Dear Students,

This material has been created to help you in learning the psychology topics needed for the 2nd semester MTO and for the psychiatry exams. This is not a compulsory learning material, but a supplementary text to help you understand the psychological topics. For the MTO and for the exams you have to learn from the textbook, which is the Introductory Textbook of Psychiatry (6th Edition by Donald W. Black and Nancy C. Andreasen).

**3. Transference and counter-transference in general medical practice**

**Transference**: the process during which the unconscious feelings, desires, impulses and attitudes towards the people (mainly parents and siblings) who have dominant significance in childhood become actualized in a similar type of relation.

These types of relations are for instance the respect of authority, incest affection, rivalry, fear from authority, opposition to the authoritarian person or jealousy of siblings.

The attitude to parents can easily be actualized in the physician – patient, teacher – student, psychotherapist – patient relationship or in the relationship between the boss and the employee in everyday life.

The person is usually not aware of the repetition, and they consider it as something belonging to the actual relationship.

If we put the transferences in two groups, we can make a distinction between positive and negative ones. In the therapeutic practice we use the positive ones only in favour of medical treatment (they can't be spread to private life), but the negative ones cause difficulties, so their reduction based on the patient's insight is essential. In the physician – patient relationship (except for psychiatry) there is no possibility for interpretation, so the physician has to be disposed towards the patient with great patience in order to increase their adherence (acceptance, concordance, persistence and compliance).

**Counter-transference**: the totality of the unconscious reactions of the physician, teacher, therapist, etc. in connection with their patient, student, etc. and especially with their transference. During this they have to make it clear for themselves whether their feelings, reactions, attitudes are adequate to the person's manifestations or their own unelaborated, more or less unconscious conflicts distort them. In the latter case the physician's self-knowledge work is essential so that the relationship with the patient would be more untroubled, hereby the medical treatment would be more efficient.

**4. Defence mechanisms**

Defence mechanisms refer to processes that are used to protect the self from experiences and impulses that are unpleasant, painful, unacceptable or may cause anxiety. Due to these mechanisms one can control their instinctual impulses, feelings and behaviour.

Defence mechanisms play a double role: they can keep thoughts from becoming conscious and they control instinctual impulses.

Defence mechanisms are operated by the central part of one's personality and are based on the reality principle. Paradoxically, defence mechanisms break this principle, since they result in the distortion of the inner and outer reality. They can be considered as the necessary evil. They are essential, because in order to maintain our psychological integrity, we unconsciously do not sense and feel everything realistically.

There is no consensus on the exact number of these mechanisms. If one does not meet the above-mentioned criteria, it should not be considered as defence mechanism. For example, acting out is an uncontrolled, impulsive, heteroaggressive or autoaggressive act that although it can stay unconscious, it does not affect instinctual impulses, experiences or behaviour.

Defence mechanisms can be divided into two main groups: immature and mature defences. Immature defence mechanisms appear in the earliest stage of development, and they get fixated by fundamental frustrations of basic needs that are repeatedly not met. Defence mechanisms are the following: splitting, denial, projection, annulation, idealization, devaluation and projective identification. Mature defence mechanisms function in more developed states of the self, which are for example repression, displacement, reaction formation, isolation, rationalisation, compensation or sublimation.

There are no such things as complete defence mechanisms, since the countered contents remain as parts of the psychological dynamics and they try to manifest. But since their way to consciousness is blocked, they manifest in a roundabout way: as symptoms. We can always find one or more defence mechanism behind a psychogenic symptom. For example, in the case of paranoia, projection has a major role or in the case of hysteria, repression is dominant, while in the case of compulsive symptoms, isolation play the major role.

**5. Flooding technique and systematic desensitization**

**Flooding technique** and **systematic desensitization** are **exposure techniques** used in behavioural therapy. The word exposure refers to "placing" patients into situations that provoke their symptoms, thus confronting them in a controlled way. This confrontation with the situation that provokes anxiety can happen in imagination or in real life, step by step or immediately.

**Systematic desensitization:**

Systematic desensitization is a classic technique in behavioural therapy. It was developed by Joseph Wolpe in the 1950s. It is based on the conception that the situation that provokes anxiety is linked to an opposite activity, to relaxation. Due to this technique, the anxiety-provoking potential of the situation gradually decreases. It was first used on patients with phobia, and even today they remained the main target group.

Steps of desensitization:

1. Relaxation: Usually Jacobson's progressive muscle relaxation is taught to the patients, Patients are asked to practise the relaxation techniques targeting different muscle groups between the sessions.
2. Establishing anxiety stimulus hierarchy: First, those situations that cause anxiety for the patient are collected, after that these are grouped into topics (for example: fear of talking or situations on the street, etc.). Lastly, the situations in each topic are ranked according to the severity of anxiety. Patients usually grade the most intense situation with 100. If it is graded 0, it means that in the situation the patient can remain calm.
3. Practicing desensitization:
    - relaxation
    - exposure of the mildest stimulus
    - another relaxation
    - imagination of the next situation
    - relaxation, activation of the resting state

**Flooding technique**

Flooding technique is also referred as in vivo exposure therapy. As opposed to desensitisation, the patient is faced with the most severe anxiety-evoking situation and the confrontation itself is usually long-lasting. The latter is needed to avoid the usual anxiety-evading reactions, which means that the patient is not let to step out of the situation, thus they need to face their own anxiety. This lasts until the patient experiences that despite of their expectations the previously assumed disaster would not happen. A major difference between systematic desensitisation and flooding is that no technique like relaxation or hypnosis is used to decrease the anxiety. Flooding can be conducted in imagination (for example the patient imagines laying in a bed with snakes that are on their body) or in reality (patients with

compulsive disorder have to live in a nomadic camp where they have to face with anxiety-evoking stimuli, thus that they cannot avoid them).

