

Dr. Emil Benedik and Mihaela Burina<sup>1</sup>

## The relationship between mental and personality disorders in psychiatric outpatients

Odnos med psihičnimi motnjami in motnjami osebnosti pri ambulantnih psihiatričnih pacientih

### POVZETEK

Različni psihološki in psihiatrični modeli skušajo pojasniti odnos med duševnimi motnjami in motnjami osebnosti, pri čemer je na voljo tudi že veliko empiričnih raziskav, ki potrjujejo povezanost specifičnih psihičnih motenj in osebnostne strukture. V tem prispevku raziskujemo povezanost psihičnih in osebnostnih motenj s psihoanalitičnega in fenomenološkega vidika pri ambulantnih psihiatričnih pacientih, in to s pomočjo osebnostnih vprašalnikov PAI (Morey, 2003) in VMO2 (Benedik, 2004). PAI je standardizirani psihološki samoocenjevalni vprašalnik za pridobivanje pomembnih kliničnih informacij, ki pomagajo pri diagnosticiranju in načrtovanju terapevtske obravnave pacientov z duševnimi motnjami (Morey, 2009). VMO2 je samoocenjevalni vprašalnik za ocenjevanje motenj osebnosti in temelji na psihiatričnih kriterijih za motnje osebnosti (DSM-IV-TR; APA, 2000), Beckovi teoriji (disfunkcionalnih) kognitivnih shem (Beck and Freeman, 2004) in psihoanalitični teoriji osebnostnih organizacij (Kernberg, 1986). Vprašalniki so bili aplicirani 129 odraslim psihiatričnim pacientom obeh spolov (od tega je bilo 56 odstotkov žensk) z različnimi psihičnimi motnjami. Rezultati faktorjske analize podpirajo teorijo o povezanosti simptomatskih in osebnostnih motenj pri pacientih z različnimi psihičnimi motnjami. Lestvice, ki opisujejo resnejše motnje osebnosti, so povezane s hujšimi, psihotičnimi simptomi, medtem ko je »blažja« osebnostna patologija povezana z »nevrotičnimi« simptomi. Lestvice, ki se nanašajo na mejno motnjo osebnosti, se povezujejo tako z blažjimi kot z izrazitejšimi motnjami. Rezultati delno podpirajo psihodinamično teorijo o povezanosti osebnostnih tipov s specifičnimi psihiatričnimi simptomi. To je skladno tudi s predhodnimi empiričnimi študijami, ki so preučevale odnos med nekaterimi motnjami osebnosti in specifičnimi psihičnimi motnjami. Kljub nekaterim metodološkim omejitvam in nenadzorovanim faktorjem, ki so lahko vplivali na rezultate, naša raziskava podpira hipotezo o povezanosti fenomenoloških vidikov motenj osebnosti in psihičnih motenj.

<sup>1</sup> Doc. Dr. Emil Benedik, klinični psiholog in psihoterapevt, Psihiatrična bolnišnica begunje, fakulteta za psihoterapevtsko znanost univerze sigmunda freuda v ljubljani; *emil.benedik@gmail.com*, tel: 041 591 620  
Mihaela Burina, univ. Dipl. Psihologinja, Zdravstveno vzgojni center zd ljubljana; *mihaela.Burina@zd-lj.si*

**Ključne besede:** motnje osebnosti, duševne motnje, komorbidnost, samoocenjevalni vprašalniki

## SUMMARY

Ample empirical evidence supports the comorbidity of mental and personality disorders. Psychological and psychiatric models from various theoretical perspectives and methodological approaches try to explain the relationship between personality and mental disorders. In this research the relationship between mental and personality disorders in psychiatric outpatients was evaluated from both psychoanalytic and phenomenological perspectives with the use of self-assessment questionnaires. The main aim of the research was to confirm the link between specific symptoms and personality disorders or traits. The relationship between personality pathology and mental disorders was studied with the help of the symptomatic scales of the Personality Assessment Inventory (PAI; Morey, 2003) and the Questionnaire of Personality Disorders (VMO2; Benedik, 2004). PAI is a standardised psychological self-assessment questionnaire, designed to obtain information on critical clinical variables that help to diagnose and plan a treatment for people with mental disorders (Morey, 2009). VMO2 is a self-assessment questionnaire constructed for the assessment of personality disorders, and is based on DSM-IV-TR (APA, 2000), Beck's theory of dysfunctional beliefs (Beck and Freeman, 2004), and psychoanalytic theories of personality (Kernberg, 1986). Questionnaires were completed by 129 adult psychiatric outpatients (56% women) with various mental disorders. Results from confirmatory factor analysis support the assumed relationship between personality and symptomatic pathology for different mental disorders. Scales involving severe personality pathology were related to more severe mental (e.g. psychotic) symptoms whereas mild personality disorders were related to "neurotic" symptoms. Scales describing borderline pathology were characterized by heterogeneous correlations with mild as well as severe symptomatic scales. The results show partial support for the psychodynamic theory of the relationship between personality types and specific psychiatric symptoms. The results are in line with previous empirical studies showing the relationship between some personality disorders and specific mental disorders. Despite some methodological problems and uncontrolled factors which could influence the results, our study supports the assumed relation between phenomenological aspects of personality characteristics and mental disorders.

**Keywords:** personality disorders, mental disorders, comorbidity, self-report questionnaires

## INTRODUCTION

The theory of a specific relationship between mental disorders and personality can be found in classic psychoanalytic studies of various character types: oral, anal, hysterical, narcissistic etc (see eg. Abraham, 1957; Fairbairn, 1978; Freud, 1987; Shultz-Hencke, 1952). The basic assumption of psychoanalysis is that we can understand the essence of symptoms only if we know "the background" - the history, needs and early experiences of the individual. This theory has some empirical evidence (see e.g. Lazare, Klerman and Armor, 1966). The connection between current problems and the personality is an idea that is present to some extent throughout the development of psychoanalysis and

finds echoes in contemporary, well-established psychoanalytic concepts like Kernberg's theory of personality organization (Kernberg, 1986). The connection between specific symptoms and the personality type also finds echoes in other theoretical approaches of mental disorders, for example in the basic concept of vulnerability (Millon in Davis, 1996) or diathesis-stress model (Meehl, 1962).

In addition to the hypothesis of the direct impact of a premorbid personality on the emergence of mental disorders, several other interpretations of this relationship exist: a) according to the concept of pathoplasticity, personality and personality disorders are not directly involved in the emergence of a mental disorder, however they impact on the course of the development of mental disorders (Millon and Davis, 1996). Therefore, personality mainly modifies symptom expression (Phillips, Gunderson, Hirschfeld in Smith., 1990); b) according to the complication model, long lasting mental disorders generate a change in personality (Millon and Davis, 1996); c) the hypothesis of a common etiologic cause explains personality and mental disorders as a manifestation of a common etiological (unknown) factor (Trull and McCrae, 1994).

These hypotheses are not necessarily in contradiction to one another; on the contrary, they could be interrelated. Applying psychological stress upon a person with a specific personality structure could cause or promote the occurrence of a mental disorder, and affect its course. At the same time a prolonged or acute mental disorder can change the personality of an individual (Benedik, 2014).

No matter how we understand the etiology of mental disorders, and the role of personality in it, there is ample empirical evidence supporting comorbidity of mental and personality disorders (see e.g. Paris 1994; Trulli & McCrae 1994; Zanarini et al., 1998). One of the reasons for the elimination of the multi-axial classification of mental disorders in the DSM-5 (APA, 2013) is the correlation between Axis I and II (Røysamb et al., 2011). This offers support for the hypothesis of specific interdependence of symptomatic (Axis I) and personality (Axis II) disorders.

Studies exploring the relationship between personality characteristics and mental disorders have showed a strong connection between the personality dimension of neuroticism and various mental disorders, such as depression and anxiety disorders (Clark, Watson, & Mineka, 1994), psychosomatic disorders (Kirmayer, Robbins, & Paris, 1994), dependence disorders, schizophrenia (Berenbaum & Fujita, 1994), anorexia (Loxton & Dawe, 2009) etc., where the above listed disorders correlate differently with various sub-dimensions of neuroticism, and some also correlate with other personality dimensions. The dimension of neuroticism is related to emotional states of anxiety and depression as well as with the predisposition for the development of them (Tyrrer, 2005). Other personality dimensions from the Big Five Model (Costa & McCrae, 1992) are also correlated with mental disorders. Loxton and Dawe (2009), for example, cite research linking extraversion with eating disorders, particularly with bulimic type, which is characterized by compulsive overeating. Other studies (see Hirschfeld, Klerman, Clayton, & Keller, 1983; Hecht et al., 1997; Benjaminsen, 1981) revealed the connection between the dimensions of introversion and the vulnerability to depression. Those with a higher risk of developing a depressive disorder are supposed to be less sociable (Reich, Noyes, Hirschfeld, Coryell, & O'Gorman, 1987; Clayton, Ernst, & Angst, 1994) and more socially isolated (Murray & Blackburn 1974).

