzer has three parts: peripheral (receptor), transmitting and central (cerebral).* The receptor part transforms one kind of energy into neural process. The transmitting part, consisting of afferent and efferent nerves, helps a neural signal to reach the central part of analyzer and transmits back the impulses regulating analyzer's activity. The central part is a cortex region which processes data coming from the receptor.

Any sensation has its own qualities, strength, and duration. The *quality of the sensation* is its inner essence which distinguishes it from other sensations (e.g., noise, smell, shape). The *strength of sensation* is determined by its degree. The *duration of sensation* is the time during which the consciousness develops and stores the impression of the particular sensation.

When tired, excited, under the influence of noise and other outer unfavorable factors, physiological functions of the analyzers and psychophysiological state may change which results in inhibition and errors in perception with erroneous actions.

The second important criterion concerns the ability to assess differences between stimuli. The difference threshold (or just noticeable difference [JND]), refers to the change in a stimulus that can just barely be detected by the organism. The German physiologist Ernst Weber (1795–1878) made an important discovery about the JND-namely, that the ability to detect differences depends not so much on the size of the difference but on the size of the difference in relationship to the absolute size of the stimulus. Weber's law maintains that the just noticeable difference of a stimulus is a constant proportion of the original intensity of the stimulus. As an example, if you have a cup of coffee that has only a very little bit of sugar in it (say 1 teaspoon), adding another teaspoon of sugar will make a big difference in taste. But if you added that same teaspoon to a cup of coffee that already had 5 teaspoons of sugar in it, then you probably wouldn't taste the difference as much (in fact, according to Weber's law, you would have to add 5 more teaspoons to make the same difference in taste).



If you study Figure 2. «Absolute Threshold», you will see that the absolute threshold is the point where we become aware of a faint stimulus. After that point, we say that the stimulus is conscious because we can accurately report on its existence (or its nonexistence) better than 50% of the time. But can subliminal stimuli (events that occur below the absolute threshold and of which we are not conscious) have an influence on our behavior?

Figure 2. Absolute Threshold

As the intensity of a stimulus increases, we are more likely to perceive it. Stimuli below the absolute threshold can still have at least some influence on us, even though we cannot consciously detect them. A variety of research programs have found that subliminal stimuli can influence our judgments and behavior, at least in the short term (Dijksterhuis, 2010). People cannot counterargue with, or attempt to avoid being influenced by, messages received outside awareness. Due to fears that people may be influenced without their knowing, subliminal advertising has been legally banned in many countries.

Classification of sensations

According to the place of the irritant:

a) *exteroceptive* (due to influence of the stimulant on the receptors, nerve endings on the surface of the skin and mucous membranes) – contact and distant;

b) *interoceptive* (caused by influence of the stimulant on the nerve endings which supply the inner organs and those located in the walls of the respiratory organs, gastrointestinal tract, etc.);

c) *proprioceptive* (associated with the signals which develop due to stimulation of the receptors located in the muscles, tendons, joints).

According to the organs where they develop they may be:

a) visual;
b) auditory;
c) cutaneous (tactile, temperature, pain);
d) olfactory;
e) motor or kinesthetic;
f) balance.

There are definite regularities which characterize sensations. An important feature is ***sensation threshold***. It's considered to be the minimal constant (value) of the irritant (stimulant) when sensation just appears. The smaller the constant of the irritant (stimulant) evoking sensation, the more sensitive are the analyzer organs to the irritant (stimulant). For example: out of all electromagnetic fluctuations the eye perceives wave-lengths of three hundred and ninety (violet color) to seven hundred and eighty (red color) millimicrons.

An important property of sensation is ***adaptation***. Adaptation is gradual decrease of sensitivity to lasting strong irritants of increase of sensibility to weak irritants during a period of time. Adaptation is possible in all kinds of sensation, but more so in visual, tactile, temperature, gustatory and olfactory sensitivity. Adaptation is weaker to acoustic and pain sensitivity. An example of adaptation may be the gradual increase of night vision (adaptation to darkness). Transition from bright light to darkness hinders us to discern objects at first. Gradually the sensitivity of the eye increases and adaptation to darkness takes place.

Sensibilization is an increased sensitivity as a result of interaction of the sensations. In clinical practice, when sensitivity in one or several analyzers disappears partially or completely, sensibilization, that is compensatory increase in sensitivity as a result of interaction and training of analyzers, is important. Thus, the loss of vision and hearing can be compensated by development of other types of sensitivity (tactile, olfactory, vibration).

Synesthesia is a sensation in one of the analyzers after stimulation of another analyzer (e.g., unpleasant taste in some visual

stimulants, color sensations at acoustic stimulants (music). A special role is played by ***pain*** – subjectively severe, sometimes unbearable, sensation which is due to very strong destroying stimulants. Pain warns about the danger. Experience of pain depends on numerous factors: concentration or distraction of the attention from the pain, expectation of pain, emotional state, personality characteristics, socio-moral orientation. The doctor should take these into account and try to create the conditions for the patient which will weaken the sensation of pain.

One of the necessary conditions of normal mental activity is a known minimum of stimuli which enters the brain from the sense organs. If a person does not receive the necessary amount of stimuli due to abnormalities of the sense organs, he falls asleep or becomes drowsy and does not remember anything that took place during this period of time. At sensory isolation, unusual mental states may appear. At first they are functional (reversible). When the period of the isolation increases, the changes may become pathological and psychosis may develop.

Perception is a mental process which consists in holistic representation of the objects and phenomena of the world at their immediate influence on the sense organs which is combined with the past human experience. The physiological basis of perception is interaction of different analyzer systems or separate parts of the same analyzer and formation of conditional reflexes to complex stimuli resulting in a more or less complicated image of an object or phenomenon.

Main properties of perception are *entity, selectivity, constancy, comprehension, apperception and objectiveness*. Perception is always whole, that is an object or a phenomenon is represented as a whole of their properties and signs.

Selectivity is revealed when one object has advantages over other objects. The main object which is more important to observer at that time appears as a vivid figure, as well as all other objects and phenomena go to background.

Constancy is more or less long stability of separate properties and qualities of the objects irrespective of the noted changes which have taken place.

Comprehension is an understanding of the essence of the object, a capability to classify it, a generalization in the world, an association with the familiar objects.

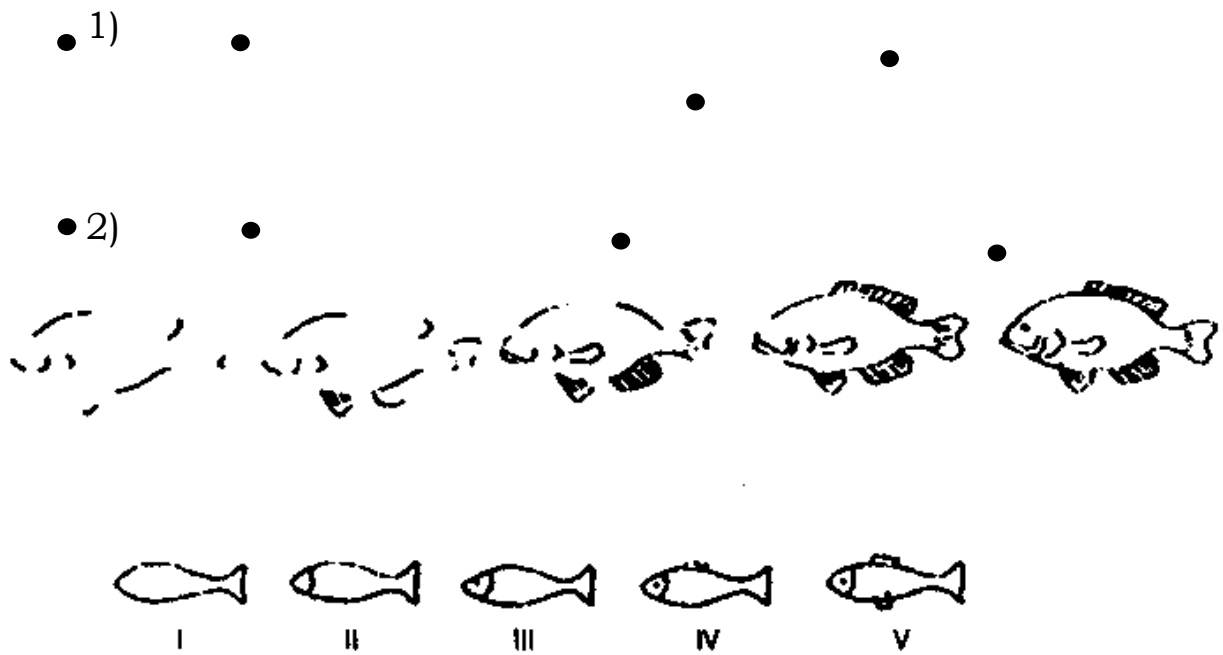
Apperception is dependence of perception on the general content of the mental activity of person and his individual characteristics, on the past experience, interests, motives, profession.

Objectivity is revealed in the act of objectification that is in the relation of the obtained information (images) to the world (object, phenomena).

Among complicated forms of perception, perception of time, space and motion are distinguished. Perception of time is representation of the duration, consequence and velocity of events or phenomena of the real world. The basis of perception of time is conditional reflexes. Prolonged periods of time are perceived, on the one hand, in the association with the processes which take place in the organism, on the other hand, in association with the rhythms of the natural phenomena. It was noted that the periods of time are evaluated subjectively, which maybe due to the interests and the character of the activity of the person as well as to the disease. The basis for perception of space is the knowledge of non-spatial properties of the objects through visual, vestibular, motor and cutaneous sensations. Together they allow the understanding of the relation of the body to the vertical, spatial location and distance to other objects. Perception of movement is representation of spatial movement of the objects, which are defined by the distance from the objects, the speed of their movement or the movement of the observer.

Sensation and perception are characterized by sensitive liveliness (objectiveness, reality, liveliness, brightness), extraprojection (the image is transferred to the place of the objective stimulant) and absence of arbitrary changes in the perceived image (objectivity of perception).

There is an interesting peculiarity of perception. It finishes all figures and objects which are not complete automatically. For example when there are 4 dots on the paper we unconsciously see a square or a trapezoid (1). Or if there's an unfinished picture we'll complete it according to the unique characteristics of our own perception (2).



This effect was studied by gestalt psychologists and is call ***Zeigarnik effect***.

With the age, knowledge and experience, sensation and perception become more complicated, pithier, close to the true essence of the objects and phenomena of the reality. Besides, the culture regulates the activity of the brain, adding different peculiarities of disposition which characterize the members of the definite group. Perception of the world, life, death varies in different cultures.

Sensation, perception and emotions are closely connected with each other. On the one hand, some sensations (e.g. of smell, color) can cause definite emotions; on the other hand, the mood of the person defines the brightness and strength of the perception.

Fantasy is the creation of new imaginary connections based on empiric material of previous impressions. Fantasy can be:

a) recreative;

b) creative.

Recreative fantasy creates a chain of notions on the basis of a certain plan (a geographical map). Creative fantasy creates new, original ties of notions and thoughts.

Perception in small children is characterized by brighter emotions especially to colored moving objects. The children of an early age (aged 1 – 2 years) can orient to the place of the objects; the visual evaluation of small distances develops very quickly. In an early

childhood, auditory perception also develops very quickly, which is important for general development of the language. In children under school age we observe further perfection of visual, motor and auditory sensations. It is very important that active development of the ability to distinguish distant objects took place during concrete pithy actions.

Auditory sensitivity in children is characterized by significant individual differences. Reduction in hearing in children can be unnoticed as the child who hears badly can guess the pronounced by the movements of the lips and the expression of the face. It is very important to know if the child hears well because at insufficient hearing acuity, mental and linguistic development may delay. In children under school age, the accuracy of movements and the rate of development of motion skills increase. But, if they can easily perform large movements, which do not require great physical strain (walking, running, dancing), smaller accurate movements are difficult for them (writing, drawing, sewing).

Cutaneous sensations develop together with motor ones. Children under school age develop accuracy in perception of the shape, size and texture of the object at touching. Perception develops intensively together with sensations. The children under school age are more accurate (when compared with the children of early age) in representation of the objects and phenomena which they perceive. Games, observations, excursions, drawing are important for development of perception in children. The game forces the child to perceive the peculiarities of different objects more accurately and consciously. Designing, drawing, modeling make them examine and investigate the objects.

In general clinical practice we can observe the following ***disturbances of sensation and perception***:

1) Quantitative:

a) *hypoesthesia* – decreased subjective brightness and intensity of sensation and perception. Physiologically normal is hypoesthesia observed as reduced sensitivity of an analyzer to definite stimulants (at its stimulation and general reduction in the tone);

b) *anesthesia* – complete switching off sensations and perception (blindness, deafness, absence of sensitivity to pain);

c) *hyperesthesia* – increased perception of a stimulant which was neutral before;

d) *agnosia* – disturbance of visual, auditory, kinetic perception at local lesions of the brain cortex (the patients perceive an object or its parts but cannot call it).

2) Qualitative:

a) *illusions* – twisted sensation and perception of real objects and phenomena in which comprehension of the images of the latter does not always correspond to the reality and can have other content. They could be physical (appear as a result of different physical properties of objects and substances – light refraction on the border of two media, mirage), physiological (due to physiological peculiarities of the analyzer functioning – feeling of movement of the surrounding objects after the train has stopped), mental (develop as a result of affective changes in the consciousness which cause the changes in other mental functions);

b) *hallucinations* – perception of non-existing objects and phenomena without stimulation of the appropriate receptors. They are classified by: analyzers – sonic (sounds, voices), visual (objects, creatures), gustatory, olfactory, tactile; complexity – simple and complex; origin – true and pseudohallucinations;

c) *paresthesia* – sensation of pricking, flash in different areas of the body usually caused by organic or functional disorder of neural conductors;

d) *senestopathy* – unusual, extremely unpleasant sensations from the inner organs and different parts of the body without any disease in this organ (sensation of softening of the bones, collapse of the lungs, hole in the stomach and other bodily illusions and hallucinations);

e) *visual psychosensory disorders (metamorphopsia)* – distortion in perception of the objects with preserved understanding of their significance and essence as well as critical attitude of the patients to them (dysmorphopsia – distortion in the shape of the object, macropsia – enlargement of the objects, micropsia – diminished objects);

f) *intero- and proprioceptive psychosensory disorders* (disturbances in the scheme of the body) – feeling of elongation, shortening, curving of the extremities, head, inner organs. They are

usually a part of depersonalization, dysmorphophobia and hypochondria syndromes.

So, *sensation* is the process of receiving information from the environment through our sensory organs. Perception is the process of interpreting and organizing the incoming information in order that we can understand it and react accordingly.

Transduction is the conversion of stimuli detected by receptor cells to electrical impulses that are transported to the brain.

Although our experiences of the world are rich and complex, humans – like all species – have their own adapted sensory strengths and sensory limitations.

Sensation and perception work together in a fluid, continuous process.

Our judgments in detection tasks are influenced by both the absolute threshold of the signal as well as our current motivations and experiences. Signal detection analysis is used to differentiate sensitivity from response biases.

The difference threshold, or just noticeable difference, is the ability to detect the smallest change in a stimulus about 50% of the time. According to Weber's law, the just noticeable difference increases in proportion to the total intensity of the stimulus.

Research has found that stimuli can influence behavior even when they are presented below the absolute threshold (i.e., subliminally). The effectiveness of subliminal advertising, however, has not been shown to be of large magnitude.

Methods of perception study

The sphere of sensation and perception is studied with observation, introspection, questioning and use of different examples. At specialized hospitals (neurology, ophthalmology, ENT), various equipment for investigation of acuity of sensation and perception in different analyzers are used. At psychological study, perception is examined with different charts and pictures (illustrations of objects, their outlines, pictures with superimposed outlines of the objects, schemes with visual illusions, pictures «figure and background», «mysterious» pictures).

To examine the vision and visual perception special charts and technical means are used. To study auditory, cutaneous and vestibular perception audiometer, Weber's compasses are used. To

study stereognosis (touching the object without looking at it), it is necessary to have different objects (models of cars, animals, household utensils).

Video to view

https://www.youtube.com/watch?v=unWnZvXJH2o
https://courses.lumenlearning.com/wmopen-psychology/chapter/outcome-sensation-and-perception/
https://www.youtube.com/watch?v=pEWOqCMKqJw
https://www.youtube.com/watch?v=0SErqVGcAR0
https://www.youtube.com/watch?v=TLHlfPTRekA
https://www.youtube.com/watch?v=feT1OdI6Htg

Control questions

1. What is sensation?
2. What is the initial stage of cognitive activity?
3. How is perception and sensation formed?
4. What parts of the analyzer do you know? The answer must be complete.
5. What is the quality of the sensation, strength and duration of a sensation?
6. What are unfavorable factors which results in inhibition and errors in perception do you know?
7. What is the classification of sensations do you know?
8. What types and role of receptors in sensations do you know?
9. What is the sensation threshold?
10. Give examples of the main components of perception …

a) What is the significance of the taste buds of the tongue and throat in the perception of taste?
b) What is the role of the visual analyzer for the perception of taste?
c) What is the role of the smell receptor for the perception of taste?
d) What is the role of the auditory receptor for taste perception?
e) What is the role of the temperature receptor for taste perception?
f) What is the role of emotional and physical states for the perception of taste?
g) What is the role of the environment for the perception of taste?
h) What is the role of hunger in the perception of taste?

11. What features of pain perception do you know?
12. What is Yerkes-Dodson Law in psychology?
13. What is the adaptation, sensibilization and synesthesia?
14. What is perception?
15. What are the main properties of perception?
16. What do you know about Zeigarnik effect?
17. What disturbances of sensation and perception in general clinical practice we can observe?
18. How we can study perception? What methods you know?

19. The accidental shooting of one's own soldiers (friendly fire) frequently occurs in wars. Based on what you have learned about sensation, perception, and psychophysics, why do you think soldiers might mistakenly fire on their own soldiers?
20. If we pick up two letters, one that weighs 1 ounce and one that weighs 2 ounces, we can notice the difference. But if we pick up two packages, one that weighs 3 pounds 1 ounce and one that weighs 3 pounds 2 ounces, we can't tell the difference. Why?
21. Take a moment and lie down quietly in your bedroom. Notice the variety and levels of what you can see, hear, and feel. Does this experience help you understand the idea of the absolute threshold?

CHAPTER 4
COGNITIVE PROCESSES OF THE PERSONALITY
Attention. Memory. Intellect

Objectives: to learn definition of the concept of «memory», «attention», «thinking» and to learn the role of attention and its liaisons to other mental functions, to get acquainted with the notion and types of memory and intellect, to get the overview of their disorders, methods of examination. Classification of memory types. Characteristics of attention and memory. Disorders of memory, attention, signs of deficits in mental functions. Signs of impaired memory and attention. Clinical and experimental methods for determining the severity of damage to mental functions. The line between norm and pathology. Signs of mental deficits. The question of reversibility – irreversibility of the defect.

Attention, memory, thinking are cognitive processes of the person which provide an opportunity to keep in consciousness the imprinted, to express and transfer it to other people.

Human sensory organs are permanently influenced by a great number of irritants. Nevertheless, not all the influences reach consciousness simultaneously. Something having prior significance for a person, satisfying his needs and interests is selected. All the rest is either perceived indistinctly or completely ignored. Selective nature of psychic activity is defined as ***attention***.

Attention is observed as concentration of consciousness on a chosen object or phenomenon, as a result this object or phenomenon is reflected clearer. In contrast to cognitive processes (sensation and perception) attention does not have its own content. It characterizes the dynamics of psychic processes. E.g. if a student does his lesson, he adopts some material, thinks over something he has read, picks out the main idea and tries to remember it. Through this an activity of cognitive processes becomes apparent, i.e. perception, thinking, memory. For a long while the student concentrates on one subject and ignores the others. Strong irritants can distract him from his educational activity, but he voluntarily turns back to the subject in question. This purposeful cognitive process is an example of attention.

One of the most used models for the evaluation of attention in patients with very different neurologic pathologies is the model of Sohlberg and Mateer: «Focused attention»: this is the ability to respond discretely to specific visual, auditory or tactile stimuli;

«Sustained attention»: this refers to the ability to maintain a consistent behavioral response during continuous and repetitive activity; «Selective attention»: this level of attention refers to the capacity to maintain a behavioral or cognitive set in the face of distracting or competing stimuli. Therefore it incorporates the notion of «freedom from distractibility»; «Alternating attention»: it refers to the capacity for mental flexibility that allows individuals to shift their focus of attention and move between tasks having different cognitive requirements; «Divided attention»: this is the highest level of attention and it refers to the ability to respond simultaneously to multiple tasks or multiple task demands; «Attention-deficit/hyperactivity disorder» is a neurobehavioral disorder characterized by a combination of inattentiveness, distractibility, hyperactivity, and impulsive behavior (ADHD appears early in life. It is estimated that 3 percent to 7 percent of school-age children are diagnosed with ADHD; boys are diagnosed more often than girls. Untreated ADHD has been shown to have long-term adverse affects on academic performance, vocational success, and socialemotional development. ADHD children have difficulty sitting still and paying attention in class and do not do well at school, even when they have normal or above-normal intelligence. They engage in a broad array of disruptive behaviors and experience peer rejection).

Attention is reflex in its nature. Its direction to the object is a specific response of an organism to some changes in the environment, which are of importance for a person. I.P.Pavlov considered specially directing sensors analyzer to perception of object, which causes creating a nidus of optimal irritation in the corresponding area part of cortex to be the basis of attention. As a result temporary nervous connections are easily formed. At this time neurons in other areas of cortex are inhibited. Irritations, which get into inhibited areas, do not create temporary connections, and a men does not notice them. A nidus with optimal irritation is intensified by concomitant irritants and inhibits reactions that are not connected with activity of dominating centers.

Kinds of attention

Involuntary attention is caused by objects and phenomena, which influence a man with their brightness, force or dynamism. ***Voluntary attention*** is directed by a man with volitional effort

according to conscious purpose. This kind of attention occurs when a man tries to fulfill some tasks.

During his activity a man can become engrossed in his work to such extent that there will be no need for directing his attention. In this case voluntary attention gains some new features – being conscious and purposeful it absorbs a man at the same time and supports itself involuntarily. This attention is called ***postvoluntary***.

A special kind of attention is ***awareness***. It's like a beam of active attention which enlightens for the consciousness some aspects of external world or internal processes to be perceived brightly and sharply. In the field of awareness could be only one object – it could be a phenomenon, a process, a thought or a thing; and this «beam» is moving constantly to cover the multiplicity of processes. Often we are much more aware of external events and pay little attention to the internal, intrapsychic events which lead us to the disorder of psychic homeostasis and further development of neurotic states.

Features of attention

Attention is characterized by several features: *volume, distributing, switching, concentration and stability*.

Volume of attention is quantity of objects or phenomena which a person simultaneously keeps in his mind. This quantity depends on the content and on personal interest. If perceiving is new, not more than one object is reflected in human consciousness at the same time. If attention is directed to known objects, human passive attention can hold a grip on a considerable number of objects at the same time. Usually 7 ± 2 objects are reflected in consciousness.

Distribution of attention is defined as human ability to perform two or more actions at the same time. It is possible, because a man can voluntarily switch his activity from one object to another. The level of distributing depends upon a person's experience, automation of activity. The more we're skilled in some process the less awareness it requires.

Switching of activity is human ability to change voluntarily and consciously direction of his activity. Physiological basis of switching of activity is shift of nidus of optimal irritation in cortex. Directing attention to the chosen object, a person distracts from other objects and phenomena. This insusceptibility of some objects and phenomena is the condition of successful perception of a chosen

object. Nevertheless, in the process of education or study the negative distraction can be observed, i.e. change of direction of attention caused by some outer irritants. The reasons for distraction are: weak human will, inability to guide one's activity, increased excitability, lack of interest to the object. Psychological basis of distraction is negative induction of irritation and inhibition in cortex. «Distraction» should not be mixed with «switching», for the latter voluntarily, consciously and purposefully.

Concentration of attention is a quality opposite to distraction; it manifests itself in human ability to direct attention to a certain object for comparatively long time, in spite of influence of other irritants. Concentration depends on motivation of activity and individual features of a person. Concentration on a definite object can be measured according to some scale. High concentration causes absorption in activity which is being done. Concentration changes in time, i.e. periodically increases and decreases. This change is called fluctuation of attention. It influences labor productivity, direction of activity, precision of perception.

Stability is an important property. A person having a stable attention can concentrate on one object for a long time. Absent-mindedness is a not very useful feature. Attention of an absent-minded person is permanently wandering from one object to another, never stopping for a long while. Among adults absent-mindedness can be regarded as a result of fatigue, somatic or mental disease. Among children absent-mindedness can be observed more often. It can be overcome by durable education.

Deviations of Attention

In clinics among different kinds of deviations increased distraction is more frequent. In this case a patient has difficulty in concentrating on one object or activity. His attention is unstable, outer irritants, even of less interest, can distract the patient's attention and disturb his activity. A patient's distraction can be so high that he cannot concentrate on a doctor's questions, permanently «jumping» from one thought to another.

Distraction accompanies increased tiredness, general weakness caused by exhaustion of nervous system, durable and intensive emotional strain, too difficult mental activity. It can be a result of infection, intoxications, injuries, tumors, vascular sclerosis of a

brain. When frontal lobes of cortex are affected, ability of switching attention decreases. Switching can be inhibited to such extent that a patient repeats some action many times not even noticing it. In clinic opposite phenomena are also observed when ability to switching attention increases. This deviation characterizes maniac patients. Frequently somatic, infections and other pathologies may result in increased exhaustion of attention, i.e. decrease of stability and volume of attention.

Memory is a form of mental reflection of the reality and with its help earlier acquired data; knowledge and events are fixed, kept and recreated. The human memory contains two types of information: specific memory, which has been accumulated in the process of evolution for many thousands of years, which is determined by unconditioned reflexes and instincts, and hereditable and acquired memory in the process of human life realized in conditioned reflexes (link to learning https://www.youtube.com/watch?v=yOgAbKJGrTA .

Memory is an information processing system; therefore, we often compare it to a computer. Memory is the set of processes used to encode, store, and retrieve information over different periods of time (Figure 3.).

Figure 3. Encoding involves the input of information into the memory system

Storage is the retention of the encoded information. Retrieval, or getting the information out of memory and back into awareness, is the third function.

Encoding. We get information into our brains through a process called encoding, which is the input of information into the memory system. Once we receive sensory information from the environment, our brains label or code it. We organize the information with other similar information and connect new concepts to existing concepts.

Encoding information occurs through automatic processing and effortful processing.

If someone asks you what you ate for lunch today, more than likely you could recall this information quite easily. This is known as automatic processing, or the encoding of details like time, space, frequency, and the meaning of words. Automatic processing is usually done without any conscious awareness. Recalling the last time you studied for a test is another example of automatic processing. But what about the actual test material you studied? It probably required a lot of work and attention on your part in order to encode that information. This is known as effortful processing.

When you first learn new skills such as driving a car, you have to put forth effort and attention to encode information about how to start a car, how to brake, how to handle a turn, and so on. Once you know how to drive, you can encode additional information about this skill automatically. (credit: Robert Couse-Baker)

Material is far better encoded when you make it meaningful.

There are three types of encoding. The encoding of words and their meaning is known as ***semantic encoding***. It was first demonstrated by William Bousfield (1935) in an experiment in which he asked people to memorize words. *The 60 words were actually divided into 4 categories of meaning, although the participants did not know this because the words were randomly presented. When they were asked to remember the words, they tended to recall them in categories, showing that they paid attention to the meanings of the words as they learned them.*

Visual encoding is the encoding of images, and ***acoustic encoding*** is the encoding of sounds, words in particular. *To see how visual encoding works, read over this list of words: car, level, dog, truth, book, value. If you were asked later to recall the words from this list, which ones do you think you'd most likely remember? You would probably have an easier time recalling the words car, dog,and book, and a more difficult time recalling the words level, truth, and value. Why is this? Because you can recall images (mental pictures) more easily than words alone. When you read the words car, dog, and book you created images of these things in your mind. These are concrete, high-imagery words. On the other hand, abstract words like level, truth, and value are low-imagery words. High-imagery words are encoded both visually and semantically (Paivio, 1986), thus building a stronger memory. Now let's turn our attention to acoustic encoding. You are driving in your car and a song comes on the radio that you haven't heard in at least 10 years, but you sing along, recalling every word.* We encode the sounds the words make. This is one of the reasons why much of what we teach young children is done through song, rhyme, and rhythm.

Which of the three types of encoding do you think would give you the best memory of verbal information? Some years ago, psychologists Fergus Craik and Endel Tulving (1975) conducted a series of experiments to find out. Craik and Tulving concluded that we process verbal information best through semantic encoding, especially if we apply what is called the self-reference effect. Semantic encoding involves a deeper level of processing than the shallower visual or acoustic encoding.

The self-reference effect is the tendency for an individual to have better memory for information that relates to oneself in comparison to material that has less personal relevance.

Storage

Once the information has been encoded, we have to somehow retain it. Our brains take the encoded information and place it in storage. Storage is the creation of a permanent record of information. In order for a memory to go into storage (i.e., long-term memory), it has to pass through three distinct stages: Sensory Memory, Short-Term Memory, and finally Long-Term Memory. These stages were first proposed by Richard Atkinson and Richard Shiffrin(1968). Their model of human memory (Figure 4), called Atkinson-Shiffrin (A-S), is based on the belief that we process memories in the same way that a computer processes information.

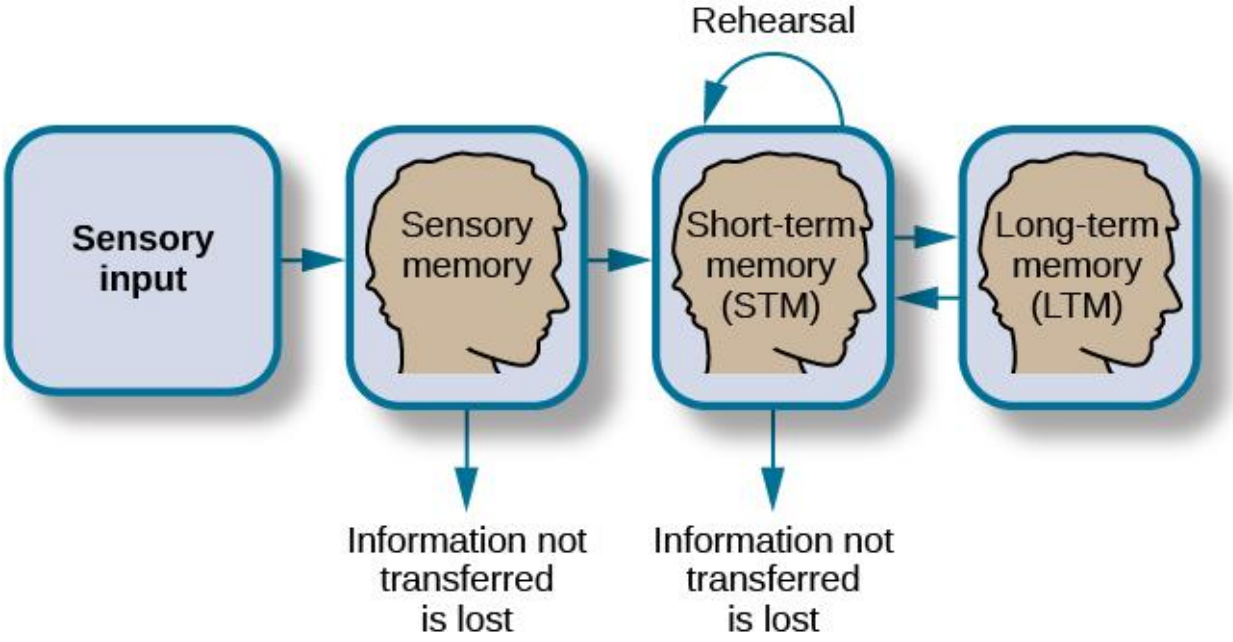


Figure 4. According to the Atkinson-Shiffrin model of memory, information passes through three distinct stages in order for it to be stored in long-term memory.