## 6. Basic concepts of cognitive psychology

Cognitive psychology was born in the 1950s. Since then, in line with the contemporary historical and social changes, information technology developed rapidly, which the theoretical concepts of cognitive psychology are closely connected to. The cognitive approach basically means the "science of knowledge", and its main theme is **information processing**. This psychological trend analyses the mental and emotional processes that lay behind conscious behaviour. Its key concept is that human behaviour can only be understood by studying mental processes and these processes can be examined objectively.

Major themes of cognitive psychology are **learning, attention, memory, intelligence, mental representations[1], perception and language**. Professionals use objective tests (like WAIS for measuring performance) to measure these constructs, with which the tested person's neurocognitive status can be assessed thoroughly.

The therapeutic method of cognitive psychology is **cognitive therapy**, which is often coupled with **behaviour therapy**. This is what common knowledge knows as **cognitive behaviour therapy**. This therapeutic trend is based on the basic principles of behaviour theory, and its key concept is that maladaptive cognition and cognitive distortions have a principal role in the emergence of psychological disorders. Thus, emotions and behaviour are directed by the way people structure and interpret their environment. The cognitive theory of psychological disorders has three main elements, which are: **negative automatic thoughts**, dysfunctional attitudes and the long-term stability of maladaptive schemas. Negative automatic thoughts appear suddenly, and these are unique and have distorted content (e.g. "People would never accept me"). **Dysfunctional attitudes** make you interpret a situation by distorted assumptions; however, they do not modify behaviour consciously, so they can only be changed slowly (e.g. "Only if I fulfil their expectations would they accept me"). The long-term stability of **maladaptive schemas** is connected to the deeper structures of personality. They form in early childhood and people tend to handle these as absolute truths. These schemas are rigid and hard to change (e.g. "Nobody loves me"). The goal of therapy is to correct these false thoughts, assumptions and schemas.

[1] **Mental representations** are hypothetical internal cognitive symbols that represent external reality.

## 7. Humanistic psychology and the principles of Rogers

Person-centred or client-centred therapy is often called as the "third force" after psychoanalysis and behaviourism. It is the centrepiece of humanistic psychology.

According **to humanistic psychology**, every person is unique and unrepeatable. Individuals live consciously, they make decisions and choices (so they are not defenceless against unconscious impulses). Their behaviour is goal-oriented, and they fundamentally strive for personal growth and development. If this process of self-fulfilment and self-actualization faces difficulties, psychopathological symptoms can occur.

**Person-centred therapy** is based on the principles of humanistic psychology. It was founded by Carl **Rogers** and started in the 1940s from the United States of America. In Hungary, it only appeared in the 1960s and got popular in the 80s after Rogers visited Szeged several times.

Starting off of the individuals described by humanistic psychology, the main goal of person-centred therapy is to explore and remove the barriers that stops the client from growing to help them work on their own development. During therapy the client come to recognize and remove the possible barriers that keep them from personal growing. Clients learns to differentiate their feelings, to evaluate themselves realistically, to accept themselves (to build a realistic self-image), to be open to new experiences and to try new behaviours. During therapy, the main focus is on "here and now". Therapist and clients work with feelings, reactions and behaviours that appear in the presence, they do not reveal or interpret the past. The therapist assures an accepting, non-judgmental environment and relationship, and is genuine and congruent in order to create the possibility of development and progress.

The three **Rogerian principles**:

- empathy (the therapist understands and appreciates the client's way of thinking and current emotional state)
- unconditional acceptance of the client
- congruence and genuineness of the therapist (being congruent with oneself and coherent).

Nowadays, this approach does not only appear in psychotherapy, but also in other helping professions like counselling, pedagogy, in the work of a pastor, etc.

*Indication:*

Emotional tension, disorders of the self-concept or self-experience, difficulties with integration, difficulties in coping with stress, problems with the way of living or in reactive states. In case of psychiatric diagnoses, it can be used in mood disorder, anxiety disorders, psychosomatic disorders, behavioural disorder or in certain personality disorders. It can also be used in the case of compensated stages of schizophrenia as a tool for enhancing rehabilitation.

*Contraindications:*
According to researchers, there is no absolute contraindication.
This method can be combined well with other therapeutic techniques.

**8. Crisis (normative, accidental)**
(The topic is deliberately longer, because you may encounter such a situation anytime during your medical practice.)
The word *crisis* means decision, turn or judgment.
**Caplan** summarized the principles of crisis theory **in the early 1970s**, and he also created the most widespread **definition** of crisis. According to this definition **crisis** is:

- a critical situation,
- a duration of the psychological imbalance of the individual,
- who had to face dangerous circumstances,
- which could be major problems to them *(!!Therefore, almost any serious illness can provoke a crisis!!*)
- but the individual is not able to avoid or solve these
- with their usual problem-solving strategies and capabilities.