What is the nature of the relationship between personality and mental disorders? Let's first explore data on the relationship between mental disorders and »anxious« personality disorders from cluster C (as defined in DSM-IV-TR; APA, 2000). According to Lyons et al. (Lyons, Tyrer, Gunderson, & Tohen, 1997), the disorders of Axis I and Axis II can be seen as part of the same syndrome, since anxiety, dependent, and »oral« personalities are often coupled with anxiety disorders. One of the strongest links between Axis I and Axis II is between avoidant personality disorder and social phobia (Tyrer 2005), as well as with generalized anxiety disorder (Noyes, Woodman, Holt, Reich, & Zimmerman, 1995). The relationship between the obsessive-compulsive disorder and the avoidant personality disorder is less clear, since some studies show a positive correlation, while others do not (Shea, 2005; Tyrer, 2005). Likewise, panic disorder is commonly associated with personality disorders from cluster C (Sanderson, Wetzler, Beck, & Betz, 1994), especially with the dependent personality disorder (Noyes et al., 1995). Agoraphobic patients are often diagnosed with dependent personality disorder, however, those without panic attacks more often have avoidant personality disorder (Hoffart, Thornes, & Hedley, 1995). Mild depression is particularly associated with avoidant personality disorder; however, the link between severe, psychotic forms of depression with personality disorders is less clear (Parker, Roussos, Austin, Hadzi-Pavlovic, Wilhelm, & Mitchell, 1998). Between 50 – 85% of outpatients, and 20 – 50% of inpatients treated for depression are diagnosed with a comorbid personality disorder (Corruble, Ginestet, & Guelfi, 1996). According to Skodol (Skodol et al., 1999) the point prevalence of an affective disorder in people with a personality disorder is approximately 61%, whereas lifetime prevalence for them is as high as 92%. Approximately 38% of them suffer from a major depressive disorder. The diagnosis of depression occurs most frequently together with a cluster C personality disorder (Farabaugh, Mischoulon, Schwartz, Pender, Fava, & Alpert, 2007), especially in outpatients (Farmer & Nelson-Gray, 1990).

Empirical validation of the psychoanalytic concept of "oral" personality (Lazare et al. 1966) - to which meaningful parallels with the modern concept of dependent, avoidant, masochistic, and depressive personality disorder can be drawn - revealed a significant correlation between traits of oral character and depression (Neilands, Silvera, Perry, Richardsen, & Holte, 2008). Dependent personality disorder significantly correlates with depression (Blatt & Homann, 1992; Bornstein, 1992; Alneas & Torgersen, 1997).

Many of the somatoform disorders, particularly somatization disorder, are associated with personality disorders. A review of studies in this area showed that the majority of patients with the somatization disorder also have a personality disorder (Tyrer, 2005). Specific connections to the anxious cluster C personality disorders are not particularly strong, since somatoform disorders are also connected to cluster B (as defined in DSM IV-TR). One exception involves patients diagnosed with hypochondriasis, which significantly correlates with the cluster C personality disorder diagnosis (Barsky, Wyshak, & Klerman, 1992). According to Tyrer (2005), patients with a personality disorder from the anxiety cluster are more likely to have additional health complications than patients without a personality disorder (Seivewright, Tyrer, Ferguson, Murphy, North, & Johnson, 2000). This supports the diathetic-stressmodel, and suggests that personal lifestyle helps create unpleasant life events and medical complications, or that these patients might respond more strongly to them (Tyrer, 2005).

Empirical data about the link between obsessive-compulsive personality disorder

and obsessive-compulsive disorder is inconclusive. On the one hand, most of the studies show that the obsessive-compulsive personality disorder occurs more often in patients with obsessive-compulsive disorder than in other patients. However, most patients with obsessive-compulsive disorder do not have the personality disorder as well (Costa, Samuels, Bagby, Daffin, & Norton, 2005). Studies show that the obsessive-compulsive personality disorder is prevalent in less than a third of patients diagnosed with the obsessive-compulsive disorder (Gabbard, 2005). The obsessive-compulsive personality disorder is frequently diagnosed together with panic disorder with agoraphobia, depression, generalized anxiety disorder, addiction to/abuse of drugs and/or alcohol, and dysthymia in elderly patients (Costa et al. 2005).

It is well documented that Axis I disorders, as defined by DSM-IV-TR, are commonly conjoined with the cluster B borderline personality disorder (APA, 2000), as well as with other personality disorders (Fyer, Frances, Sullivan, Hurt, & Clarkin, 1988). Yet borderline personality disorder is exceptional in its strong comorbidity with various axis I disorders. Stone (2005) gives details on the relationship between mental disorders and borderline personality disorder, confirming its association with major depressive disorder, bipolar II disorder, eating disorders, anxiety disorders (e.g. panic disorder, social anxiety, obsessive compulsive disorder), psychoactive substance abuse, dissociative disorder, post-traumatic stress disorder, erotomania, and other forms of obsessive love and impulsive aggression (Stone, 2005).

Schizotypal personality disorder is also often present in patients with mental disorders. Based on extensive epidemiological studies, Pulay et al. (2009) concluded that schizotypal, avoidant, dependent, and borderline personality disorders are associated with schizophrenia and psychotic episodes. We reached a similar conclusion in a correlational study finding a strong relationship between schizotypal personality disorder and schizophrenia (Benedik & Čoderl, 2014).

Available statistical data about comorbidity between personality disorders and various Axis I mental disorders is often incongruent and unclear. One possible reason for this is the categorical approach to assessment of personality disorders currently in use in the psychiatric diagnostic system. To diagnose a personality disorder a certain number of equally important criteria have to be fulfilled, which can make the assessment less sensitive and clear. The combination of criteria within the same diagnostic category can vary a lot, leading to a very different clinical picture of two patients diagnosed with the same personality disorder. The personality is a complex phenomenon, where certain personality traits may be associated with symptoms while others are not. The strength of the connection between personality traits and specific symptoms of mental disorders can depend on the severity of the symptom, or on the specific phase of the disease. For example, Clark and others (Clark, Vittengl, Kraft, & Jarrett, 2003) found that some sub-dimensions of the dependent personality disorder significantly correlate with symptoms of depression while the patient is in the depressive stage, however later in the remission or after an achieved psychotherapeutic progress, they do not. Some personality traits may be more dependent on situational factors than others, or there is an interactive relationship between stable and more situational conditioned personality traits.

In contrast to the categorical, the dimensional approach uses structured interviews and self-assessment questionnaires for the identification of personality disorders. Schroeders' and colleagues' (Schroeder, Hoppe, Andresen, Naber, Lammers, & Huber, 2012)

research showed a large discrepancy between the end diagnosis of a comorbid personality disorder in patients with schizophrenia when assessed with the categorical compared to the dimensional approach. The authors concluded that the dimensional approach is more sensitive, with better content and construct validity. But the dimensional approach does not give as clear a delimitation between “healthy” and “disturbed” personalities as the categorical approach does.

Unfortunately, personality assessment using self-assessment questionnaires is limited by the potentially low reliability and validity of the applied measures. Coppi and Metcalfe (1965) showed that individuals in depressed and/or anxious states describe their personal traits differently than when they feel better. The personality assessment can be contaminated or distorted by the current mental or emotional state of the person (Clark et al., 2003), especially when using self-assessment instruments (Tyrer, 2005). Tyrer (2005) adds that the problem of interaction between the current mental state and the clinical presentation of the person's personality is biggest in personality disorders from the »anxiety« cluster. The research from Hirschfeld and colleagues (Hirschfeld et al., 1983) found that acute depression affects an individual's self-assessment in the areas of emotional lability (higher level of emotional lability than usual), interpersonal dependency (more dependent), extraversion (lower), passivity (higher), and objectivity (lower than usual). On the other hand, no differences in test scores were detected on scales of dominance, impulsiveness, obsessiveness, rigidity, level of activity, and self-limitation, when measured in the phase of depression and the remission phase respectively, which could mean that these scales are a valid indicator of individual personality traits, and are not a reflection of the current clinical presentation. Kendell and DiScipio (1968) found that scores on the scale of neuroticism and extraversion in depressed patients are significantly different if the instructions specifically tell participants to assess themselves according to the way they were before the depressive episode. However, the question whether this is a more realistic assessment of the general personality functioning remains open, since there is a possibility that depressed people idealize their premorbid period. Additionally, it is unclear when answers to personality questions reflect current mental state and when they reflect a long-lasting personality trait, one which can lead to an incorrect diagnosis of a personality disorder. The research from Shea et al (Shea, Glass, Pilkonis, Watkins, & Docherty, 1987) noted that while a patient is in the acute phase of depression, diagnoses of a cluster C are overrepresented, while a cluster B personality disorder may be overlooked. Joffe and Regan (1988) noted that patients may fulfill criteria for avoidant, dependent, schizoid, schizotypal, or borderline personality disorders when in the acute phase of depression, but not when in remission. In the acute phase of depression all patients fulfilled criteria for at least one personality disorder, and furthermore the probability of a patient fulfilling criteria for more than one personality disorder was significantly higher in the acute phase than in remission. Nonetheless some studies report no significant impact of the patients' acute phase of depression on their diagnosis of a personality disorder (Loranger et al. 1991; Bagby, Rector, Bindseil, Dickens, Levitan, & Kennedy, 1998).