Sensory Memory. In the Atkinson-Shiffrin model, stimuli from the environment are processed first in sensory memory: storage of brief sensory events, such as sights, sounds, and tastes. It is very brief storage – up to a couple of seconds. We are constantly bombarded with sensory information. We cannot absorb all of it, or even most of it. And most of it has no impact on our lives. Sensory information about sights, sounds, smells, and even textures, which we do not view as valuable information, we discard. If we view something as valuable, the information will move into our short-term memory system.

So, sensory memory refers to the information we receive through the senses. This memory is very brief lasting a few seconds. The sensory register contains only unprocessed information which can be transferred to the next stage, short-term memory, if the person chooses to do so.

Short Term Memory (STM) occurs when the information in our sensory memory is transferred to our consciousness or our awareness Short term memory can definitely last longer than sensory memory (up to 30 seconds or so), but it still has a very limited capacity. According to research, we can remember approximately 5 to 9 (7 +/- 2) bits of information in our short term memory at any given time. Think of short-term memory as the information you have displayed on your computer screen – a document, a spreadsheet, or a web page. Then, information in short-term memory goes to long-term memory (you save it to your hard drive), or it is discarded (you delete a document or close a web browser). This step of rehearsal, the conscious repetition of information to be remembered, to move STM into long-term memory is called **memory consolidation**.

Long term memory (LTM) is similar to the permanent storage of a computer. Unlike the other two types, LTM is relatively permanent and is unlimited in terms of its storage capacity. When we process information, we attach significance to it and information deemed important is transferred to our long term memory.

There are other reasons information is transferred. Sometimes our brains seem full of insignificant facts. Repetition plays a role in this, as we tend to remember things more the more they are rehearsed. Other times, information is transferred because it is somehow attached to some significant events. There is no doubt that

those items which go into long term memory are those which we also have vivid associations. We remember both verbal terms and visual cues. Words are most useful for encoding abstract concepts, such as the meaning of words, whereas visual imagery is best for representing concrete event.

Long-term memory is divided into two types: *explicit and implicit* (Figure 5.). Understanding the different types is important because a person's age or particular types of brain trauma or disorders can leave certain types of LTM intact while having disastrous consequences for other types. ***Explicit memories*** are those we consciously try to remember and recall. *For example, if you are studying for your chemistry exam, the material you are learning will be part of your explicit memory.* (Note: Sometimes, but not always, the terms explicit memory and declarative memory are used interchangeably.)

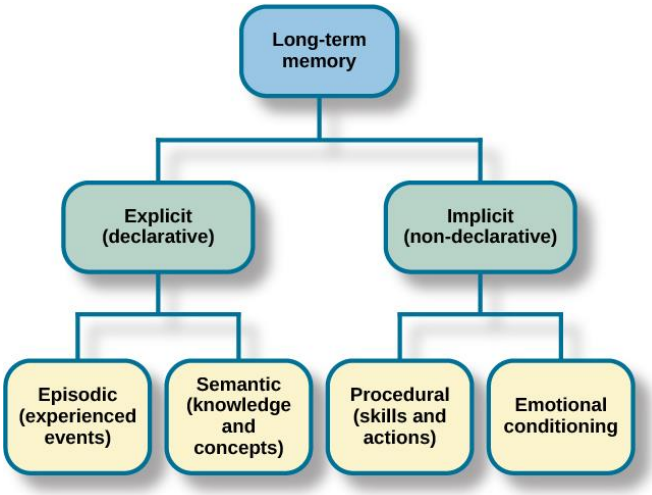


Figure 5. There are two components of long-term memory: explicit and implicit. Explicit memory includes episodic and semantic memory. Implicit memory includes procedural memory and things learned through conditioning.

Implicit memories are memories that are not part of our consciousness. They are memories formed from behaviors. Implicit memory is also called non-declarative memory.

Procedural memory is a type of implicit memory: it stores information about how to do things. It is the memory for skilled actions, such as how to brush your teeth, how to drive a car, how to swim the crawl (freestyle) stroke. *If you are learning how to swim freestyle, you practice the stroke: how to move your arms, how to turn your head to alternate breathing from side to side, and how to kick your legs. You would practice this many times until you become good at it. Once you learn how to swim freestyle and*

your body knows how to move through the water, you will never forget how to swim freestyle, even if you do not swim for a couple of decades.

Declarative memory has to do with the storage of facts and events we personally experienced. Explicit (declarative) memory has two parts: semantic memory and episodic memory. Semantic means having to do with language and knowledge about language. Stored in our semantic memory is knowledge about words, concepts, and language-based knowledge and facts. *For example, answers to the following questions are stored in your semantic memory:*

Who was the first President of the United States?

What is democracy?

What is the longest river in the world?

Episodic memory is information about events we have personally experienced. The concept of episodic memory was first proposed about 40 years ago (Tulving, 1972). Since then, Tulving and others have looked at scientific evidence and reformulated the theory. Currently, scientists believe that episodic memory is memory about happenings in particular places at particular times, the what, where, and when of an event (Tulving, 2002). It involves recollection of visual imagery as well as the feeling of familiarity.

The basis of the human memory and its physiological mechanisms contain the system of conditioned reflexes, forming temporary connections or «traces», processes occurring in the nervous system which were studied in detail by I.P. Pavlov and his scientific school. Of all the present theories of memory chemical theory has the biggest influence. According to it, impulses coming from the periphery toward the brain cortex cause changes in the chemical composition of the nervous cells; the RNA plays a major role in the processes of encoding and decoding of data as well as placing it for storage.

An important aspect of remembering is its counterpart-forgetting. Sometimes the information is not available and lost by the distractions in the environment. Another cause of forgetting is the phenomenon of repression which is facilitated by the unconscious process of avoiding unwanted thoughts and feelings. Repressed thoughts generally are not accessible to the individual except through special circumstances, such as psychoanalysis or some provocative event highly charged to the original event. Amnesia, loss

of memory, can be psychological or physiological in origin. The processes of memory are following:

1) Memorizing (fixation) – acquisition of information;

2) Retention – the process of keeping information;

3) Reproduction – the process of getting information from the storage to use;

4) Forgetting – forcing out the information which lost its urgency to the latent layers of memory or perhaps the complete destruction of all the information.

Types of memory

According to participation of analyzers and functional systems, there is visual, aural, olfactory, sense, tactile, emotional, motor, mixed memory (memorizing images, sounds, smell, touches, emotional stress, movements, complex action, etc.).

According to participation of the signal system: image memory (the first signal system is the memory for the image, sounds, smell, activities, etc.); verbal-logical memory (the second signal system) is the memory for the words, judgment, etc.

According to the mechanism of memorizing: mechanical (mechanical memorizing of information – phone numbers, definite numbers, material without support of semantic association) and verbal-logical (memorizing information with support of semantic meaning and internal logical connection).

According to the degree of involvement of active attention and volition: involuntary (involuntary memorizing and reproducing) and voluntary (purposeful memorizing and reproducing).

According to the place and role in the structure of activity: sensory memory, operative (short storage of information which is necessary for achieving the definite aim and loses its urgency after achievement of the task), short memory (memorizing for a short time) and prolonged memory (memorizing knowledge, abilities and practical skills for a long time).

According to the degree of use of memorizing means: mediated and immediate memory. At each age the memory has its own peculiarities:

- In children under 1 year – image memory (memorizing bright stimuli and images of relatives, their recognition);

- In children aged 2-3 years – improvement of image memory, appearance of verbal-logical memory;

- At the age of 4-5 years – rapid development of verbal-logical memory, voluntary memorizing and reproducing, richness of content of memory images, using not only perceptions but notions;

- From 14-15 to 25-30 years – the highest level of development of memory;

- After 30 years – gradual reducing ability for mechanical memorizing and the highest level of logical memory;

- After 40-45 years – evident prevalence of logical memory;

- After 60 years – decreasing mechanical and verbal-logical memory for the current events; everything that happened at the younger age is recalled better. This peculiarity is called a law of reverse motion of memory (T. Ribot, 1881).

Individual peculiarities of memory play a great role in memorizing processes. For example, general level of its components and properties, prevalence of aural, visual and other memories, its training, daily and age dynamics of processes of memory (especially fixation and reproduction), change of image and verbal-logical memory depending on the state of health, interest, emotional condition, personal meaning of information, figurativeness of the material and others varies greatly in each person.

Properties of memorizing:

- Simple events in life accompanied by strong feelings like exultation, fear of rage are memorized quicker and kept for a long time.
- Complex but less interesting events which are emotionally neutral are memorized more slowly and are kept for a longer period than emotionally significant ones.
- Better facilitation to the process of memorizing and reproducing results in increasing concentration of attention to the definite information.
- When memorizing a quite big piece of data, its beginning and end are recollected in mind quicker («edge effect»).
- It is important for associative connection of impressions and their reproduction whether they are a logically connected in a whole or they are separate elements.

- Strange, weird and unusual impressions are memorized better that common ones.

Mnemonic is another word for memory tool. Mnemonics are techniques for remembering information that is otherwise quite difficult to recall. The idea behind using mnemonics is to encode difficult-to-remember information in a way that is much easier to remember. The key idea is that by coding information using vivid mental images, you can reliably code both information and the structure of information. And because the images are vivid, they are easy to recall when you need them.

There are many techniques that make learning easier and faster. One technique, known as the «loci memory system», involves picturing yourself in a familiar setting and associating it with something you need to learn. Let's assume that you needed to memorize the function and structure of a neuron. Begin by picturing yourself walking into the entry hall of your home. At the same time pretend that you are walking through a dendrite. As you walk down the hall toward the living room, imagine that you are traveling in the dendrite to the cell body. As you exit the living room and walk down the hall toward the bedrooms, think of traveling down an axon toward the terminal button that contains the neurotransmitter. In this example you are connecting new information with something very familiar. We recall information much better when we involve our imagination. An even better way to perform this exercise would be to actually walk through your home while you visualize the parts of a neuron. In this situation you would not only be using your imagination but at the same time doing something physically. It is important to realize that we have strong memories for what we do physically. Just think how long you have remembered how to ride a bike even though you may not have ridden a bike for years.

Some tips for memory improvement:

1) Defining which kind of data (audio, visual or kinesthetic) you memorize the best and then using mainly of that data type supported by other types.

2) Understanding of the text, formulas, pictures and other material.

3) Clarity of aim and connection of the material learned with earlier acquired content and the practical performance.

4) Active logical processing of the material includes making a plan of the text, expressing its main idea, joining data in groups and categories, selecting their titles, establishing different logical connections within this material and connections of this material with the other;

5) Positive motivation for the data memorizing.

6) Rational use of illustrative material (pictures, drawings, diagrams and others);

7) Connection of the memorizing process with bright emotional states.

8) Rational organization of revising in time, for example, 5-6 times at the first day, 4 times at the second day, 2-3 times at the third day, change of methods of revision (individually, in chorus, etc.), partial change of revision methods.

9) Implementation of self-control for evaluating the material that has been poorly acquired.

10) Usage of the material being studied for solving tasks and activities of different types.

Memory disorders

a) Quantitative:

- Hypermnesia is a short extreme increasing of involuntary reproduction; it occurs in feverish and hypnotic conditions and in maniacal patients.
- Hypomnesia is an extreme weakening of memorizing (fixation) or reproducing of past events.
- Amnesia is an absence of recollections about the past limited by the definite period of time or the situation. Amnesia could be fixative, anterograde, retrograde and mixed.

b) Qualitative:

- Paramnesia is a disturbance of memory when some fictional recollections appear (pseudo-reminiscences and confabulations).
- Cryptomnesia is a distortion of memory, which is found in decreasing or disappearing difference between the events corresponding to reality and seen while dreaming, heard or read. In some cases the heard, read or seen while dreaming is recalled as happened to the patient (associative recollections); appropriation of somebody else's ideas refers to this disturbance. In the other cases,

on the contrary, real events are recalled as the heard, read or seen while dreaming (estranged recollections).

Intellect is a system of all cognitive abilities of the person. That is an ability for cognition and solving the problems which determines success of any activity. Intellect includes experience, acquired knowledge and ability to its quick and expedient use in new situations which were not met before and besides in the process of solving complex tasks.

Intelligence refers to the abilities involved in learning and adapting behavior. There are several prominent theories of intelligence. Early intelligence theorists believed intelligence was quite general and followed through every action. However, L.L. Thurstone believed in seven different kinds of mental abilities: spatial ability, memory, perceptual speed, word fluency, numerical ability, reasoning and verbal meaning. In contrast, R.B. Cattell identified crystallized and fluid intelligence as two clusters of mental abilities.

Contemporary theorists propose alternative theories of intelligence. Robert Sternberg's triarchic theory of intelligence stated that analytical intelligence, creative intelligence, and practical intelligence are the three basic kinds of intelligence. In contrast, Howard Gardner's theory of multiple intelligences proposes eight different kinds of intelligence: logical-mathematical, linguistic, spatial, musical, bodily- kinesthetic, interpersonal, intrapersonal, and naturalistic. Daniel Goleman has proposed emotional intelligence theory. The five traits of emotional intelligence include: knowing one's own emotions; managing one's own emotions; using emotions; to motivate oneself; recognizing the emotions o other people; and managing relationships. It is important to be able to distinguish among these different theories and to draw distinctions among the various intelligence types.

Individual differences in intelligence may be influenced by both heredity and the environment. Twin studies have revealed that twins reared apart have similar intelligence test scores. In addition, adoption studies revealed a child's IQ score is more similar to the biological mother. Together these types of studies have made a case for the heritability of intelligence. Intellectually stimulating

surroundings and good nutrition can increase IQ. Other studies show adoptive children raised by parents of high socioeconomic status may have higher IQs than adoptive children raised by parents of low socioeconomic status. In recognition of the impact of environment on IQ, early intervention programs like Head Start have been created. The Flynn Effect refers to the noted increase in IQ scores that has occurred in recent decades.

Underlying gender differences in mental ability have not been found. Cognitive differences appear to be restricted to specific cognitive skills. The tendency is for girls to display greater verbal ability, and for boys' strengths to lie in spatial and mathematic abilities. Males tend to fall more regularly at the extremes of the intelligence range, having many more extremely high IQ scores, and also scores within the range of mental retardation. Research suggests that environmental factors such as upbringing play a large factor in the gender discrepancies noted in career choice.

Cultural differences in academic achievement are the result of the varied approaches to study and school success found across cultures. An innate superiority in intelligence was not found in a particular culture. The cultures with the strongest ethic for study and most challenging curricula had the highest achievement rates.

The two extremes of intelligence are mental retardation and intellectually gifted. Evaluations of mental retardation involve tests of motor skills, social adaptation, and behavior. People diagnosed with mental retardation may display savant performance. The cause of most mental retardation is unknown, however identifiable contributions stem from environmental, social, nutritional, and other risk factors. The rarer and most severe cases of mental retardation may involve genetic or biological disorders. Genetic diseases include PKU and Down syndrome. Biologically caused mental retardation may be dramatically moderated through interventions and appropriate socialization.

Giftedness appears at the other extreme of the intelligence scale. Most gifted individuals display special talents in only a few areas, and much giftedness is not recognized for this reason. Recent studies suggest that giftedness is an asset for socialization, and does not lead to problems with peer interaction.

Finally, creativity is the ability to produce novel and socially valued ideas or objects. There is no definite link between intelligence and creativity beyond a certain IQ threshold level. The most creative people seek problems to solve and tend to be dedicated, ambitious and curious. The Torrance Test of Creative Thinking asks questions relating to pictures, and the ChristensenGuilford Test involves listing and responding to open-ended word questions. Test scores interpret the potential for imagination and association. This leads to problems of validity and caution is recommended in this area of assessment.

One can distinguish three forms of intellectual behavior:

1) Verbal intellect is keeping the vocabulary, erudition, ability to understand reading;

2) Ability for solving the problems;

3) Practical intellect which includes ability to adjust to outer circumstances.

The structure of practical intellect contains process of adequate perception and understanding the events, adequate self-esteem and ability to act rationally under new circumstances. Intellectual activity is more complex sphere of mental activity which includes some cognitive processes. However, intellect can not be considered just as a summary of these cognitive processes. Attention and memory are prerequisites for the intellect; however, they are not completely comprehensive for understanding the essence of intellectual activity and cannot be replaced by thinking.

Disturbances of intellect infantilism is a universal or partly physical and mental retardation causing delayed maturity of judgements, infantile naivety, emotional instability and increased influence of emotions on thinking.

Oligophrenia (mental deficiency) is underdevelopment of intellect due to the causes present during the intrauterine period or in childhood under the age of 2 years. There are 3 degrees of oligophrenia – moronity, imbecility and idiocy.

Dementia is an acquired defectiveness of intellect which is characterized by inability of acquisition of new knowledge and earlier acquired knowledge, skills and hypomnesia. Dementia could be global or lacunar.

METHODS OF EXAMINATION

Examination of attention

Change of a patient's attention can be noticed with a naked eye, but experiments and psychological research supplies more precise data. For studying the stability of attention psychologists use a special table. Right checked column is covered with a stripe of paper checked the same way. Using only vision a patient is to follow each line and mark its ending with a corresponding number. The stripe having been taken off, it is compared with some standard and the number of mistakes is put down. For patients with greater decrease of attention a table with fewer lines can be used.

For a research of volume and stability of attention they use a table on which 17 blue and 29 red confetti are stuck in disorder. A patient is to count confetti not using a pointer. Switching of attention can be tested with a special table. There are three tests. The first test is to show with a pointer all even numbers in progressive order from 2 to 24, marking spent time. The second test is to show light numbers in regressive order from 21 to 1. The spent time is marked. The third test is to show alternately black numbers in progressive and light ones – in regressive order.

The time spent for the third test is larger than the sum of the time spent for the first and the second tests. This difference is an index of switching rate.

There are some other methods of studying attention, e.g. proofreading correction test (Burdon's test, Anfimov's table). A patient's task is to cross out some given letters (e.g. A, M, K, P) from a given set of letters. Not only missed or wrongly crossed out letters count, but also the time spent for fulfilling the task. Spent time and quantity of mistakes denote stability of attention.

Examination of memory

The condition of memory is studied by questioning the patient. It helps to find out whether the patient calls things by their right names (year, month, date), if he knows the place where he is and who is close to him, if he says his age, date of birth in a proper way. Amnesic disorientation connected with disorders of memory should differ from disorientation observed against a background of impaired

consciousness and it is usually accompanied by torpor and other disturbances.

While studying memory about the past events besides questions concerning different periods of the patient's life, the dates which are sometimes difficult to check up, it is necessary to examine memorizing well-known historic dates more or less remote in time, events in recent times (circumstances of hospitalization, etc.), events preceded the disease or trauma. Severe disturbances in memorizing of current events, fictional recollections (pseudo-reminiscences and confabulations) are found out in questions concerning the recent events («Where were you yesterday?» or «What have you done today?», «Whom did you meet?»). Taking into account instability of the content of fictional recollections one should repeat the same questions later in the conversation. With such examining the primary content of the answer usually changes.

Visual memory includes memorizing linear geometrical figures (F. E. Rybakov), simple and more complex drawings. The patient is proposed to look through attentively for 10 seconds and memorize geometrical figures and then find them among the figures represented in the other chart. The patient usually memorizes 5-6 figures. Memorizing the objects in the charts is investigated by the same way.

Oral memory is the memorizing of numbers, words and sentences by hearing. The patient is proposed to listen to the numbers attentively, memorize words and sentences and repeat them. It is necessary to read words slowly and clearly. The studies are recommended to start from simple digits, then come to two-digit numbers, three-digit numbers and so on (it concerns memorizing words with different number of syllables). The patient is to read the proposed material for memorizing just once. The necessity of repeated reading points to hypomnesia.

Memorizing 10 words (according to A.R. Luria) – the patient is read 10 words and proposed to repeat them. The exercise is repeated 5 times and in 50-60 minutes the patient is asked to reproduce the words he has memorized. The chart of the results is made normally; about 9-10 words are reproduced by the third repetition. It allows to judge about the condition of the memory, stability of attention and emotional attitude of the patient to the test.

Reproduction of stories – after reading and listening to a short story the patient retells its content orally or in writing. The method allows checking up the condition of memory, stability of attention and logical thinking.

Examination of intellect

The Stanford-Binet Intelligence Scale was the first individual test to establish a numerical value of intelligence, now known as intelligence quotient (IQ). Four kinds of mental abilities are measured by this test: verbal intelligence, abstract/visual reasoning, quantative reasoning, and short term memory. The Wechsler Intelligence scales are another type of intelligence test. The Wechsler Adult Intelligence Scale (WAIS-III) and the Wechsler Intelligence Scale for Children (WISC-III) are used to test intelligence in individual adults and children. Group tests for intelligence have also been written and are widely used in schools. Performance tests and culture fair tests have been designed to help assess intelligence in people who are not fluent in English or who come from outside the culture in which the test was devised. The studies of intellect according to Wechsler – this method consists of two groups of subtests (verbal – 6 and non verbal – 5). The peculiarities of the answers in every test are taken into account, and then the coefficients of verbal, non verbal and general intellects are calculated.

Raven's charts – this test consists of 60 charts (5 sets). Every set of charts contains a task of increasing level. The correct solution of every task is evaluated as 1. After it the total number of points in all the charts and separate series is calculated. The result is considered as index of intellect level, mental productivity of the patient.

A good intelligence test must yield reliability and validity. Split-half reliability is a way to determine reliability by dividing the test into two parts and checking scores on both parts. Measures of validity include content validity and criterion-related validity. IQ tests have been highly criticized for a number of reasons including narrowness of question content, discrimination against minorities, or against people of different social classes and cultures. In addition, critics claim that IQ and intelligence are not the same, and IQ scores are a simplified way of summing up complex abilities. Despite the

criticisms, studies have shown that IQ tests do tend to accurately predict school success, occupational success and job performance.

Video to view

https://www.youtube.com/watch?v=yOgAbKJGrTA
https://www.youtube.com/watch?v=D-2p86FvqF4
https://www.youtube.com/watch?v=TUoJc0NPajQ

Topic: «Parts of the Brain Involved with Memory» and topic: «Problems with Memory» to self-study (Link to learning:

- https://psu.pb.unizin.org/intropsych/chapter/chapter-5-memory/
- https://www.ted.com/talks/steve_ramirez_and_xu_liu_a_mouse_a_laser_beam_a_manipulated_memory).

Control questions

1. How to Study Effectively?
2. Watch this fascinating TED Talks lecture titled «Feats of Memory Anyone Can Do». The lecture is given by Joshua Foer, a science writer who «accidentally» won the U. S. Memory Championships. He explains a mnemonic device called the memory palace.
3. What Memory-Enhancing Strategies do you know?
4. What is Forgetting, Encoding Failure and Memory Errors?
5. Pls, name Schacter's Seven Sins of Memory. And also give their full description.
6. Compare and contrast the two types of amnesia.
7. What is the unreliability of eyewitness testimony?
8. What is the encoding failure?
9. Discuss the various memory errors.
10. Compare and contrast the two types of interference.
11. Explain the brain functions involved in memory.
12. Recognize the roles of the hippocampus, amygdala, and cerebellum.

CHAPTER 5
EMOTIONS AND FEELINGS. THINKING AND SPEECH

Objectives: to learn the emotion's structure in normal state, types of feelings and to get the overview of their disorders, methods of examination; to get acquainted with the structure of thinking, its variants and types, normal and deviant conditions, methods of examination.

Emotions are also a unique aspect of personality. When faced with the same situation, 2 people may experience different emotions. Or they may each experience the same emotion but in different degrees. Emotion refers to a feeling and its attendant thoughts, psychological and biological states, and range of impulses to act. The Oxford English Dictionary defines ***emotion as*** «any agitation or disturbance of mind, feeling, passion, any vehement or excited mental state».

Emotions are the subjective states of man and animals, which arise up under the action of external and internal irritants and expressed as a direct experiencing (satisfaction or not, fright, gladness, anger ect). They are acting important part in the teaching process (gaining vital experience). Executing the role of negative or positive reinforcement, emotions are instrumental in making of biologically active forms of behavior and removal of reactions, losing the biological value. Thus, emotions are the method of increase of adjusting possibilities of organism, and also one of main mechanisms of the internal regulations psychical activity and behavior, necessities of organism directed on satisfaction. Human's emotions has a social determination. They are existed under the influencing of morality and law rules of certain socialeconomy formation. So highest forms of emotions arise up on the basis of social (morality) and spiritual (esthetic, intellectual) necessities.

Classification

There is a long-standing debate about which emotions should be considered primary, or if there are primary emotions at all. The argument for set of core emotions is based to some extent on studies that suggest there are universally recognized facial expressions for four emotions: ***fear, anger, sadness,*** and ***enjoyment***. According to some theorists the following clusters or groups of emotion are universal.

Basic and complex categories, where some are modified in some way to form complex emotions (e.g. Paul Ekman). In one model, the complex emotions could arise from cultural conditioning or association combined with the basic emotions. Alternatively, analogous to the way primary colors combine, ***primary emotions*** could blend to form the full spectrum of human emotional experience. For example interpersonal anger and disgust could blend to form contempt.

Robert Plutchik proposed a three-dimensional «circumplex model» which describes the relations among emotions. This model is similar to a color wheel. The vertical dimension represents intensity, and the circle represents degrees of similarity among the emotions. He posited eight primary emotion dimensions arranged as four pairs of opposites. Some have also argued for the existence of meta-emotions which are emotions about emotions. «***Metaemotions***». Plutchik proposed that eight basic emotions exist: *fear, surprise, disgust, anger, anticipation, joy, and acceptance*. Plutchik's views on emotions have been challenged by anthropologists and other scientists who contend that emotions are defined differently according to language and culture. Distinctions are now drawn between primary and secondary emotions. *Primary emotions* are universal emotions, whereas *secondary emotions* are not found in all cultures. It is important to be able to identify and describe each of the different theories of emotion and the challenges to each. These include the James-Lange theory, Cannon-Brad theory, and cognitive theories of emotions.

Another important means of distinguishing emotions concerns their occurrence in time. Some emotions occur over a period of seconds (e.g. surprise) where others can last years (e.g. love). The latter could be regarded as a long term tendency to have an emotion regarding a certain object rather than an emotion proper (though this is disputed). A distinction is then made between emotion episodes and emotional dispositions. Dispositions are also comparable to character traits, where someone may be said to be generally disposed to experience certain emotions, though about different objects. For example an irritable person is generally disposed to feel irritation more easily or quickly than others do. Finally, some theorists (e.g. Klaus Scherer, 2005) place emotions within a more general category

of «affective states» where affective states can also include emotion-related phenomena such as pleasure and pain, motivational states (e.g. hunger or curiosity), moods, dispositions and traits.

Emotions may be communicated verbally or nonverbally through voice quality, facial expression, body language, personal space, and gestures. Most facial expressions are innate and may serve an adaptive function. The amount of acceptable personal space varies depending on activities, emotions felt, and on the customs of a particular culture. Explicit acts and gestures are often effective nonverbal ways to communicate emotions. However, care should be taken when interpreting verbal and nonverbal cues as people often overestimate their ability to accurately interpret messages conveyed by others.

Finally, expression of emotions differs between the sexes and among cultures. Men are more likely to inhibit expression of their emotions. Also men and women tend to have different emotional reactions to the same stimuli and differ in their ability to interpret nonverbal cues. Culture shapes emotional experiences. Researches who take the universalist position believe that facial expressions look similar across cultures when certain emotions are expressed. In contrast, researchers who take the culture-learning position believe that people learn appropriate facial expressions for emotions within their culture. Although research shows more support for the universalist position, display rules that vary across cultures often make it difficult to interpret emotions expressed by people from other cultures.

Theories of emotions

Theories about emotions stretch back at least as far as the Ancient Greek Stoics, as well as Plato and Aristotle. We also see sophisticated theories in the works of philosophers such as René Descartes, Baruch Spinoza and David Hume. Later theories of emotions tend to be informed by advances in empirical research. Often theories are not mutually exclusive and many researchers incorporate multiple perspectives in their work.

Somatic theories. Somatic theories of emotion claim that bodily responses rather than judgements are essential to emotions. The first modern version of such theories comes from William James in the 1880s. The theory lost favour in the 20th Century, but has regained

popularity more recently due largely to theorists such as John Cacioppo, António Damásio, Joseph E. LeDoux and Robert Zajonc who are able to appeal to neurological evidence.

James-Lange theory. For many years in psychology it was thought that a subjective state of fear, anger, or happiness produced behavior changes. William James, in the United States, in the article «What is an Emotion?», argued that emotional experience is largely due to the experience of bodily changes. James argued for this view largely on the basis of everyday situations. Standing in the path of an oncoming train, he claimed, you quickly step off the track. The feeling of fear is not truly experienced until you have retreated to the side and after the onset of such physiological responses as rapid heartbeat, trembling, and increased rate of breathing. When the results of this behavior and physiology reach the cerebral cortex, then you are truly afraid.

The Danish psychologist Carl Lange also proposed a similar theory at around the same time, so this position is known as the James-Lange theory. This theory and its derivatives state that a changed situation leads to a changed bodily state. As James says that the perception of bodily changes as they occur IS the emotion. James further claims that we feel sad because we cry, angry because we strike, afraid because we tremble, and neither we cry, strike, nor tremble because we are sorry, angry, or fearful, as the case may be. This theory is supported by experiments in which by manipulating the bodily state, a desired emotion is induced. Such experiments also have therapeutic implications (e.g. in laughter therapy, dance therapy). The James-Lange theory is often misunderstood because it seems counter-intuitive. Most people believe that emotions give rise to emotion-specific actions: i.e. «I'm crying because I'm sad», or «I ran away because I was scared». The James-Lange theory, conversely, asserts that first we react to a situation (running away and crying happen before the emotion), and then we interpret our actions into an emotional response. In this way, emotions serve to explain and organize our own actions to us. Several objections have been raised to this viewpoint, one of which concerns the timing. Some physiological changes do not take place immediately, even though our feelings appear rapidly. Furthermore, our feelings sometime continue even after the bodily response has disappeared. Still

another problem, as we have seen, is that psychologists have been unsuccessful in identifying various feelings on the basis of physiological changes. If the feeling is a function of the bodily processes, there must be different physiological changes. If the feeling is a function of bodily processes, there must be different physiological conditions associated with the different emotional responses.