**Consequence: psychological imbalance**
It does matter whether the individuals get out of the difficult situation successfully (creative crisis) or damaged (negative crisis).
**Crisis have 2 types:**
**1) normative/normal crisis** (Erikson – developmental or maturation crisis)
Normative crises arise from changes in normal life processes. Personality development goes through predetermined phases or stages (early childhood, adolescence, young adulthood, middle age and elderly age), in which individuals have to face problems or crises characteristic in the given life stage.

The key to the next life stage is to find the solution for the given life task or problem: its absence hinders the success of solving the problems of later life stages.
These tasks can be found at the turning points of particular life cycles: adolescent crisis, pregnancy, middle-age, retirement, etc.
(As a more detailed example: in the **adolescence, searching and creating the identity** is the task of this life stage. The failed solution in this case leads to role diffusion. Answering the question of adolescent **identity crisis** (i.e. "Who am I?") leads to the development of identity. If the person is not able to find the answer to this question, then the confusion, the search for self-identity becomes permanent, and the young person cannot move on to the next stage of life, which involves the problems that **young adults** have to solve. In this stage, the young adult should develop his/her ability to be **intimate**, and a condition to this is the already existing identity. However, if the identity has not developed yet, the person would be shut-in and unable to pay attention to the others, which prevents the development of intimacy. Then the person has to face the feelings of loneliness and isolation.)

**2) accidental/random crisis**

In these cases, the threatening circumstance is usually an unexpected event from *outside,* such as natural disasters, breakups, divorce crises, becoming unemployed, grief, existential falls, loss of emotionally important people or significant things = "object loss" or (seemingly) life-threatening diseases, etc.

According to the theory of the **crisis matrix** developed by Jacobson, **if the developmental and accidental crisis coincide, it makes the person more vulnerable than usual**.

From a medical point of view, it is important to think about this when we work with a patient, who is between two life stages. In these cases, a serious illness is more likely to tilt the psychological balance and worsen several functions like attention, the ability to cooperate, etc.

According to Jacobson, the crisis **lasts up to six to eight weeks.**

The period of the crisis begins with the trigger effect, which takes minutes, perhaps hours. The period of fear and unrest lasts for days, and the period of adaptation is a process that lasts for weeks. Finally, the recovering balance lasts for the following months.

Stages of crisis:

1st phase is **preparedness**: This phase is characterized by a strong motivation to find solution, where vegetative symptoms and psychic functions get in focus.

2nd phase is **struggle**: This phase is characterized by attempts and seeking ways. As the strategy fails, the person becomes hastier, tense, impulsive and starts to lose reality. The consequences are frustration, disorganization and constriction.

3rd phase is **haste**: The person is driven by emotions and impulses, try to seek other ways to solve the problem and he can become convulsive and constricted. The reality-control further decreases, impulsivity and aggressive acts are typical. It is a threatening state, but it still could be resolved.

4th phase is **collapse**: The adaptability fails completely; hopelessness, feeling of desperation, dangerous constriction, escalating regression and destructive (self-destructive) tendencies characterize this stage.

Possible outcomes of the crisis:

a) **solution**

b) **compromise**, thus **ineffective solution**

c) **collapse**.

a) The "creative crisis" is the possibility of reaching a more advanced state of psychical balance.

This is the most beneficial outcome of a crisis. In this case, the origin of the crisis might dissolve spontaneously, or the person resolves the situation with the help of their own personality and/or external sources. With this outcome, the crisis enlarges the repertoire of coping strategies, strengthen the personality, which results in a more advanced developmental stage that may increase self-esteem.

*b) Find the balance in the dysfunctional functioning*

The person adjusts to an earlier unacceptable life situation bearing values the person cannot accept. That is why a new crisis can emerge due to the repetitive compulsion to decide.

Its symptoms can be: adjustment disorder, anxiety, posttraumatic symptoms, depression, dependence (alcohol, medication and/or drug), psychosomatic disorders (high blood pressure or irritable bowel syndrome). It is important to ask the time when the disease appeared.

*c) The two main types of collapse* are psychosis and suicide.

**What are the characteristics of a person in crisis?**

- The attention is mainly focused on the problem or on a smaller detail of the main problem.

- The individual seems strange: on one hand the person wonders about the crises, on its explanations and solutions, on the other hand the individual can look anguished and can be tormented by fears and anxiety.
- Emotional reactions can barely be controlled, and the person can be very impulsive.
- Everyday functioning has a low intensity.
- The person's relationships change and can judge people according to the help received from them.
- The person can be influenced more easily, could become dependent to somebody who helps them, or can fall into deep regression.
- The system of orientation collapses; there are no future plans for someone in crisis.
- The person knows a lot about the problem but cannot organise this knowledge.

Supporting environment, family, friends or a person who listens and helps can **mean a significant help** for someone in crisis.

Crisis hotlines are available to call in these cases. They are specialised on crisis and these numbers usually can be called for free for everybody who is in a tough life situation.

In person, one can go to crisis ambulance services, institutes of mental health or family services, psychologists, psychiatrists etc.

During a whole lifetime, everyone faces crises, but to obtain a constructive solution it is always advisory to look for professional help or seek help from friends.

## 9. Rules of psychotherapy and its principles

### Definition of psychotherapy

Psychotherapy is defined as a specialised treatment of mental disorders with psychological methods led by a professional. Specialised treatment means a way of treatment based on interpersonal relationship that has a predetermined purpose, methodology and indication. Every segment of this definition bears importance.