The main aim of our research is to contribute to the understanding of the complex relationship between specific mental disorders and (pathological) personality traits in psychiatric outpatients in a relatively stable remission using self-assessment questionnaires. The main aim of the research is to confirm the link between specific symptoms and personality disorders or traits. The research is conducted from a phenomenological

point of view, since patients are describing (assessing) their own experiences of their mental disorder.

We hypothesize that selected symptomatic scales of the Personality assessment inventory (PAI; Morey, 2003) are connected with personality scales of the Questionnaire of personality disorders (VMO2; Benedik, 2004) and PAI, thus confirming the link between symptoms and personality traits (disorders) in accordance with the psychoanalytical theoretical concepts. According to them, severe, borderline personality pathology (from cluster A and B as defined in DSM-IV-TR) is linked with severe mental disorders (e.g. the symptoms of psychosis), while neurotic personalities (disorders of personality from cluster C) are characterized by milder mental disorders (e.g. symptoms of anxiety disorders, depression).

## SUBJECTS AND METHODS

### Participants

The study was based on 129 randomly selected adult outpatients of the Psychiatric Hospital Begunje, which is a regional hospital in Slovenia. 72 of the selected patients were women (56 %) and 57 were men. All participants completed the PAI (Morey, 2003) and VMO2 (Benedik, 2004). The research has been approved by the National Medical Ethics Committee (approval No. 29/3/12) and conforms to the provisions of the Declaration of Helsinki. Prior to the study, the informed consent of all participants was obtained and their anonymity was preserved. The average age of the participants was 38 years ( $M = 37.90$ ,  $SD = 11.96$ ), ranging from 19 to 66 years. The participants average level of education was high school ( $M = 3.43$ ;  $SD = 1.20$ ) and they came from various professional backgrounds. Our sample comprised only of Slovenians, most of them coming from the Gorenjska region. The patients were admitted to a public outpatient psychiatric facility in Slovenia between 2013 and 2016. We excluded acute psychotic and severe distress patients, patients with severe comorbid somatic illness and patients that were intoxicated by alcohol or drugs. According to ICD-10 (WHO, 1992), the sample included participants with the following psychiatric diagnoses: recurrent depressive disorder (mild or moderate) without psychotic features ( $N = 47$ ), acute and transient psychotic disorders ( $N = 19$ ), personality disorders, mostly emotionally unstable - borderline type ( $N = 14$ ), alcohol dependence ( $N = 11$ ), adjustment disorder ( $N = 13$ ), anxiety disorders ( $N = 20$ ), bipolar disorder ( $N = 3$ ) and dissociative disorder ( $N = 2$ ). 40% of the patients had two psychiatric diagnoses. High co-morbidity is particularly noticeable in patients with anxiety and depression disorder. To all patients, with the exception of patients with alcohol dependence, at least one psychiatric medication (anxiolytic, antidepressant or antipsychotic) was prescribed.

### Measures and procedure

*Personality Assessment Inventory PAI (Morey, 2003; Slovenian adaptation: Gosar & Boben, 2009)*

The PAI is a self-assessment tool for the assessment of personality traits in adults, designed to obtain information on critical clinical variables that help diagnose mental disorders and plan a treatment (Morey, 2009). 344 items constitute non-overlapping scales covering the

constructs most relevant to a broad-based assessment of mental disorders: four validity scales, eleven clinical scales, five treatment scales, and two interpersonal scales. Ten of these scales have conceptually derived subscales that help to understand and explain a multitude of complex clinical constructs.

The four validity scales cover the respondents' overall approach to the test that could affect the validity of the results: a) inconsistency, to determine the degree to which respondents answer similar questions in the same way; b) infrequency, to determine the degree to which respondents rate extremely bizarre or unusual statements, rare among healthy individuals as well as psychiatric patients, as true; c) negative impression, to determine the degree to which respondents describe themselves in an overly negative light, or try to simulate a disease; d) positive impression, to determine the degree to which respondents describe themselves in an overly positive light, or are unwilling to admit even the smallest of problems.

Clinical scales measure the main characteristics of a specific mental disorder or personality traits (Morey, 2003; 2009). Each clinical scale has subscales that represent more specific aspects of a disorder or trait:

- **Somatic Concerns.** Items measure respondents' physical concerns and complaints, that are specific to individuals with somatoform and conversion disorders, but this does not mean that the scale can exclude a genuine physical illness. The scale describes means by which one controls unpleasant bodily experiences. It includes subscales: Conversion, Somatization and Health Concerns;
- **Anxiety.** Items in the scale refer to the phenomenology and the visible signs of anxiety, with emphasis on the modalities in which they are expressed: on the emotional, cognitive or physical level. Subscales are: Cognitive Anxiety (worrying), Affective Anxiety (tension and fatigue) and Physiological Anxiety (physical signs of stress);
- **Anxiety Related Disorders.** The scale measures more specific symptoms and behaviour that relate to different categories of anxiety disorders. Subscales are: Obsessive-Compulsive, Phobias and Traumatic Stress;
- **Depression.** The scale describes symptoms of depressive disorders. Subscales are Cognitive Depression (thoughts of worthlessness, hopelessness, and personal failure), Affective Depression (feeling of sadness, loss of interest in normal activities, and anhedonia) and Physiological Depression (focuses on the level of physical functioning, activity, and energy, including disturbance in sleep patterns, changes in appetite, and weight loss).
- **Mania.** Items of the scale relate to the affective, cognitive and behavioural symptoms of mania and hypomania, such as over activity, elevated mood (euphoria), irritability, decreased need for sleep, attention deficit etc. Subscales are Activity Level, Grandiosity and Irritability.
- **Paranoia.** Included items describe symptoms of paranoid disorders and lasting traits of paranoid personality. Subscales are: Resentment, Hypervigilance (suspiciousness, distrust), Persecution (a feeling that others are against them). The first two subscales reflect personality traits whereas Persecution is supposed to be more symptomatic (Morey, 2003);
- **Schizophrenia** measures the respondent's symptoms relevant to a wide range of schizophrenic disorders, especially when the score is very high. Only slightly

elevated results may rather reflect personality traits, such as social alienation, distrust, hostility to others and unconventionality (Morey, 2003). Subscales are: Psychotic Experiences (eg. hallucinations and delusions), Social Detachment (social isolation and disdain for others - also characterizes the schizoid personality), and Thought Disorder (eg. confusion). Elevated subscales of Social Detachment and Thought Disorder (without Psychotic Experiences) can reflect schizoid or schizotypal personality disorder (Morey, 2003);

- **Borderline Features.** Items describe traits of a borderline personality disorder, e.g. ambivalent and unstable relationships, impulsivity, rapid mood changes, poor emotional control. Subscales are: Affective Instability, Identity Problems, Negative Relationships (unstable relationships with others, filled with conflict), Self-Harm (self-harming behaviour);
- **Antisocial Features.** Items involve a variety of antisocial acts and personality traits, such as cruel/criminal behaviour, problems with authority, tendency to be unempathetic, callous, egocentric, unfair, unstable and in search of excitement. Subscales are: Antisocial Behaviour (eg. severe offences and criminal behaviour), Egocentricity and Stimulus Seeking (eg. interest in "adrenaline" activities). The latter two subscales describe personality traits, whereas the first (Antisocial Behaviour) relates only to behaviour;
- **Alcohol Problems.** The scale provides an assessment of behaviours and consequences related to alcohol use, abuse, and dependence as well as traits of people addicted to alcohol, eg. inability to control or withstand alcohol, harmful consequences on the physical, psychological, social and professional functioning of a person.
- **Drug Problems.** Items measure problematic consequences of excessive drug use and the personal traits of people addicted to various psychoactive substances, e.g. inability to abstain and harmful consequences on the physical, psychological and social functioning of a person.

Treatment scales measure important factors related to treatment of clinical disorders (Morey, 2003):

- **Aggression.** The scale provides a global assessment of attitudinal and behavioural features relevant to aggression, anger, and hostility, including previous aggressive behaviour (physical and verbal) and the attitudes that lead to aggressive behaviour;
- **Suicidal Ideation.** Items range from description of general, vague ideas about suicide to despair and detailed plans for suicide;
- **Stress.** The scale assesses the situation of the respondents, their various current or recent life stressors regarding family life, health, employment, finances and other important areas of life;
- **Non-support.** The scale, as with Stress, describes characteristics of the environment as experienced by the respondents – their perception of the quality and availability (or lack) of social support;
- **Treatment Rejection** measures certain attributes and attitudes of the respondent that are known to predict interest in and motivation for personal change, including feeling negative stress and dissatisfaction, willingness to cooperate, recognizing the need for change, openness to new ideas, and a willingness to

accept responsibility for one's actions.