Neurobiological theories. Based on discoveries made through neural mapping of the limbic system, the neurobiological explanation of human emotion is that emotion is a pleasant or unpleasant mental state organized in the limbic system of the mammalian brain. If distinguished from reactive responses of reptiles, emotions would then be mammalian elaborations of general vertebrate arousal patterns, in which neurochemicals (e.g., dopamine, noradrenaline, and serotonin) step-up or step-down the brain's activity level, as visible in body movements, gestures, and postures. In mammals, primates, and human beings, feelings are displayed as emotion cues. For example, the human emotion of love is proposed to have evolved from paleocircuits of the mammalian brain (specifically, modules of the cingulate gyrus) which facilitate the care, feeding, and grooming of offspring. Paleocircuits are neural platforms for bodily expression configured millions of years before the advent of cortical circuits for speech. They consist of pre-configured pathways or networks of nerve cells in the forebrain, brain stem and spinal cord. They evolved prior to the earliest mammalian ancestors, as far back as the jawless fish, to control motor function. Presumably, before the mammalian brain, life in the non-verbal world was automatic, preconscious, and predictable. The motor centers of reptiles react to sensory cues of vision, sound, touch, chemical, gravity, and motion with pre-set body movements and programmed postures. With the arrival of night-active mammals, circa 180 million years ago, smell replaced vision as the dominant sense, and a different way of responding arose from the olfactory sense, which is proposed to have developed into mammalian emotion and emotional memory. In the Jurassic Period, the mammalian brain invested heavily in olfaction to succeed at night as reptiles slept – one explanation for why olfactory lobes in mammalian brains are proportionally larger than in the reptiles.

These odor pathways gradually formed the neural blueprint for what was later to become our limbic brain.

Emotions are thought to be related to activity in brain areas that direct our attention, motivate our behavior, and determine the significance of what is going on around us. Pioneering work by Broca (1878), Papez (1937), and MacLean (1952) suggested that emotion is related to a group of structures in the center of the brain called the limbic system, which includes the hypothalamus, cingulate cortex, hippocampi, and other structures. More recent research has shown that some of these limbic structures are not as directly related to emotion as others are, while some non-limbic structures have been found to be of greater emotional relevance.

Prefrontal Cortex. There is ample evidence that the left prefrontal cortex is activated by stimuli that cause positive approach. If attractive stimuli can selectively activate a region of the brain, then logically the converse should hold, that selective activation of that region of the brain should cause a stimulus to be judged more positively. This was demonstrated for moderately attractive visual stimuli and replicated and extended to include negative stimuli.

Two neurobiological models of emotion in the prefrontal cortex made opposing predictions. The Valence Model predicted that anger, a negative emotion, would activate the right prefrontal cortex. The Direction Model predicted that anger, an approach emotion, would activate the left prefrontal cortex. The second model was supported. This still left open the question of whether the opposite of approach in the prefrontal cortex is better described as moving away (Direction Model), as unmoving but with strength and resistance (Movement Model), or as unmoving with passive yielding (Action Tendency Model). Support for the Action Tendency Model (passivity related to right prefrontal activity) comes from research on shyness and research on behavioral inhibition. Research that tested the competing hypotheses generated by all four models also supported the Action Tendency Model.

Homeostatic Emotion. Another neurological approach, described by Bud Craig in 2003, distinguishes between two classes of emotion. «Classical emotions» include lust, anger and fear, and they are feelings evoked by environmental stimuli, which motivate us (to, in these examples,respectively, copulate/fight/flee). «Homeostatic

emotions» are feelings evoked by internal body states, which modulate our behavior. Thirst, hunger, feeling hot or cold (core temperature), feeling sleep deprived, salt hunger and air hunger are all examples of homeostatic emotion; each is a signal from a body system saying «Things aren't right down here. Drink/eat/move into the shade/put on something warm/sleep/lick salty rocks/breathe». We begin to feel a homeostatic emotion when one of these systems drifts out of balance, and the feeling prompts us to do what is necessary to restore that system to balance. Pain is a homeostatic emotion telling us «Things aren't right here. Withdraw and protect».

Cognitive theories. There are some theories on emotions arguing that cognitive activity in the form of judgments, evaluations, or thoughts is necessary in order for an emotion to occur. This, argued by Richard Lazarus, is necessary to capture the fact that emotions are about something or have intentionality. Such cognitive activity may be conscious or unconscious and may or may not take the form of conceptual processing. An influential theory here is that of Lazarus. A prominent philosophical exponent is Robert C. Solomon (e.g. The Passions, Emotions and the Meaning of Life, 1993). The theory proposed by Nico Frijda where appraisal leads to action tendencies is another example. It has also been suggested that emotions (affect heuristics, feelings and gut-feeling reactions) are often used as shortcuts to process information and influence behaviour.

According to this evidence, our interpretation of the situation determines what kind of feelings we experience, whereas the physiological changes determine how strong they seem to be. In the cognitivephysiological theory, emotion is said to be the joint product of the individual's understanding, or cognition, and the physiological arousal.

Perceptual theory. A recent hybrid of the somatic and cognitive theories of emotion is the perceptual theory. This theory is neo-Jamesian in arguing that bodily responses are central to emotions, yet it emphasises the meaningfulness of emotions or the idea that emotions are about something, as is recognised by cognitive theories. The novel claim of this theory is that conceptually based cognition is unnecessary for such meaning. Rather the bodily changes themselves perceive the meaningful content of the emotion because

of being causally triggered by certain situations. In this respect, emotions are held to be analogous to faculties such as vision or touch, which provide information about the relation between the subject and the world in various ways. A sophisticated defense of this view is found in philosopher Jesse Prinz's book Gut Reactions and psychologist James Laird's book Feelings.

Affective Events Theory. This a communication-based theory developed by Howard M. Weiss and Russell Cropanzano (1996), that looks at the causes, structures, and consequences of emotional experience (especially in work contexts.) This theory suggests that emotions are influenced and caused by events which in turn influence attitudes and behaviors. This theoretical frame also emphasizes time in that human beings experience what they call emotion episodes – a – series of emotional states extended over time and organized around an underlying theme. This theory has been utilized by numerous researchers to better understand emotion from a communicative lens, and was reviewed further by Howard M. Weiss and Daniel J. Beal in their article, Reflections on Affective Events Theory published in Research on Emotion in Organizations in 2005.

Cannon-Bard theory. In the Cannon-Bard theory, Walter Bradford Cannon argued against the dominance of the James-Lange theory regarding the physiological aspects of emotions in the second edition of Bodily Changes in Pain, Hunger, Fear and Rage. Where James argued that emotional behaviour often precedes or defines the emotion, Cannon and Philip Bard argued that the emotion arises first and then stimulates typical behaviour. It emphasized the roles of the thalamus in emotional activity and is sometimes called the thalamic theory. According to this view, the thalamus plays a key role in activating the muscles and glands and in stimulating other parts of the brain, all of which are involved in the emotional experience (Cannon, 1929). This theory was helpful in showing the importance of the lower brain centers, not considered in James's approach, but the neural anatomy of emotion is far more complicated. In the first place, the thalamus is not directly involved in activating the muscles and glands. Second, the theory assumes that the thalamus, as a switchboard mechanism, relays impulses to the sympathetic nervous system and to the brain simultaneously, prompting a joint arousal of

the emotional experience. But many other physiological structures are involved, especially the cerebral cortex.

Two-factor theory. Another cognitive theory is the Singer-Schachter theory. This is based on experiments purportedly showing that subjects can have different emotional reactions despite being placed into the same physiological state with an injection of adrenaline. Subjects were observed to express either anger or amusement depending on whether another person in the situation displayed that emotion. Hence the combination of the appraisal of the situation (cognitive) and the participants' reception of adrenaline or a placebo together determined the response. This experiment has been criticized in Jesse Prinz (2004) Gut Reactions.

Disorders of emotions

Apathy (also called impassivity or perfunctoriness) is a state of indifference, or the suppression of emotions such as concern, excitement, motivation and passion. An apathetic individual has an absence of interest or concern to emotional, social, or physical life. They may also exhibit an insensibility or sluggishness.

Depression or ***moping*** is a state of low mood and aversion to activity. While often described as a dysfunction, there are also strong arguments for seeing depression as an adaptive defense mechanism. The Diagnostic and Statistical Manual of Mental Disorders defines a depressed person as experiencing feelings of sadness, helplessness and hopelessness. In traditional colloquy, «depressed» is often synonymous with «sad», but both clinical depression and non-clinical depression can also refer to a conglomeration of more than one feeling.

Anxiety is a psychological and physiological state characterized by cognitive, somatic, emotional, and behavioral components. These components combine to create an unpleasant feeling that is typically associated with uneasiness, fear, or worry. Anxiety is a generalized mood condition that occurs without an identifiable triggering stimulus. As such, it is distinguished from fear, which occurs in the presence of an observed threat. Additionally, fear is related to the specific behaviors of escape and avoidance, whereas anxiety is the result of threats that are perceived to be uncontrollable or unavoidable. Another view is that anxiety is «a future-oriented mood state in which one is ready or prepared to attempt to cope with

upcoming negative events» suggesting that it is a distinction between future vs. present dangers that divides anxiety and fear. Anxiety is considered to be a normal reaction to stress. It may help a person to deal with a difficult situation, for example at work or at school, by prompting one to cope with it. When anxiety becomes excessive, it may fall under the classification of an anxiety disorder.

Fear is an emotional response to a threat. It is a basic survival mechanism occurring in response to a specific stimulus, such as pain or the threat of danger. Some psychologists such as John B. Watson, Robert Plutchik, and Paul Ekman have suggested that fear is one of a small set of basic or innate emotions. This set also includes such emotions as joy, sadness, and anger. Fear should be distinguished from the related emotional state of anxiety, which typically occurs without any external threat. Additionally, fear is related to the specific behaviors of escape and avoidance, whereas anxiety is the result of threats which are perceived to be uncontrollable or unavoidable. Worth noting is that fear always relates to future events, such as worsening of a situation, or continuation of a situation that is unacceptable. Fear could also be an instant reaction, to something presently happening.

Phobia or ***morbid fear***, is an intense and persistent fear of certain situations, activities, things, or people. The main symptom of this disorder is the excessive and unreasonable desire to avoid the feared subject. When the fear is beyond one's control, and if the fear is interfering with daily life, then a diagnosis under one of the anxiety disorders can be made. Phobias are the most common form of anxiety disorders. An American study by the National Institute of Mental Health (NIMH) found that between 8.7% and 18.1% of Americans suffer from phobias. Broken down by age and gender, the study found that phobias were the most common mental illness among women in all age groups and the second most common illness among men older than 25.

Dysphoria is an unpleasant or uncomfortable mood, such as sadness (depressed mood), anxiety, irritability, or restlessness. Etymologically, it is the opposite of euphoria. Dysphoria refers only to a condition of mood and may be experienced in response to ordinary life events, such as illness or grief. Additionally, it is a feature of many psychiatric disorders, including anxiety disorders

and mood disorders. Dysphoria is usually experienced during depressive episodes, but in people with bipolar disorder, it may also be experienced during manic or hypomanic episodes. Dysphoria in the context of a mood disorder indicates a heightened risk of suicide. Dysphoria can be chemically induced by substances including μ-opioid antagonists and selective κ-opioid agonists. Dysphoria isalso one of the symptoms of hypoglycemia.

Euphoria is medically recognized as a mental/emotional state defined as a sense of great (usually exaggerated) elation and wellbeing. Technically, euphoria is an affect, but the term is often colloquially used to define emotion as an intense state of transcendent happiness combined with an overwhelming sense of wellbeing. The word derives from Greek εὐφορία, «power of enduring easily, fertility». Euphoria is generally considered to be an exaggerated, resulting from an abnormal psychological state with or without the use of psychoactive drugs and not typically achieved during the normal course of human experience. However, some natural behaviors, such as activities resulting in orgasm or the triumph of an athlete, can induce brief states of euphoria. Euphoria has also been cited during certain religious or spiritual rituals and meditation.

Examination of emotions

Patient's examination. Keep to the attention mimic peculiarities, faces expression. On the patient's skin may be scars as traces of the depressive or affective suicidal attempts (on the heart, neck or elbow areas).

Conversation. Ask about patient's mood. It may be very important to observe for mimic and panthomimic of a patient during all period of examination and conversation. Additional dates may be received by means of conversation with relatives, colleagues or other patients.

Experimental methods:

- Investigation of a self-estimating by Dembo-Rubinshtein. On the symbolic line of some human's peculiarities (health, mind, character, happiness ect.) psychologist propose to the patient to find his/her position by drop marking and explain it. Fixate selfestimating level, explanations and peculiarities of emotion's reactions.

- There are many indirect methods of investigation of emotional functioning, such as associative experiment, Rozenzveig Test, Rorschach Test, anxiety evaluation ect.

Feelings

Sadness: grief, sorrow, cheerlessness, gloom, melancholy, self-pity, loneliness, dejection, despair, and when pathological, depression.

Fear: anxiety, apprehension, nervousness, concern, consternation, misgiving, wariness, qualm, edginess, dread, fright, terror, and when pathological - phobia and panic.

Enjoyment: happiness, joy, relief, contentment, bliss, delight, amusement, pride, sensual pleasure, thrill, rapture, gratification, satisfaction, euphoria, whimsy, ecstasy, and when pathological, mania:

a) ***Love***: acceptance, friendliness, trust, kindness, affinity, devotion, adoration, infatuation, agape;

b) ***Surprise***: shock, astonishment, amazement, wonder;

c) ***Disgust***: contempt, disdain, scorn, abhorrence, aversion, distaste;

d) ***Shame***: guilt, embarrassment, chagrin, remorse, humiliation, regret, mortification, and contrition.

Each of these categories has a basic emotional nucleus at its core, with its variants and mutations. In the outer level are moods, which, technically speaking, are more muted and last far longer than an emotion. Beyond moods are dispositions, the temperamental tendency to evoke a given emotion or moods such as melancholy, anxiety, or cheer. Further beyond such inclinations are the disorders of emotion such as clinical depressive disorders or generalized anxiety disorder, in which an individual feels chronically trapped in a pathological state.

Emotions themselves are neither good nor bad. It is how they affect a person e.g. anger can be a positive force when it is a reaction to social injustice. Then anger can be the spark that motivates people to work for needed social change. Anger can be a negative force if expressed in ways that hurt others. People in all sorts of societies demonstrate an ability to recognize some facial expressions as indicative of certain feelings. Even voluntary efforts to adopt certain facial expressions, turning the mount intentionally down or up in the

corners, for example, prompt the corresponding feelings of sadness or happiness, respectively. These findings have increased speculation on the possibilities of a genetic basis of emotional expression (Ekman, 1980).

Will

Will, in Western philosophical discussions, consonant with a common English usage, refers to a property of the mind, and an attribute of acts intentionally performed. Actions made according to a person's will are called «willing» or «voluntary» and sometimes pejoratively «willful» or «at will». In general, «Will» does not refer to one particular or most preferred desire but rather to the general capacity to have such desires and act decisively to achieve them, according to whatever criteria the willing agent applies. The will is in turn important within philosophy because a person's will is one of the most distinct parts of their mind, along with reason and understanding. It is one of the things which makes a person who they are, and it is especially important in ethics, because it is the part which determines whether people act, at least when they act deliberately. Psychologists also deal with issues of will and «willpower» the ability to effect will in behavior; some people are highly intrinsically motivated and do whatever seems best to them, while others are «weak-wille» and easily suggestible (extrinsically motivated) by society or outward inducement.

Apparent failures of the will and volition have also been reported associated with a number of mental and neurological disorders. They also study the phenomenon of Akrasia, wherein people seemingly act against their best interests and know that they are doing so (for instance, restarting cigarette smoking after having intellectually decided to quit). Advocates of Sigmund Freud's psychology stress the importance of the influence of the unconscious mind upon the apparent conscious exercise of will. Abraham Low, a critic of psychoanalysis, stressed the importance of will, the ability to control thoughts and impulses, as fundamental for achieving mental health.

The sociologist Ferdinand Tönnies, in analysing group psychology, distinguishes between will directed at furthering the interests of the group (Wesenwille or «essential wil»), and will directed at furthering individual goals (Kürwille or «arbitrary will»).

Mental States

Mood

Moods tend to have a relatively long-term character. One can be sad or cheerful for several hours or even for several days. Nevertheless moods, like emotions, are acute states that are limited in time. The main difference between moods and emotions is that moods are essentially non-intentional (e.g. one is not sad or cheerful at something). Moods are not directed at a particular subject but rather at the surroundings in general or at «the world as a whole». Whereas emotions are usually elicited by an explicit cause (e.g. some event), moods have combined causes (e.g. «It is raining», «I didn't sleep well», «Someone has finished the coffee!»). Consequently, we are generally unable to specify the cause of a particular mood. A person is sometimes not even aware of being in a certain mood (e.g. if we are grumpy in the morning we usually only realize it when someone else tells us).

Frustration

Most persons experience feelings of frustration when someone or something obstructs them in some way. And most persons respond to the feeling of frustration by wanting to force the «other» to provide satisfaction. The healthy response to frustration, however, requires a different psychological attitude than satisfaction.

Frustration/Anxiety

For other investigators more compelling evidence on the origins of aggression is found in the environment, and one early hypothesis pointed to the role of frustrating circumstances. In this view, called *the frustration-aggression hypothesis*, «aggressive behavior always presupposes the existence of frustration», and frustration inevitable leads to some form of aggression. When the boss is unusually nasty, we speculate the he just failed to negotiate a business deal or that someone rejected him. Similarly, a child denied a cookie may have a temper tantrum. The role of frustration in aggression has been demonstrated in numerous studies. When children were prevented from using attractive toys, visible through a screen, they were more destructive in play than were comparable children allowed access to these toys. When other children were forced to work harder and harder to obtain toys, they became more and more aggressive toward an inanimate object. In daily life, attacks on minority groups have

increased with economic depression. All of these studies, not without limitations, also show that aggression can be displaced. In displaced aggression a counterattack against the frustrating event is impossible or dangerous, and so it is directed instead toward some less threatening circumstance.

The chief problem with the frustration-aggression hypotheses is that is has been stated too broadly. The idea is too sweeping. Aggression can occur without frustration, as we shall see. This hypothesis is perhaps most relevant in the animal kingdom, where motivation is more obviously tied to biological drives.

Passion

Passion (from the Ancient Greek verb πάσχω (paskho) meaning to suffer) is a term applied to a very strong feeling about a person or thing. Passion is an intense emotion compelling feeling, enthusiasm, or desire for something.

The term is also often applied to a lively or eager interest in or admiration for a proposal, cause, or activity or love – to a feeling of unusual excitement, enthusiasm or compelling emotion, a positive affinity or love, towards a subject. It is particularly used in the context of romance or sexual desire though it generally implies a deeper or more encompassing emotion than that implied by the term lust.

Temptation

A temptation is an act that looks appealing to an individual. It is usually used to describe acts with negative connotations and as such, tends to lead a person to regret such actions, for various reasons: legal, social, psychological (including feeling guilt), health, economic, etc. Temptation also describes the coaxing or inducing a person into committing such an act, by manipulation or otherwise of curiosity, desire or fear of loss. «Temptation» is usually used in a loose sense to describe actions which indicate a lack of self control, such as procrastination or eating junk food. Temptation is a common recurring theme in world literature.

Temptation has repercussions for even the strongest. «Temptation» is something that allures, excites, and seduces someone. Infatuation can also lead to temptation as someone might do something for «love» in spite of his better judgment. In advertising, temptation is a theme common to many of the marketing and

advertising techniques used to make products more attractive for purchase by consumers.

Thinking is a mediated generalized reflection of reality in the human mind with all its important ties and connections. Thinking is always based on a sensitive reflection of the world. The properties of things and phenomena, connections between them are reflected in a generalized form as the type of notions, laws and essence. That is the images of sensitive cognition are the material only with the help of which reflection can arise on the level of thought. It always develops as a result of the knowledge acquired by a human being.

In practice, thinking as a separate mental process does not exist, it exists invisibly in all other cognitive processes: perception, attention, memory, etc. Thinking is a generalized cognition of reality where the words, language, function of analyzers are most important. With development of psychology, language, playing and studying activities one can follow gradually development and improvement of thinking with' all its features, inherent in the given historic era and appropriate individual conditions of development in a definite microenvironment (structure of society).

The material embodiment of thinking and the tool for thought exchange is a speech with its grammar and vocabulary.

Basic mental operations

Analysis is a disassembling of a whole into parts in thoughts or mental apportionment of its aspects, actions and relations from a whole.

Synthesis is a mental assembling of the parts, properties, actions into the whole. Synthesis is not a mechanical unity of the parts and thus it does not result in their summing.

As a rule, analysis and synthesis are carried out together, rendering assistance to more thorough cognition of the reality.

Comparison is a determination of similarity or difference between subjects and phenomena or their separate signs. While considering them in different aspects and combinations we get to know the subjects, object and phenomena better and more thoroughly.

Abstraction permits to pick out certain elements from the wholes and concentrate on them, thus making reality more schematized.

Generalization is a selection of general and essential that is typical for the definite number of subjects and notions.

Concrete definition is a transition from the abstracts to the individual real subjects and phenomena.

Classification is a division and their grouping of objects on the basis of certain elements.

Systematization is division with a following grouping (unification) but not of separate objects as in classification but in groups or classes.

There are three categories of thinking.

Concepts are the reflection in the mind of general and important properties of a group of initial objects or phenomena of reality. Concepts are the highest form of the reflection of reality as they reflect the general, most important, regular properties of objects and phenomena. Definite concepts reflect the ties and relationship between objects and phenomena. Abstract concepts do not reflect real objects or phenomena. They reflect only certain properties of objects combining into notions on the basis of abstractions of the given objects.

Judgment is a reflection of links between the subjects and phenomena of reality or between their properties and signs. Judgment is a result of somebody's expression about something. They affirm or reject any relations between subjects, events and phenomena of the reality.

Conclusion is a link between thoughts (notions, judgments) resulting in getting different judgment from one or several judgments, or withdrawing it from the content of initial judgments.

Induction and ***deduction*** are the means of making conclusions which reflect direction of thought. ***Induction*** is movement of thought from a single statement to general knowledge. Inductive conclusion results in general judgment. ***Deduction*** is movement of knowledge from more general to less general.

Classification of types of thinking:

By the character of the aids used:

- Visual aid is a material for thinking activity presented in a visual, specific form (plaster cast, laboratory equipment and others).
- Semantic aid is a material for thinking activity presented in a sense, symbolic form (operating with numbers, verbal description of the situation).

By the character of duration of the cognitive processes:

- Intuitive thinking is performed as «gripping» the situation, provided decision without information about the ways and conditions of its performance.
- Analytical thinking is performed by means of logical conclusions leading to the correct understanding the main principle of appropriateness.

By the character of the tasks solved:

- Practical thinking takes place if the person has to solve the definite situation with its characteristic features and conditions.
- Theoretical thinking takes place if the tasks are being solved by the person in general and they submit to the search of the main appropriateness, rules, determination of the type of situation.

By functions:

- Creative thinking is reproduction of new ideas, search of the original solving the task.
- Stereotype thinking is reproductive decision of typical tasks according to the earlier acquired scheme.

Depending on the content of the task being solved there are *three kinds of thinking*:

- ✓ ***Visually-active thinking*** is thinking where solving the task includes outer motive tests. It is characteristic for this type of thinking that the task is solved with the help of real, physical transformation of the situations, approbation of the properties of the objects. At preschool age (under 3 years) thinking is visuallyactive in general. It is often applied in adults in every day life and is necessary if it is impossible to provide the results of any actions beforehand (the work of tester, constructor).
- ✓ ***Concrete-graphic thinking*** is connected with operating images. This form of thinking is completely and extensively represented in children of pre-school (4-7 year old) and young

school ages, but in adults it occurs in the people whose professions are connected with clear and lively conception about different subjects or phenomena (writers, artists, musicians, actors).

- ✓ ***Abstract-logical thinking*** operates on the base of linguistic means and represents later stage of historic and ontogenetic development of thinking. This thinking is characterized by the use of notions, logical constructions which sometimes do not have a graphic description (honesty, pride and others). Due to verballogical thinking a person can establish more general appropriateness, provide for the development of processes in the nature and society, to generalize different visual materials.

From the age of 8-10 years one can clearly observe development of abstract-logical, conceptual thinking and up to 14-16 years the ability to form the highest form of abstraction, complex judgments and conclusions is being formed and they are the basis of consciousness and self-consciousness.

It should be noted that all the types of thinking are closely connected with each other. Therefore while trying to determine the type of thinking, one should remember that this process is always relative and conditional. The development of all the types of thinking and their unity can provide correct and quite complete reflection of reality by the man.

Quality of thinking

- ***Depth of thinking*** is an ability to embrace the task as a whole without missing necessary separate moments at the same time. Depth of thinking is expressed in the ability to investigate the essence of complex questions. The quality opposite to the depth of thinking is superficial knowledge if a person pays attention to small things but he does not see the main point. Independence of thinking is characterized by the ability of the man to propose new tasks and find out approaches for their solving without asking for help.
- ***Flexibility*** of thought is expressed in freedom from fettering influence of the past, in ability to change actions quickly in case of change of situation, to find out new, original unknown ways and methods of solving the tasks.
- ***Speed*** of thought is necessary, especially in the cases if the person has to make definite decisions quickly (for example, during

accident, operation). It is necessary to take into account inhibition of thinking by negative emotions.

- ***Consistency*** is systematic character and strict logic.
- ***Criticism*** of mind is the ability of the man to evaluate personal and other ideas objectively, to check up all the propositions and conclusions thoroughly and in detail. All these properties constitute productivity of mind. The advantage of using visual-active, visual-image and verbal-logical types of thinking refers to the individual features.

Thinking is closely connected with language and speech.

Language is a system of signs which are means of communication, thinking activity, method of expression of person's selfconsciousness, passing on from one generation to another and storage of information.

The language exists and is realized through speech. One can distinguish outer speech (oral, written) and internal speech (about oneself) with observation of ideomotor movements of muscles of speech organs, though they do not produce sounds at this time. Speech should be considered as «immediate effectiveness of the thought», as practical use of language.

The language is being formed in the historic development as a system of communicative means. Thinking and language are not identical (the same thought may be expressed in different verbal forms). One can distinguish expressive speech (for communicative use), written, internal speech (when the thought is formed and exists, it appears later than loud speech in children).

Disorders of speech:

- ***Ankyloglossia*** is incorrect pronunciation of separate sounds and phrases.
- ***Disarthria*** is impossibility of accurate articulation when speaking.
- ***Aphasia*** is a disturbance in perception of spoken language.
- ***Alexia*** is a disturbance in perception of written language.
- ***Agraphia*** is a disturbance of writing.
- ***Stammering*** is a disturbance of fluency, difficulties in pronouncing sound combinations.
- ***Logorrhea*** is a fast, non-stoppable speech.

There is a big variety of ***thinking disturbances*** occurring in general practice, but they could be categorized in 3 groups. Every group is based on the notion of associations. Association is one thinking operation in a unit of time. This notion is totally artificial and abstract and is implemented for easing the classification process.

Disturbances by speed and flexibility of associations:

- ❖ Acceleration of thinking (increase of associations in a unit of time).
- ❖ Deceleration of thinking (decrease of associations in a unit of time).
- ❖ Stop of thinking («Schperrung»).
- ❖ Circumstantiality of thinking is inability to move from one line of associations to another.

Disturbances by orderliness and purposefulness of associations:

- ❖ Incoherence of thoughts (there is no relation between thoughts and sentences, and even words and syllables).
- ❖ Verbigeration (stereotype repetition of words and phrases).
- ❖ Paralogical thinking (conclusions are made not according to the laws of logic).
- ❖ Ambitendency of thinking (simultaneous being of two alternative thoughts).
- ❖ Pathological philosophizing.
- ❖ Pathological detailed elaboration (inability of picking out the most principal and important, sticking on separate details).
- ❖ Pathological symbolism (conclusions which are built on occasional associations).
- ❖ Neologisms (creation of new words which are understandable only for the creator).

Disturbances by content of formed associations:

- ❖ Obsessive thoughts occur without the person's desire and against his wish. The patient assesses them in a critical way, fights against them but can not make effort to avoid them.
- ❖ Overvalued ideas are the judgments occurring as a result of real situation but have disproportionate, prevalent meaning in thinking due to the strongly pronounced emotional coloring. These thoughts would not be incorrect if the patient did not pay

great attention to them. Pathology occurs because of strong exaggeration of the importance of the thought. One of the variants of these thoughts is hypochondriac state (hypernosognosia) when the patient overestimates real unhealthy sensations and considers being ill with a very serious and dangerous disease. These patients constantly visit doctors, ask for treatment, change drugs all the time.

- Raving ideas are produced by a psychotic mind. They could seem like truth or be absolutely fantastic and weird. It's common to pick out paranoial, paranoid and paraphrenic raving.

Methods of thinking examination

When talking to the patient one should pay attention to the speed of associations and their features. It is necessary to give the patient possibility to talk freely about everything he wants including every abstract topics.

A number of experimental psychological methods can be used for examination of thinking.

Generalization of notions. Four initial notions are proposed and the task to define them by one word is given. In such way ability to synthesize is determined.

Exclusion of notions. Four or five words are proposed and it is necessary to find the word inappropriate in meaning to the others. It gives the possibility to judge about the ability to analyze.

Methods of comparison. The patient is given the task to find out similarities and differences between two notions.

Explanation of figurative sense of proverbs gives the possibility to evaluate the level of thinking and intellectual development.

Associative experiment. 20-25 words prepared beforehand are proposed to the patient, and he is to answer in one word after 2-3 seconds what are those words about. This method gives the possibility to judge about the speed of thinking, content of dominative notions, and qualitative peculiarities of the person.

Explanations of topical pictures. The patient is given a postcard with a reproduction of a picture, and he is to retell its content. The method checks up quick wits of the patients, their ability to emphasize the essence and emotional reaction.

Establishment of sequence of events. Using a series of 3-6 pictures of some event the patient have to reproduce a connected narrative. This method is intended for revealing quick wits of the patients, ability to understand the links of events and make some sequent conclusions.

Classification. For examination it's necessary to use a set of cards with pictures of different objects or their verbal signs. A set of cards provides different possibilities to solve the task. The patient is proposed to isolate one picture which is inappropriate in meaning to three ones. This method is used for examining the level of processes of generalization and abstraction, sequence of judgments.

Pictograms. The patient is given a blank sheet of paper, pencil and is proposed to draw a sketch for memorizing the words. This method gives the possibility to study individual thinking productivity in patients. Little determination and regulation of thinking processes by condition of experience gives the possibility to find out disturbances of thinking in patient.