### Theoretical background

There no unified theoretical background, since each method has its own. The development of a psychotherapeutic method depends on the number of fields where the theoretical background is developed. The main fields are the following: theory of personality and psychological functioning (psychology), theory of development: highlighting the role of childhood relationships, theory of illness, psychopathology, theory of therapeutic effect, therapeutic situation, theory of relationship and processes, theory of therapeutic method,

social psychology and interpersonal relationships, group, environment/context, cultural anthropology, systems theory and theory of complexity.

**Therapeutic environment and therapeutic process**

Key concepts are the therapeutic situation, the therapy session, the form of therapy, the therapy contract and the therapeutic framework.

The therapeutic situation in psychotherapy describes that the therapy has a predefined goal (healing), and it has somewhat different roles as opposed to an average doctor-patient relationship. It does not only include the goal, context and set-up and therapeutic form, but also the used method and the patient's and therapist's work process.

Psychotherapy takes place in sessions. Therapeutic sessions have a predefined time limitation that has been set in practice. It is important that the sessions are held in regular intervals, at the same place and time without any distraction. These factors cannot be changed arbitrarily. Each session has a typical inner course and relationship dynamics.

**The "quantity" of psychotherapy – time factor**

In case of psychotherapy, we think about therapeutic method and relationship quantity at the same time. The latter means the amount of therapy sessions, based on which we differentiate really short (1-4 sessions), short (10-30 sessions), medium (30-100 sessions) and long (above 100 sessions) therapies.

**The course of change: the therapeutic process**

The therapeutic relationship follows this scheme: establishing contact; examination; preparation of therapy; agreement (setting up the therapy contract); introductory stage; main stage; closure; detachment; control; relationship after therapy.

**Characteristic of indication: goal of therapy and therapy contract**

The therapy contract lays down the main rules that are necessary for healing. It is usually an oral agreement between the patient and the therapist, which sets the goal of the therapy, the tasks of the patient, the form of therapy (for example free linking of verbal messages or confidentiality in group psychotherapy), function of the therapist (for example facilitating understanding) and the circumstances and formal characteristic of therapy (e.g. the intensity, place, expenses and number of sessions).

The therapeutic framework ensures compliance with those factors that were set in the therapy contract. The therapeutic framework and the therapeutic method provide the therapeutic situation in which the unique psychological process (i.e. the patient's change) can start: this is called the therapeutic process.

## 10. Progressive relaxation, autogenic training and biofeedback

The method of **autogenic training** was developed by Schultz in the 1920s. He observed that patients' anxiety and inner tension decreased following the use of suggestions on different body parts. Autogenic training contains steps that are built on each other. These steps focus on the relaxation of different body parts and organ systems. The basic steps of the training are the following: relaxation of the muscles of the limbs, creating the resting tone of the cardiac activity, breathing, visceral organs and vasomotor system of the head. The therapist teaches the method to the patient, so the patient is able to use this technique alone and anytime. This is not only useful for psychological disorders, but can also be used for preventive purposes, healthcare self-knowledge or self-improvement.

The condition of learning the techniques is based on practicing at home between sessions and writing a so-called practice journal, which is discussed with the therapist. This helps the psychic processes to become conscious and integrated. Due to therapy, anxiety symptoms decrease, self-knowledge, body awareness, concentration and cognitive abilities improve. It has a good impact on health and on somatic conditions (due to the resting tone of the body), and it also helps to cope with stress.

This relaxed state can create the basis of additional work with guided mental imagery (Katathym Imaginative Therapy) or with symbols (symbol therapy).

### Biofeedback

By using special measuring instruments, patients get feedback on the level of their relaxed state. This helps to recognize anxiety and stress, or to learn about relaxed state. For example, measuring pulse, blood pressure, body temperature, galvanic skin response (since stress and anxiety increase sweating), EMG or EEG can be measured.

### Progressive relaxation

This method is also based on the fact that muscles get tense due to stress and anxiety. If we relax them consciously, our psychological state can also change. During progressive relaxation, one focuses on the tension of a specific muscle group. After relaxation, one focuses on the feeling of loosening of that muscle group. Progressive means that we gradually extend this method of tension and relaxation to the whole body in a certain order, repeating the same process. This method also helps to recognize which muscle is tensed and how the body responds to chronic stress. (Sometimes during our daily routine, we do not even recognize that our level of stress has increased or became permanent, or we may not see the connection between existing symptoms and stress. It is really common that when a headache,

backache or neckache occurs, it is advised to take stress-induced, lasting muscle tension into account.)

*Contraindications*: being prone to regression, borderline and psychotic state, obsessive disorder, hypochondria or paranoid symptoms.

It can be well *combined* with other psychotherapeutic methods (for example behaviour therapy), and it can also be helpful in somatic interventions to release fear or to use suggestive elements.

**11. Disciplines of the psychodynamic approach**

The psychodynamic approach is based on the theories of **Sigmund Freud**. He created the **topographical model** of the psyche, which claims that constructs of the mind have three domains: the **conscious**, the **preconscious**, and the **unconscious**. The conscious mind contains all thoughts and ideas that are consciously in the mind. The contents of the preconscious mind are out of the realm of conscious contents, but they can easily become conscious. However, the contents of the unconscious mind, which is the most important domain from the perspective of the personality, cannot become conscious, because certain forces of the psyche prevent it to happen.