- The PAI also includes two scales based on the interpersonal paradigm of personality assessment (see e.g. Wiggins, 2003) that describe respondents' relationships with others (Morey, 2003):
- Dominance captures the degree to which a person desires control and independence in interpersonal relationships. The scale is bipolar with dominant interpersonal style at one end and subordinate at the other;
- Warmth gives an estimate of respondents' empathetic and supportive relationships with others. The scale is bipolar with a warm, engaging interpersonal style at one end and a cold, distant or dismissive interpersonal style at the other.

In the construction of the PAI scales rational and empirical methods were used. In the selection process of final items both conceptual and empirical characteristics were taken into account, meaning each item had to satisfy several (psychometric and theoretical) criteria. The authors emphasize the phenomenological aspects of the items (Morey, 2009), which are an important advantage of the questionnaire. However, it is not clear whether PAI is a questionnaire for the assessment of mental disorders/symptoms or personality traits (or both). The authors recognize this but do not seem to perceive it as a problem.

Based on our content analysis and the authors' definition (Morey, 2009) we separated scales that measure mainly symptoms, situational traits or mood, from scales describing enduring personality traits. The following scales of PAI were selected as mainly symptomatic scales:

- Somatic Complaints,
- Anxiety,
- Anxiety Related Disorders (ARD) - Obsessive-Compulsive,
- Anxiety Related Disorders (ARD) - Phobias,
- Anxiety Related Disorders (ARD) -Traumatic Stress,
- Depression,
- Mania,
- Paranoia - Persecution,
- Schizophrenia - Psychotic Experiences,
- Antisocial Features (AF) - Antisocial Behaviour,
- Alcohol Problems,
- Drug Problems,
- Aggression,
- Suicidal Ideation,
- Stress.

The scales measuring enduring personality traits are given below as follows:

- Paranoia - Resentment,
- Paranoia - Hypervigilance,
- Schizophrenia - Social Detachment,
- Borderline Features (BF),
- Antisocial Features (AF) - Egocentricity,
- Antisocial Features (AF) - Stimulus Seeking,
- Dominance,
- Warmth.

The above scales were used as a comparison between current difficulties and permanent personality traits.

*Questionnaire of personality disorders (Vprašalnik motenj osebnosti) VMO2 (Benedik, 2004; 2007; 2014)*

The VMO2 is a self-assessment questionnaire referring to the psychiatric categories of personality disorders (PD) according to DSM-IV-TR (APA, 2000), while within a specific category there is the hypothesis of quantitative and normally distributed personality traits.

Items of the VMO2 were derived from the standard psychiatric classification of personality disorders DSM-IV-TR (APA 2000) as well as from concepts of the psychoanalytic and cognitive paradigm of personality assessment (Benedik 2014; Benedik & Čoderl 2014). The initial selection of items describing personality traits was drawn from various theoretical fields, such as:

- the theory of cognitive schemas (Beck & Freeman, 2004; Young, 1999), typical for a specific personality disorder as defined in the psychiatric classification DSM-IV-TR;
- the psychoanalytic concept of a public self (Josephs, 1995). Items selected relate to the public self (ie. experiences of oneself and other people, that an individual recognizes, accepts and is willing to share with others), and in part to the private self (self-experiences that remain private), which are supposed to be typical for people with various disorders. We assume that the latter can be identified through a self-assessment questionnaire;
- the Kernberg theory of personality organization (Kernberg, 1996). The theory provides typical defense mechanisms and a specific experience of oneself and others for each personality structure, which should be reflected in the responses to the questionnaire;
- and as mentioned before, items for the VMO2 were selected according to the psychiatric classification of personality disorders DSM-IV-TR, that describes 10 PD's (histrionic, obsessive-compulsive, avoidant, dependent, narcissistic, borderline, antisocial, paranoid, schizoid and schizotypal). The depressive PD was added to the list since it often occurs in clinical practice. Despite the criticism of symptomatic or behavioural criteria for PD this nomenclature persisted, these are after all generally accepted concepts in clinical psychology and in the psychiatric profession (Benedik, 2014).

Since we were looking to identify permanent personality traits, the guiding rule in the selection of the items for the questionnaire was a relatively enduring perception of oneself and other people (as opposed to the personality questionnaires MMPI-2 and PAI, which are often not clear in what they are measuring: personality traits, current symptoms or situational experience). The content for individual scales of VMO was derived from the following sources: Personality disorders: DSM-IV and beyond (Millon & Davis, 1996), Character and self-experience (Josephs, 1995), Cognitive Therapy of personality disorders (Beck & Freeman, 2004), Severe personality disorders (Kernberg, 1996) and Cognitive therapy for personality disorders (Young, 1999).

Based on the content analysis and the considered statistical criteria - inter-rater reliability of two independent professionals (clinical psychologists) and the analysis of the

internal consistency - the final selection of 193 items represents 10 personality scales of VMO and the validity scale. Preliminary research showed satisfactory internal consistency, the expected factor structure and construct validity of the scales of the questionnaire (Benedik, 2007; 2014; 2016). The criterion validity was measured and confirmed with The Personality Diagnostic Questionnaire PDQ-IV (Hyer, 1994), The Personality Inventory for DSM-5, PID-5 (Krueger, Derringer, Markon, Watson & Skodol, 2012) and psychiatric assessments (Benedik, 2007; 2014). For detailed description of the construction and validation process of VMO and VMO2 see Benedik (2007; 2014; 2016).

The VMO2 scales are based on the phenomenology of a specific PD:

- Histrionic PD: persons with this disorder describe themselves according to the impression they leave on other people. They see themselves as sociable, friendly, warm, welcoming, engaging, interesting and popular, and are constantly seeking attention and approval from others. They expect to be accepted and experiences indifference as rejection. They like to attract with their appearance and behaviour;
- Obsessive-compulsive PD: They swear by rules, moral standards, order, hierarchy, and formal relationships. He/she They see themselves as committed to work, diligent, reliable, tidy, precise and effective. They are economical, prone to collectibles, cautious in spending, and worried about their health. They are afraid that others could see they as irresponsible, not able to meet (superiors') expectations, as someone who makes mistakes. They strive for perfection and catastrophizes mistakes. They perceive their subordinates as inadequate and are invested in eliminating their shortcomings. They believe their criticism is correct and adequate, regardless of the feedback received from others (subordinates);
- Avoidant PD: they see themselves as incompetent, inferior and unattractive, describing feelings of emptiness, loneliness and social isolation. they feel unaccepted and rejected, oscillating between the desire for affection and fear of rejection and embarrassment. They describe themselves as anxious, sad, angry and alienated from both themselves and from others. Other people seem critical, humiliating and treacherous to them. They avoid social situations that might trigger unpleasant feelings of rejection and fantasizes about the gratification they long for;
- Depressive PD: They describe themselves as a sensitive, vulnerable, serious, worried and empathic person. They have low self-esteem, are self-critical, often feel helpless, worthless, and think of themselves as a failure. They often feel guilty and deserving of criticism and punishment. They express anger towards others in a covert, subtle way. They want love and support from others, and to be seen as a peaceful person who is willing to forgive, give and sacrifice himself. They are pessimists, expecting the worst to happen. They feel abandoned, discarded and bereft;
- Dependent PD: the basic feature is the lack of self-confidence. Such persons see themselves as weak, fragile and insufficient, particularly when left to themselves. Other people are perceived as the only option, and thus responsible for the fulfillment of their needs. They have to let go and flow with the decision making of others. Their biggest fear is to be left alone. They perceive themselves as tho-

- thoughtful, cooperative and ambitious, but on the other hand they are prone to self humiliation and accentuation of their flaws;
- Narcissistic PD: They believe that social rules do not apply to them, that they deserve to have special status and treatment. They expect recognition and admiration and perceive themselves as superior to others. They often dream of success, fame and ideal love. They are inclined to trust others, believing that they think of them as the best, most beautiful and smartest persons. Criticism is perceived as the envy others feel because of their preeminence. Their beliefs are correct, others are wrong. There is only one, their (absolute) truth. They highlight and appreciates the appearance of things (status, material wealth, physical attractiveness);
- Borderline PD: such persons expect attention, support and protection, but often experiences rejection and separation, their greatest threats. They feel empty and lonely; confused and conflicted about who they are and what they want. They see others, as well as themselves, as either black or white, at first ideal and later utterly disappointing. They do not set particular goals, are indecisive, quickly weary and often bored. Therefore, they like adrenaline packed activities and/or seeks out adventures. They are not persistent: dull and everyday tasks present a large burden to them;
- Antisocial PD: they experience the world around them as corrupt, exploitative, and governed by the law of the jungle. Others are not to be trusted or cared for; everyone should take care of themselves. If they will not take advantage of, defeat or outpace others, they will defeat them. They perceive them as deprived of power, benefits and amenities that are wrongly owned by others. Therefore, they have the right to seize what they want, no matter the means and without regard to others. In this struggle, everything is allowed, the rights of others are not important. They are free; rules do not apply to them. In general, they perceive them as charming, self-confident, strong and self-sufficient;
- Paranoid PD: persons with this disorder do not trust anyone. What is more, they are constantly on their guard against a fraud, a conspiracy or an attack. They believe that the world is unfair. Even the people closest to them may be against them. They think of themselves as an average, modest and decent person who wants others to respect him/her and leave him/her alone. They perceive themselves as disadvantaged and abused. Learning about the mistakes of others heightens their self-worth and self-sufficiency. They emphasize the need for objectivity, fairness and does not forgive easily. They are jealous;
- Schizoid PD: they express disinterest in social life and focuses attention on formal, objective aspects of social as well as emotional events. Their interest in sexuality and expression of emotions is diminished. They choose to play side roles in professional, social and family life. They are rather by themselves than with others and are self-sufficient. They describe themselves as a pleasant, sensitive, polite, undemanding and considerate person. They see that others perceive them as apprehensive, detached and introverted, but hopes that this is interpreted as an expression of his enlightenment, spirituality, respect for the privacy of others and tolerance. Nevertheless, a lot of the time they feel misunderstood;
- Schizotypal PD: similar to schizoid personality, persons with schizotypal personality keep others at arm's length because they feel alienated, misplaced and

misunderstood. For them life is empty, shallow, and meaningless. Similarly, they perceive themselves as alienated, depersonalized, empty and vain, more dead than alive. They might have some unusual sensations, perceptions of themselves and the world, which are borderline psychotic, and interprets them as a mystical experience or as a sign of their outstanding abilities.