Video to view

https://www.youtube.com/watch?v=55_-YsfSPK0
https://www.youtube.com/watch?v=CI2MglIQpF4
https://www.youtube.com/watch?v=ynHioCxAMEI
https://www.youtube.com/watch?v=lNbVnJr3ths

https://www.youtube.com/watch?v=Tmrnud7Nhhw
https://www.youtube.com/watch?v=dWKoKvkW0w0

Control questions

1. Attention, types of attention, their characteristics.
2. Properties of attention.
3. Mental operations as the main mechanisms of thinking, their characteristics.
4. Classification of types of thinking. Logical forms of thinking.
5. Individual differences of thinking. Manifestation of intellectual abilities in the professional activity of a doctor.
6. Intelligence: basic approaches to understanding.The connection between thinking and speaking.
7. Thinking as the highest form of human cognitive activity. Understanding its specifics in comparison with direct sensory reflection.
8. The concept of memory. Characteristics of the main processes of memory.

9. Classification of memory types and their relationship.
10. Semantic and mechanical memorization and their place and role in the acquisition of knowledge.
11. Reproduction, its types and role in the processes of assimilation and preservation of knowledge.
12. Conditions for effective memorization, storage and reproduction of information.
13. Forgetting, its causes and ways to deal with it.
14. Association, its types.
15. Individual differences in memory.
16. Memory in the professional activity of a doctor.

CHAPTER 6
TEMPERAMENT and CHARACTER. PSYCHOLOGY OF PERSONALITY. PSYCHOLOGICAL DISORDERS

Objectives: to learn the concept of a harmonious personality; to study the structure and psychological peculiarities of personality (temperament, character), influences of biological and social factors to the personality development. To get the overview of personality disorders, methods of examination.. The main symptoms and syndromes of personality disorders. Personality disorders: antisocial, narcissistic, dissociative, histrionic, schizoid, paranoid, schizotypal, anancastic, masochistic, depressive, manic, obsessive, compulsive.

Personality psychology is a branch of psychology that studies personality and individual differences. Its areas of focus include:

- Constructing a coherent picture of a person and his or her major psychological processes.
- Investigating individual differences, that is, how people can differ from one another.
- Investigating human nature, that is, how all people's behaviour is similar.

One emphasis in this area is to construct a coherent picture of a person and his or her major psychological processes. Another emphasis views personality as the study of individual differences, in other words, how people differ from each other. A third area of emphasis examines human nature and how all people are similar to one another. These three viewpoints merge together in the study of personality.

Personality can be defined as a dynamic and organized set of characteristics possessed by a person that uniquely influences his or her cognitions, motivations, and behaviors in various situations. The word «personality» originates from the Latin persona, which means mask. Significantly, in the theatre of the ancient Latinspeaking world, the mask was not used as a plot device to disguise the identity of a character, but rather was a convention employed to represent or typify that character.

The pioneering American psychologist, Gordon Allport (1937) described two major ways to study personality, the nomothetic and the idiographic. Nomothetic psychology seeks general laws that can

be applied to many different people, such as the principle of selfactualization, or the trait of extraversion. Idiographic psychology is an attempt to understand the unique aspects of a particular individual.

The study of personality has a rich and varied history in psychology, with an abundance of theoretical traditions. The major theories include dispositional (trait) perspective, psychodynamic, humanistic, biological, behaviorist and social learning perspective. There is no consensus on the definition of «personality» in psychology. Most researchers and psychologists do not explicitly identify themselves with a certain perspective and often take an eclectic approach. Some research is empirically driven such as the «Big 5» personality model whereas other research emphasizes theory development such as psychodynamics. There is also a substantial emphasis on the applied field of personality testing.

Personality theories

Critics of personality theory claim personality is «plastic» across time, places, moods, and situations. Changes in personality may indeed result from diet (or lack thereof), medical effects, significant events, or learning. However, most personality theories emphasize stability over fluctuation.

Trait theories

According to the Diagnostic and Statistical Manual of the American Psychiatric Association, personality traits are «enduring patterns of perceiving, relating to, and thinking about the environment and oneself that are exhibited in a wide range of social and personal contexts». Theorists generally assume a) traits are relatively stable over time, b) traits differ among individuals (e.g. some people are outgoing while others are reserved), and c) traits influence behavior.

The most common models of traits incorporate three to five broad dimensions or factors. The least controversial dimension, observed as far back as the ancient Greeks, is simply extraversion vs. introversion (outgoing and physical-stimulation-oriented vs. quiet and physical-stimulation-averse).

Gordon Allport delineated different kinds of traits, which he also called dispositions. Central traits are basic to an individual's personality, while secondary traits are more peripheral. Common

traits are those recognized within a culture and thus may vary from culture to culture. Cardinal traits are those by which an individual may be strongly recognized.

Raymond Cattell's research propagated a two-tiered personality structure with sixteen «primary factors» (16 Personality Factors) and five «secondary factors».

Hans Eysenck believed just three traits – extraversion, neuroticism and psychoticism – were sufficient to describe human personality. Differences between Cattell and Eysenck emerged due to preferences for different forms of factor analysis, with Cattell using oblique, Eysenck orthogonal, rotation to analyse the factors that emerged when personality questionnaires were subjected to statistical analysis. Today, the Big Five factors have the weight of a considerable amount of empirical research behind them, building on the work of Cattell and others.

Lewis Goldberg proposed a five-dimension personality model, nicknamed the «Big Five»:

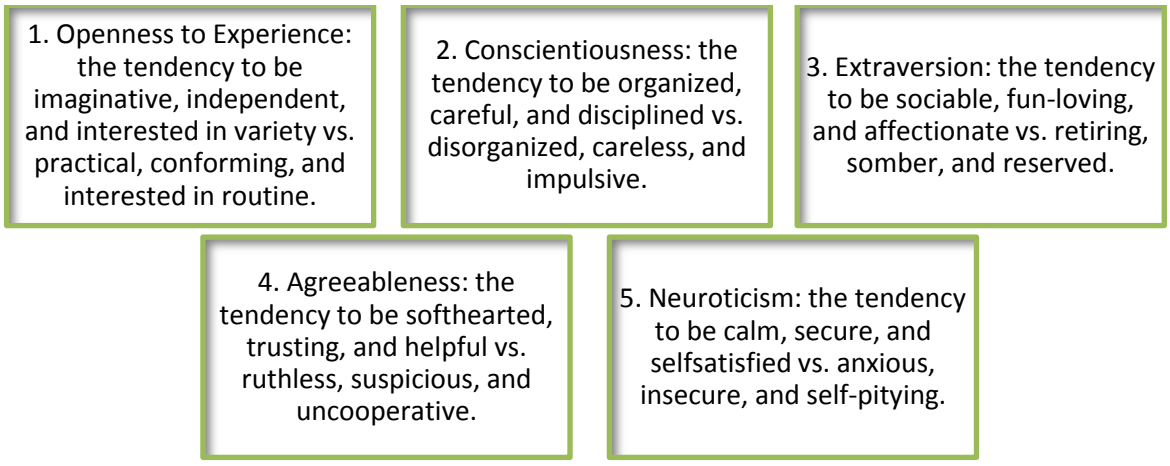


Figure 6. Personality model «Big Five» by Lewis Goldberg

The Big Five contain important dimensions of personality. However, some personality researchers argue that this list of major traits is not exhaustive. Some support has been found for two additional factors: excellent/ordinary and evil/decent. However, no definitive conclusions have been established.

John L. Holland's RIASEC vocational model, commonly referred to as the *Holland Codes*, stipulates that six personality traits lead people to choose their career paths. In this circumplex model, the six types are represented as a hexagon, with adjacent types more

closely related than those more distant. The model is widely used in vocational counseling.

Trait models have been criticized as being purely descriptive and offering little explanation of the underlying causes of personality. Eysenck's theory, however, does propose biological mechanisms as driving traits, and modern behavior genetics researchers have shown a clear genetic substrate to them. Another potential weakness of trait theories is that they lead people to accept oversimplified classifications, or worse offer advice, based on a superficial analysis of their personality. Finally, trait models often underestimate the effect of specific situations on people's behavior. It is important to remember that traits are statistical generalizations that do not always correspond to an individual's behavior.

Type theories

Personality type refers to the psychological classification of different types of people. Personality types are distinguished from personality traits, which come in different levels or degrees.

Psychoanalytic theories

Psychoanalytic theories explain human behaviour in terms of the interaction of various components of personality. Sigmund Freud was the founder of this school. Freud drew on the physics of his day (thermodynamics) to coin the term psychodynamics. Based on the idea of converting heat into mechanical energy, he proposed psychic energy could be converted into behavior. Freud's theory places central importance on dynamic, unconscious psychological conflicts.

Freud divides human personality into three significant components: the (id, ego and the superego). **The id** acts according to the pleasure principle, demanding immediate gratification of its needs regardless of external environment; **the ego** then must emerge in order to realistically meet the wishes and demands of **the id** in accordance with the outside world, adhering to the reality principle. Finally, **the superego** (conscience) inculcates moral judgment and societal rules upon the ego, thus forcing the demands of the id to be met not only realistically but morally. The superego is the last function of the personality to develop, and is the embodiment of parental/social ideals established during childhood. According to Freud, personality is based on the dynamic interactions of these three components.

The channeling and release of sexual (libidal) and aggressive energies, which ensues from the «Eros» (sex; instinctual selfpreservation) and «Thanatos» (death; instinctual self-annihilation) drives respectively, are major components of his theory. It is important to note Freud's broad understanding of sexuality included all kinds of pleasurable feelings experienced by the human body. Freud proposed five psychosexual stages of personality development. He believed adult personality is dependent upon early childhood experiences and largely determined by age five. Fixations that develop during the Infantile stage contribute to adult personality and behavior.

One of Sigmund Freud's earlier associates, Alfred Adler, did agree with Freud early childhood experiences are important to development, and believed birth order may influence personality development. Adler believed the oldest was the one that set high goals to achieve to get the attention they lost back when the younger siblings were born. He believed the middle children were competitive and ambitious possibly so they are able to surpass the first-born's achievements, but were not as much concerned about the glory. Also he believed the last born would be more dependent and sociable but be the baby. He also believed that the only child loves being the center of attention and matures quickly, but in the end fails to become independent.

Heinz Kohut thought similarly to Freud's idea of transference. He used narcissism as a model of how we develop our sense of self. Narcissism is the exaggerated sense of one self in which is believed to exist in order to protect one's low self esteem and sense of worthlessness. Kohut had a significant impact on the field by extending Freud's theory of narcissism and introducing what he called the «self-object transferences» of mirroring and idealization. In other words, children need to idealize and emotionally «sink into» and identify with the idealized competence of admired figures such as parents or older siblings. They also need to have their self-worth mirrored by these people. These experiences allow them to thereby learn the self-soothing and other skills that are necessary for the development of a healthy sense of self.

Another important figure in the world of personality theory was Karen Horney. She is credited with the development of the "real self»

and the «ideal self». She believes all people have these two views of their own self. The «real self» is how you really are with regards to personality, values, and morals; but the «ideal self» is a construct you apply to yourself to conform to social and personal norms and goals. Ideal self would be «I can be successful, I am CEO material»; and real self would be «I just work in the mail room, with not much chance of high promotion».

Behaviorist theories

Behaviorists explain personality in terms of the effects external stimuli have on behavior. It was a radical shift away from Freudian philosophy. This school of thought was developed by B. F. Skinner who put forth a model which emphasized the mutual interaction of the person or «the organism» with its environment. Skinner believed children do bad things because the behavior obtains attention that serves as a reinforcer. For example: a child cries because the child's crying in the past has led to attention. These are the response, and consequences. The response is the child crying, and the attention that child gets is the reinforcing consequence. According to this theory, people's behavior is formed by processes such as operant conditioning. Skinner put forward a «three term contingency model» which helped promote analysis of behavior based on the «Stimulus – Response – Consequence Model» in which the critical question is: «Under which circumstances or antecedent «stimuli» does the organism engage in a particular behavior or «response», which in turn produces a particular «consequence»?»

Richard Herrnstein extended this theory by accounting for attitudes and traits. An attitude develops as the response strength (the tendency to respond) in the presences of a group of stimuli become stable. Rather than describing conditionable traits in nonbehavioral language, response strength in a given situation accounts for the environmental portion. Herrstein also saw traits as having a large genetic or biological component as do most modern behaviorists.

Ivan Pavlov is another notable influence. He is well known for his classical conditions experiments involving a dog. These physiological studies on this dog led him to discover the foundation of behaviorism as well as classical conditioning.

Social cognitive theories

In cognitivism, behavior is explained as guided by cognitions (e.g. expectations) about the world, especially those about other people. Cognitive theories are theories of personality that emphasize cognitive processes such as thinking and judging.

Albert Bandura, a social learning theorist suggested the forces of memory and emotions worked in conjunction with environmental influences. Bandura was known mostly for his «Bobo Doll experiment». During these experiments, Bandura video taped a college student kicking and verbally abusing a bobo doll. He then showed this video to a class of kindergarten children who were getting ready to go out to play. When they entered the play room, they saw bobo dolls, and some hammers. The people observing these children at play saw a group of children beating the doll. He called this study and his findings observational learning, or modeling.

Early examples of approaches to cognitive style are listed by Baron (1982). These include Witkin's (1965) work on field dependency, Gardner's (1953) discovering people had consistent preference for the number of categories they used to categorise heterogeneous objects, and Block and Petersen's (1955) work on confidence in line discrimination judgments. Baron relates early development of cognitive approaches of personality to ego psychology. More central to this field have been:

- Self-efficacy work, dealing with confidence people have in abilities to do tasks.
- Locus of control theory dealing with different beliefs people have about whether their worlds are controlled by themselves or external factors.
- Attributional style theory dealing with different ways in which people explain events in their lives. This approach builds upon locus of control, but extends it by stating we also need to consider whether people attribute to stable causes or variable causes, and to global causes or specific causes.

Various scales have been developed to assess both attributional style and locus of control. Locus of control scales include those used by Rotter and later by Duttweiler, the Nowicki and Strickland (1973) Locus of Control Scale for Children and various locus of control scales specifically in the health domain, most famously that of

Kenneth Wallston and his colleagues, the Multidimensional Health Locus of Control Scale. Attributional style has been assessed by the Attributional Style Questionnaire, the Expanded Attributional Style Questionnaire, the Attributions Questionnaire, the Real Events Attributional Style Questionnaire and the Attributional Style Assessment Test.

Walter Mischel (1999) has also defended a cognitive approach to personality. His work refers to «Cognitive Affective Units», and considers factors such as encoding of stimuli, affect, goal-setting, and self-regulatory beliefs. The term «Cognitive Affective Units» shows how his approach considers affect as well as cognition.

Humanistic theories

In humanistic psychology it is emphasized people have free will and they play an active role in determining how they behave. Accordingly, humanistic psychology focuses on subjective experiences of persons as opposed to forced, definitive factors that determine behavior. Abraham Maslow and Carl Rogers were proponents of this view, which is based on the «phenomenal field» theory of Combs and Snygg (1949).

Maslow spent much of his time studying what he called «selfactualizing persons», those who are «fulfilling themselves and doing the best they are capable of doing». Maslow believes all who are interested in growth move towards self-actualizing (growth, happiness, satisfaction) views. Many of these people demonstrate a trend in dimensions of their personalities. Characteristics of selfactualizers according to Maslow include the four key dimensions:

1. Awareness – maintaining constant enjoyment and awe of life. These individuals often experienced a «peak experience». He defined a peak experience as an «intensification of any experience to the degree there is a loss or transcendence of self». A peak experience is one in which an individual perceives an expansion of his or herself, and detects a unity and meaningfulness in life. Intense concentration on an activity one is involved in, such as running a marathon, may invoke a peak experience.

2. Reality and problem centered – they have tendency to be concerned with «problems» in their surroundings.

3. Acceptance/Spontaneity – they accept their surroundings and what cannot be changed.

4. Unhostile sense of humor/ democratic – they do not like joking about others, which can be viewed as offensive. They have friends of all backgrounds and religions and hold very close friendships.

Maslow and Rogers emphasized a view of the person as an active, creative, experiencing human being who lives in the present and subjectively responds to current perceptions, relationships, and encounters. They disagree with the dark, pessimistic outlook of those in the Freudian psychoanalysis ranks, but rather view humanistic theories as positive and optimistic proposals which stress the tendency of the human personality toward growth and self-actualization. This progressing self will remain the center of its constantly changing world; a world that will help mold the self but not necessarily confine it. Rather, the self has opportunity for maturation based on its encounters with this world. This understanding attempts to reduce the acceptance of hopeless redundancy. Humanistic therapy typically relies on the client for information of the past and its effect on the present, therefore the client dictates the type of guidance the therapist may initiate. This allows for an individualized approach to therapy. Rogers found patients differ in how they respond to other people. Rogers tried to model a particular approach to therapy- he stressed the reflective or empathetic response. This response type takes the client's viewpoint and reflects back his or her feeling and the context for it. An example of a reflective response would be, «It seems you are feeling anxious about your upcoming marriage». This response type seeks to clarify the therapist's understanding while also encouraging the client to think more deeply and seek to fully understand the feelings they have expressed.

Biopsychological theories

Some of the earliest thinking about possible biological bases of personality grew out of the case of Phineas Gage. In an 1848 accident, a large iron rod was driven through Gage's head, and his personality apparently changed as a result (although descriptions of these psychological changes are usually exaggerated.

In general, patients with brain damage have been difficult to find and study. In the 1990s, researchers began to use Electroencephalography (EEG), Positron Emission Tomography (PET) and more recently functional Magnetic Resonance Imaging (fMRI),

which is now the most widely used imaging technique to help localize personality traits in the brain. One of the founders of this area of brain research is Richard Davidson of the University of Wisconsin–Madison. Davidson's research lab has focused on the role of the prefrontal cortex (PFC) and amygdala in manifesting human personality. In particular, this research has looked at hemispheric asymmetry of activity in these regions. Neuropsychological experiments have suggested that hemispheric asymmetry can affect an individual's personality (particularly in social settings) for individuals with NLD (non-verbal learning disorder), which is marked by the impairment of nonverbal information controlled by the right hemisphere of the brain. Progress will arise in the areas of gross motor skills, inability to organize visual-spatial relations, or adapt to novel social situations. Frequently, a person with NLD is unable to interpret non-verbal cues, and therefore experiences difficulty interacting with peers in socially normative ways.

One integrative, biopsychosocial approach to personality and psychopathology, linking brain and environmental factors to specific types of activity, is the hypostatic model of personality, created by Codrin Stefan Tapu.

Temperament

In psychology, ***temperament*** refers to those aspects of an individual's personality, such as introversion or extroversion, that are often regarded as innate rather than learnt. A great many classificatory schemes for temperament have been developed; none, though, has achieved general consensus.

Historically, the concept of temperament was part of the theory of the four humours, with their corresponding four temperaments. The concept played an important part in pre-modern psychology, and was explored by philosophers such as Immanuel Kant and Hermann Lotze. David W. Keirsey also drew upon the early models of temperament when developing the Keirsey Temperament Sorter. More recently, scientists seeking evidence of a biological basis of personality have further examined the relationship between temperament and character (defined in this context as the learnt aspects of personality). However, biological correlations have proven hard to confirm.

Temperament is determined through specific behavioural profiles, usually focusing on those that are both easily measurable and testable early in childhood. Commonly tested factors include irritability, activity, frequency of smiling, and an approach or avoidant posture to unfamiliar events. There is generally a low correlation between descriptions by teachers and behavioural observations by scientists of features used in determining temperament. Temperament is hypothesized to be associated with biological factors, but these have proven difficult to test directly.

Character structure

A character structure is a system of relatively permanent motivational and other traits that are manifested in the specific ways that an individual relates and reacts to others, to various kinds of stimuli, and the environment that will most likely bring about a normal or productive character structure. On the other hand, a child whose nurture and/or education are not ideal, living in a treacherous environment and interacting with adults who do not take the long-term interests of the child to heart will be more likely to form a pattern of behavior that suits the child to avoid the challenges put forth by a malign social environment. The means that the child invents to make the best of a hostile environment.

Although this may serve the child well while in that bad environment, it may also cause the child to react in inappropriate ways, ways damaging to his or her own interests, when interacting with people in a more ideal social context. Major trauma that occurs later in life, even in adulthood, can sometimes have a profound effect. See post-traumatic stress disorder. However, character may also develop in a positive way according to how the individual meets the psychosocial challenges of the life cycle (Erikson).

Freud's first paper on character described the anal character consisting of stubbornness, stinginess and extreme neatness. He saw this as a reaction formation to the child's having to give up pleasure in anal eroticism.The positive version of this character is the conscientious, inner directed obsessive. Freud also described the erotic character as both loving and dependent. And the narcissistic character as the natural leader, aggressive and independent because of not internalizing a strong super-ego.

For Erich Fromm character develops as the way in which an individual structures modes of assimilation and relatedness.The character types are almost identical to Freud's but Fromm gives them different names, receptive, hoarding, exploitative. Fromm adds the marketing type as the person who continually adapts the self to succeed in the new service economy. For Fromm, character types can be productive or unproductive. Fromm notes that character structures develop in each individual to enable him or her to interact successfully within a given society, to adapt to its mode of production and social norms, (see social character) may be very counter-productive when used in a different society.

Fromm got his ideas about character structure from two associates/students of Freud, Sándor Ferenczi and Wilhelm Reich. It is Reich who really developed the concept from Ferenczi, and added to it an exploration of character structure as it applies to body structure and development as well mental life. For Wilhelm Reich, character structures are based upon blocks-chronic, unconsciously held muscular contractions-against awareness of feelings. The blocks result from trauma: the child learns to limit his awareness of strong feelings as his needs are thwarted by parents and they meet his cries for fulfillment with neglect or punishment. Reich argued for five basic character structures, each with its own body type developed as a result of the particular blocks created due to deprivation or frustration of the child's stage-specific needs.

The schizoid structure, which could result in full blown schizophrenia: this is the result of a wound of not feeling wanted by hostile parents, even in the womb. There is a fragmentation of both body and mind with this structure.

The oral structure: from deprivation of warmth and milk from the mother, around age 1. The oral structure adopts an attitude of «you do it for me, because you didn't nurture me when I was young». Shoulders are usually hunched, head bent forward, wrists and ankles weak, as if to say, «I can't get it for myself».

The masochist structure: this wound occurs when the parent refuses to allow the child to say «no», the first step in setting boundaries. The child seeks relief from the rage that builds up underneath bounded muscle and fat, by provoking others to punish him.

The psychopath or upwardly displaced structure: this wound, around the age of 3, is around the parent manipulating, emotionally molesting the child, seducing him into feeling he is «special», for her (the parent's) own narcisstic needs. The child concludes he must never again permit himself to be vulnerable, and so decides he will instead manipulate and overpower others with his will. The body is well developed above, weak below, as the psychopath pulls away from the ground and attempts to overpower from above. This structure has variations, depending on the admixture with prior wounds: the overbearing is the pure type, the submissive is mixed with oral, the withdrawing, with schizoid.

The rigid: this wound occurs around the time of the first puberty, the age of 4. The child's sexuality is not affirmed by the parent, but instead shamed or denied. This structure seeks to prove to the parents and others that he is worthy of love. He is often beautifully harmonious, but there is a physical split around the diaphragm between heart and pelvis: love and sex. This person has trouble with being aware of his emotions, which are strong, yet buried. This rigid structure has many substructures, depending on the exact nature of the wound, the admixture with other pre-rigid (oedipal) structures, and the gender: in women, the masculine aggressive, hysterical, and the alternating; in men, the phallic narcissist, the compulsive, and the passive feminine.

While each of these structures has blocks, and these blocks to some degree resemble «armour», it is only the rigid structure that truly has what Reich called «character armour»: a system of blocks all over the body. Depending on which version of rigid one is, the rigid character possesses either «plate» (i.e. clanky) or «mesh»(much more flexible) character armour.

Disorders of Personality

Psychopathy is a psychological construct that describes chronic disregard for ethical principles and antisocial behavior. The term is often used interchangeably with sociopathy. This is a commonly made mistake. Sociopathy is no longer a correct term to use, and when it is used it actually refers to what is considered Antisocial Personality Disorder. Psychopaths are not diagnosed because there is no current diagnostic criteria in the DSM-IV-TR. Instead, labeling a person a psychopath would be done through a forensic

measurement such as the Hare PCLR-2, and would refer to the set of behavioral and emotional characteristics that person has (this would be similar to labeling someone an extrovert – they are not diagnosed as extroverts). In the ICD-10 diagnosis criteria, the terms antisocial/dissocial personality disorder are used.

The term is used as a definition in law, for example, «psychopathic personality disorder» under the Mental Health Act 1983 of the UK as well as to denote a severe condition often related to antisocial or dissocial personality disorder as defined by the Psychopathy Checklist-Revised (PCL-R). The term «psychopathy» is often confused with psychotic disorders. It is estimated that approximately one percent of the general population are psychopaths. The psychopath is defined by an uninhibited gratification in criminal, sexual, or aggressive impulses and the inability to learn from past mistakes. Individuals with this disorder gain satisfaction through their antisocial behavior and lack remorse for their actions.

Accentuation personality – it's a borderline deviation of the normal personality, which characterized by depressed or evaluated some character's peculiarities that may result in person's hypersensitivity to some specific psychotraumatic situations. There are many types of personality's accentuations (by Karl Leonhard):

- *Cycloid type* – change phases of good and bed mood with different duration.
- *Hyperthymic type* – permanently evaluation of mood with high level of chaotic psychic activity.
- *Labile type* – abrupt changes of mood according to the situation.
- *Asthenic type* – quick appearance of fatigue, irritability, disposed to depression state and hypochondria.
- *Sensitive type* – high level of sensitivity, fears, anxiety, feeling of self-good-for-nothing.
- *Psychasthenic type* - high level of anxiety, suspiciousness, indecision, disposed to self-analysis, permanent doubts and tendencies to obsessive ritual acts.
- *Schizoid type* – isolating, introverting, emotion's alienating, absence of care about relatives, difficult in emotion's contacts.
- *Epileptoid type* – tendencies to dysphoric mood, social conflicts, pedantic behaviour, disposed to anger's attacks.

- *Paranoid type* - high level of suspiciousness to another, touching, domination of negative emotions, tendencies to social dominate, disposed to conflicts.
- *Hysterical type* – expressive tendencies to ignore unpleasant subjective factors and acts, disposed to lies, fantasying as methods of social manipulations, adventuristic acts, vanity, escape to illness.
- Disthymic type – bed mood domination, disposed to depression, concentration on the dark sides of the life.

A *psychological disorder* is an ongoing dysfunctional pattern of thought, emotion, and behavior that causes significant distress, and that is considered deviant in that person's culture or society. Psychological disorders have much in common with other medical disorders. They are out of the patient's control, they may in some cases be treated by drugs, and their treatment is often covered by medical insurance. Psychological disorders have both biological (nature) as well as environmental (nurture) influences. These causal influences are reflected in the bio-psycho-social model of illness.

The ***bio-psycho-social model of illness*** is a way of understanding disorder that assumes that disorder is caused by biological, psychological, and social factors (Figure 7.). *The biological component* of the bio-psycho-social model refers to the influences on disorder that come from the functioning of the individual's body. Particularly important are genetic characteristics that make some people more vulnerable to a disorder than others and the influence of neurotransmitters. *The psychological component* of the bio-psycho-social model refers to the influences that come from the individual, such as patterns of negative thinking and stress responses. *The social component* refers to the influences on disorder due to social and cultural factors such as socioeconomic status, homelessness, abuse, and discrimination.

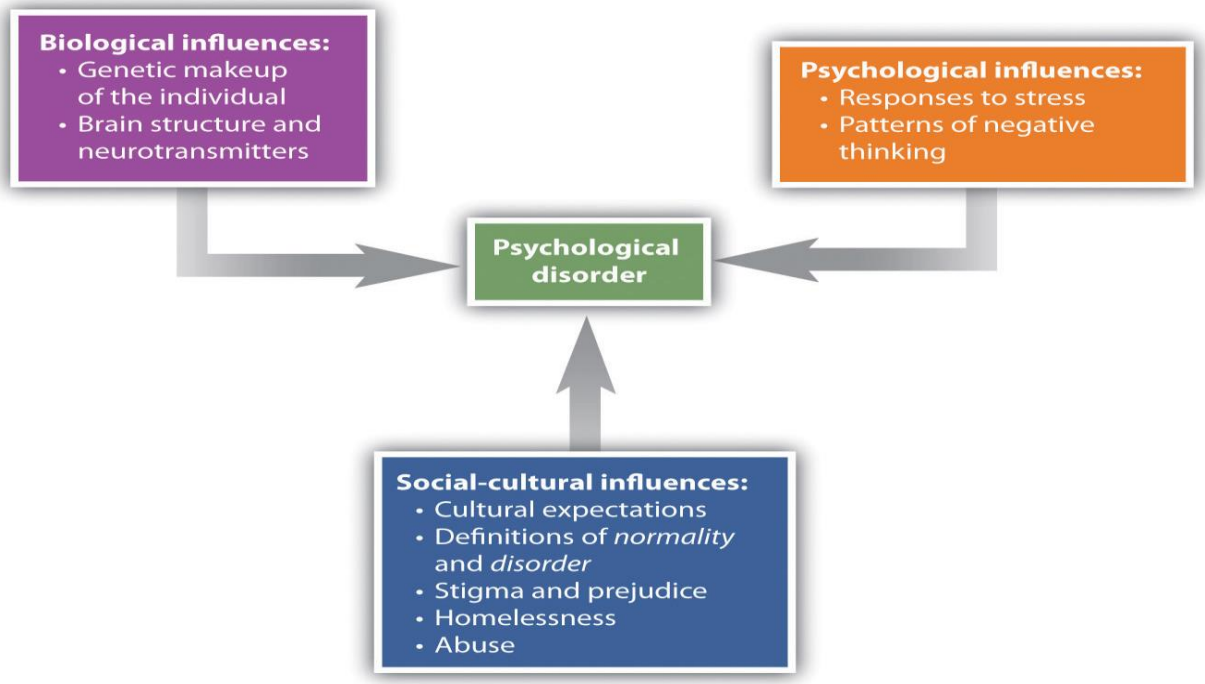


Figure 7. The Bio-Psycho-Social Model

To consider one example, the psychological disorder of schizophrenia has a biological cause because it is known that there are patterns of genes that make a person vulnerable to the disorder (Gejman, Sanders, & Duan, 2010). But whether or not the person with a biological vulnerability experiences the disorder depends in large part on psychological factors such as how the individual responds to the stress he experiences, as well as social factors such as whether or not he is exposed to stressful environments in adolescence and whether or not he has support from people who care about him.

Whether a given behavior is considered a psychological disorder is determined not only by whether a behavior is unusual (e.g., whether it is «mild» anxiety versus «extreme» anxiety) but also by whether a behavior is maladaptive – that is, the extent to which it causes distress and dysfunction (impairment in one or more important areas of functioning) to the individual. *An intense fear of spiders, for example, would not be considered a psychological disorder unless it has a significant negative impact on the sufferer's life, for instance by causing him or her to be unable to step outside the house.* The focus on distress and dysfunction means that behaviors that are simply unusual are not classified as disorders.