Freud also created the **structural model of personality**, which is generally accepted among the followers of the psychodynamic school. According to this model, the personality is composed of three elements that constantly interact with each other, and this results in complex human behaviour. The contents of the **id** are psychological forms of pleasure seeking, they are unconscious and partly genetic, partly acquired and repressed. The id acts according to the pleasure principle, it aims to satisfy every need and desire immediately. It aims to extinguish every tension created by the unfulfilled instinctual needs, so it often has a conflict with the other two domains, the ego and the superego. The superego contains internalized moral and social norms and prohibitions, so one of its main functions is acting as a conscience. The ego depends on the instinctual needs of the id, the commands of the superego and on the circumstances of reality. It acts as a connecting factor of the psyche and acts according to the reality principle. It has a major role in regulating behaviour and maintaining a healthy psychological functioning.

The psychodynamic approach is based on the following additional principles:

**Psychic determinism:** According to this theory, there are no spontaneous mental processes, because all of them are determined by causes and effects, hence they can be known. The efficacy and motivation of human behaviour comes from the instincts. The motivation and

drive of human behaviour are determined by intrapsychic factors like inner impulses, needs, desires, and intrapsychic conflicts. The external social factors affect in an indirect, secondary way. These intrapsychic factors form the reasons behind manifested, observable behaviour. Therefore, clinical examination, treatment and researches need to focus on these intrapsychic mechanisms, even if they cannot be observed directly.

**Psychogenetic principle:** A fundamental factor in the development of behaviour and its disorders is the frustration or excessive satisfaction of childhood needs. Therefore parents, siblings (people in positions of authority) and the environment have a high impact on people's life. Events of the past (of early childhood) have higher importance than factors in the present.

## 12. Comparison of clinical psychology and health psychology, their comparison with associated fields

Psychology is a human science field that is based on bioethical research methodology. In order to be licensed to work in the healthcare system, psychologists need to complete a medical postgraduate training (which takes 3 or 4 years) in addition to their psychology MA qualification. Two types of medical postgraduate trainings are available in Hungary: clinical psychology and health psychology.

There are many overlaps and similarities between the work of these two fields. Both clinical psychologists and health psychologists take part in the treatment of somatic and mental illnesses. They often provide individual or group therapies for inpatients or outpatients.

One of the most important differences among the two fields is their different approach to patient care. Health psychology basically focuses on the support of coping with illnesses and prevention, while clinical psychology has an important role in the diagnosis and therapy of mental illnesses. With the help of different psychodiagnostic measures, clinical psychologists assess the persons' thinking and behaviour style and examine other additional aspects, such as the individuals' interests, personal values, attitudes, perception style, intellectual abilities and psychodynamics. In order to fulfil these diagnostic purposes, clinical psychologists usually use some of the following tests: projective personality tests (e.g. Rorschach Test, Szondi Test or Thematic Apperception Test); objective personality tests, like the Structured Clinical Interview (SCID) or the self-administered MMPI test; performance tests, such as intelligence tests (WAIS-III, WAIS-IV); and different symptom-rating scales (e.g. the BDI).

Psychodiagnostic examination can be performed by clinical psychologists and clinical psychologist trainees as well but only the clinical psychologist has the qualification to write expert opinions. The work of clinical or health psychologists and physicians (psychiatrists) complement each other. Except for the writing of expert opinions (which is the competence of clinical psychologists), both health and clinical psychologists can carry out shorter individual or group therapies. In somatic departments, duties of physicians and psychologists are usually better separated: physicians carry out pharmacotherapy, while health psychologists lead psychotherapeutic treatment. In psychiatric departments, psychiatrists often provide psychotherapeutic treatment besides pharmacotherapy.

## 13. Personality disorders (PD)

Definition

Personality can be defined as the set of an individual's observable behaviour and subjective experience. Thus, a person's description includes both social and private aspects. Personality disorder refers to the endurance of maladaptive patterns of behaviour and experience, which deviates from those accepted by the individual's culture. Personality disorders are common and chronic psychiatric illnesses. The prevalence of personality disorders ranges around 10% to 20% in general population. Individuals with personality disorders often reject psychiatric treatment and deny their problems. Behavioural disorders associated to personality disorders usually occur following puberty. As age progresses, they can ingrain and cause lifestyle mistakes that are difficult to correct. Because of this, there is the following maxim, which highlights that the diagnosis of personality disorders can be seen from the individuals' anamnesis; as opposed to other psychiatric illnesses, where mostly the patients' symptoms and complaints lead to the diagnosis. People with personality disorders have a higher risk for having lifestyle problems, as indicated below: the number of divorces is higher among them; they are more likely to become unemployed and homeless; child abuse is more common in this group; they become victims of accidents more frequently; they are hospitalized more often; 70% of perpetrators of criminal acts have personality disorders; they commit self-destructive behaviour more often and 60 to 70% of alcohol-dependents and 70 to 90% of drug addicts suffer from personality disorders.