## RESULTS

To check for potential confounding effects of demographic variables, t-test statistics on gender and correlation between age and education with selected PAI and VMO2 scales were calculated. There were no differences between genders in any of PAI and VMO2 scales, with an exception for PAI subscale ARD – Phobias. Women reached higher scores on Phobias than men ( $t = 2.32$ ,  $p < .05$ ; Cohen's  $d = .41$ ). The Pearson correlations between selected scales of PAI/VMO2 and age ranged from .01 to .35. Only two of them were significant at  $p < .01$  level: the scale Histrionic PD ( $r = -.35$ ) and Stress ( $r = .24$ ). The correlation coefficients between selected scales of PAI/VMO2 and level of education were low as well, ranging from .02 to .36. Significant correlations at  $p < .01$  level were found for following scales: Paranoid PD ( $r = -.31$ ), Depressive PD ( $r = -.31$ ) and BF - Identity ( $r = .36$ ).

Overall, the descriptive analysis of VMO2 and PAI scales and subscales showed a near symmetrical distribution. For the evaluation of the hypothesis of significant relationship between various symptomatic and personality disorders exploratory factor analysis was used. Since high interconnectivity of the variables was expected, oblique rotation was used. Two comparisons were made: between symptomatic and personality scales of PAI, and between symptomatic scales of PAI and personality scales of VMO2 respectively.

### Relationship between symptomatic and personality scales of PAI.

An exploratory factor analysis of the selected PAI scales and subscales with the method of principal components and Equamax rotation with Kaiser normalization was used. Factor analysis identified four significant factors explaining 65.12% of the variance and showed decreasing eigen values of 8.51, 3.50, 1.58 and 1.39 respectively. Table 1 shows weighted factors for symptomatic and personality scales of PAI after equamax oblique rotation.

Table 1: Factor loading matrix of symptomatic and personality scales of PAI

PAI scale	Factor			
	1	2	3	4
Anxiety	<b>.773</b>	.336		.361
Somatic Complaints	<b>.697</b>			
ARD - Phobias	<b>.669</b>			.314
Depression	<b>.667</b>			.569
<b>Borderline Features (BF)</b>	<b>.655</b>	.431		.371
Suicidal Ideation	<b>.629</b>			.320
Ard - Traumatic Stress	<b>.625</b>	.433		.307
Schizophrenia - Psychotic Experiences	<b>.592</b>		.452	
Stress	<b>.501</b>	.349		
<b>Paranoia - Persecution</b>		<b>.752</b>		
<b>Paranoia - Hypervigilance</b>		<b>.704</b>		
Agression		<b>.677</b>	.448	
Ard - Obsessive-Compulsive	.377	<b>.588</b>		
<b>Paranoia - Resentment</b>		<b>.565</b>		.491
Mania		<b>.554</b>	.530	
Af - Antisocial Behaviors			<b>.853</b>	
Af - Stimulus-seeking		.307	<b>.681</b>	
Alcohol problems			<b>.644</b>	
Drug problems			<b>.625</b>	
<b>Af - Egocentricity</b>			<b>.585</b>	
<b>Warmth</b>				<b>-.872</b>
<b>Schizophrenia - Social Detachment</b>	.419			<b>.780</b>
<b>Dominance</b>	-.458	.409	.414	<b>-.476</b>

Note: factor analysis with the method of principal components and equamax rotation with Kaiser normalization was used. Only factors with loading higher than 0.30 are shown. **In bold:** personality scales of PAI



The first factor, explaining 36.98% of the total variance, includes personality scale BF and symptomatic scales of Anxiety, Depression, Somatic Complaints, Stress, ARD - Phobias, ARD - Traumatic Stress, Suicide Ideation, and Schizophrenia - Psychotic Experiences. Somewhat weaker loading with factor one have personality scale Dominance (with the opposite pole - Submissiveness) and Schizophrenia - Social Detachment. The second factor could be called the Paranoid Factor, since it includes all paranoia related personality and symptomatic scales, as well as Aggression and ARD - Obsessive Compulsive scale. This factor describes different options for the management of aggression. The third factor includes antisocial personality traits, which are also linked to problems with alcohol and drugs. The last, fourth factor describes primarily personality traits associated with social withdrawal and passivity. It includes scales Warmth (opposite pole of it) and social detachment (subscale of Schizophrenia) and dominance (the opposite pole of it).

Given the importance of the first factor, an additional factor analysis of symptomatic scales only with personality subscales of Borderline Features was done. A three-factor solution explains 62.70% of the variance, with significant eigenvalues of 7.99, 2.41, and 1.51 respectively. Table 2 contains the factor loadings of symptomatic scales and BF subscales from the PAI after equamax oblique rotation.

The first factor explains 42.03% of the total variance and includes BF - Identity Problems and BF - Affective Instability along with symptomatic scales of Depression, Anxiety, ARD-Phobias, ARD-Traumatic Stress, Suicide Ideation, Somatic Complaints, and Stress. The second factor relates to interpersonal relationships: it includes personality scale BF - Negative Relationships along with Paranoia- Persecution, ARD- Obsessive Compulsive (OCD is also reflected in the interpersonal relationships) and Aggression. The third factor includes BF - Self Harm, and is associated with other »excessive« behaviours: AF - Antisocial Behaviours, Drug and Alcohol Problems, Mania and Psychotic Experiences.

### Relationship between symptomatic scales of PAI and personality scales of VMO2

A joint exploratory factor analysis with the method of principal components and equamax rotation with Kaiser normalization was carried out on symptomatic scales of the questionnaire PAI and personality scales of VMO2. A five-factor solution explains 73% of the variance, with eigenvalues of 11.46, 3.42., 1.67, 1.43 and 1.00 respectively. Table 3 shows the rotated five-factor solution of symptomatic scales of PAI and personality scales of VMO2.

The first factor explains 44.07% of the total variance and includes mainly VMO2 scales: Avoidant, Schizoid, Depressive and Dependent PD. The symptomatic scale included in the first factor is the ARD - Phobias. The second factor explains 13.14% of the total variance and links Borderline PD with the following symptomatic scales: Depression, Suicide Ideation, Stress, Somatic Complaints, Anxiety and ARD- Traumatic Stress. As can be seen in Table 3, the first and the second factor are not independent. Judging by the content of both factors, this association might be interpreted in terms of the connectedness of depressive, schizoid and borderline personality disorders and their symptoms. The third factor (6.43% of the total variance) includes VMO2 scales of Histrionic, Narcissistic, Antisocial, and Schizotypal PD along with PAI scales of Mania and Psychotic Experiences. The fourth factor (explaining 5.50% of the total variance) links Paranoid

Table 2: Factor loading matrix of PAI symptomatic scales and BF subscales

PAI Scale	Factor		
	1	2	3
Depression	<b>.895</b>		
Anxiety	<b>.830</b>	.345	
<b>BF - Identity Problems</b>	<b>.825</b>		
ARD - Phobias	<b>.758</b>		
Suicide Ideation	<b>.694</b>		
ARD - Traumatic Stress	<b>.692</b>	.484	
Somatic Complaints	<b>.606</b>	.334	
<b>BF - Affective Instability</b>	<b>.596</b>	.393	.477
Stress	<b>.553</b>	.475	
Paranoia - Persecution	.	<b>.779</b>	
<b>BF - Negative Relationships</b>	.417	<b>.703</b>	
ARD - Obsessive Compulsive		<b>.668</b>	
Aggression		<b>.656</b>	.421
AF - Antisocial Behaviours			<b>.843</b>
Alcohol Problems			<b>.713</b>
<b>BF - Self-Harm</b>	.433		<b>.635</b>
Drug Problems			<b>.585</b>
Mania		.544	<b>.570</b>
Schizophrenia - Psychotic Experiences		.326	<b>.522</b>

Note: factor analysis with the method of principal components and equamax rotation with Kaiser normalization was used. Only factors with loading higher than 0.30 are shown. **In bold: BF** (Borderline Features) subscales of PAI.