Attention-deficit/hyperactivity disorder (ADHD) is a developmental behavior disorder characterized by problems with focus, difficulty maintaining attention, and inability to concentrate, in which symptoms start before 7 years of age Although it is usually

first diagnosed in childhood, ADHD can remain problematic in adults, and up to 7% of college students are diagnosed with it. In adults the symptoms of ADHD include forgetfulness, difficulty paying attention to details, procrastination, disorganized work habits, and not listening to others. ADHD is about 70% more likely to occur in males than in females, and is often comorbid with other behavioral and conduct disorders. *The diagnosis of ADHD has quadrupled over the past 20 years such that it is now diagnosed in about 1 out of every 20 American children and is the most common psychological disorder among children in the world. ADHD is also being diagnosed much more frequently in adolescents and adults.* Although skeptics argue that ADHD is overdiagnosed and is a handy excuse for behavioral problems, most psychologists believe that ADHD is a real disorder that is caused by a combination of genetic and environmental factors.

Autistic Disorder and Asperger's Disorder.

Autistic disorder (autism) is a disorder of neural development characterized by impaired social interaction and communication and by restricted and repetitive behavior, and in which symptoms begin before 7 years of age.

Asperger's disorder is a developmental disorder that affects a child's ability to socialize and communicate effectively with others and in which symptoms begin before 7 years of age. The symptoms of Asperger's are almost identical to that of autism (with the exception of a delay in language development).

Although for many years autism was thought to be primarily a socially determined disorder, in which parents who were cold, distant, and rejecting created the problem, current research suggests that biological factors are most important. The heritability of autism has been estimated to be as high as 90%. Scientists speculate that autism is caused by an unknown genetically determined brain abnormality that occurs early in development. It is likely that several different brain sites are affected, and the search for these areas is being conducted in scientific laboratories.

Anxiety, the nervousness or agitation that we sometimes experience, often about something that is going to happen, is a natural part of life. We all feel anxious at times, maybe when we think about our upcoming visit to the dentist or the presentation we have to give to our class next week. Anxiety is an important and useful

human emotion; it is associated with the activation of the sympathetic nervous system and the physiological and behavioral responses that help protect us from danger. But too much anxiety can be debilitating, and every year millions of people suffer from **anxiety disorders**, which are psychological disturbances marked by irrational fears, often of everyday objects and situations.

Generalized anxiety disorder (GAD) is a psychological disorder diagnosed in situations in which a person has been excessively worrying about money, health, work, family life, or relationships for at least 6 months, even though he or she knows that the concerns are exaggerated, and when the anxiety causes significant distress and dysfunction. In addition to their feelings of anxiety, people who suffer from GAD may also experience a variety of physical symptoms, including irritability, sleep troubles, difficulty concentrating, muscle aches, trembling, perspiration, and hot flashes. The sufferer cannot deal with what is causing the anxiety, nor avoid it, because there is no clear cause for anxiety. In fact, the sufferer frequently knows, at least cognitively, that there is really nothing to worry about. Generalized anxiety disorder is most likely to develop between the ages of 7 and 40 years, but its influence may in some cases lessen with age.

Panic disorder is a psychological disorder characterized by sudden attacks of anxiety and terror that have led to significant behavioral changes in the person's life. Symptoms of a panic attack include shortness of breath, heart palpitations, trembling, dizziness, choking sensations, nausea, and an intense feeling of dread or impending doom. Panic attacks can often be mistaken for heart attacks or other serious physical illnesses, and they may lead the person experiencing them to go to a hospital emergency room. Panic attacks may last as little as one or as much as 20 minutes, but they often peak and subside within about 10 minutes. Sufferers are often anxious because they fear that they will have another attack. They focus their attention on the thoughts and images of their fears, becoming excessively sensitive to cues that signal the possibility of threat. They may also become unsure of the source of their arousal, misattributing it to situations that are not actually the cause. As a result, they may begin to avoid places where attacks have occurred

in the past, such as driving, using an elevator, or being in public places.

A phobia (from the Greek word phobos, which means «fear») is a specific fear of a certain object, situation, or activity. The fear experience can range from a sense of unease to a full-blown panic attack. Most people learn to live with their phobias, but for others the fear can be so debilitating that they go to extremes to avoid the fearful situation. *A sufferer of arachnophobia (fear of spiders), for example, may refuse to enter a room until it has been checked thoroughly for spiders, or may refuse to vacation in the countryside because spiders may be there*. Phobias are characterized by their specificity and their irrationality. *A person with acrophobia (a fear of height) could fearlessly sail around the world on a sailboat with no concerns yet refuse to go out onto the balcony on the fifth floor of a building*.

A common phobia is *social phobia*, extreme shyness around people or discomfort in social situations. Social phobia may be specific to a certain event, such as speaking in public or using a public restroom, or it can be a more generalized anxiety toward almost all people outside of close family and friends. People with social phobia will often experience physical symptoms in public, such as sweating profusely, blushing, stuttering, nausea, and dizziness. They are convinced that everybody around them notices these symptoms as they are occurring. Women are somewhat more likely than men to suffer from social phobia.

The most incapacitating phobia is *agoraphobia*, defined as anxiety about being in places or situations from which escape might be difficult or embarrassing, or in which help may not be available (American Psychiatric Association, 2000). Typical places that provoke the panic attacks are parking lots; crowded streets or shops; and bridges, tunnels, or expressways. People (mostly women) who suffer from agoraphobia may have great difficulty leaving their homes and interacting with other people.

In most cases phobias first appear in childhood and adolescence, and usually persist into adulthood. Figure «The Most Common Phobias» presents a list of the common phobias that are diagnosed by psychologists.

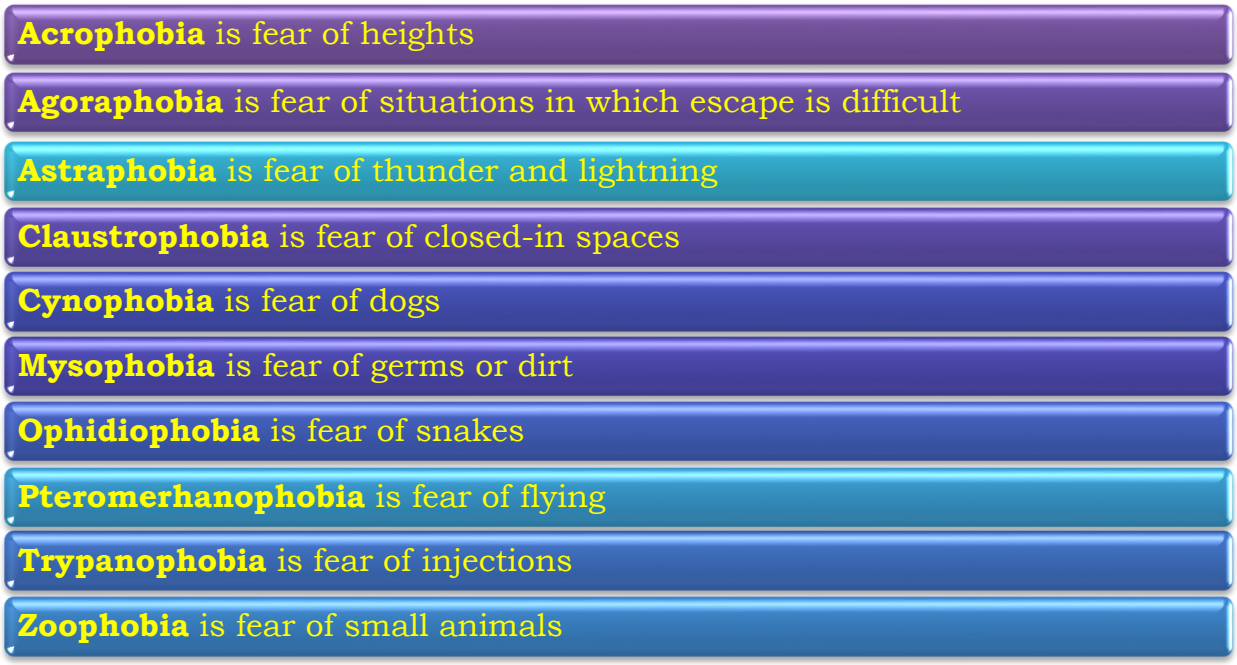


Figure 8. The Most Common Phobias

Obsessive-compulsive disorder (OCD) is a psychological disorder that is diagnosed when an individual continuously experiences distressing or frightening thoughts, and engages inobsessions (repetitive thoughts) or compulsions (repetitive behaviors) in an attempt to calm these thoughts. OCD is diagnosed when the obsessive thoughts are so disturbing and the compulsive behaviors are so time consuming that they cause distress and significant dysfunction in a person's everyday life. *Washing your hands once or even twice to make sure that they are clean is normal; washing them 20 times is not. Keeping your fridge neat is a good idea; spending hours a day on it is not.* The sufferers know that these rituals are senseless, but they cannot bring themselves to stop them, in part because the relief that they feel after they perform them acts as a reinforcer, making the behavior more likely to occur again. Sufferers of OCD may avoid certain places that trigger the obsessive thoughts, or use alcohol or drugs to try to calm themselves down. OCD has a low prevalence rate (about 1% of the population in a given year) in relation to other anxiety disorders, and usually develops in adolescence or early adulthood. The course of OCD varies from person to person. Symptoms can come and go, decrease, or worsen over time.

A dissociative disorder is a condition that involves disruptions or breakdowns of memory, awareness, and identity. The dissociation is used as a defense against the trauma. ***Dissociative amnesia*** is a

psychological disorder that involves extensive, but selective, memory loss, but in which there is no physiological explanation for the forgetting. The amnesia is normally brought on by a trauma – a situation that causes such painful anxiety that the individual «forgets» in order to escape. These kinds of trauma include disasters, accidents, physical abuse, rape, and other forms of severe stress. Although the personality of people who are experiencing dissociative amnesia remains fundamentally unchanged – and they recall how to carry out daily tasks such as reading, writing, and problem solving – they tend to forget things about their personal lives – for instance, their name, age, and occupation – and may fail to recognize family and friends. ***A dissociative fugue***, is a psychological disorder in which an individual loses complete memory of his or her identity and may even assume a new one, often far from home. The individual with dissociative fugue experiences all the symptoms of dissociative amnesia but also leaves the situation entirely. The fugue state may last for just a matter of hours or may continue for months. Recovery from the fugue state tends to be rapid, but when people recover they commonly have no memory of the stressful event that triggered the fugue or of events that occurred during their fugue state. ***Dissociative identity disorder*** is a psychological disorder in which two or more distinct and individual personalities exist in the same person, and there is an extreme memory disruption regarding personal information about the other personalities. Dissociative identity disorder was once known as «multiple personality disorder», and this label is still sometimes used. This disorder is sometimes mistakenly referred to as schizophrenia. In some cases of dissociative identity disorder, there can be more than 10 different personalities in one individual. Switches from one personality to another tend to occur suddenly, often triggered by a stressful situation. The *host personality* is the personality in control of the body most of the time, and the *alter personalities* tend to differ from each other in terms of age, race, gender, language, manners, and even sexual orientation. Each personality has unique memories and social relationships. Women are more frequently diagnosed with dissociative identity disorder than are men. The dissociative disorders are relatively rare conditions and are most frequently observed in adolescents and young adults. In part because they are so unusual and difficult to

diagnose, clinicians and researchers disagree about the legitimacy of the disorders, and particularly about dissociative identity disorder. Some clinicians argue that the descriptions in the DSMaccurately reflect the symptoms of these patients, whereas others believe that patients are faking, role-playing, or using the disorder as a way to justify behavior.

Both nature and nurture contribute to the development of anxiety disorders. In terms of our evolutionary experiences, humans have evolved to fear dangerous situations. Those of us who had a healthy fear of the dark, of storms, of high places, of closed spaces, and of spiders and snakes were more likely to survive and have descendants. Our evolutionary experience can account for some modern fears as well. A fear of elevators may be a modern version of our fear of closed spaces, while a fear of flying may be related to a fear of heights.

Also supporting the role of biology, anxiety disorders, including PTSD, are heritable. Neuroimaging studies have found that anxiety disorders are linked to areas of the brain that are associated with emotion, blood pressure and heart rate, decision making, and action monitoring. People who were abused in childhood are more likely to be anxious than those who had normal childhoods, even with the same genetic disposition to anxiety sensitivity. And the most severe anxiety and dissociative disorders, such as PTSD, are usually triggered by the experience of a major stressful event. One problem is that modern life creates a lot of anxiety. Although our life expectancy and quality of life have improved over the past 50 years, the same period has also created a sharp increase in anxiety levels. These changes suggest that most anxiety disorders stem from perceived, rather than actual, threats to our well-being.

In contrast to the anxiety disorders, the causes of the dissociative orders are less clear, which is part of the reason that there is disagreement about their existence. Unlike most psychological orders, there is little evidence of a genetic predisposition; they seem to be almost entirely environmentally determined. Severe emotional trauma during childhood, such as physical or sexual abuse, coupled with a strong stressor, is typically cited as the underlying cause suggest that people with personalities that lead them to fantasize and become intensely absorbed in their own personal experiences are more susceptible to developing dissociative disorders under stress. Dissociative disorders can in many cases be successfully treated, usually by psychotherapy.

Mood (or affective) disorders are psychological disorders in which the person's mood negatively influences his or her physical, perceptual, social, and cognitive processes. People who suffer from mood disorders tend to experience more intense – and particularly more intense negative – moods. The most common symptom of mood disorders is negative mood, also known as sadness or depression. Mood disorders can occur at any age, and the median age of onset is

32 years. *Recurrence of depressive episodes is fairly common and is greatest for those who first experience depression before the age of 15 years. About twice as many women suffer from depression than do men.*

A depression has a variety of negative effects on our behaviors. In addition to the loss of interest, productivity, and social contact that accompanies depression, the person's sense of hopelessness and sadness may become so severe that he or she considers or even succeeds in committing suicide. Suicide is the 11th leading cause of death in the United States, and a suicide occurs approximately every 16 minutes. Almost all the people who commit suicide have a diagnosable psychiatric disorder at the time of their death.

Behaviors Associated with Depression

- Changes in appetite; weight loss or gain.
- Difficulty concentrating, remembering details, and making decisions.
- Fatigue and decreased energy.
- Feelings of hopelessness, helplessness, and pessimism.
- Increased use of alcohol or drugs.
- Irritability, restlessness.
- Loss of interest in activities or hobbies once pleasurable, including sex.
- Loss of interest in personal appearance.
- Persistent aches or pains, headaches, cramps, or digestive problems that do not improve with treatment.
- Sleep disorders, either trouble sleeping or excessive sleeping.
- Thoughts of suicide or attempts at suicide.

People who experience depression for many years, such that it becomes to seem normal and part of their everyday life, and who feel that they are rarely or never happy, will likely be diagnosed with a mood disorder. If the depression is mild but long-lasting, they will be diagnosed with **dysthymia**, a condition characterized by mild, but chronic, depressive symptoms that last for at least 2 years.

If the depression continues and becomes even more severe, the diagnosis may become that of major depressive disorder. **Major depressive disorder (clinical depression)** is a mental disorder characterized by an all-encompassing low mood accompanied by low self-esteem and by loss of interest or pleasure in normally enjoyable activities. Those who suffer from major depressive disorder feel an intense sadness, despair, and loss of interest in pursuits that once gave them pleasure. These negative feelings profoundly limit the

individual's day-to-day functioning and ability to maintain and develop interests in life. In some cases clinically depressed people lose contact with reality and may receive a diagnosis of major depressive episode with psychotic features. In these cases the depression includes delusions and hallucinations.

Bipolar disorder is a psychological disorder characterized by swings in mood from overly «high» to sad and hopeless, and back again, with periods of near-normal mood in between. Bipolar disorder is diagnosed where experiences with depression are followed by a more normal period and then a period of mania or euphoria in which the person feels particularly awake, alive, excited, and involved in everyday activities but is also impulsive, agitated, and distracted. Bipolar disorder is an often chronic and lifelong condition that may begin in childhood. Although the normal pattern involves swings from high to low, in some cases the person may experience both highs and lows at the same time. Determining whether a person has bipolar disorder is difficult due to the frequent presence of comorbidity with both depression and anxiety disorders. Bipolar disorder is more likely to be diagnosed when it is initially observed at an early age, when the frequency of depressive episodes is high, and when there is a sudden onset of the symptoms.

Mood disorders are known to be at least in part genetic, because they are heritable. Neurotransmitters also play an important role in mood disorders. Serotonin, dopamine, and norepinephrine are all known to influence mood, and drugs that influence the actions of these chemicals are often used to treat mood disorders. The brains of those with mood disorders may in some cases show structural differences from those without them. Videbech and Ravnkilde (2004) found that the hippocampus was smaller in depressed subjects than in normal subjects, and this may be the result of reduced neurogenesis (the process of generating new neurons) in depressed people. Antidepressant drugs may alleviate depression in part by increasing neurogenesis. But psychological and social determinants are also important in creating mood disorders and depression. In terms of psychological characteristics, mood states are influenced in large part by our cognitions. Negative thoughts about ourselves and our relationships to others create negative moods, and a goal of cognitive therapy for mood disorders is to attempt to change people's cognitions to be more positive. Negative moods also create negative behaviors toward others, such as acting sad, slouching, and avoiding others, which may lead those others to respond negatively to the person, for instance by isolating that person, which then creates even more depression (Figure 9. «Cycle of Depression»). You can see how it might become difficult for people to break out of this «cycle of depression».

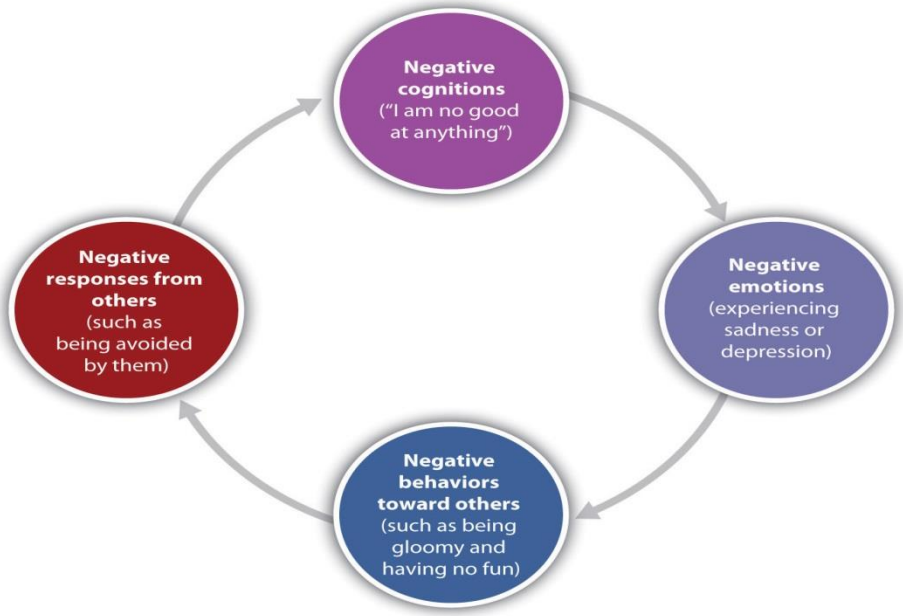


Figure 9. Cycle of Depression

Negative emotions create negative behaviors, which lead people to respond negatively to the individual, creating even more depression.

The term «**schizophrenia**», which in Greek means «split mind», was first used to describe a psychological disorder by Eugen Bleuler (1857–1939), a Swiss psychiatrist who was studying patients who had very severe thought disorders. **Schizophrenia** is a serious psychological disorder marked by delusions, hallucinations, loss of contact with reality, inappropriate affect, disorganized speech, social withdrawal, and deterioration of adaptive behavior. Schizophrenia is the most chronic and debilitating of all psychological disorders. It affects men and women equally, occurs in similar rates across ethnicities and across cultures. Onset of schizophrenia is usually between the ages of 16 and 30 and rarely after the age of 45 or in children.

Schizophrenia is accompanied by a variety of symptoms, but not all patients have all of them. The symptoms are divided into positive symptoms, negative symptoms, and cognitive symptoms. *Positive symptoms* refer to the presence of abnormal behaviors or experiences (such as hallucinations) that are not observed in normal people, whereas *negative symptoms* (such as lack of affect and an inability to socialize with others) refer to the loss or deterioration of thoughts and behaviors that are typical of normal functioning. Finally, *cognitive symptoms* are the changes in cognitive processes

that accompany schizophrenia. Because the patient has lost contact with reality, we say that he or she is experiencing ***psychosis***, which is a psychological condition characterized by a loss of contact with reality.

People with schizophrenia almost always suffer from ***hallucinations*** – imaginary sensations that occur in the absence of a real stimulus or which are gross distortions of a real stimulus. Auditory hallucinations are the most common and are reported by approximately three quarters of patients. Schizophrenic patients frequently report hearing imaginary voices that curse them, comment on their behavior, order them to do things, or warn them of danger. Visual hallucinations are less common and frequently involve seeing God or the devil.

Schizophrenic people also commonly experience ***delusions***, which are false beliefs not commonly shared by others within one's culture, and maintained even though they are obviously out of touch with reality. People with delusions of grandeur believe that they are important, famous, or powerful. Some claim to have been assigned to a special covert mission. People with *delusions of persecution* believe that a person or group seeks to harm them. They may think that people are able to read their minds and control their thoughts. *If a person suffers from delusions of persecution, there is a good chance that he or she will become violent, and this violence is typically directed at family members*.

Movement disorders typically appear as agitated movements, such as repeating a certain motion again and again, but can in some cases include catatonia, a state in which a person does not move and is unresponsive to others. People suffering from schizophrenia also often suffer from the positive symptom of ***derailment*** – the shifting from one subject to another, without following any one line of thought to conclusion – and may exhibit *grossly disorganized behavior* including inappropriate sexual behavior, peculiar appearance and dress, unusual agitation (e.g., shouting and swearing), strange body movements, and awkward facial expressions. It is also common for schizophrenia sufferers to experience ***inappropriate affect***.

Negative symptoms of schizophrenia include social withdrawal, poor hygiene and grooming, poor problem-solving abilities, and a distorted sense of time. Patients often suffer from flat affect, which means that they express almost no emotional response (e.g., they

speak in a monotone and have a blank facial expression) even though they may report feeling emotions. Another negative symptom is the tendency toward incoherent language, for instance, to repeat the speech of others («echo speech»). Some schizophrenics experience motor disturbances, ranging from complete catatonia and apparent obliviousness to their environment to random and frenzied motor activity during which they become hyperactive and incoherent. *Cognitive symptoms of schizophrenia* are typically difficult for outsiders to recognize but make it extremely difficult for the sufferer to lead a normal life. These symptoms include difficulty comprehending information and using it to make decisions (the lack of executive control), difficulty maintaining focus and attention, and problems with working memory (the ability to use information immediately after it is learned).

The likelihood of developing schizophrenia increases dramatically if a close relative also has the disease.

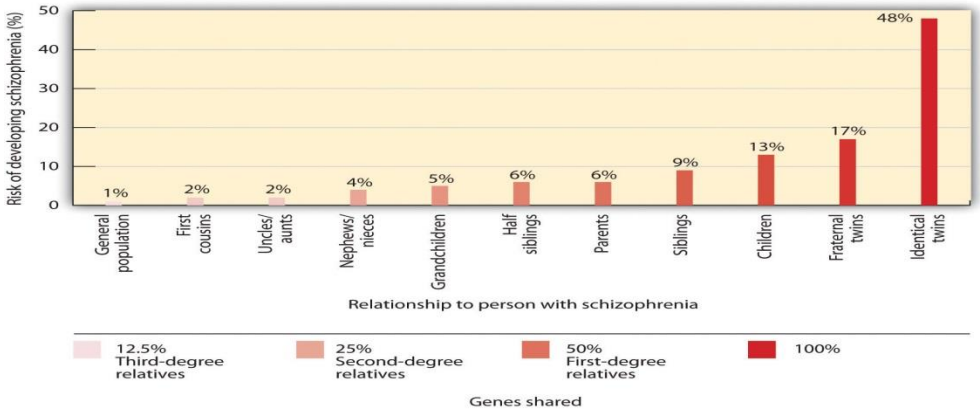


Figure 10. Genetic Disposition to Develop Schizophrenia

The risk of developing schizophrenia increases substantially if a person has a relative with the disease.

Neuroimaging studies have found some differences in brain structure between schizophrenic and normal patients. In some people with schizophrenia, the cerebral ventricles (fluid-filled spaces in the brain) are enlarged. People with schizophrenia also frequently show an overall loss of neurons in the cerebral cortex, and some show less activity in the frontal and temporal lobes, which are the areas of the brain involved in language, attention, and memory. This would explain the deterioration of functioning in language and thought processing that is commonly experienced by schizophrenic patients. Many researchers believe that schizophrenia is caused in part by excess dopamine, and this theory is supported by the fact that most of the drugs useful in treating schizophrenia inhibit dopamine activity in the brain. Levels of serotonin may also play a part. But recent evidence suggests that the role of neurotransmitters in schizophrenia is more complicated

than was once believed. It also remains unclear whether observed differences in the neurotransmitter systems of people with schizophrenia cause the disease, or if they are the result of the disease itself or its treatment. A genetic predisposition to developing schizophrenia does not always develop into the actual disorder. Even if a person has an identical twin with schizophrenia, he still has less than a 50% chance of getting it himself, and over 60% of all schizophrenic people have no first – or second-degree relatives with schizophrenia. This suggests that there are important environmental causes as well. One hypothesis is that schizophrenia is caused in part by disruptions to normal brain development in infancy that may be caused by poverty, malnutrition, and disease. Stress also increases the likelihood that a person will develop schizophrenic symptoms; onset and relapse of schizophrenia typically occur during periods of increased stress. However, it may be that people who develop schizophrenia are more vulnerable to stress than others and not necessarily that they experience more stress than others. Many homeless people are likely to be suffering from undiagnosed schizophrenia.

Another social factor that has been found to be important in schizophrenia is the degree to which one or more of the patient's relatives is highly critical or highly emotional in their attitude toward the patient. Hooley and Hiller (1998) found that schizophrenic patients who ended a stay in a hospital and returned to a family with high expressed emotion were three times more likely to relapse than patients who returned to a family with low expressed emotion.

A personality disorder is a disorder characterized by inflexible patterns of thinking, feeling, or relating to others that cause problems in personal, social, and work situations. Personality disorders tend to emerge during late childhood or adolescence and usually continue throughout adulthood. They are categorized into three types: those characterized by odd or eccentric behavior, those characterized by dramatic or erratic behavior, and those characterized by anxious or inhibited behavior.

Borderline personality disorder (BPD) is a psychological disorder characterized by a prolonged disturbance of personality accompanied by mood swings, unstable personal relationships, identity problems, threats of self-destructive behavior, fears of abandonment, and impulsivity. About three quarters of diagnosed cases of BDP are women. People with BPD fear being abandoned by others. They often show a clinging dependency on the other person and engage in manipulation to try to maintain the relationship. They become angry if the other person limits the relationship, but also deny that they care about the person. As a defense against fear of abandonment, borderline people are compulsively social. But their behaviors, including their intense anger, demands, and

suspiciousness, repel people. People with BPD often deal with stress by engaging in self-destructive behaviors, for instance by being sexually promiscuous, getting into fights, binge eating and purging, engaging in self-mutilation or drug abuse, and threatening suicide. These behaviors are designed to call forth a «saving» response from the other person. People with BPD are a continuing burden for police, hospitals, and therapists. Borderline individuals also show disturbance in their concepts of identity: they are uncertain about self-image, gender identity, values, loyalties, and goals. They may have chronic feelings of emptiness or boredom and be unable to tolerate being alone. *BPD has both genetic as well as environmental roots. In terms of genetics, research has found that those with BPD frequently have neurotransmitter imbalances, and the disorder is heritable. In terms of environment, many theories about the causes of BPD focus on a disturbed early relationship between the child and his or her parents. Some theories focus on the development of attachment in early childhood, while others point to parents who fail to provide adequate attention to the child's feelings. Others focus on parental abuse (both sexual and physical) in adolescence, as well as on divorce, alcoholism, and other stressors. The dangers of BPD are greater when they are associated with childhood sexual abuse, early age of onset, substance abuse, and aggressive behaviors. The problems are amplified when the diagnosis is comorbid (as it often is) with other disorders, such as substance abuse disorder, major depressive disorder, and posttraumatic stress disorder.*

Antisocial personality disorder (APD) is characterized by a disregard of the rights of others, and a tendency to violate those rights without being concerned about doing so. APD is a pervasive pattern of violation of the rights of others that begins in childhood or early adolescence and continues into adulthood. APD is about three times more likely to be diagnosed in men than in women. To be diagnosed with APD the person must be 18 years of age or older and have a documented history of conduct disorder before the age of 15. People having antisocial personality disorder are sometimes referred to as «sociopaths» or «psychopaths». People with APD feel little distress for the pain they cause others. They lie, engage in violence against animals and people, and frequently have drug and alcohol abuse problems. They are egocentric and frequently impulsive, for instance suddenly changing jobs or relationships. People with APD soon end up with a criminal record and often spend time incarcerated. The intensity of antisocial symptoms tends to peak during the 20s and then may decrease over time. *Biological and*

environmental factors are both implicated in the development of antisocial personality disorder. The biological abnormalities include low autonomic activity during stress, biochemical imbalances, right hemisphere abnormalities, and reduced gray matter in the frontal lobes. Environmental factors include neglectful and abusive parenting styles, such as the use of harsh and inconsistent discipline and inappropriate modeling.

Video to view

https://www.youtube.com/watch?v=4E1JiDFxFGk
https://www.youtube.com/watch?v=ZwMlHkWKDwM
https://www.youtube.com/watch?v=RrWBhVlD1H8
https://www.youtube.com/watch?v=DhlRgwdDc-E
https://www.youtube.com/watch?v=z-IR48Mb3W0
https://www.youtube.com/watch?v=ztQguL_AwA0
https://www.youtube.com/watch?v=PURvJV2SMso
https://www.youtube.com/watch?v=Cst9NY1Mmbc
https://www.youtube.com/watch?v=6jUv3gDAM1E
https://www.youtube.com/watch?v=8Pc2gSDLW8k
https://www.youtube.com/watch?v=iHEWj9POttY
https://www.youtube.com/watch?v=jYA9CHX1NLU

Control questions

1. Define «psychological disorder» and summarize the general causes of disorder.
2. Explain why it is so difficult to define disorder, and how the Diagnostic and Statistical Manual of Mental Disorders (DSM) is used to make diagnoses.
3. Describe the stigma of psychological disorders and their impact on those who suffer from them.
4. Consider the behaviors of the people listed and explain your choice.

Yes	No	Need more information	Description
			Jackie frequently talks to herself while she is working out her math homework. Her roommate sometimes hears her and wonders if she is OK.
			Charlie believes that the noises made by cars and planes going by outside his house have secret meanings. He is convinced that he was involved in the start of a nuclear war and that the only way for him to survive is to find the answer to a difficult riddle.
			Harriet gets very depressed during the winter months when the light is low. She sometimes stays in her pajamas for the whole weekend, eating chocolate and watching TV.