History

Personality disorder was originally called psychopathy, and always meant some kind of behavioural disorder. Important authors with their theories about personality disorders are listed: Hippocrates differentiated four temperament types; Pinel described mania without delusion (manie sans delire) in 1801; Prichard wrote about moral insanity (insania moralis) in 1837; Freud and Abraham thought that character pathologies are caused by fixations during psychosexual development; Schneider categorized psychopathic personalities in 1934; Cleckley described the characteristics of antisocial personality (by using the term 'psychopathy') and finally: the term antisocial personality disorder have been used since the release of DSM-III (1968).

## Classification

Since the release of the DSM-III, three personality disorder clusters have been differentiated: cluster A including odd or eccentric disorders (paranoid PD, schizoid PD and schizotypal PD); cluster B including dramatic disorders (borderline PD, histrionic PD, narcissistic PD and antisocial PD) and cluster C including anxious disorders (avoidant PD, dependent PD and obsessive-compulsive PD).

There is an overlap between the currently used diagnostic manuals: the ICD-10 and the DSM-5. However, the DSM-5 additionally differentiates personality changes due to another medical condition (e.g. due to frontal lobe damage) and describes an additional category: other specified personality disorder.

Besides clinical examination, the following psychodiagnostic tools can help to identify the correct diagnosis: the Rorschach test, the Minnesota Multiphasic Personality Inventory (MMPI), the Temperament and Character Inventory (TCI), the Szondi Test, the Thematic Apperception Test (TAT) and further drawing tests and self-report questionnaires.

## Aetiology

The role of genetic, psychological and biological factors is not specific in personality disorders. In specific cases, the interaction of these may provide the actual etiopathogenesis of the disease. The bio-psycho-social model summarizes this interactional pattern.

It should be noted that besides the psychodynamic conception of personality disorders, Cloninger's psychobiological model of personality development has also been validated recently.

## Therapeutic possibilities

Since maladaptive behaviour in personality disorders are partly of biological origin and some of them have psychosocial origins from early stages of personality development, these patients' therapies are longer, and they often have only a moderate effect. Possible psychotherapeutic interventions are the following: classical psychoanalysis and modified psychodynamic therapies, group therapies, socio-therapies and cognitive-behavioural therapies. Pharmacological treatment can also have a role in the therapy of personality disorders.

## 14. Burn-out and its prevention

In 1974, Freudenberger was the first to describe the term burnout and he thought that this syndrome develops due to emotional burden and stress, it also includes physical, emotional and mental exhaustion, feelings of hopelessness and incompetence, the loss of aims and ideals and negative attitudes towards the self, work and other people.

Maslach and Jackson modified this definition in 1988 and differentiated 3 dimensions of burnout: emotional exhaustion, depersonalization and reduced personal efficacy. According to their approach, burnout is the result of stress experienced in burdening interpersonal relationships. In light of this, it is understandable that burnout is especially common among helping professionals, but also it can occur in other professions as well.

Cherniss developed the model of the development of burnout syndrome: the first stage involves perceived stress; in the second stage, physical and emotional fatigue is present; and in the third stage defence mechanisms can be observed, such as cynicism, emotional withdrawal and separation.

Symptoms of burnout are similar to depression; however, they can be differentiated. In case of burnout, individuals feel the constant presence of physical, emotional and mental exhaustion, they regard work-related problems as hardly solvable and they do not notice their need for help. Gradually, this hopelessness spreads to other areas of life and affects self-perception negatively. Depression is usually intrapersonal, meaning that it develops due to intrapersonal factors; while burnout is based on interpersonal factors, since it is defined by the special characteristics of work-related interactions with others (e.g. colleagues, clients and patients). Burnout can be regarded as the result of the unresolved mismatch between the expectations of the workplace and the individual, with which the individual cannot cope with, so that can lead to a self-sustaining process.

The prevalence of burnout is around 15 to 20% in general population, but similar ratios can be found among university students (especially among medical students). Burnout is common among young people and career entrants. In their case, marriage and social networks can play protective roles. Self-esteem, self-awareness, positive thinking and religion are also proved to be important protective factors.

Different burnout prevention programs are available in the universities: career-socialization and self-awareness trainings. Besides self-awareness trainings, communication and stress management trainings (e.g. autogenic training), separation of work-life and private life (e.g. do not get involved in patients' life), case-presentation groups (e.g. Balint group) and preparation for role conflicts (between family vs. work) can be effective against burnout in case of employees.

## 15. Definition of symptom scales and their comparison with projective and performance tests

This topic is closely connected to the following topics: No. 16, 17, 18, 20

You can find testing situations and test in every aspect of life (like language exams, assessment of colour vision, medical examinations, etc.). Psychological tests are scientifically developed testing tools, which are made to accurately assess human abilities, performance, features, psychological and neuropsychological status.

Questionnaires that measure only one dimension are symptom scales that assess concrete symptoms. Such scales exist for measuring affective disorders (Hamilton, Beck or Zung), symptoms of anxiety (e.g. the Hamilton Anxiety Scale, the STAI, the Yale-Brown Obsessive-Compulsive Scale) or symptoms if schizophrenia (the Positive and Negative Syndrome Scale).

Projective tests are personality tests that cannot be evaluated by the existence of a particular symptom (like in case of symptom scales), nor can they be evaluated by answering correctly or incorrectly (like in the case of performance tests). The essence of projective tests is that the deeper structures of personality, its unconscious motivations, defence mechanisms and conflicts cannot be explored by direct queries. During these tests, the tested person should speak about stimuli that are difficult to determine. The basis of the working of these tests is

that an ambiguous or "multi-ambiguous" stimulus is presented to the tested person who give meaning and interpret this stimulus by projecting their unconscious psychical content into it. By evaluating the answers one gives, clinicians can deduce the overall mechanism of the person's psyche. The most notable projective tests are the Rorschach Test, the Thematic apperception test and the Szondi Test.