Table 3: Factor loading matrix of symptomatic scales of PAI and personality scales of the VMO2

Scales PAI and VMO2	Factor				
	1	2	3	4	5
<b>Avoidant PD</b>	<b>.806</b>	.305			
ARD - Phobias	<b>.720</b>				
<b>Depressive PD</b>	<b>.684</b>	.577			
<b>Dependent PD</b>	<b>.672</b>	.338	.418		
<b>Schizoid PD</b>	<b>.634</b>	.453			
Suicide Ideation		<b>.766</b>			
Stress		<b>.737</b>			
Depression	.539	<b>.662</b>			
Somatic Complaints	.335	<b>.623</b>			
<b>Borderline PD</b>	.349	<b>.608</b>	.497		.333
Anxiety	.550	<b>.552</b>		.391	
ARD - Traumatic Stress	.453	<b>.489</b>		.420	
<b>Histrionic PD</b>			<b>.898</b>		
<b>Narcissistic PD</b>			<b>.697</b>	.439	
Mania			<b>.682</b>	.474	
<b>Antisocial PD</b>			<b>.644</b>		.523
<b>Schizotypal PD</b>	.412		<b>.567</b>		.359
Schizophrenia - Psychotic Experiences			<b>.482</b>		.302
Paranoia - Persecution				<b>.830</b>	
<b>Paranoid PD</b>	.378		.319	<b>.693</b>	
ARD - Obsessive- Compulsive			.302	<b>.656</b>	
Aggression	-.346			<b>.653</b>	.388
<b>Obsessive-Compulsive PD</b>	.510		.306	<b>.562</b>	
Drug Problems					<b>.827</b>
AF - Antisocial Behaviors			.362		<b>.773</b>
Alcohol Problems					<b>.638</b>

Note: factor analysis with the method of principal components and equamax rotation with Kaiser normalization was used. Only factors with loading higher than 0.30 are shown. **In bold:** VMO2 personality scales

and Obsessive-Compulsive PD (VMO2 scales) with its symptomatic parallels from the questionnaire PAI (Paranoia - Persecution and ARD Obsessive Compulsive), and with general Aggression. The fifth factor (explaining 3.85% of the total variance) refers to the use of psychoactive substances and antisocial behaviour.

The correlations between variables included in the fourth factor are positive and high (Table 4), especially between Obsessive-Compulsive PD and ARD - Obsessive-Compulsive, and Paranoid PD and Paranoia-Persecution. However, a very high correlation between the Paranoid and Obsessive-Compulsive personality disorder exists as well.

Table 4: Correlation between symptomatic and personality scales

Scales of PAI and VMO2		VMO2 Obsessive-Compulsive PD	VMO2 Paranoid PD	PAI Paranoia - Persecution	PAI ARD - Obsessive Compulsive
VMO2 Obsessive- Compulsive PD	Pearson r	1			
	p value				
	N	129			
VMO2 Paranoid PD	Pearson r	<b>.788*</b>	1		
	p value	.000			
	N	129	129		
PAI Paranoia - Persecution	Pearson r	<b>.522**</b>	<b>.738**</b>	1	
	p value	.000	.000		
	N	129	129	129	
PAI Anxiety Related Disorders- Obsessive-Compulsive	Pearson r	<b>.580**</b>	<b>.565**</b>	<b>.433**</b>	1
	p value	.000	.000	.000	
	N	129	129	129	129

\*\* Correlation is significant at p= 0.01 (2-way test).

## DISCUSSION

There are two approaches to the assessment of personality disorders: the categorical model used in psychiatric classification of personality disorders, and the dimensional model used in clinical psychology. Both have advantages and disadvantages. The categorical model has proved to be more problematic than the dimensional model, both conceptually and from an empirical point of view (Clark, 2007; Widiger & Trull, 2007). It is less sensitive, and has lower content and construct validity (Schroeder et al., 2012). On the other hand, there is no clear line between healthy and disturbed personality traits in the dimensional model. Its division is based on quantitative deviation from what is considered normal (the statistical mean) and the arbitrarily set threshold. Additionally, it is often based on self-assessment questionnaires that come with a specific set of problems, e.g. an acute mental disorder, weak introspection or unwillingness to disclose information about oneself (which is not rare among individuals with pathological personality traits) which all influence the end result. To regulate unwanted effects that may contribute to a false assessment, questionnaires include a variety of control scales.

Despite the shortcomings of self-assessment questionnaires, they are in line with the dimensional and phenomenological approaches, and can attain better validity and sensitivity in detection of the relationship between personality and mental disorders. The personality questionnaires PAI and VMO2 were used to determine whether experiences of oneself and one's surroundings (representations of self and others) are associated with mental health problems (disorders), and which representations are associated with what mental disorders. PAI consists of personality and symptomatic scales whereas VMO2 consists only of personality scales.

The results of both factor analyses indicate specific links between symptoms and personality traits. Borderline personality disorder is associated with various symptoms, particularly with anxiety, symptoms of depression and behaviours associated with it (e.g. suicide attempts), and physical complaints with somatoform features. These traits are linked with the experience of trauma, which is common for individuals with borderline personality disorder as well as for those with depressive disorder (see e.g. Paris, 2001; Stone, 2005).

Given the salient heterogeneity of borderline personality disorder, the relationship between sub-dimensions of the disorder and specific symptoms was considered (Table 2). The first two subscales, BF - Identity Problems and BF - Affective Instability, are primarily associated with anxious - depressive emotional states and physical problems, while BF - Negative Relationships are associated with aggression towards others. The Third factor includes Borderline Feature- Self-Harm, which focuses mostly on behaviour, and connects it with other »excessive« behaviours: psychotic experiences, problems with drugs and alcohol, antisocial, and manic behaviour.

In patients with borderline personality disorder there is present a mixture of internalized (pathological turning of the aggression towards the self through feelings of guilt and shame) and externalized styles of problem management (perception of the conflict as external to oneself, looking for the culprit of unpleasant emotions, which might lead to heteroaggressive behaviour). In psychoanalytical theory (see e.g. Kernberg, 1986) the latter represents a less mature form of defense, namely schizoid-paranoid position (Klein, 1984). This is evident in the second, so called Paranoid Factor (Table 1), which

includes paranoid personality scales with the overall aggressive behaviour. This result is consistent with the hypothesis of less mature conflict management in people with severe personality (paranoid) pathology.

Factor analysis of personality (VMO2) and symptomatic scales (PAI) shows a connection between avoidant, schizoid, depressive and dependent personality disorders, with their common denominator of social anxiety and withdrawal, captured in the symptomatic scale ARD - Phobia. These personality disorders, with an exception of schizoid personality disorder - though Millon (1996; 2009) sees it as a mild pathology - refer to mild personality pathology, »neurotic« symptoms, and phobias. This (first) factor is, as expected, significantly associated with symptomatic scales constituting the second largest factor: Depression, Suicide Ideation, Stress and Anxiety, which is otherwise associated with borderline personality disorder. A peculiarity of this factor is the scale Somatic Complaints, i.e. somatization, an immature defense mechanism according to psychoanalytic theory (Kernberg, 1986). The third factor includes histrionic, narcissistic, antisocial and schizotypal personality disorder and symptoms of mania and psychotic experiences. A common feature of these seemingly different phenomena is externalization of conflicts/problems, in contrast to the first two factors where the problems seem to be internalized. The perception of the importance of self is less critical, grandiose. Borderline personality organization, which includes histrionic, narcissistic, antisocial and schizotypal personality disorder is therefore associated with less mature defenses.

An expected relationship between ARD- Obsessive-Compulsive and Obsessive-Compulsive PD, and Paranoia - Persecution and Paranoid PD can be observed from the data, along with a strong correlation between Paranoid and Obsessive-Compulsive PD. As discussed in the introduction, empirical data more or less supports the psychoanalytical hypothesis of the connection between personality and symptoms. In both cases the externalization of the internal conflict and an attempt to control one's own aggression are present, with our premise that a maturer defence mechanism (i.e. projection) is manifested in obsessive-compulsive disorder/personality, and less mature mechanisms (i.e. projective identification) are more common in paranoid disorder/personality. The strong correlation between obsessive-compulsive and paranoid PD may reflect the limited scope of the quantitative-statistical and phenomenological research that explores the surface tendencies and behaviours, whereas the internal dynamics might be overlooked.

## CONCLUSION

How should we understand the relationship between personality traits, personality disorders and mental disorders? If we try to integrate the categorical and dimensional models we can understand a personality disorder as an intensified normal personality trait that at some point, in interaction with other personality traits and external circumstances, »jump« to a new quality, a personality disorder with its expression in a specific mental disorder, i.e. difficulties as experienced by a specific individual and/or his surroundings. Specific (personality) disorders are inextricably linked, depending on a number of situational and personal factors. With the help of the phenomenological and correlation methods we can reveal only some of its aspects.