			Frank seems to be afraid of a lot of things. He worries about driving on the highway and about severe weather that may come through his neighborhood. But mostly he fears mice, checking under his bed frequently to see if any are present.
			A worshipper speaking in «tongues» at an Evangelical church views himself as «filled» with the Holy Spirit and is considered blessed with the gift to speak the «language of angels».

5. Do you or your friends hold stereotypes about the mentally ill? You should find clips from any films or other popular media that portray mental illness positively or negatively? Is it more or less acceptable to stereotype the mentally ill than to stereotype other social groups?
6. Consider the psychological disorders listed «Categories of Psychological Disorders Based» (you may go to http://en.wikipedia.org/wiki/DSM-IV_Codes_(alphabetical) and browse the complete list). Do you know people who may suffer from any of them? Can you or have you talked to them about their experiences? If so, how do they experience the illness?
7. Consider the diagnosis of ADHD, autism, and Asperger's disorder from the biological, personal, and social-cultural perspectives. Do you think that these disorders are overdiagnosed? How might clinicians determine if ADHD is dysfunctional or distressing to the individual?
8. Outline and describe the different types of anxiety disorders.
9. Outline and describe the different types of dissociative disorders.
10. Explain the biological and environmental causes of anxiety and dissociative disorders.
11. Categorize and describe the three major symptoms of schizophrenia.
12. Differentiate the five types of schizophrenia and their characteristics.
13. Identify the biological and social factors that increase the likelihood that a person will develop schizophrenia.
14. Categorize the different types of personality disorders and differentiate antisocial personality disorder from borderline personality disorder.
15. Outline the biological and environmental factors that may contribute to a person developing a personality disorder.

CHAPTER 7
PSYCHOSOMATIC DISORDERS IN GENERAL CLINICAL PRACTICE. PSYCHOLOGICAL PECULIARITIES OF PATIENTS WITH DIFFERENT DISEASES

Objectives: to get acquainted with psychological peculiarities of patients with different diseases and to take them into consideration in medical tactics.

Each disease, except its typical clinical manifestations, is always accompanied by larger or smaller changes in patient's mentality. Any disease, even if it is not accompanied by organic disturbances in the brain, influences the patient's mentality. On the one hand, the clinical picture of mental changes is determined by disease and on the other hand, by peculiarities of psychological characteristics of the patient.

Psychological peculiarities of patients with internal diseases

At acute onset of the disease a sense of confusion, fear of death appears in patients. At lingering illness the mood is reduced, irritability and excitability appear.

There is fear, anxiety, confusion in acute period of disease in patients with rheumatism. In future the mood is reduced and in severe cases flaccidity and apathy are changed by the appearance of locomotive and speech activities with underestimation of severity of disease and its consequences. The patients with progressive polyarthritis are suppressed and depressive; such patients get on with each other badly. As opposed to this the patients with Bechterew's disease are amicable, as a rule, optimistic, they accept their fate with a smile even at immovable spinal column.

During the initial period of forming valvular heart diseases there are unpleasant sensations, the patients fix their attention on the heart work, fear of death from cardiac arrest appears.

In hypertension during the first stage the majority of patients estimate their health condition adequately, they fulfill all doctor's prescriptions. People with anxious hypochondriac character perceive increased arterial pressure as a catastrophe. They fix their attention on unhealthy sensations, range of their interests is limited by the disease. In hypertension some patients ignore the possibility of sever consequences and refuse from treatment and they do not give up harmful habits.

In cerebral atherosclerosis the patients become groundlessly susceptible, hesitation of mood, lacrimation, diminution of efficiency and irritability are noticed.

During the period preceding to development of myocardial infarction a sensation of vagueness in the head, difficulties in concentration of attention, presentiment of approaching danger, anxiety, melancholy, in some cases euphoria appears. In acute period of myocardial infarction the painful syndrome is accompanied by fear of death; during the recovery the attention of patients is fixed on their sensations, they are hypochondriac.

In bronchial asthma the emotional tension promotes the origin of asphyxia attacks, moreover, the reaction at this to a considerable extent depends on peculiarities of the person. Such patients often feel fear connected with waiting for another attack. In chronic course of bronchial asthma the change of patient's character occurs. In pneumonia, when the temperature is rising, consciousness of patients can be disturbed.

In acute pneumonia in some patients reduction of activity, hypodynamia, unsociability unhealthy attitude to investigation and treatment are observed. When the temperature is rising, the consciousness of the patients can be disturbed.

In chronic lung diseases many patients feel reduction of mood, irritability, their attention is fixed on unpleasant sensations, and a thought of incurability appears.

In pathology of organs of digestion psychological peculiarities of patients are formed under the influence of such symptoms as meteorism, frequent urges to defecate, which cause a sense of shyness, discomfort. The patients with chronic gastritis complain of weakness, reveal the activity in investigation and treatment, some of them are afraid of carcinoma of stomach.

In peptic and duodenum ulcer patients often «go into disease», fixing their attention on unpleasant sensations, they feel fear of pains. The loss of weight, gastric hemorrhage, diminution of efficiency cause anxiety for life, sensation of irreparability.

Nonspecific ulcerative colitis is often accompanied by sense of melancholy dissatisfaction with the fear of death.

In chronic liver diseases such characteristics as dissatisfaction, «irritable» grumbling appear in patients' nature. It is necessary to pay

special attention to the patients with malignant neoplasms because different mental reactions can develop according to the stage of disease. Thus, at the first stage the mood usually comes down in waiting of «verdict»; attention is riveted to own sensation, results of investigations, doctor's words; overestimation of vital values occurs, features of character often become keen. When the diagnosis is known, there are affective reactions, the patients begin to fight with the approaching danger, fatigability appears, the mood is come down, the sensation of pain becomes keen. There is no fear of death at premortal stage in many patients. A special cation and tact should be kept at contacts with incurable patients. All trivialities must be taken into account, personnel and relatives have not to bustle. Telling the diagnosis to the patient in case of incurable disease is an important question. It is necessary to have an individual approach with taking into consideration characterologic peculiarities of the patient.

The patients with groundless persistent fear of malignant neoplasm, which they think they have found, require a great psychotherapeutic work. The doctor must patiently and persuasively prove insolvency of patient's suspicions. Such patients must not be ignored on no account, because a scornful doctor's attitude can finally persuade them in their truth and it can lead to suicide.

Gerontology: in some therapeutic departments there are more than 60 per cent of people over 60. There is no doubt that the improvement of vital conditions and medical aid prolong the life. But somatic preservation of life is not always connected with its positive mental filling. Old people can not adapt to rapid changes of life and they are not able to understand much that is difficult for young people too. In spite of that they live with young people in the family, they are still relatively isolated as far as they do not always understand new conditions of work and life. But in those cases when the people live in total solitude, their condition is the most complicated. In old solitary people such paradoxical phenomenon may be occurred that their disease will become the last opportunity of establishing the contact with people: the doctor comes to the patient, the patient can be hospitalized, where in the group of patients he would feel sympathy and interest to him.

The border between the health and disease is more pronounced in old people than in a young age. German people say about everyday usual malaise – «Alltagsbeschwerden». In frequently repeated malaise in old people attitude to it plays an important role: whether this malaise will be felt more intensively, cause fear and diffidence or whether a person on the border between health and disease will be able to abstract from unpleasant sensations, to livemore by impressions of events, happening in the world and the contacts with surrounding people than by own body and fear of it.

At deficiency of other stimuli, aged solitary people concentrate their attention on somatic processes, intensively feel their sensations, conditioned by organic and neurotic causes, and do the only, which, to their opinion, makes sense: they go to the doctor and ask for help.

Psychological peculiarities of patients in surgical clinics

In this speciality the technique has achieved more perfection both in sense of interventions and in equipment. Surgeons' concentration of attention on surgical technique and its facilities sometimes leads to underestimation of patient's psychological state. In a number of cases there is cold, featureless atmosphere, where the patient does not feel well. When the patients change frequently and the personnel is in a hurry, which is caused by emergency, it is not always possible to develop psychological relations between the medical personnel and the patient. Moreover, the patients often consider the surgeon an ideal doctor who brings help by means of rapid energetic intervention, which is taken by the patients passively. In surgery, in surgeon's conduct, in popularization of prominent achievements of modern surgery those are definite magic features, that is why today we can speak about one of the magic forms. In surgery the patient more than in other speciality is given to doctor's power, especially when he is under narcosis during the operation. Mental shocks, felt by the patient in such circumstances, often lead to that, the patient before the operation informs his doctor about vital problems frequently kept from the other.

Crippling interventions such as amputation of limbs, mastectomy in breast cancer, providing intestinal patency in intestinal carcinoma, partial gastrectomy in relapses of ulcer cause a considerable psychial trauma to the patient. Subjective feelings and

patient's attitude to his own physical state often play the most important part in the future life than the size of organic lesion.

Sometimes patients refuse from operation. The causes of refusal are:

♦ The patient has frightened by other patients, who had undergone such intervention, and telling about unpleasant impressions, which they had felt «heroically», they want to be in the center of attention and to call the astonishment.

♦ Similar operation has led to severe consequences, deformation or even death of the patient's relative or friend.

♦ The patient underestimates or denies his disease on lightmindedness or to avoid misgivings or cares.

♦ For everything the patient reacts by fear or misgiving. The question is often about psychopathic and neurotic persons.

♦ Unpleasant own impressions of the previous operations, for example, fear of narcosis, when many patients feel expressed fear «of a sense of falling into a bottomless precipice».

One of the most important stages is preparation to the operation. The surgeon should reveal interest and affability, to estimate the role of the disease and operation in the patient's life and his future; it is important to listen to his misgivings and wishes. Some patients are afraid of unconsciousness and helplessness, caused by narcosis, they feel fear of not waking up, suffocating, disclosing their secrets, «telling nonsenses», becoming funny. Such mood is sometimes strengthened by other people who tell about their impressions, which they had felt. Some patients unwarrantably say that «narcosis had not produced any effect» and they were operated being «in clear consciousness». Sometimes because of ignorance they take local or lumbal anesthesia for general one.

At the first stage of narcosis the patients are not notable for increased receptivity to personnel expressions which retained in their memory, but sometimes, these words are perceived illusory or remembered distortly after recovering from anesthesia, and mental iatrogenia can develop without the fault of personnel. That is why it is necessary to bring to minimum speech contact between the medical personnel during the operation. At recovery from anesthesia patients demonstrate increased sensitivity to sensory irritations, such as noise, strong light, smell, which can cause nausea and

vomiting. It is necessary to take this into consideration at preparation of the room where the patient will be kept after recovery from anesthesia.

The operation is a source of tension, as it is connected with waiting of result, sometimes the patients are injured by the delay in the terms of the operation. Although after the operation the majority of patients do not know about its consequences, they have a sense of alleviation, because of «becoming a thing of the past», «their returning to life», or «avoiding of death». It can favourably influence the action of a surgical placebo, especially in patients with inoperable tumours. However, in the majority of cases a sense of alleviation is brief or it is changed by strengthening of symptoms, resulting from both the disease and the postoperative weakening of the organism. If the disease becomes worst, the patients unwarrantably attribute it to the operation: «The operation is guilty», «I should not have agreed to the operation». The postoperative course becomes difficult due to such circumstances as: a bad contact of patient with the personnel, the patient's incapacity to express his condition by means of words unfavourable vital and family situations which can complicate the operation's results, bad adaptability; his emotional immaturity, a weak or unbalanced type of temper, neurotic features of the character.

Elderly people adapt worse to the changes, they are more afraid of death. Their wounds heal slowly, the postoperative complications develop frequently and last for a long time. (Twenty five per cent of elderly people have postoperative complications). They also have brain disorders with disturbance of blood supply and metabolism.

They long for visitors who must be admitted to the patients, as they get accustomed to their belonging, the nurse should arrange with patient's relatives which things are necessary for the patient, for instance, spectacles or hearing apparatus. In spite of strict demands of a hygienic regimen in surgical department these requirements can be satisfied.

Plastic surgery. According to this speciality two fields of psychological problems can be described, which are various to some degree, but equally labour-intensive and complicated. Objectively, there are those conditions when the surgeon improves the results of severe injuries or burns, and during the team-work with the

personnel or a psychologist he should prepare the patient to a sudden psychic trauma, for example, the first look in a mirror after the operation. The face looks aesthetically better when compared with what it was after the trauma or burn, the patient compares his appearance with that he had before the trauma or burn, and he can be disappointed or shocked.

Another field of problems deals with cosmetic operations, with the dissatisfaction with appearance and it has exclusively subjective character. For instance, the patient does not wish to have a «potato» nose or a «very turned-up nose», and he persistently demands improvement of this defect. Satisfaction of this requirement, if it has very subjective reasons, and moreover, if it is accompanied by striking, exalt, a hysterical conduct is somewhat dangerous. Such patient may be dissatisfied with improving the defect, and he or she will insist on one more operation. In such patients their «defect» is a subjective internal justification of their vital failure, for example, in private life. Then they accuse the surgeons of their problems and try to punish them. In this case the question is about an expressed type of extrapunitic reaction of frustration.

Traumatology

Traumatologists should take into account that the attitude to trauma and rendering help change according to that fact whether the trauma prevents some interests and demands of the injured patient or relieves them. As a rule, sportsmen do not visit a doctor with small traumas. Injured people, who want to hide their traumas, for example, children, who had come to blow and had been afraid of punishment, or adults, who are in conflict with police, avoid the registration. At injury the motivation influences trophic processes and healing of wounds. «The wounds are healed better in soldiers of attacking army than in soldiers of retreating army». The most impotent psychological task of medical personnel is attraction of the injured patient to an active rehabilitation for prognosis of favourable results.

Orthopedics

Marked body deformations influence the development of the person. The inferiority complex, malice, sarcasm, hostile prejudice with respect to healthy people are observed. Such development is noticed in persons with scoliosis; they are reserved, gloomy, avoid the

society, they do not go to disco or to bathe, especially girls. Sometimes some very tall young people insist on shortening their extremities in order to find a partner more easily. The attitude to orthopedic defects is often disharmonic: some people try to hide their defect and avoid such kinds of activity which may be useful for them, for example, swimming. On the contrary, others incline to hypercompensation try to compare with healthy people or even to leave them behind in sport, tourism, or dances. Some people try to derive benefit, for example, to get retired. Possible malingering is not diagnosed easily as in such cases the organic functional psychogenic symptomatology is interlaced indistinctly. Sometimes, according to their imagination about «the right on health», the patients insist on complicated operations which require the fulfillment of unreal demands.

Psychological peculiarities of patients in gynecological clinics

In girls the appearance of first menstruation sometimes causes fear and neurotic reactions that is why they should be psychologically prepared. But, even in that case when the girl is informed she can feel painful menstruation. The girl who little by little becomes a woman feels her feet and looks for the corresponding examples. Most often her mother becomes such an example. If the mother's marriage is unhappy, the daughter takes the part of the woman dually or even with misgiving and aversion.

But even in healthy women, during the menstruation there are pains in sacral region and abdomen, pressure in genital organs, mental irritability and inclination to depression. At negative mental feeling of menses these symptoms may be strengthened, and dysmenorrhea appears. In dysmenorrhea it is difficult to establish the role of hormonal and mental factors, and all the peculiarities should be born in mind. At premenstrual period in many women the similar manifestations are present: irritability, fatigue, and headaches. Premenstrual complaints may be relieved by means of placebo in 60 per cent that shows the considerable influence of mental factors in their origin. Expectation of menstruation is often tense, connected with fear of pregnancy. Amenorrhea (e.g. the full absence of menstruation) may be caused by suggestion and hypnosis. It also develops in depression and fear of unwanted

pregnancy. In that case there is a positive reverse connection, «vicious circle»: misgivings lead to amenorrhea which strengthens the fear. The influence of these disturbances was described: at earthquakes, air raids, in concentration camps, at death of the closest people or relatives and even at removals. Sometimes it is said about amenorrhea as «tendentious» purposeful symptom; living in a hostel, the girls are ashamed, try to avoid the attention that is why they suppress the menstruation psychogenically. On the contrary, menstruation as a tendentious sign can appear prematurely, for instance, before the operation which causes fear in women, so that the menstruation «saves» the patient from unpleasantness for some time.

At gynecological examination in is necessary to remember about the feeling of shyness. The women are often admitted to a gynecological clinic for intervention that is why it is necessary to keep similar recommendations as in surgical departments. Obstetric divisions deserve a special attention. The physician should know about the feelings of an expectant mother, especially of primipara: anxiety for pregnancy termination, fear of labor pains, trouble for the infant's health. The unbalance, emotional instability, shame of parturient women demands benevolentness, affability, cordiality from the personnel. If possible delivery room should be situated not closely to admitting unit and prenatal wards. It is very important to watch for puerperant women as various mental reactions may occur during postpartum period.

Climacteric is one of the most important stages in a woman's life, when the hormonal changes sometimes cause flushes to the head, tachycardia and other symptoms. But all these disturbances, appearing in climacteric, are not only hormonal ones. For a number of women menopause is a stimulus for summing up the life, for thoughts of whether they are glad of their life and what they can expect from the future. Many women do not know that sexual life may be continued after menopause and it may be more harmonic, especially in women who were afraid of pregnancy. Doctor's assertions that disorders in climacteric have exceptionally hormonal origin can cause iatrogenia.

Psychological peculiarities of patients with infectious diseases

The fact of discovering the infectious disease and necessity of hospitalization cause senses of shame, fear in patients, they are afraid that they can become a source of contamination of their nearest. At prodromal stage of the infectious disease the patient's estimation of his condition depends on psychological traumatic situation. Signs of general toxic character predominate, sometimes there is disorder of consciousness. At recovery stage various asthenic manifestations prevail. In patients with dangerous infections, severity of the disease, high contagiousness, a doubtful prognosis often cause acute psychological reactions, reminding the conduct of people in situations of mass natural calamity.

Psychological peculiarities of patients infected by HIV

The reaction on the diagnosis of AIDS (the most terrible disease, «the plague of the 20 th century») is manifestation of psychological stress with reduction of the mood, ideas of self-accusation, suicide thoughts or trends. Obsessive fear of death, ideas about the process of death appear in the patients, some are afraid of a thought about a possibility of infection of the relatives. In future the symptom of intellect reduction appears. In patients from the risk group, including the infected persons and the most exposed to contamination people, alarm, irritability, anxiety are observed, capacity to work is reduced. They are fixed on their health, read a lot of literature about this disease, look for the symptoms of this disease. Many people break their sexual contacts. Some of them reveal the frank antisocial tendencies, trying to pass the virus to other people.

Psychological peculiarities of patients with tuberculosis

Diagnosis of tuberculosis, necessity of prolonged hospital treatment are taken by some patients as a tragedy, a catastrophe. Anxiety, fear that the nearest and colleagues will avoid contacts with them develop. However, the majority of people receives the fact of disease and necessity of treatment correctly.

Psychological condition of the patients with tuberculosis is characterized by special sensitivity, sentimentality, emotional lability, exhaustion. The patients are asthenic, and on this background there are situationally conditioned affective manifestations and hysteric reactions. The doctor must take into

account these peculiarities and consider conflict situations with surrounding people and personnel to be a manifestation of the disease. In these cases it is necessary to prescribe sedatives and not to reprimand the patients.

In asthenia there is an increased mood with garrulity, motor activity, which rapidly change into irascibility, tension or indifference. A number of psychological problems are also caused by the treatment. The cooperation of the patients and their responsibility have great significance. The condition of undisciplined and irresponsible patients is often worsened because they do not keep prescribed regimen and method of treatment. This circumstance increases the demands to the organization of the regimen and to individual psychotherapeutic approach to the patients.

Psychological peculiarities of patients with skin and venereal diseases

The skin is the organ which the person shows to the surrounding people, as well as his figure. It has a significant psychological meaning. Mental reactions in skin disorders include a wider range of disorders, conditioned by negative aesthetic ideas, squeamishness on the hand of surrounding people and by shame, a sense of own inferiority complex and uncertainty of future in the patient. The appearance of the patient is distorted considerably by psoriasis, eczema, acne, scars after chronic granuloma and burns, colloids, hypertrichosis. Especially in the pubertal period the patients fall into depression, often not corresponding to the character of the disease on the objective point of view, for example, in imperceptible acne or moderate loss of hair. In some skin disorders a special problem is pruritus, which may lead to irritability, insonmia and depression. The patient is often thankful for elimination of the signs of the disease.

Venereology. Some patients dissimulate their sexual or veneral disorders in order to avoid investigation of the circumstances, which caused the disease. They look for prohibited methods of treatment: uncertainty in the effectiveness of treatment may suggest misgivings and doubts, whether they have recovered or complications have not appeared. The result of dissimulation may be infection of other people. According to the patient's conduct, opinions, partly to the

appearance and hygiene, a skilled venereologist decides whether he can rely upon the patient's information and his cooperation in the process of treatment. In contrast to socially doubtful persons, who are vulgar, toady, sly and insincere, some accidentally infected patients are shy or they suffer from shame and feel pangs of conscience, sense of own inferiority complex, and they need an approval and definite reduction of the disease significance. Gonorrhea and trichomoniasis are the examples of that somatically «banal» and easily cured disease which may be very severe from psychological point of view.

At recovery some patients underestimate the role of the doctor's observation for the consolidation of treatment successes. Other patients reveal suspiciousness, overestimate the significance of separate symptoms.

Psychological peculiarities of relations «mother – child – doctor»

The work with children, care for them, sick or healthy, correct estimation of their conduct, reactions require a special knowledge. In pediatrics, the demand of appropriate and differential approach to children of various age groups is a psychologically difficult question. A good pediatrician possesses the entire range of verbal and mimic expressions which help him approach each sick child individually. A pediatrician, who has his own children, is in more favourable condition, as he can use his own experience. The age of the child is not a reliable indicator, showing to the personnel the level of communication with him. There is a certain percent of feebleminded children, a great number of narrow-minded and retarded children, who can make up this lag in future, and children with accelerated development, which is retarded afterwards and none the less they caught up with other children.

The child's disease is a very difficult situation for all family. The child's reaction on the disease depends on the parents' conduct and ways of upbringing. The child of a pre-school age is afraid of the fact of hospitalization, isolation of parents. If in the family the children were spoilt «idols», they would be helpless in hospital. The parents' conduct at severe conditions often influences unfavourably their children. In case when the urgent hospitalization is needed the pathologic reaction may arise when the child weeps, cries or does not

leave his mother. Such reactions may last from some hours to some days.

Great psychological problems arise in the parents, when they learn about a severe, incurable, chronic disease of the child. At first, reactions of distrust are observed, and the parents consult various specialists, they hope for a misdiagnosis. The results of the investigations are often discussed in the presence of the child that influences him negatively.

In children with a lingering illness, when the parents create them special conditions, inclination to hysteric reactions, features of mental infantilism appear, which makes adaptation to outer environment difficult.

In children's medical establishments the doctors and personnel must be able to devote themselves to the children, to play with them, as in the play a child is calmed down. During the process of plays the doctor studies the personal peculiarities of the child, his wishes and needs. The play diverts children from unpleasant feelings. It is recommended to gather children with the same level of development in the same ward. It is necessary to remember that children, even little ones, always listen to doctors' and students' talks in the ward and then they speak about their misgivings to the parents.

Sometimes in teenagers the cases of simulation malingering in order to attract the attention or as the protests against any troubles are observed. Parents suffer most of all when their child is ill with sarcoma or leukemia. The personnel receives the death of a child more heavily than the death of an adult.

Psychological peculiarities of the work of dentists

In dentistry the first place is occupied by a pain, which leads the patient to the doctor. There is the vicious circle: fear of pain makes the patient neglect small carious processes and processes causing pain, as a rule, demand more extensive and painful interventions. When rendering help a dentist usually takes into consideration the fact that the sensitivity to pain is various in different age categories; it is also due to refraction of the pulp with the age. It is necessary to take into account individual differences in sensitivity to pain caused by either innate or acquired reasons.

Super-sensitive patients whose pains are not managed by ordinary methods of treatment should be cured gradually, dentists

have to receive them repeatedly and use the all accessible means for reduction of pain. If the doctor has to hurt the patients, he must act quickly, without hesitation because uncertainty slows down manipulation, reduces the quality and none the less, harms the patient. It is appropriately to show the patient that the doctor understands and fully estimates his pain, but it is not necessary to express an excessive sympathy when the dentist rendering aid hurts the patients. The patient's anxiety before the treatment and his fear of pain complicate the work of the dentist considerably.

That is why in some cases it is necessary to carry out the joint work of a dentist, psychotherapist and psychiatrist. Both psychotherapy and some psychopharmacologic facilities can reduce the fear and pain. Tooth extraction and preparation to it cause the most considerable tension in many persons. Skilled dentists sometimes can do extraction so dexterously that the patients prepared for a great torture can be very astonished. It is not necessary to show the patient the bloody extracted tooth pressed in pincers as negative associations are created for future. Before extraction or during it some patients reveal an abnormal reaction of a fear or fear attack of a hysteric type. It is necessary to distinguish confidently depressed hysteric attack from a collapse and an epileptic attack. At rendering a help to the patient it is possible to recommend the dentist to signal the nurse his demands by means of gestures to avoid the use of technical terms, for example, dower jaw (mandibula) pincers!»

The patients insist on making dentures on different reasons: improvement of jaw functions is the most frequent, sometimes there is an aesthetic reason, especially in women. There are great psychic problems with removable dentures which uninterruptedly remind the patient about his age, association of his condition with the age and about other circumstances. Total denture changes the face, that is why the patient is not always satisfied with the denture even if it functions well. The term «mental incorporation of a denture» is used for definition of patient's adaptation to it. Persons feeling shy of their dentures sometimes isolate themselves from the society, avoid acquaintances and friends. Symbolically teeth have a meaning of aggressiveness, success in society and erotics; thus, depression and sense of inferiority complex develop in people with teeth defects.

Children with teeth anomalies suffer from speech disturbances and can differ from others by appearance and face, they look «stupid». They suffer from mockeries of surrounding people and react to them differently; inferiority complex and aggressiveness appear, sometimes they play the part of «a clown in the class». In order to compensate these difficulties in children's group the parents sometimes praise to excess and overestimate the abilities and talents of their child so that it may lead to disappointment.

Psychological factor is also connected with caries and its complications. Caries is often observed in the countries where there is the highest consumption of sugar and sweets. Considerable role belongs to the way of children's nutrition which mainly depends on whether the parents allow their children to eat sweets especially before sleep. Parents, grandparents can not be of principle in this question, even if they know a lot about correct nutrition of the child. There is a reason of «giving a child all that they could not afford to themselves», a striving to like to their children, sometimes they try to suppress the pangs of conscience in that they do not pay enough attention to the children. In some children and adults sweets become the means of calming at personal unpleasantnesses, failure and shortage of aim and sense of life.

In gingivitis depressions and apathy are always noticed when the patient is told carelessly about the prognosis of the disease. Bad breathing makes the contacts difficult. In inflammation of the oral mucosa and tongue, cancerophobia sometimes develops.

The place where dental aid is rendered, must correspond to the demands of deontology and psychoprophylaxis. The reception room must be very comfortable with many magazines, it should not remind a hospital. The sanitary posters are not an object of attention of the patients who feel fear and tension in the reception room. In dentists's surgery it is appropriately to limit as much as possible specific dental elements, such as a white colour, «exhibition of instruments» with which the patient connects a number of his misgivings. A row of chairs standing next to each other acts negatively on the patient because it reminds them a conveyor.

Psychological peculiarities of blind people

In childhood the parents of blind children try to guard them excessively, to create sparing conditions, to protect them from

difficulties to forge the initiative. It leads to development of shyness, indecision, a striving to cry, inclination to fantasy, the departure from children's group. The beginning of school studies is often accompanied by neurotic reactions, suspiciousness, offence, helplessness. In blind people the overvalued ideals of decline form, they feel badly among sighted people, a forced stay in such group causes autic tendencies. Young people up to 20-30 years of age manage with suddenly arised blindness, for example, after injury, better than middle-aged and elderly people. The last constant hope is for any change or any scientific discovery. Difficult mental problems appear in a married couple where blindness of both spouses is caused genetically. They doubt if they can have children, expecting that their children will be blind and all the consequences of this, for example, difficult upbringing of blind children, help of healthy children to blind parents and as a result there is parents' dependence on children.

Psychological peculiarities of hard on hearing and deaf people

Personal reactions on declining or loss of hearing are various. Hearing apparatus plays an important part in the life of the patients. Increasing deafness causes painful feelings as regards of inferiority complex there are irritability, offence, difficulty in contacts, suspiciousness, mistrust. Because of difficulty in contacts with surrounding people the ideas of reference may develop, patients think that the surrounding people condemn or laugh at them. The treatment of such people at in-patient departments has a lot of difficulties. The patient tries to listen attentively to the doctor's words and «hears something terrible about his disease». The people with hearing loss usually hide their defect from other patients in a ward and feel too shy to say that they do not hear everything.

The doctor must give a special talk to patients with hearing loss to dispel their doubts and misgivings.

Psychological peculiarities of patients with injures of face

The face of a person defines the impression which it makes on other people and helps to give an idea about himself. Mimicry defines the emotional state of a person. Aesthetic criterion with regard to the body is inherent in every man, but it plays an important role with

regard to his face. People with disfigured faces notice the curious and sometimes mocking looks of surrounding people that is why they become supersensitive, suspicious and touchy. They are often afraid to go to the street, to meet people, who knew them before. Some people leave their places and begin in a new life in those places where they have never been before. A correct psychotherapeutic approach may relieve the sufferings of such a patient and it helps to create a positive attitude to life.

Psychological peculiarities of patients with organic cerebral affections

A neurologist meets fear of brain tumor and severe encephalopathy in minor diseases, for example, in headaches of other ethiology. Psychological examination may help in determining the level of disorders of higher nervous activity and mentality at organic cerebral affections.

Psychogenic factors sometimes provoke extrapyramid symptoms of organic affections, for instance, in Parkinson's disease, in some patients they also provoke a big spastic fit and attack of migraine. Diseases connected with limitation of mobility cause depression and suppression. More attention should be paid to development of consequences of cerebral hemorrhages. The question is about individual school for adults, who need renovation of disturbed knowledge and abilities, such as speech, reading, writing and calculation.

Peculiarities of contact with mentally ill patients

The attitude to mentally ill people must be the same as to other patients: correct, polite, benevolent, merciful, affable. Speaking to such patients it is necessary to listen attentively to the patient's complaints even if they seem absurd as to manifestations of the disease. It is impossible to show rudeness, contempt, mockery to the patients. The doctor should get out existed in society prejudices with regards to mentally ill. It is necessary to remember that in some patients there is absence of understanding of disease and to carry out the urgent hospitalization to the psychiatric department and to treat them without agreement or, sometimes, in spite of their demands. It requires tact and patience. It is recommended to talk with the relatives calmly, softly, to convince them in necessity of treatment in out-patient or in-patient departments. In psychiatric

clinic it is necessary to keep vigilance, to see that the patients do not make any actions, threatening to health and life of the patient and surrounding people. In contacts with mentally ill it is necessary to convince, but not to deceive them.