Performance tests measure certain abilities/skills, groups of abilities/skills or functions. Performance tests are the WAIS IQ Test, the Raven's Progressive Matrices Test or the Addenbrooke's Cognitive Examination (see topic No. 18, 20).

**16. The Hamilton Depression Scale (HAM-D) and the Beck Depression Inventory (BDI)**

The HAM-D and the BDI measure the severity of depressive symptoms; thus, they are not diagnostic tools. Their results reflect the actual state of the individuals; therefore, repeated assessment of them allows the follow-up of patients' status.

The HAM-D is a semi-structured interview, which means that the interviewer asks questions based on a predefined set of criteria and scores the actual severity of depressive symptoms according to the patient's answers. The original version was developed by Max Hamilton in 1960. It contains 21 items (of which 17 items are rated). Points between 0-7 represent the normal range. Scores above 7 indicate mild (8-13), moderate (14-18), severe (18-22) or very severe (>22 points) depressive symptoms. Items cover the following areas: mood, feelings of guilt, suicide ideation, sleeping disturbances, agitation or psychomotor retardation, anxiety, weight changes and somatic symptoms.

The BDI is a self-report symptom-rating scale. Its most frequently used version contains 21 items. Aaron T. Beck was the first to describe depression from a cognitive perspective. He developed the first version of BDI in accordance with his theory in 1961. We can find 21 items, each with a set of at least four possible answers describing the levels of severity of the given depressive symptom. The responder should choose one from these statements that best describes their actual state. Each item can be scored from 0 to 3 according to the severity of the given symptom. Points between 0-13 are represent the normal range. Scores above 13 imply mild (14-19), moderate (20-28) or severe (>29 points) depressive symptoms. The second and the ninth item aim to assess the risk of suicidal behaviour: the former one asks about feelings of hopelessness and the latter one measures suicidal thoughts.

The HAM-D is regarded to be more objective, since the BDI is a self-report questionnaire reflecting on the responder's subjective feelings or manipulative intention.

### 17. Spielberger's State and Trait Anxiety Inventory (STAI)

The STAI is a frequently used self-report symptom-rating scale in clinical practice detecting the level of anxiety. This inventory differentiates two types of anxiety: state and trait anxiety. Since trait anxiety reflects on an individual's relatively more stable disposition of anxiety, it can be interpreted as a personality trait ("How do you generally feel?"). The state anxiety scale indicates the respondent's actual level of anxiety ("How do you feel right now?").

The STAI is a 40-item questionnaire. Items can be rated on a 4-point Likert-scale based on the respondents' level of agreement with the statements. The STAI contains reversed items as well, which should be recoded into reversed values when interpreting test-results.

### 18. Wechsler's Adult Intelligence Scale (WAIS – IV) and the Raven Matrices

Intelligence can be defined in many ways. According to Stern, intelligence is the ability to cope with new situations, whilst Wechsler regarded it as a global ability that allows to act purposefully, think rationally and deal with our environment effectively.

The WAIS is the most widely used intelligence test for adults in the world. Standardization of this test has been conducted in many countries including Hungary. Wechsler also developed an intelligence test for children (Wechsler Intelligence Scale for Children, WISC).

The WAIS-III has a two-factor structure, consisting of two subscales: verbal and performance scales containing 5-5 subtests. Subtests get progressively harder.

Verbal subtests measure general knowledge, understanding of situations, verbal and numerical short-term memory, calculation skills and comparison skills.

The *digit symbol – coding* task is one of the performance subtests of the WAIS-III, during which participants have to copy predefined symbols paired with numbers within 90 seconds. During the *picture completion* task, the participant should identify the missing parts of different pictures. In the *picture arrangement subtest*, participants should chronologically rearrange pictures related to each other. In the *block design* task, participants work within a specified time limit in order to arrange red-and-white blocks to recreate a design they were

shown. Finally: mixed parts of three figures should be pieced together in the *object assembly* test. Figure 1 shows which abilities are needed for the different subtests.

| | | **Subtests** | **What they measure** |
|---|---|---|---|
| **Verbal** | 1. | Information | General acquired knowledge |
| | 2. | Comprehension | Ability to evaluate and use their previously acquired experiences |
| | 3. | Digit span | Attention, short-term memory, concentration skills |
| | 4. | Arithmetic | Intellectual speed, numerical thinking abilities |
| | 5. | Similarities | Abstract thinking |
| **Performance** | 6. | Digit symbol – coding | Association and psychomotor speed, visuomotor coordination |
| | 7. | Picture arrangement | Understanding of the situation, visual system-recognition |
| | 8. | Picture completion | Visual figure recognition and identification, conceptualization |
| | 9. | Block design | Analyzation, synthetization |
| | 10. | Object assembly | Thinking style, combinative skills |

**Figure 1.** WAIS-III subtests and the abilities they measure

Besides general IQ, Verbal IQ (VIQ) and Performance IQ (PIQ) can be determined based on the test results. Scores between 91 and 109 indicate average IQ, while scores below 68 are extremely low.