The present study supports the relationship between personality disorders and specific symptoms, especially for borderline PD. The results reflect the heterogeneous clinical

presentation of borderline PD, since Borderline Personality Features correlated with milder as well as with more severe symptoms. The results also offer partial support for our hypothesis that the severity of the symptoms will correlate with the level of personality pathology. Mild personality pathology (cluster C, according to DSM-5) correlated with milder, »neurotic« symptoms, in contrast to severe personality disorders (cluster A and B, according to DSM-5) that correlated with severer symptoms.

The main shortcoming of the present research is a relatively small sample used for a factor analysis. A sample of psychiatric patients, although limited to outpatients, is quite heterogeneous, which poses certain limitations when trying to generalize the findings. Further research on a bigger and more homogeneous sample would be necessary. Secondly, there was a relatively strong correlation between different symptoms and disorders, which could be attributed to the phenomenological, self-assessment method we used. This method is limited by the participants' self-awareness and motivation for self disclosure, both affecting the validity of the results. In future research, additional assessment methods should be used, e.g. structured interviews, performance tests.

#### Acknowledgements:

- None.

#### Conflict of interest:

- None to declare.

## REFERENCES

- Abraham, K. (1957). *Papers on psychoanalysis*. New York: Basic Books.
- Alnaes, R. in Torgersen, S. (1997). Personality and personality disorders predict development and relapses of major depression. *Acta Psychiatrica Scandinavica*, 95(4), 336-342.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders DSM-IV-TR* (4th ed. text revision). Washington, DC: Author.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders DSM-5*. (5th ed.). Washington, DC: Author.
- Bagby, R. M., Rector, N. A., Bindseil, K., Dickens, S. E., Levitan, R. D., & Kennedy, S. H. (1998). Self-Report Ratings and Informant's Ratings of Personalities of Depressed Outpatients. *American Journal of Psychiatry*, 155(3), 437-438.
- Barsky A.J., Wyshak G., & Klerman, G.L. (1992). Psychiatric comorbidity in DSMIII-R hypochondriasis. *Archives of General Psychiatry*, 49: 101-108.
- Beck, A. T. in Freeman, A. (2004). *Cognitive therapy of personality disorders*. New York: The Guilford Press.
- Benedik, E. (2004). Vprašalnik motenj osebnosti: razvoj in preliminarna raziskava. *Psihološka obzorja*, 13 (3), 119-138.
- Benedik, E. (2007). Vprašalnik motenj osebnosti VMO. V Avsec, A. (ur.). *Psihodiagnostika osebnosti* (str. 215-223). Ljubljana: Filozofska fakulteta, Oddelek za psihologijo.
- Benedik, E. in Čoderl, S. (2014). Phenomenological aspects of personality disorders in adult psychiatric patients. *Psychiatria Danubina*, 26 (2), 127-136.
- Benedik, E. (2014). *Osebnost med zdravjem in boleznijo*. 2., dopolnjena izdaja. Lesce: samozaložba.
- Benedik, E. (2016). Validacija vprašalnika motenj osebnosti VMO2. Ljubljana: Fakulteta za psihoterapevtsko znanost SFU Ljubljana (neobjavljeno).
- Benjaminsen, S. (1981). Primary non-endogenous depression and features attributed to reactive depression. *Journal of Affective Disorders*, 3(3), 245-259.
- Berenbaum, H. & Fujita, F. (1994). Schizophrenia and personality: Exploring the boundaries and connections between vulnerability and outcome. *Journal of Abnormal Psychology*, 103 (1), 148-158.
- Blatt, S. J. & Homann, E. (1992). Parent-child interaction in the etiology of dependent and self-critical depression. *Clinical psychology review*, 12(1), 47-91.
- Bornstein, R. F. (1992). The dependent personality: developmental, social, and clinical perspectives. *Psychological Bulletin*, 112(1), 3.
- Clark, L. A. (2007). Assessment and diagnosis of personality disorder: Perennial issues and an emerging reconceptualization. *Annual Review of Psychology*, 58, 227-257.
- Clark L.A., Vittengl J., Kraft D., & Jarrett R.B. (2003). Separate personality traits from states to predict depression. *Journal of Personality Disorders*, 17, 152-172.
- Clark L.A., Vittengl J.R., Kraft D., & Jarrett R.B. (2003). Shared, not unique, components of personality and psychosocial functioning predict depression severity after acute-phase cognitive therapy. *Journal of Personality Disorders*. 17(5): 406-430.
- Clark, L. A., Watson, D., & Mineka, S. (1994). Temperament, personality and the mood and anxiety disorders. *Journal of Abnormal Psychology*. 103(1), 103-116.
- Clayton, P. J., Ernst, C. & Angst, J. (1994). Premorbid personality traits of men who develop unipolar or bipolar disorders. *European Archives of Psychiatry and Clinical Neuroscience*,

- 243(6), 340-346.
- Corruble, E., Ginetet, D., & Guelfi, J. D. (1996). Comorbidity of personality disorders and unipolar major depression: A review. *Journal of Affective Disorders*, 37(2), 157-170.
- Costa, P. T. & McCrae, R. R. (1992). Revised NEO Personality Inventory (NOE-PI-PR) and NEO Five Factor Inventory (NEO-FFI) professional manual. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T. & Widiger T. A. (1994). *Personality disorders and the five-factor model of personality*. Washington (DC): American Psychological Association.
- Coppen, A.L., Metcalfe, H. (1965). The effect of a depressive illness on MMPI scores. *British Journal of Psychiatry*, 111, 236-239.
- Costa, P., Samuels, J., Bagby, M., Daffin, L., & Norton, H. (2005). Obsessive-Compulsive Personality Disorder: A Review. V Maj, M., Akiskal, H. S., Mezzich, J. E. in Okasha, A. (ur.), *Personality Disorders*. John Wiley & Sons Ltd, 404-439.
- Davidson, J., Miller, R. & Strickland, R. (1985). Neuroticism and Personality Disorder in Depression. *Journal of affective disorders*, 8(2), 177-182.
- Fairbairn, W.R. D. (1978). *Psychoanalytic studies of the personality*. London: Routledge & Kegan Paul.
- Farabaugh, A., Mischoulon, D., Schwartz, F., Pender, M., Fava, M., & Alpert, J. (2007). Dysfunctional attitudes and personality disorder comorbidity during long-term treatment of MDD. *Depression and anxiety*, 24(6), 433-439.
- Farmer, R. & Nelson-Gray, R. O. (1990). Personality disorders and depression: Hypothetical relations, empirical findings, and methodological considerations. *Clinical Psychology Review*, 10(4), 453-476.
- Freud, S. (1987). *Metapsihološki spisi*. Ljubljana: ŠKUC, FF (prevod Bahovec, E., Baskar, B., Dobnikar, M., Dolar, M., Mihelj, V., Riha, R., Štandeker, I. & Žižek, S.).
- Fyer, M.R., Frances A.J., Sullivan T., Hurt S.W., & Clarkin J. (1988). Co-morbidity of borderline personality disorder. *Archives of General Psychiatry*, 45, 348-352.
- Gabbard, G. O. (2005). Obsessive-compulsive personality disorder: Elusive for whom? V Maj, M., Akiskal, H. S., Mezzich, J. E. in Okasha, A. (ur.), *Personality Disorders*. John Wiley & Sons Ltd, 440-443.
- Hecht, H., van Calker, D., Spraul, G., Bonus, M., Wark, H. J., Berger, M., & von Zerssen, D. (1997). Premorbid personality in patients with uni- and bipolar affective disorders and controls: assessment by the Biographical personality interview (BPI). *European archives of psychiatry and clinical neuroscience*, 247(1), 23-30.
- Hirschfeld, R. M. A., Klerman, G. L., Clayton, P. J. & Keller, M. B. (1983). Personality and Depression: Empirical Findings. *Archives of General Psychiatry*, 40(9), 993-998.
- Hirschfeld, R. M. A., Klerman, G. L., Clayton, P. J., Keller, M. B., McDonald-Scott, P. & Larkin, B. H. (1983). Assessing personality: Effects of the Depressive State on Trait Measurement. *American Journal of Psychiatry*, 140(6), 695-699.
- Hoffart A., Thornes K., & Hedley L.M. (1995). DSM-III-R Axis I and II disorders in agoraphobic inpatients with and without panic disorder before and after psychosocial treatment. *Psychiatry Resources*, 56: 1-9.
- Hyler, S. E. (1994). *Personality Diagnostic Questionnaire*. New York: New York State Psychiatric Institute.
- Joffe, R. T. & Regan, J. J. (1988). Personality and depression. *Journal of Psychiatric Research*, 22(4), 279-286.
- Josephs, L. (1995). *Character and self-experience. Working with obsessive-compulsive, depressive-masochistic, narcissistic, and other character styles*. London: Jason Aronson.