Psychological peculiarities of care for dying patients

The human being is the only living being who knows about inevitability of death. However, the man can not realize it himself. According to psychological investigations the man usually dies like he lived. All the strength, senses, ideas about his life are also inherent to his death. The man is not always afraid of death. Worn out by unbearable pains, exhausted by chronic disease, the patient, to whom analgesics do not help, thinks about the death as deliverance.

The majority of doctors and nurses, meeting with death day after day, try to defend themselves from its negative influence. However, the doctor has not only to help but also to try to understand his patient's feelings. Helpless, dependence of a dying person on surrounding people, his isolation must be taken into account at organization of care. One should regard the wishes of a dying patient with respect. Measures are dictated by his needs and possibilities of their fulfillment. The care of relatives and attention of friends are required for such a patient.

The question is often discussed whether it is advisable to tell the patient about «approaching» death. It is not always possible to persuade the patient that he can stand any «verdict». It is necessary to keep up the hope on recovery. There are a lot of cases in medicine when the condition of hopeless patients was improved.

In hospitals the doctors should pay great attention to proper placing dying people. The neighbour's death may cause a shock in other patients, that is why it is very important to isolate a dying person. The care for such patient in a small ward is more intensive and does not disturb others.

Relatives of a dying person also require care, sympathy and attention. Doctors sometimes listen to unjust accusations to their address. And they must regard this patiently try to help those who feels misfortune keenly.

Young doctors sometimes say that to help a patient to die means to fulfill a humane action, to save him from sufferings. However, the doctor, possessing professional psychological qualities, such as

humanism, sympathy, honesty, selflessness, never agrees with justification of euthanasia. A doctor must try to prolong the life of his patient to the last minute and to relieve his sufferings by pharmacological and psychotherapeutic means.

Neither patient's requests nor wishes of his relatives, even registered officially (statements, video records, etc.) can not excuse euthanasia made by the doctor.

Video to view

https://www.embodiedphilosophy.com/what-is-psychosomatic/
https://www.youtube.com/watch?v=4IrU0U40s2Y
https://www.youtube.com/watch?v=7_LSLTuxTtQ
https://www.youtube.com/watch?v=1Y-LeSi-3SM

Control questions

1. Features of the psyche of patients in a therapeutic clinic.
2. Features of the psyche of the surgical and cancer patient depending on the stage of treatment.
3. Psychological changes in patients with endocrine pathology.
4. Features of the psyche of patients with infectious diseases.
5. Changes in the psyche of patients with malformations and facial injuries and body.
6. Psychological changes in the personality of pregnant women depending on trimester of pregnancy and mental disorders of pregnancy and childbirth.
7. Features of the psyche of sick children and the elderly.

CHAPTER 8
PSYCHOLOGY OF COMMUNICATION. BASIS OF CONFLICT STUDY

Objectives: to study psychological aspects of the medical process, to learn how to communicate with concrete patients in different forms of pathology taking into consideration psychological peculiarities of these patients. To study the means of communication, types of communication, functions of communication. To learn the basic concepts of conflict study.

The process of treatment of every disease is accompanied by a number of psychological phenomena closely connected with the personality of the patient and the doctor, as well as the applied therapeutic methods which produce both the positive and (sometimes) negative effects. Consideration of the psychological factors in the medical process makes it possible to obtain a more profound assessment for the efficacy of the therapy and prognosis. Assessment of the therapeutic dynamics in the somatic, psychological and social planes should be regarded as the most adequate one.

Organizing the medical process, it is important to take into account the attitude of each particular patient to his disease, this attitude being significantly dependent on the inner picture of the disease, i.e. a complex of feelings and sensations of the patient, his emotional and intellectual responses to the disease and its treatment. The inner picture of the disease does not consist only of the subjective complaints of the patient, but also includes his emotional and intellectual attitude dependent upon the personality peculiarities, the general cultural level, the social medium and upbringing. The attitude of the patients to their disease may be as follows:

1. *Normal*, i.e. corresponding to the patient's state or the information given to him about the disease.
2. *Scornful*, when the patient underestimates the severity of his disease, is not treated and does not take any care of himself, as well as demonstrates ungrounded optimism with respect to the prognosis of the disease.
3. *Denying*, when the patient «does not pay attention to the disease», does not take medical advice, fights back any thoughts on his disease and reasonings about it; it also includes dissimulation.

4. *Nosophobic*, when the patient is disproportionately afraid of the disease, undergoes repeated examinations, changes his doctors; to a greater or less degree he understands that his fears are exaggerated but cannot fight them.

5. *Hypochondriac*, when the patient guesses or is sure that he suffers from a severe disease, or when he overestimates the severity of some less serious disease.

6. *Nosophilic*, connected with some calming and pleasant sensations during the disease; it proceeds from the fact that the patient should not perform his duties, the children can play and dream, the adults can read or be engaged in some of their hobbies; the family is attentive to the patient and takes more care of him.

7. *Utilitarian*, which is the highest manifestation of the nosophilic response. The utilitarian response can be more or less deliberate; it may be based on some slight or severe disease, but sometimes is observed even in a healthy person. The utilitarian response can be manifested with different forms of the patients' behaviour: aggravation, simulation and dissimulation. It can have a triple motivation:

a) receiving of sympathy, attention and a better examination;

b) finding a way out of some unpleasant situation, as, for instance, imprisonment, military service, hated work, obligation to pay alimony;

c) receiving of material benefits: pension, vacation, free time which can be also used with some economic benefit.

Aggravation is exaggeration of signs of the disease and subjective complaints. This exaggeration can be completely deliberate, but sometimes is rather caused by emotional motives of a deeper origin, e.g. fear, distrust, feeling of solitude, hopelessness, suspect that the doctor does not believe him. Transitions from the deliberate aggravation to a less deliberate one are sometimes rather unostentatious, and in some cases even hardly perceptible.

Simulation is a pretence with the help of which a person tries to create an impression that there is a disease and its signs. It occurs less frequently than aggravation. As a rule, it is used only by very primitive persons in whom its revealing can be relatively easy, or, on the contrary, by well-experienced, pushful and irresponsible persons. A great risk for the malingerer is incurred by the fact that he strives

for a certain benefit, this aim being revealed sooner or later. If he does not reach his aim, e.g. receives a pension promising him a well-to-do life with a possibility to earn extra money, this circumstance cannot be concealed from surrounding people and revision of the case will put an end to the simulation. The doctor should not be in a hurry to make a conclusion about simulation until he absolutely makes sure that his suspicions are correct. In this case, a less experienced doctor must always consult his more experienced colleague. Substantiation and argumentation of simulation are particularly important in case of drawing a written conclusion about it. Substitution of the wording «a deliberate production of signs» or «an attempt of a deliberate affected representation of a disease» for the word «simulation» in a medical conclusion is more expedient.

Dissimulation means concealing of the disease and its signs. It often occurs in psychiatry in cases of psychoses. As far as other patients are concerned, it is mainly observed in the diseases resulting in some objective or subjective disadvantages for the patient, e.g.: in tuberculosis it is a prolonged staying at a sanatorium, syphilis is accompanied by notification about the disease and revealing of the focus of the infection, surgery is fraught with a possible operation. The greater is the extent of saving the patient from the fear of the forthcoming examination, treatment and consequences of the disease, the more successful is prevention of dissimulation.

The success of the medical influence does not depend only upon the psychological peculiarities of the patient, but first of all is determined by the moral make-up of the doctor whose professional activity radically differs from that of any other specialist. The life makes great demands of the doctor as a specialist. First of all, they include a high professionalism, an aspiration for a constant enrichment of his own knowledge. The doctor must be a person of high moral standards whose authority is established by profound knowledge in his field, a personal charm, modesty, optimism, honesty, truthfulness, justice, selflessness and humanism.

A sincere and deep personal interest of the doctor in elimination of the patient's ailments gives rise to inventiveness in the forms of help. Confidence in the doctor often depends upon the first impression which develops in the patient during the first meeting with his doctor, the doctor's urgent facial expression, gesticulation,

tone of his voice, expressions, as well as his appearance: if the patient sees that his doctor is untidy and sleepy for some reasons which are not caused by his work, he looses any belief considering that a person who is not able to take care of himself cannot care for others and be reliable in his work. The patients are rather inclined to excuse different deviations in the external manifestations and appearance of those medical workers whom they already know and in whom they already have confidence.

The medical worker gains his patients' confidence in the case if, as a personality, he is harmonious, quiet and positive, but not haughty, and if his manner of behaviour is rapid, persistent and decisive, accompanied by humane sympathy and delicacy. Taking every serious decision, the doctor must imagine the results of its effect on the patient's health and life. The necessity of having patience and control over himself makes particular demands of him. He must always consider various possible ways in the development of the disease. It is not easy for the doctor to combine in his work the necessary thoughtfulness and reasonableness with the required decisiveness and coolness, optimism with a critical attitude and modesty.

For the patient, an even-tempered personality of the doctor is a complex of harmonious external stimuli whose effect participates in the patient's recovery. The medical worker must bring up and form his personality, firstly, observing a direct response to his behaviour (by the talk, assessment of the facial expression and gestures of the patient) and, secondly, in an indirect way, when his behaviour is assessed by his colleagues. It requires some effort, a certain critical attitude towards himself and a necessary measure of culture which must go without saying for the medical worker.

The patients' confidence in a younger medical worker with a less life experience and less skills becomes more perfect owing to his honesty, modesty and readiness to render help. The patient looses his confidence and the medical worker loses his authority in the case when the patient gains the impression that the medical worker is a so-called «bad person». Such an impression may be created by the doctor's behaviour if he speaks bad about his colleagues, treats his subordinates haughtily and toadies up to his bosses, displays vanity, lack of criticism, garrulity and malicious joy. The vanity is

demonstrated, for instance, when the doctor does not apply to his more experienced colleague for consultation or exaggerates the severity of the disease for the patient in order to receive more recognition and admiration after the patient's recovery.

More serious personal shortcomings of the medical worker may lead the patient to the suggestion that a doctor or a nurse with such streaks cannot be honest and reliable in serving their duties either.

The literature describes some possible psychological types of doctors:

- *«Compassionate»* – tender-hearted, merciful, easily responsive to the patient's sufferings.
- *«Pragmatic»* – taking into consideration only the objective side of the disease in the work with his patients, does not pay any attention to the patients' sufferings.
- *«Moralist»* – inclined to moral admonitions and indignant if the patient doubts or does not follow his doctor's recommendations.
- *«Diligent»* – honest in his work, serious, assiduous, industrious and not inclined to joke with the patients.
- *«Activist» («public worker»)* – prefers solving of various organizational problems and serving of social duties in the medical institution to work with his patients.
- *«Dogmatic»* – strictly follows the mastered diagnostic and therapeutic directions and schemes, hardly apprehends any new things.
- *«Technocrat»* – overestimates the significance of laboratory and apparatus data, does not attach any importance to the patients' sufferings and other subjective aspects of the disease.
- *«Psychotherapist»* – tries to grasp the patient's sufferings, help him with a piece of advice or making him change his mind.
- *«Sybarite»* – likes cosiness and comfort, the patients irritate him with their complaints, he does not consider much their opinion and is inclined to the Bohemian mode of life.
- *«Artist»* – inclined to demonstration of his knowledge and professional skills to the patients and their relatives, depending upon the conditions he plays parts of various doctors, namely: «hesitating», «attentive», «luminary», etc.

- *«Bored idler»* – a high self-estimation with a rather modest stock of knowledge, stereotyped diagnosis and administration of treatment, a scornful attitude towards his inquisitive colleagues.
- *«Misanthrope»* – a doctor under compulsion: a lack of any calling for the doctor's activity is displayed through the absence of such streaks as mercifulness, kindness, as well as through rudeness, a disgusted attitude towards the patients and malicious jokes.

The above scheme does not exhaust the whole variety of psychological types of doctors. It should be taken into account that formation of some or other type of the doctor is to a considerable extent dependent upon his upbringing. Some prerequisites for establishing positive relationships between the doctor and the patient appear even before they come into direct contact. As a rule, the patient coming to the doctor knows about him more than the doctor about the patient. Reputation of the health service in general and the medical institution where the patient comes in particular is of importance too. Tension, dissatisfaction and anger of the patient who had to get to the doctor by an uncomfortable transport and, moreover, wait his turn for a long time at the reception room may often become inadequately apparent when meeting a nurse or a doctor who have not the slightest idea of the causes of this reaction and groundlessly explain it as a hostile attitude towards them.

It is also necessary to mention a possible action of «the transfer of the aesthetic stereotype». Beautiful people rather arouse sympathy and confidence, while plain ones stir up antipathy and uncertainty. In this way, the notion of beauty is associated with good features, and ugliness with evil. Despite the fact that this supposition is groundless, it subconsciously produces a rather strong effect: an outwardly attractive patient arouses more sympathy in the doctor even if in reality he requires less help than a patient whose appearance stirs up antipathy. And, on the contrary, the doctor acting esthetically positively arouses more confidence.

In making contact with the patient, the first impression created by the doctor on him is important. It is also influenced by the general atmosphere of the medical institution and behaviour of all its workers: auxiliary personnel, administrative staff, the nurse on reception and registration of the patient. During the first contact with the doctor the patient must gain the impression that the doctor wants

to help him. The doctor is obliged to control himself to such an extent that all common norms of the social contact were observed. It means that he must personally introduce himself to the patient, if the latter is not acquainted with him, and hold out his hand. Such behaviour calms the patient, develops a feeling of safety in him and increases his consciousness of the personal dignity.

To give the patient an opportunity for a free and uninterrupted account of his sufferings, problems, complaints, troubles and fears is one of the prerequisites for developing a positive attitude. The doctor should not demonstrate that he is very busy, though it may be in reality. The doctor must «resound to the patient's statements» with his own personality. If the patient is not given an opportunity to express his opinion to a necessary extent, he often complains that the doctor «has not listened to him at all» and he has not been examined in compliance with all the rules, though in reality all the necessary things were made. From the patient's side, such cases reveal dissatisfaction that he is neglected as a personality. A talkative patient, an extroverted type achieves psychic ventilation easier; moreover, he even excites curiosity of the doctor in his account if it is entertaining. But actually the above psychic ventilation is more necessary for a concealed introverted type who conceals his problems, complaints and sometimes even signs of a disease as a result of timidness, shame or exaggerated modesty.

Confidence is the main component in the patient's attitude to his doctor. Nevertheless, gaining of the confidence does not proceed only from the psychological aspect of the relations between the doctor and the patient, but it also has a broader social aspect. The doctor can gain the confidence of his patient and establish positive contact with him through satisfying his groundless demands.

Development of such relations usually proceeds from the mutual satisfaction of the interests, where one side is presented by the doctor and the other one with the patients who may render him some service, but thereby affecting the effective and actually necessary examination of all the patients that in the first place must be performed from the viewpoint of their diseases, but not depending upon their social standing or abilities.

A psychological problem arises also in those cases when the doctor notices that his relations with the patient develop in an

unfavourable direction. Then the doctor should behave with restraint and patience, resist any provocations, do not provoke himself and try to gradually gain his patient's confidence with calmness and understanding.

Medical practice knows cases when the doctor experiences diagnostic difficulties that sometimes result in medical mistakes. There are objective and subjective causes of these mistakes. A medical mistake means a delusion of the doctor with absence of any negligence, carelessness or a thoughtless attitude to his duties. Medical mistakes are often caused by peculiarities in the doctor's personality and character, as well as by how he feels rather than by his insufficient professional training and qualification. This subjective factor accounts for 60 – 70% of the total number of mistakes. Sometimes mistakes are caused by the doctor's sluggishness, indecision, diffidence, insufficient constructiveness of his thinking, inability to correctly and rapidly orientate himself in a difficult situation, an insufficiently developed ability to correctly and logically compare and synthesize all the elements of the information obtained about the patient. Unwarranted caution taken by the doctor may be extremely dangerous in situations when the patient's state requires prompt and decisive actions, On the other hand, unwarranted self-confidence which is not supported by real evidence sometimes results in making «popular» florid diagnoses.

Such peculiarities in the doctor's character as optimism or pessimism may play a part in a wrong prognostic assessment of the severity of a disease. The doctor must always really assess the true situation and should not take the desired thing for the real one. Diagnostic mistakes may also result from the fact how the doctor feels, his asthenic states, the feeling of tiredness and sleepiness. The paramount significance of personality peculiarities in the medical profession must be assessed during the professional selection for higher medical schools. If the applicant's individual personality peculiarities, interests and inclinations do not satisfy the demands of medical deontology he should not choose the profession of a doctor.

The work of the nurse who spends much more time in direct contact with the patient than the doctor is of great importance at in-patient medical institutions. The patient seeks for understanding and

support from her. She must both professionally master the skills of caring for her patients and know the rules of the psychological approach to them, as a lack of knowledge of these rules often results in the fact that the patients express their «displeasure» and protest against the «formal» and «barrack» behaviour of some nurses despite the fact that from the physical viewpoint the care for them was good. On the other hand, the development of relationships between the nurse and the patient is sometimes fraught with appearance of both a danger of not keeping a certain necessary distance and an aspiration to a flirt or helpless sympathy. The nurse must be able to manifest her understanding of the patient's difficulties and problems, but should not seek to solve these problems.

Depending upon their character and attitude to the work, the following individual types of nurses are separated.

1. ***The practical type***, characterized by accuracy and strictness, sometimes forgetting the humane side of the patient. In a paradoxical form it may be sometimes manifested by the fact that she awakens a sleeping patient in order to give him some soporific.

2. ***The artistic type***, characterized by affected behaviour; without any sense of proportion, such a nurse tries to impress the patient and be pompous.

3. ***The nervous type***; such a nurse is often tired, irritated andthe patients do not feel calmness near her. She subconsciously tries to evade some duties; for example, out of apprehension to be infected.

4. ***The male type*** of the nurse, with a strong constitution: she is resolute, energetic, self-confident and consistent. The patients characterize her behaviour as «military». In a favourable case, she becomes a good organizer and successfully trains young nurses. In an unfavourable case, such nurses may be primitive, aggressive and despotic.

5. ***The maternal type*** of the nurse, a «sweet nurse», often with a pyknic constitution.

6. ***Nurses-specialists who work***, e.g., on an electrocardiograph or electroencephalograph; sometimes they have a feeling of superiority over the nurses working at departments; if they do not conceal this attitude, it may result in tense relations between them and other personnel.

Medical deontology

Organizing the work of different medical institutions, one should proceed from the basic statements of the medical deontology and ethics. Medical deontology and ethics are the whole complex of principles of regulation and standards of behaviour for the doctor and other medical workers conditioned by the specific character of their activity (care for other people's health, treatment, etc.) and position in the society.

Deontology (the science about the due) is the teaching of behaviour principles of the medical personnel contributing to creation of the necessary psychoprophylactic and psychotherapeutic situation in the diagnostic and medical process excluding negative consequences (it is a part of the medical ethics).

Medical deontology and ethics also envisage a high level of training of the nurses, their accuracy and honesty in carrying out the doctor's administrations with regard for the age, individual peculiarities, disease and morbid state of the patients, tactfulness and a psychotherapeutic approach of the nurses and practical nurses in attending to the patients and work with their relatives.

The very atmosphere of the medical institution should dispose the patients to a frank and heart-to-heart talk, arouse their faith in recovery; as early as in the registry the patients should understand that everything at the polyclinic is directed to help them and alleviate their sufferings. It is necessary to calm the patient and give him the feeling of confidence. One should exclude any conditions of strictness and ostentatious business-like efficiency. Visual aids at the polyclinic (stands, posters) must not arouse any feelings of fear and alertness in the patients or remind them of their diseases. The polyclinic should be comfortable and clean, the rooms should be located proceeding from the patients' comfort. It is also very important to establish the protective regimen at the in-patient departments. Much depends upon the patients' contact with their doctor. It is necessary to start a conversation with the patient talking to him but not looking through results of his analyses; the doctor should thoroughly think over every word addressed to his patient and avoid using slangy words. The round of wards at the departments should be made every day and better at the same time; it is not recommended to ask and elucidate any intimate details in other patients' presence during the

rounds, as these details are connected with the patient's life and disease.

The doctor should display great tact and delicacy in the case when he has to change the treatment administered by another doctor. It is prohibited to tell the patient that he was treated incorrectly as it may shake his faith in medicine on the whole.

An important aspect of the doctor's activity consists in the medical secret which is defined as follows: the medical secret means any information which is not to be made public and includes data about the patient's disease and personal life obtained from him or revealed in the process Of his examination and treatment, i.e. when the medical worker performs his professional duties. Any data concerning the functional peculiarities of the patient's organism, corporal defects, bad habits, peculiarities of his mentality and, finally, his private property, circle of acquaintance, interests, hobbies, etc., rather than only the disease itself should not be made public. The purpose of the medical secret is to prevent cases of causing the patient and other persons any possible moral, material and medical harm. Lack of satisfying the requirements of deontology and medical ethics results in development of iatrogenies.

Iatrogenies

Iatropathogeny, contracted to iatrogeny (iatros = doctor, gennao = to do, to produce), is such a method of examination, treatment or carrying out prophylactic measures that results in causing harm to the patient's health by the doctor. In the broader sense of the word, it means the harm to the patient done by a medical worker. In this connection, the term «sorrorigeny» is used; it means the harm caused by a nurse (sorror = nurse), like other fields use the term «didactogeny», or «pedagogeny», i.e. causing of harm to a pupil by his teacher in the process of training.

Somatic iatrogeny is distinguished, where the harm may be done by using drugs (e.g. allergic responses after administration of antibiotics), mechanical manipulations (surgical operations), irradiation (X-ray examination and radiotherapy) etc. Somatic iatrogeny which is through no fault of medical workers may result from an unusual and unexpected pathological responsiveness of the patient, e.g. to the drug which causes no complications in other cases.

Sometimes they are due to an insufficient skill of the doctor, peculiarities in his personality, temperament and character, as well as his mental state, e.g. inability to focus his attention in cases of tiredness and haste. The cause of a harmful effect of some unsuccessfully chosen drug consists, first of all, in the person who administered it rather than in the drug itself.

Psychic iatrogeny is a type of psychogeny. The latter means the psychogenic mechanism in the development of a disease, i.e. development of the disease caused by psychic effects and impressions. Psychic iatrogeny includes a harmful psychic effect produced by the doctor on his patient through words and all means of contacts among people which have their effect on the whole organism of the patient rather than on his mentality only.

Possible sources of iatrogenies are mentioned below. An incorrect provision of medical education and popularization of data of the medical science may become a collective source of psychic iatrogeny. In the process of sanitary-instructive work, it is prohibited to describe the signs of a disease without their purposeful selection and give a full objective description of the treatment. It is necessary to focus attention only on those facts and circumstances that can help persons without any medical education get a real idea of the disease and the necessary information how to prevent it. If the listeners have no medical education, the medical worker should not discuss the differential diagnosis even if they ask questions concerning their personal signs and complaints, but the whole picture of the disease and its treatment is unknown. Such explanations may be given during individual sanitary-instructive work with sick and healthy persons.

In the process of preventive medical examinations at factories, examinations of the men called up for military service, donors, sportsmen, expectant mothers (these measures are directed at promoting good health for the population) doctors may often reveal some accidental and insignificant abnormalities, e.g. unimportant deviations on an electrocardiogram, minute gynaecological or neurological signs, etc. If the examinee gets to know about these deviations, their meaning should be immediately explained to him, otherwise he may think that they are very serious and it is for this that he was not informed about them. However it is better to do

preventive examinations in such a way that the examine (does not get any information about these insignificant deviations.

Mentality is affected by a «medical labyrinth». The patient seeks for medical advice but is sent from one doctor to another, and everywhere he is said that he «should be treated by another doctor», with different degrees of politeness he is not rendered any aid. The feelings of dissatisfaction, tension and anger begin to grow in the patient, he is afraid that for this reason his disease will become neglected and difficult for treatment.

The following types of iatrogeny are distinguished:

1. Etiological iatrogeny, e.g. iatrogeny due to overestimation of heredity; the doctor's phrase «It is hereditary» causes hopelessness in the patient, the latter fears that the same bad fate will overtake the other members of his family.

2. Organolocalistic iatrogeny develops in the case where the doctor explains undiagnosed neurosis, i.e. a functional psychogenic disease, as an organic local process in the brain, e.g. thrombosis of the cerebral vessels.

3. Diagnostic iatrogeny, when an ungrounded diagnosis which later undergoes unsuccessful changes becomes a source of a psychic trauma for the patient. Some words produce, so to say, a «toxic» effect on the patient; first of all, these are «infarction, paralysis, tumour, cancer, schizophrenia. Therefore it is better to avoid these expressions.

Sometimes iatrogenies are caused by unclear statements made by the doctor, Even seemingly harmless statements made in the patient's presence at an X-ray room result in his unexpected traumatism, particularly if they are pronounced with some significance or surprise.

4. ***Therapeutic iatrogeny*** develops in the process of treatment. Its example can be provided by the use of some drug about which the patient knows that it did not help him in the past. Here a negative placebo effect is produced. Therefore prior to administration of any treatment it is recommended to check the case history how effective was the treatment previously used. As a rule, it is often forgotten because of a lack of time. Therapeutic iatrogeny is facilitated by a so-called therapeutic nihilism, i.e. a pessimistic viewpoint of the doctor on the supposed results of the treatment.

5. The process of treatment may be characterized by ***pharmaceutogeny***, i.e. causing of some harm to the patient by a lame statement of the pharmacist. Patients often demand from the pharmacist to explain the features and effects of the drug administered by the doctor. It is dangerous to use such statements as «It is too potent for you» or «It is no good at all, but I have got something better».

6. ***Prognostic iatrogeny*** proceeds from an unsuccessfully formulated prognosis of the disease. From this viewpoint, such cynical and openly traumatizing statements as, e.g. «You have only a few hours to live», deserve censure. However, both straightforward and peremptory optimistic statements are of a questionable value even in the case when the doctor believes that using them he will suggestively produce a positive effect on the patient. Such statements as «In a week you will be sound as a bell, upon my word!» may become false and will shake the patient's confidence in his doctor in future.

Besides the above situations and circumstances, sources of iatrogeny may be also found in the medical worker's (first of all, the doctor's) personality; e.g. in his unwarrantedly peremptory statements, excessive self-conceit: an omniscient doctor. Such a personality easily suggests the patient his opinions and viewpoints.

Personalities of the peremptory type easily substitute absolute confidence for a good possibility in their statements. But the opinion once formed does not enable them also to watch other potential features in the process of the development of the disease; the above features may become predominant, e.g. during the transition of the disease from the syndrome of bronchitis initially diagnosed as a common disease to a malignant process.

The diffident and doubting doctor, as a type of personality, is at the opposite pole. The patient often explains himself the way of the doctor's behaviour conformably to his disease, e.g. the doctor's hesitations are regarded as proof of the severity or even incurability of his state. The doctor increases this impression by the fact that he «thinks aloud», tells the patient about all possibilities of the differential diagnosis, does not complete a long line of auxiliary methods of examination and leaves the patient without any treatment for this time or gives him the initiative with respect to the kind of treatment, e.g. with such words as «If only I knew what to do

with you!» The doctor should always be an artist in the correct understanding of the meaning of this word; he should be able to conceal from the patient a possible difficulty and, in the majority of cases, some temporary uncertainty about his diagnostic and therapeutic approach. The doctor's subjective uncertainty should not affect his objective behaviour.

The patient's personality may be another source of iatrogeny. A timorous, frightened, diffident, emotionally vulnerable and mentally inflexible patient is recognized by his tense facial expression, an increased sweating of his palms when shaking hands, often also by some fine motor tremor. He is inclined to timorously interpret our wordy or other manifestations, frequently even those ones that are not of any significance for us. We may be additionally surprised how such a patient understands our silence or a tired gesture of a hand that are regarded by him more important than words. The nurse may observe how such a patient restlessly walks at the waiting-room before his turn comes, how he lively participates in talks of other patients about diseases or quietly and with strained attention listens to them. Other patients would try to get insignificant details from the nurse before going to the doctor. It is necessary to tell the nurse that she should inform the doctor about such patients.

Sometimes the role of the patient's personality in the «iatrogenic impairment» can be so pronounced and decisive that the question is not of iatrogeny proper, but pseudoiatrogeny which is through no fault of the doctor. Pseudoiatrogeny develops in the cases when the patient cites such statements of the doctor which he has never made or isolates only separate parts from the doctor's explanation. At present much attention is paid to training general practitioners, i.e. family doctors.

The general practitioner (family doctor) works following the principle of the district doctor, hereby attending to adults, teenagers and children and performing the following functional duties:

- organization of and carrying out a complex of measures for general prophylactic medical examination of the population in his district, elaboration of individual complexes of prophylactic, medical and health-improving measures for each resident of the district, prophylactic inoculations and dehelminthization of the population, popularizes principles of the healthy mode of life;

- rendering of the opportune medical aid to the adults and Children of the district in charge.

The general practitioner (family doctor) must know:

♦ fundamentals of medical psychology, social hygiene, organization of public health and economics in compliance with the tasks of health control for the population of the district in charge;

♦ fundamentals of general theoretical subjects within the scope required for solving professional tasks;

♦ anatomical-physiological and psychological peculiarities of the adults, children and aged people, peculiarities in the development of healthy children and teenagers, contemporary classifications of internal diseases in children and adults; health groups and risk factors in the development of diseases;

♦ causes of appearance of pathological processes in the organism, mechanisms of their development, the course of diseases depending upon the sex and age, their clinical manifestations and main syndromes;

♦ clinical picture, diagnosis and prevention of mental diseases and narcomanias (disturbances of perception, memory, thinking, mentality, the sphere of emotions, attention, drives, unrestricted activity and consciousness, the above aspects of psychoses related to somatic diseases, as well as those of schizophrenia and the manic-depressive syndrome, epilepsy, psychoses of the involutional period, neurasthenia, obsessive-compulsive neuroses, hysteria, psychopathies, mental retardation, alcoholism and alcoholic psychoses, narcomaniae and toxomaniae);

♦ fundamentals of examination in mental diseases;

♦ fundamentals of resuscitation, clinical picture, diagnosis and principles of treating main emergencies;

♦ pharmacotherapy of the most common diseases, the mechanism of effect and doses of the main drug preparations.

The general practitioner must know the aspects of psychohygiene and psychology of the family, attitude of the members of the family to their health, responses of the family to stresses, psychological problems of the family, attitude of the members of the family to sick persons (alcoholism, narcomanias, psychosexual disturbances).

The family doctor must be able:

- ✓ to take case history of sick and healthy persons using psychodeontological regularities of communication, to determine the mental state of the patient (stress, anger, fear, joy, etc.), streaks of his character, temperament, the level of mental development, anxiety and alarm;
- ✓ to observe the mental activity of people, to use the method of rational psychotherapy;
- ✓ to diagnose nervous system disturbances (craniocerebral symptoms, autonomic dystoniae, polyneurititides, plexititides, radiculopathies, autonomic-endocrine disturbance of the hypothalamic localization, brain concussion and contusion);
- ✓ to determine the state of the processes of perception, memory, thinking, attention and purposeful activity, consciousness and mentality, to diagnose affective disturbances, neuroses, psychopathies, alcoholism and narcomanias.