The WAIS test battery is constantly under development and the most recent version is the Wechsler Adult Intelligence Scale (WAIS-IV). The test distinguishes four subdimensions, which are the following: Verbal Comprehension, Perceptual Reasoning, Working Memory and Processing Speed, which assess different aspects of intelligence. Just like in the case of the WAIS-III, a cumulative intelligence score is calculated from the WAIS-IV, but the assessment focuses on the intelligence ranges that enables clinicians to have a general picture of the patient's global cognitive functioning.

The Raven's Progressive Matrices test is another commonly used intelligence test, assessing visual, non-verbal abilities. This intelligence test contains geometric figures.

Participants should identify the missing element of a whole geometric picture (or pattern). Items get progressively harder. This test can be administered individually or in groups.

## 19. Main characteristics of the MMPI

The MMPI (Minnesota Multiphasic Personality Inventory) is one of the most frequently used personality tests in clinical practice. It contains 566 items that can be answered with "true", "false" or "cannot say". Developers of the test collected questions from different psychiatric case studies; then psychiatric patients and healthy control subjects filled out these. The final version of the MMPI contains those items that differentiated psychiatric patients from healthy individuals.

Items of the MMPI comprise of 10 clinical scales and 4 validity scales. Clinical scales are the following: Hypochondriasis (Hs), Depression (D), Hysteria (Hy), Psychopathic Deviate (Pd), Masculinity/Femininity (Mf), Paranoia (Pa), Psychasthenia (Pt), Schizophrenia (Sc), Hypomania (Ma) and Social Introversion (Si). Scores of these subscales show how the examined person is similar to psychiatric patients with the given diagnosis. Scores above 70 points can be regarded as pathological. Results of the clinical scales outline the personality profile of the responder, which can be graphically illustrated.

Validity scales (Cannot say [CNS], Lie [L], Infrequency [F] and Defensiveness [K]) explore the validity of the measurement, honesty or the distortion of answers (i.e. test-taker "faking good") and the consistency/coherence of the given answers. Personality profiles should be interpreted with caution or cannot be interpreted when results of the validity scales are high.

The MMPI-2 is the latest version of this test. Its structure and scoring method are the same as the MMPI. Although the MMPI and the MMPI-2 have their limitations, they measure psychopathological symptoms adequately and are useful for clinicians in treatment and planning therapy as well.

## 20. Mini-Mental State Examination, Addenbrooke's Cognitive Examination and the Clock Drawing Task

<u>Mini-Mental State Examination (MMSE)</u>

Despite the critiques of the MMSE, it is one of the most frequently used measures of general cognitive functioning. It consists of 10 tasks assessing the following functions:

orientation, short-term memory, attention and calculation, verbal recall, forming quick associations, denomination, analysation-synthetization and visuospatial ability. Administration of the test takes about 10 minutes. It was developed to screen for dementia and to follow-up the course of patients' cognitive changes.

The MMSE is not sensitive to early cognitive impairment. Test results are affected by sociodemographic variables. Due to floor and ceiling effects, false negative (in case of individuals with higher premorbid IQ and higher level of education) and false positive results (among individuals with lower premorbid IQ and lower level of education, but with no cognitive impairment) are common. However, some of these demographic effects can be eliminated by the correction of raw scores (e.g. with level of education and age).

Maximal score on the MMSE is 30. Scores between 27-28 can indicate mild cognitive impairment. In that case, assessment of the Clock Drawing Task is recommended to decide whether further examinations are necessary. Lower scores can indicate mild dementia (20-26), moderate dementia (10-19) or severe dementia (<10). Besides the results of this test, patient history (including history from a relative/family member), the clinical picture and the results of diagnostic imaging techniques should also be taken into consideration in treatment planning. If an individual's MMSE result is at least 3 points below the expected score based on their age and level of education and/or if results are decreased compared to the individual's previous score, cognitive decline is probable.

Clock Drawing Task (CDT)

The CDT became a frequently used screening tool for dementia. It can be used separately or following the MMSE in cases when cognitive decline is probable. The sensitivity of test results can be increased by the combination of these two tests. Drawing a clock requires that several cognitive and perceptual functions are intact, which are the following: executive functions, orientation in space, abstraction, concentration, visuospatial functions, planning and response inhibition.

Several versions of the CDT are available with different instructions and scoring methods. Cognitive impairment is probable when a respondent places numbers (crowded, missed or swapped numbers) and hour hands incorrectly (setting the clock incorrectly). Besides the result of this test, patient history (including history from a relative/family member), the clinical picture and the results of diagnostic imaging techniques should also be taken into consideration in treatment planning.

Addenbrooke's Cognitive Examination (ACE)

Early detection of Alzheimer's Disease is essential for its effective treatment. It is an important diagnostic task to differentiate Alzheimer's Disease from frontotemporal dementia, and the ACE was designed for this purpose. The ACE contains the MMSE, the CDT and further neuropsychological exercises like fluency tasks. Administration of this test does not require medical qualification and it takes about 15-20 minutes.

It explores the following cognitive areas: attention and orientation, episodic and semantic memory, verbal fluency (phonemic and semantic), aphasia tasks, visuospatial skills and language skills. The maximal score on the ACE is 100. Cut-off points are 88 points (originally) and later 83 points. The VLOM ratio can help with the differentiation of Alzheimer' Disease from frontotemporal dementia.