Successful performance of his professional functions by the family doctor is possible if only he has such most important personal streaks and skills as:

- ➢ humanism and justice, mercy and sincerity, tactfulness and affability in relations with other people; modesty and delicacy;
- ➢ possession of high culture, a regular execution of instructive and educational work among the population, the work for strengthening the healthy mode of life;
- ➢ initiative, discipline, careful fulfillment of his obligations, loyalty to Hippocratic oath, honesty and self-discipline in his work, a principled and exacting attitude to himself and other members of the staff; a systematic increase of his professional knowledge and skills.

Psychology of communication. Basis of conflict study

Communication (personal contacts) is a complicated process of establishing relations between people resulting in mental contacts which include information exchange, mutual influence, mutual experience and mutual understanding.

Functions of personal contacts are as follows: information, regulation, affective. The following interrelated aspects can be distinguished in the process of communication: communicative (consists in information exchange), interactive (act exchange), perceptive (mutual understanding between partners).

Depending on the characteristics of the partners communication may be:

- interpersonal;
- individual-group;
- collective-individual;
- group.

The ***communicative aspect*** of personal contacts is associated with revealing specific features of information process between people as active subjects, that is with the account of the relations between the partners, their purposes, aims, intentions, which results in information transmission and enrichment of the knowledge, thoughts, ideas with which the communicants exchange. The means of the process of communication are different systems of signs, language, in particular, as well as non-verbal means: mimics, gestures, pantomimic, posture of the partners, paralinguistic systems (intonation, non-verbal elements of speech, e.g. pauses), the system of organization of the space and time of communication, eye contacts. A very important feature of communicative process is intention of its participants to influence one another and to provide the ideal presentation in the partner with influencing the behaviour of the partner (personalization). An important condition of this is not only the use of a uniform language but also similar understanding of the essence of the communicative situation.

The ***interactive aspect*** of personal contact consists in construction of a common interrelation. Important are motives and purposes of the communication from the both parties. There are several types of personal contacts, concord, competition, and conflict. It is necessary to remember that concord, competition and conflict are not only interaction of two personalities. They take place between the parts of the groups and between the groups as a whole. Interaction is observed in the form of feelings which can both make the people closer or separate them. The intensity of feelings influences the efficacy of the action of the members of the group and is one of the signs of social psychological climate in the group.

The ***perceptive aspect*** of personal contacts includes formation of the image of the other person which is achieved by «reading» the mental features and peculiarities of behaviour by the physical characteristics of the person. The process of communication requires

at least two persons. Main mechanisms of learning the other person is identification (similarity), reflection (understanding how the subject is perceived by other persons), stereotyping (classification of different forms of behaviour).

Reflection is understanding of the perception by the partner with contacts and correction of the own behaviour depending on the behaviour of the other person.

Stereotyping is perception, classification and evaluation of the partner's personality basing on definite ideas.

Identification is the process of learning the quality on the basis of which the personality can be classified.

Identification and reflection are mainly performed subconsciously that is why the mistakes in evaluation of the people are frequent, they form stereotypical ideas. A number of effects develop in the process of interpersonal perception and cognition: priority, novelty, and halo.

One of the tasks of social psychology is working out the means for correction and optimizing personal contacts, development of abilities and skills of communication. Among a number of forms of teaching the art of communication, a significant place is occupied by psychological training (mastering communication skills with the use of different programs).

Personal contacts are the form of human activity. The human being is surrounded not only by the world of objects, but also by people. He is connected with the both. These interrelations are established and develop through the work, training, that is through activity. Common activity is not possible without personal contacts and information exchange that is without communication. The main characteristics of communication as a sort of activity is that through it the person forms his relations with the other people.

Communication includes numerous mental and material forms of vital activity and is a need of a human being. Only mentally ill persons renounce real connections with people but with this they satisfy their need in contacts with pathological fantasies.

Joining into small groups, establishing contacts during common activity, people exchange information. Communication is always determined by the system of social relations, but in dynamics in the structure of communication it is impossible to separate the

personal and social. Therefore, social and individual are closely connected in the language, one of the most important means of communication. The mechanism of language and its individual manifestation is speech. Language is a system of signs which have a definite importance and are used for transmission and storage of information. Speech (verbal language) belongs to the linguistic signs which are built according to certain grammar rules.

Non-linguistic signs are symbols, e.g. copies, the systems of traffic signs. Besides verbal, there are non-verbal means of communication (the language of gestures, mimics, etc.). In his activity the human being uses different types of speech:

♦ Oral monologue speech, i.e. the speech of one person (speaker, lecturer, narrator).

♦ Dialogic speech takes place as a conversation among several persons.

♦ Written speech uses written signs and has its own construction characteristics.

♦ Inner speech exists only in our brain they are the speeches to him/herself.

The functions of communication are various. An elementary function of communication is establishing mutual understanding at a formal level. This may be a nod, a smile, and a gesture. Main functions of communication are social ones as we live in the society and solve collective tasks. We have service functions (manager, subordinate, doctor, pupil), vital functions (customer, neighbor), family functions (husband, wife, relatives). To fulfil a social function means to do what is necessary at the definite place under the given conditions according to certain laws, on the one hand, and customs, on the other.

Social functions are subdivided into those of management and control; they are connected with the organization of group activity. The forms of interpersonal communication depend on the feelings of the person to his/her relatives, colleagues, and strangers. They work out their strategy of communication on the basis of these feelings. When forming the attitude to the work, the staff, the other persons and to the person him/herself, emotional satisfaction with I ho contact is very important.

The function of personality self-actualization consists of trying to act together with the rest achieving the purpose or increasing the influence on the rest.

From the moment of the birth, the adults encourage the child to establish contacts. The need in communication develops in stages. The child uses different means to attract the attention of the adults before starting speaking (cry, smile, gestures).

When the child is brought up properly, he/she gradually changes his mode of communication from aspiration to attract the attention of the adults to co-operation. At 2 months the child starts to smile in response to special interjections and words addressed to him, at 5-6 months he starts to babble. The fist words are pronounced at approximately 1 year. With the development of speech, communication becomes more effective.

Functional signs are an important component of the appearance (in addition to anatomical features). They are mimics, gestures, pantomimic, gait, voice which are a complex of signals and inform about mental processes and states of the person. The majority of people concentrate the attention on the face of the partner, especially the eyes. Contraction of the facial muscles changes the look which allows foreseeing the actions of the partner.

The character of recognition of the emotional states can be of diagnostic significance. The clothes also influence the character of contacts. An old saying «the clothes makes the person» is important now. Without doubt the clothes, hair-do and manners influence the first impression about the person. A negative attitude can be formed if the partner' s clothes are not neat, and vice versa the person dressed neatly, with taste produces good impression. The clothes influence not only the partner, but also the person himself. He feels certain if well dressed. Fashion is also important. It dictates how to dress to look modern and smart. The fashion changes quickly that is why the person has to have his own style of clothes. The difference in clothes demonstrates generation gaps. The style of the clothes can underline the individual character of the person, to hide shortcomings and emphasize the advantages. To establish normal interrelations between people, especially at work or at home, the culture of contact is important. It consists in the presence of tolerance, benevolence, respect, tact, and politeness.

The moral qualities of the person, the level of his culture are evaluated according to his actions. In different situations the culture of interpersonal contacts is based on definite rules which have been worked out for thousands years. These rules determine the forms of contacts regulated by the society and are termed etiquette. It contains both technical aspects of contacts, that is the rules about the outer side of the behavior and the principles, violation of which causes punishment and blame. Numerous rules of the etiquette have become the elements of culture of contacts at hospitals.

The outer side of service contacts regulates service etiquette. Thus, a component of medical ethics is observing the rules of decency, good form and behaviour. The person who knows the culture of communication exhibits it everywhere: in the family, at work, on holiday, in public places. The ability to convey the thoughts and feelings to other people, the ability not only to speak, but also to listen, to show understanding and good-will, sympathy and attention compose the culture of everyday communication.

A true culture of interpersonal relations is determined by ethical norms. A great role is played by self-estimation of the personality, attention concentration, and the ability to take the position of the partner.

One of the important characteristics of the personality is self-estimation, that is the ability to evaluate himself and the attitude to the others. Self-estimation allows analyzing the actions. It depends on education and cultural level. If a person has no desire to self-estimation, he cannot understand the rest and form interrelations, show such qualities as tact and delicacy.

Communication begins with perception of one another.

Attention concentration is important which allows perception with the account of mental features. Communication will be effective if the first impression will cause the feeling of attraction. If it fails, the communication will be difficult. In any case communication must be established and maintained with the consideration of individual features of the personality of the communicants.

Interrelations can become richer if the people acquire the skills of communication and observe the rules and principles of cultured communication. Showing respect to a personal dignity and individuality of the personality allows improving the interrelations.

«Treat the people as you would like to be treated» is the main rule of morals which should be the credo of any doctor.

Conflict is collision of opposite aims, interests, thoughts or views or the subjects of their interaction. The following stages of conflict can be distinguished: incubation, latent, open conflict, obvious conflict behavior.

Varieties of conflict are intrapersonal, interpersonal, intergroup, inter-organization, inter-state, and international. Scheme of conflict development:

- Cause.
- Reaction of the parties.
- Key cause of the conflict.
- Suggestions about the conflict resolution.
- Agreement with the suggestion – the conflict does not develop.
- Disagreement with the suggestion – the conflict develops.
- Control of the conflict.
- Consequences of the conflict.

Depending on the duration, the conflicts are divided into short, long, prolonged. There are five ways to resolve interpersonal conflicts (according to K. Thomas):

1. Competition – the desire to achieve satisfaction of the interests to the prejudice of the other person.

2. Adaptation – in contrast to competition, sacrificing the interests for the sake of the other person.

3. Compromise – mutual interests of the both parties.

4. Avoidance – absence of desire to co-operation and absence of desire to achieve own interests and aims.

5. Co-operation – search for an alternative decision completely satisfying the both parties.

Organization of the treatment process requires the ability to communicate, prevent the situations which may cause conflict as well as the ability to settle the conflict from all its participants: patients, their relatives, doctors, and paramedical personnel.

In a medical team every person has a definite number of responsibilities. One of the conditions which can prevent conflict in a hospital is strict observation of the rules of medical ethics and subordination. Thus, when young doctors start their career and

begin to acquire the skills of practical work, the relations between them and their medical authorities (chief doctor, department chief) resemble the relations between the pupil and the teacher. When the stage of training is over, competition starts, and if it is not sound, conflict arises.

The role of general group reaction of the medical staff to the patients is great. There are patients with whom everybody sympathizes; it is easy to work with them. There are patients with whom it is more difficult to work, the surrounding experiences negative feelings to them, it may become the cause of conflict.

Psychological incompatibility can arise between the nurse and the patients, patient and doctor, relatives of the patients and the doctor, which impedes effective treatment. If they fail to change their relations, it is necessary to change the doctor, the nurse.

A good psychological climate in hospitals is determined by welldisposed attitude between all the participants of the treatment process. It influences favorably the patients, provides more effective treatment. The arguments with the patients which some nurses allow showing their superiority are harmful.

One of the most important means of communication is speech and words. The addressed words to the patient influence him greatly. The doctor must think over every word when speaking to the patient. The environment in which the patients are at the medical institution, individual mental characteristics of the patients, the attitude to them are decisive in the process of treatment. The account of mental characteristics in the whole is an important condition of optimizing mutual activity of people and their relation in the treatment process.

Video to view

https://ukmediation.net/2020/07/27/webinar-psychology-of-conflict-2/
https://www.youtube.com/watch?v=LPYTndFFTko&feature=emb_rel_pause
https://www.youtube.com/watch?v=M_eLtvraIFI
https://www.youtube.com/watch?v=u6WXDTfnxAw
https://www.youtube.com/watch?v=bp1rOuf4VT8
https://www.youtube.com/watch?v=m3WDSvbWR8A
https://www.youtube.com/watch?v=xpeSU3Sjkvo

Control questions

1. Basic requirements for the personality of a medical worker.
2. Definition of «medical duty» and «medical secrecy».
3. Causes and types of medical errors.
4. Signs of «Emotional burnout syndrome», its symptoms and ways to prevent it.
5. Definitions of medical ethics and deontology.
6. Important professional qualities of a doctor.
7. Medical errors: causes and types.

CHAPTER 9
PSYCHOHYGIENE. PSYCHOPROPHYLAXIS. PSYCHOTHERAPY

Objectives: to discuss the issue and tasks of psychohygiene, valeology, psychoprophylaxis, trend in social-labour rehabilitation.

The goal of this chapter is to review the techniques that are used to treat psychological disorder. Just as psychologists consider the causes of disorder in terms of the bio-psycho-social model of illness, treatment is also based on psychological, biological, and social approaches.

The psychological approach to reducing disorder involves providing help to individuals or families through psychological therapy, including psychoanalysis, humanistic-oriented therapy, cognitive behavioural therapy (CBT), and other approaches.

The biomedical approach to reducing disorder is based on the use of medications to treat mental disorders such as schizophrenia, depression, and anxiety, as well as the employment of brain intervention techniques, including electroconvulsive therapy (ECT), transcranial magnetic stimulation (TMS), and psychosurgery.

The social approach to reducing disorder focuses on changing the social environment in which individuals live to reduce the underlying causes of disorder. These approaches include group, couples, and family therapy, as well as community outreach programs. The community approach is likely to be the most effective of the three approaches because it focuses not only on treatment, but also on prevention of disorders.

Treatment for psychological disorder begins when the individual who is experiencing distress visits a counsellor or therapist. The therapist will begin by systematically learning about the patient's needs through a formal psychological assessment, which is an evaluation of the patient's psychological and mental health. During the assessment the psychologist may give personality tests such as the Minnesota Multiphasic Personal Inventory (MMPI-2), Millon Adolescent Clinical Inventory (MACI), or projective tests, and will conduct a thorough interview with the patient. The therapist may get more information from family members or school personnel.

After the medical and psychological assessments are completed, the therapist will make a formal diagnosis using the detailed descriptions of the disorder provided in the Diagnostic and Statistical Manual of Mental Disorders (DSM; see below). If a diagnosis is made, the therapist will select a course of therapy that he or she feels will be most effective. One approach to treatment is psychotherapy, the professional treatment for psychological disorder through techniques designed to encourage communication of conflicts and insight. The fundamental aspect of psychotherapy is that the patient directly confronts the disorder and works with the therapist to help reduce it. Therapy includes assessing the patient's issues and problems, planning a course of treatment, setting goals for change, the treatment itself, and an evaluation of the patient's progress.

Psychodynamic therapy (psychoanalysis) is a psychological treatment based on Freudian and neo-Freudian personality theories in which the therapist helps the patient explore the unconscious dynamics of personality. The analyst engages with the patient, usually in one-on-one sessions, often with the patient lying on a couch and facing away. The goal of the psychotherapy is for the patient to talk about his or her personal concerns and anxieties, allowing the therapist to try to understand the underlying unconscious problems that are causing the symptoms (the process of interpretation). The analyst may try out some interpretations on the patient and observe how he or she responds to them.

The patient may be asked to verbalize his or her thoughts through *free association*, in which the therapist listens while the client talks about whatever comes to mind, without any censorship or filtering. The client may also be asked to report on his or her dreams, and the therapist will use dream analysis to analyze the *symbolism of the dreams* in an effort to probe the unconscious thoughts of the client and interpret their significance. On the basis of the thoughts expressed by the patient, the analyst discovers the unconscious conflicts causing the patient's symptoms and interprets them for the patient. The goal of psychotherapy is to help the patient develop *insight* – that is, an understanding of the unconscious causes of the disorder, but the patient often shows resistance to these new understandings, using defence mechanisms to avoid the painful feelings in his or her unconscious. The patient might forget or miss

appointments, or act out with hostile feelings toward the therapist. The therapist attempts to help the patient develop insight into the causes of the resistance. The sessions may also lead to transference, in which the patient unconsciously redirects feelings experienced in an important personal relationship toward the therapist. For instance, the patient may transfer feelings of guilt that come from the father or mother to the therapist. Some therapists believe that transference should be encouraged, as it allows the client to resolve hidden conflicts and work through feelings that are present in the relationships.

Important Characteristics and Experiences in Psychoanalysis

Free association. The therapist listens while the client talks about whatever comes to mind, without any censorship or filtering. The therapist then tries to interpret these free associations, looking for unconscious causes of symptoms.

Dream analysis. The therapist listens while the client describes his or her dreams and then analyzes the symbolism of the dreams in an effort to probe the unconscious thoughts of the client and interpret their significance.

Insight. An understanding by the patient of the unconscious causes of his or her symptoms.

Interpretation. The therapist uses the patient's expressed thoughts to try to understand the underlying unconscious problems. The analyst may try out some interpretations on the patient and observe how he or she responds to them.

Resistance. The patient's use of defence mechanisms to avoid the painful feelings in his or her unconscious. The patient might forget or miss appointments, or act out with hostile feelings toward the therapist. The therapist attempts to help the patient develop insight into the causes of the resistance.

Transference. The unconscious redirection of the feelings experienced in an important personal relationship toward the therapist. For instance, the patient may transfer feelings of guilt that come from the father or mother to the therapist.

One problem with traditional psychoanalysis is that the sessions may take place several times a week, go on for many years, and cost thousands of dollars. To help more people benefit, modern psychodynamic approaches frequently use shorter-term, focused, and goal-oriented approaches. In these brief psychodynamic therapies, the therapist helps the client determine the important issues to be discussed at the beginning of treatment and usually takes a more active role than in classic psychoanalysis.

Humanistic therapy is a psychological treatment based on the personality theories of Carl Rogers and other humanistic psychologists. *Humanistic therapy is based on the idea that people develop psychological problems when they are burdened by limits and expectations placed on them by themselves and others, and the treatment emphasizes the person's capacity for self-realization and fulfillment.* Humanistic therapies attempt to promote growth and responsibility by helping clients consider their own situations and the world around them.

Carl Rogers developed *person-centred therapy* (or client-centred therapy), an approach to treatment in which the client is helped to grow and develop as the therapist provides a comfortable, nonjudgmental environment. Rogers argued that therapy was most productive when the therapist created a positive relationship with the client – a therapeutic alliance. *The therapeutic alliance* is a relationship between the client and the therapist that is facilitated when the therapist is genuine (i.e., he or she creates no barriers to free-flowing thoughts and feelings), when the therapist treats the client with unconditional positive regard (i.e., he or she values the client without any qualifications, displaying an accepting attitude toward whatever the client is feeling at the moment), and when the therapist develops empathy with the client (i.e., he or she actively listens to and accurately perceives the personal feelings that the client experiences).

The development of a positive therapeutic alliance has been found to be exceedingly important to successful therapy. The ideas of genuineness, empathy, and unconditional positive regard in a nurturing relationship in which the therapist actively listens to and reflects the feelings of the client is probably the most fundamental part of contemporary psychotherapy.

Psychodynamic and humanistic therapies are recommended primarily for people suffering from generalized anxiety or mood disorders, and who desire to feel better about themselves overall.

Cognitive behavioural therapy (CBT) is a structured approach to treatment that attempts to reduce psychological disorders through systematic procedures based on cognitive and behavioural principles. CBT is based on the idea that there is a recursive link among our thoughts, our feelings, and our behaviour (Figure 11. «Cognitive Behavioural Therapy»).

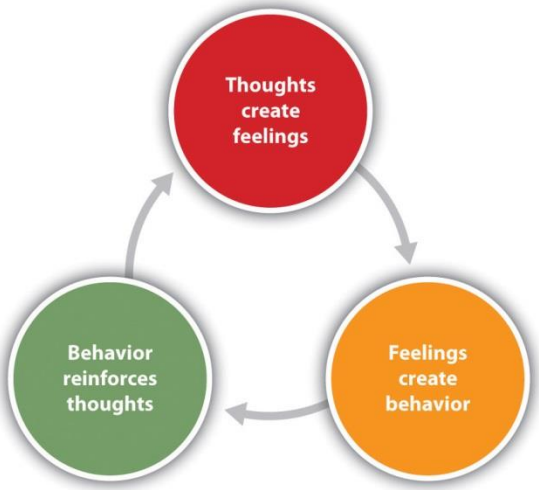


Figure 11. Cognitive Behavioural Therapy

Cognitive behavioural therapy (CBT) is based on the idea that our thoughts, feelings, and behaviour reinforce each other and that changing our thoughts or behaviour can make us feel better. *For instance, if we are feeling depressed, our negative thoughts («I am doing poorly in my chemistry class») lead to negative feelings («I feel hopeless and sad»), which then contribute to negative behaviours (e.g., lethargy, lack of interest, lack of studying). When we or other people look at the negative behaviour, the negative thoughts are reinforced and the cycle repeats itself.*

CBT is a very broad approach that is used for the treatment of a variety of problems, including mood, anxiety, personality, eating, substance abuse, attention-deficit, and psychotic disorders. CBT treats the symptoms of the disorder (the behaviours or the cognitions) and does not attempt to address the underlying issues that cause the problem. The goal is simply to stop the negative cycle by intervening to change cognition or behaviour. The client and the therapist work together to develop the goals of the therapy, the particular ways that the goals will be reached, and the timeline for reaching them. The procedures are problem-solving and action-oriented, and the client is forced to take responsibility for his or her own treatment. The client is assigned tasks to complete that will help improve the disorder and takes an active part in the therapy. The treatment usually lasts between 10 and 20 sessions. Depending on the particular disorder, some CBT treatments may be primarily behavioural in orientation, focusing on the principles of classical, operant, and observational learning, whereas other treatments are more cognitive, focused on changing negative thoughts related to the disorder. But almost all

CBT treatments use a combination of behavioural and cognitive approaches.

Behaviour therapy is psychological treatment that is based on principles of learning. The most direct approach is through operant conditioning using reward or punishment. Reinforcement may be used to teach new skills to people, such as with those with autism or schizophrenia. *If the patient has trouble dressing or grooming, then reinforcement techniques, such as providing tokens that can be exchanged for snacks, are used to reinforce appropriate behaviours such as putting on one's clothes in the morning or taking a shower at night. If the patient has trouble interacting with others, reinforcement will be used to teach the client how to respond more appropriately in public, for instance, by maintaining eye contact, smiling when appropriate, and modulating tone of voice.* As the patient practises the different techniques, the appropriate behaviours are shaped through reinforcement to allow the client to manage more complex social situations. *In some cases observational learning may also be used; the client may be asked to observe the behaviour of others who are more socially skilled to acquire appropriate behaviours. People who learn to improve their interpersonal skills through skills training may be more accepted by others and this social support may have substantial positive effects on their emotions.*

When the disorder is anxiety or phobia, then the goal of the CBT is to reduce the negative affective responses to the feared stimulus. ***Exposure therapy*** is a behavioural therapy based on the classical conditioning principle of extinction, in which people are confronted with a feared stimulus with the goal of decreasing their negative emotional responses to it. Exposure treatment can be carried out in real situations or through imagination, and it is used in the treatment of panic disorder, agoraphobia, social phobia, OCD, and post-traumatic stress disorder (PTSD). *In flooding, a client is exposed to the source of his fear all at once. An agoraphobic might be taken to a crowded shopping mall or someone with an extreme fear of heights to the top of a tall building. The assumption is that the fear will subside as the client habituates to the situation while receiving emotional support from the therapist during the stressful experience. An advantage of the flooding technique is that it is quick and often effective, but a disadvantage is that the patient may relapse after a short period of time.*

Systematic desensitization is a behavioural treatment that combines imagining or experiencing the feared object or situation with relaxation exercises. The client and the therapist work together to prepare a hierarchy of fears, starting with the least frightening, and moving to the most frightening scenario surrounding the object.

The patient then confronts the fears in a systematic manner, sometimes using his or her imagination but usually, when possible, in real life. Desensitization techniques use the principle of ***counterconditioning***, in which a second incompatible response (relaxation; e.g., through deep breathing) is conditioned to an already conditioned response (the fear response). The continued pairing of the relaxation responses with the feared stimulus as the patient works up the hierarchy gradually leads the fear response to be extinguished and the relaxation response to take its place.

Behaviour therapy works best when people directly experience the feared object. Fears of spiders are more directly habituated when the patient interacts with a real spider, and fears of flying are best extinguished when the patient gets on a real plane. But it is often difficult and expensive to create these experiences for the patient. *Recent advances in virtual reality have allowed clinicians to provide CBT in what seem like real situations to the patient. In virtual reality CBT, the therapist uses computer-generated, three-dimensional, lifelike images of the feared stimulus in a systematic desensitization program. Specially designed computer equipment, often with a head-mount display, is used to create a simulated environment. A common use is in helping patients who are experiencing PTSD return to the scene of the trauma and learn how to cope with the stress it invokes. Some of the advantages of the virtual reality treatment approach are that it is economical, the treatment session can be held in the therapist's office with no loss of time or confidentiality, the session can easily be terminated as soon as a patient feels uncomfortable, and many patients who have resisted live exposure to the object of their fears are willing to try the new virtual reality option first.*

Aversion therapy is a type of behaviour therapy in which positive punishment is used to reduce the frequency of an undesirable behaviour. An unpleasant stimulus is intentionally paired with a harmful or socially unacceptable behaviour until the behaviour becomes associated with unpleasant sensations and is hopefully reduced. *Alcoholism has long been treated with aversion therapy. In a standard approach, patients are treated at a hospital where they are administered a drug, antabuse, that makes them nauseous if they consume any alcohol. The technique works very well if the user keeps taking the drug, but unless it is combined with other approaches the patients are likely to relapse after they stop the drug.*

While behavioural approaches focus on the actions of the patient, **cognitive therapy** is a psychological treatment that helps clients identify incorrect or distorted beliefs that are contributing to

disorder. In cognitive therapy the therapist helps the patient develop new, healthier ways of thinking about themselves and about the others around them. The idea of cognitive therapy is that changing thoughts will change emotions, and that the new emotions will then influence behaviour. The goal of cognitive therapy is not necessarily to get people to think more positively but rather to think more accurately. *For instance, a person who thinks «no one cares about me» is likely to feel rejected, isolated, and lonely. If the therapist can remind the person that she has a mother or daughter who does care about her, more positive feelings will likely follow. Similarly, changing beliefs from «I have to be perfect» to «No one is always perfect – I'm doing pretty good», from «I am a terrible student» to «I am doing well in some of my courses», or from «She did that on purpose to hurt me» to «Maybe she didn't realize how important it was to me» may all be helpful.*

To this point we have considered the different approaches to psychotherapy under the assumption that a therapist will use only one approach with a given patient. But this is not the case; the most commonly practised approach to therapy is an **eclectic therapy**, an approach to treatment in which the therapist uses whichever techniques seem most useful and relevant for a given patient. *For bipolar disorder, for instance, the therapist may use both psychological skills training to help the patient cope with the severe highs and lows, but may also suggest that the patient consider biomedical drug therapies.* ***Dialectical behavioural therapy*** (DBT) is essentially a cognitive therapy, but it includes a particular emphasis on attempting to enlist the help of the patient in his or her own treatment. A dialectical behavioural therapist begins by attempting to develop a positive therapeutic alliance with the client, and then tries to encourage the patient to become part of the treatment process. In DBT the therapist aims to accept and validate the client's feelings at any given time while nonetheless informing the client that some feelings and behaviours are maladaptive, and showing the client better alternatives. The therapist will use both individual and group therapy, helping the patient work toward improving interpersonal effectiveness, emotion regulation, and distress tolerance skills.

Psychohygiene is a complex of measures to provide normal development of a person, preservation and strengthening mental health, maintenance of the most desired conditions for human mental activity.

Psychoprophylaxis is a complex of measures to prevent mental frustration and diseases (initial psychoprophylaxis), and also recurrences of the mental diseases (secondary psychoprophylaxis).

There is primary, secondary and tertiary prophylaxis. Primary prophylaxis means protection of health of future children, genetic consultations, measures directed to improvement of the women's health, organization of obstetric aid, early revealing of malformations in the new-born, medical pedagogical correction.

The secondary prophylaxis is early diagnosis, prognosis and prevention of dangerous states, early beginning of treatment, using adequate methods of correction, long supporting therapy.

Tertiary prophylaxis is a system of measures aimed at the prevention of physical inability at chronic diseases.

Psychoprophylaxy consists in the following measures:

1. Prevention of psychoviolating influences at home and at work (basis of prophylaxis of neurosis, psychopathy and some other mental pathologies).
2. Prevention of iatrogeny and didactogeny.
3. Providing with necessary treatment and psychotherapeutic care for somatic and recovering patients (attention, goodwill, etc.).
4. Individual approach to the definition of industrial amount of work after illness, regulation of working conditions and life.
5. Performance of antirecurrent therapy after illness. Besides the mentioned ones, the especially important place in psychoprophylaxis is occupied by creation of correct dietary regimen and resting time, favourable psychological atmosphere at home, medical establishment and at work, psychotherapeutic training of all medical stuff and appropriate approach to the patients.

Social labour rehabilitation includes a complex of measures on maintenance and restoration of social communications and professional skills of the patient after illness. Drug treatment (supporting therapy) is also included.

The task of rehabilitation is to adapt the patient to former or varied working and home environment by training of the preserved abilities of the patient.

Labour rehabilitation restores work capacity of the patient with the help of drugs, physiotherapeutic procedures.

Social rehabilitation is creation of the appropriate environment in family (improvement of living conditions, financial support), restoration of the contacts with others, restoration of the social status of the patient.

Video to view

https://psu.pb.unizin.org/intropsych/chapter/chapter-9-treating-psychological-disorders/

https://www.apa.org/topics/psychotherapy-works

https://psychcentral.com/psychotherapy#Getting-Started-in-Psychotherapy

https://www.youtube.com/watch?v=6nEL44QkL9w

https://www.youtube.com/watch?v=Otio4pzeAo4

Control questions

1. Summarize the ways that scientists evaluate the effectiveness of psychological, behavioural, and community service approaches to preventing and reducing disorders.
2. Summarize which types of therapy are most effective for which disorders.
3. Explain the behavioural and cognitive aspects of cognitive-behavioural therapy and how CBT is used to reduce psychological disorders.
4. Explain the advantages of group therapy and self-help groups for treating disorder.
5. Evaluate the procedures and goals of community mental health services.
6. Definition of the concept of psychotherapy, its purpose and main tasks.
7. Characteristics of general factors of psychotherapy.
8. Characteristics of the stages of psychotherapy.
9. Indications and contraindications to the use of psychotherapeutic techniques.
10. Disclosure of the essence of psychoanalytic psychotherapy. Features of cognitive-behavioral psychotherapy. Features of individual and group psychotherapy.
11. Outline and differentiate the psychodynamic, humanistic, behavioural, and cognitive approaches to psychotherapy.
12. Define the concept of psychohygiene, its types and features.
13. Psychoprophylaxis, types and their characteristics.

Contents

Електронне навчальне видання

Коляда Наталія Вікторівна

МЕДИЧНА ПСИХОЛОГІЯ ТА ПРОФЕСІЙНЕ СПІЛКУВАННЯ

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для всіх освітніх програм студентів бакалаврів, аспірантів, магістрів денної форми навчання

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