- Kendell, R. E. & DiScipio, W. J. (1968). Eyesenck Personality Inventory Scores of Patients with Depressive Illness. *The British Journal of Psychiatry*, 114(511), 767-770.
- Kernberg, O. F. (1986). *Severe personality disorders. Psychotherapeutic strategies*. New Haven: Yale University Press.
- Kirmayer, L. J., Robbins, J. M., & Paris, J. (1994). Somatoform disorders: Personality and the social matrix of somatic distress. *Journal of Abnormal Psychology*, 103(1), 125-136.
- Klein, M. (1984). *Envy and Gratitude and Other Works 1946-1963*. London: The Hogarth Press.
- Krueger, R. F., Derringer, J., Markon, K. E., Watson, D., & Skodol, A. E. (2012). Initial construction of a maladaptive personality trait model and inventory for DSM-5. *Psychological Medicine*, 42, 1879-1890
- Lazare, A., Klerman, G. L., & Armor, D. J. (1966). Oral, obsessive, and hysterical personality patterns: An investigation of psychoanalytic concepts by means of factor analysis. *Archives of General Psychiatry*, 14(6), 624-630.
- Loranger, A. W., Lenzenweger, M. F., Gartner, A. F., Susman, V. L., Herzog, J., Zammit, G. K., Gartner, J. D., Abrams, R. C., & Young, R. C. (1991). Trait-State Artifacts and the Diagnosis of Personality Disorders. *Archives of General Psychiatry*, 48(8), 720-728.
- Loxton, N. J. & Dawe, S. (2009). Personality and eating disorders. In P. J. Corr in G. Mathews (ur.), *The Cambridge handbook of personality psychology*. (str. 687-699). Cambridge: Cambridge University Press.
- Lyons M.J., Tyrer P., Gunderson J., & Tohen M. (1997) Heuristic models of comorbidity of axis I and axis II disorders. *Journal of Personality Disorders*, 11, 260-269.
- McGlashan T.H., Grilo C.M., Skodol A.E., Gunderson J.G., Shea, M.T., Morey, L.C., Zanarini, M.C., & Stout, R.L. (2000). The Collaborative Longitudinal Personality Disorders Study: baseline Axis I/II and II/II diagnostic co-occurrence. *Acta Psychiatrica Scandinavica*, 102, 256-264.
- Mehl, P.E. (1962). Schizotaxia, schizotypy and schizophrenia. *American Psychologist*, 17, 827-838.
- Millon, T. (2009). *Millon clinical multi-axial inventory - III (MCMI-III) (4th ed.)*. Minneapolis: NCS Pearson.
- Millon, T. & Davis, R. D. (1996). *Disorders of personality. DSM-IV and beyond*. USA: Wiley.
- Morey, L. C. (2003). *Essentials of PAI assessment*. USA: John Wiley & Sons.
- Morey, L. C. (2009). *Vprašalnik za oceno osebnosti: PAI - priročnik*. Ljubljana: Center za psihodiagnostična sredstva. (Slovenska priredba: Gosar, D. in Boben, D., prevod Brajovič, T.).
- Mulder, R. T., Joyce, P. R., & Luty, S. E. (2003). The Relationship of Personality Disorders to Treatment Outcome in Depressed Outpatients. *Journal of Clinical Psychiatry*, 64(3), 259-264.
- Murray, L. G. & Blackburn, I. M. (1974). Personality differences in patients with depressive illness and anxiety neurosis. *Acta Psychiatrica Scandinavica*, 50(2), 183-191.
- Newton-Howes G., Tyrer P., & Johnson T. (2006). Personality disorder and the outcome of depression: a meta-analysis of published studies. *The British Journal of Psychiatry*, 188(1), 13-20.
- Neilsands, T. B., Silvera, D. H., Perry, J. A., Richardsen, A. & Holte, A. (2008). A validation and short form of the Basic character inventory. *Scandinavian Journal of Psychology*, 49(2), 161-168
- Noyes R. Jr., Woodman C.L., Holt, C.S., Reich, J.H., & Zimmerman, M.B. (1995). Avoidant personality traits distinguish social phobic and panic disorder subjects. *Journal of Nervous and Mental Disease*, 183: 145-153.
- Paris, J. (1994). *Social factors in the personality disorders. A biopsychosocial approach to etiology and treatment*. Cambridge: University Press.

- Paris, J. (2001). Psychosocial adversity. V W. J. Livesley (ur.), *Handbook of Personality Disorders*. New York: Guilford Press, 231-241.
- Parker, G., Roussos, J., Austin, M.P., Hadzi-Pavlovic, D., Wilhelm, K., & Mitchell P. (1998). Disordered personality style: higher rates in non-melancholic compared to melancholic depression. *Journal of Affective Disorders*, 47, 131-140.
- Pfohl, B. Stangl, D. & Zimmerman, M. (1984). The implication of DSM-III personality disorders for patients with major depression. *Journal of Affective Disorders*, 7, 209-3018.
- Phillips, K. A., Gunderson, J. G., Hirschfeld, R. M. A., & Smith, L. E. (1990). A Review of the Depressive Personality. *American Journal of Psychiatry*, 147(7), 830-837.
- Pilkonis, P. A. & Frank, E. (1988). Personality pathology in recurrent depression: nature, prevalence, and relationship to treatment response. *American Journal of Psychiatry*, 145(4), 435-441.
- Pulay, A. J., Stinson, F. S., Dawson, D. A., Goldstein, R. B., Chou, S. P., Huang, B., Saha, T. D., Smith, S. M., Pickering, R. P., Ruan, W. J., Hasin, D. S., & Grant, B. F. (2009). Prevalence, correlates, disability, and comorbidity of DSM-IV schizotypal personality disorder: results from the wave 2 national epidemiologic survey on alcohol and related conditions. *Journal of Clinical Psychiatry*, 11(2): 53-67
- Reich, J., Noyes, R., Hirschfeld, R., Coryell, W., & O'Gorman, T. (1987). State and Personality in Depressed and Panic Patients. *American Journal of Psychiatry*, 144(2), 181-187.
- Røysamb, E., Kendler, K. S., Tambs, K., Ørstavik, R.E., Neale, M.C., Aggen, S.H., . . . Reichborn-Kjennerud, T. (2011). The joint structure of DSM-IV Axis I and Axis II disorders. *Journal of Abnormal Psychology*, 120: 198-209.
- Sanderson, W.C., Wetzler, S., Beck, A.T., & Betz, F. (1994). Prevalence of personality disorders among patients with anxiety disorders. *Psychiatry Researches*, 51: 167-174.
- Seivewright, H., Tyrer, P., & Johnson, T. (1998). Prediction of outcome in neurotic disorder: a five year prospective study. *Psychological Medicine*, 28, 1149-1157.
- Seivewright, N., Tyrer, P., Ferguson, B., Murphy, S., North, B., & Johnson, T. (2000). Longitudinal study of the influence of life events and personality status on diagnostic change in three neurotic disorders. *Depression and Anxiety*, 11, 105-113.
- Seivewright, H., Tyrer, P., & Johnson, T. (2004). Persistent social dysfunction in anxious and depressed patients with personality disorder. *Acta Psychiatrica Scandinavica*, 109(2):104-9.
- Shea, M. T. (2005). Anxious Cluster Personality Disorders and Axis I Anxiety Disorders: Comments on the Comorbidity Issue. V Maj, M., Akiskal, H. S., Mezzich, J. E. in Okasha, A. (ur.), *Personality Disorders* (str., 386-389). USA: John Wiley & Sons Ltd.
- Shea, M. T., Glass, D. R., Pilkonis, P. A., Watkins, J. & Docherty, J. P. (1987). Frequency and implications of personality disorders in a sample of depressed outpatients. *Journal of Personality Disorders*, 1(1), 27-42.
- Schroeder, K., Hoppe, A., Andresen, B., Naber, D., Lammers, C. H. & Huber, C. G. (2012) Considering DSM-5: Personality Diagnostics in Patients with Schizophrenia Spectrum Disorders. *Psychiatry*, 75, 2, 120-134.
- Skodol, A. E., Stout, R. L., McGlashan, T. H., Grilo, C. M., Gunderson, J. G., Shea, M. T., Morey, L. C., Zanarini, M. C., Dyck, I. R. & Oldham, J. M. (1999). Co-occurrence of mood and personality disorders: A report from the collaborative longitudinal personality disorders study (CLPS). *Depression and anxiety*, 10(4), 175-182.
- Stone, M. (2005). Borderline and Histrionic Personality Disorders: A Review. V Maj, M., Akiskal, H. S., Mezzich, J. E. in Okasha, A. (ur.), *Personality Disorders* (str. 201-231). USA: John Wiley & Sons Ltd.
- Trull, T. J. & McCrae, R. R. (1994). A five-factor perspective on personality disorder research. V Costa, P. & Widiger, T. A., *Personality disorders and the Five-factor model of personality* (str. 59-71). Washington DC: APA.
- Tyrer, P. (2005). The anxious cluster of personality disorders: A review. V Maj, M., Akiskal, H. S., Mezzich, J. E. in Okasha, A. (ur.), *Personality Disorders* (str. 349-375). John Wiley & Sons Ltd,
- Watson, D., & Clark L.A. (1984). Negative affectivity: the disposition to experience aversive emotional states. *Psychological Bulletin*, 96, 465-490.
- Widiger, T. A., & Trull, T. J. (2007). Plate tectonics in the classification of personality disorder: Shifting to a dimensional model. *American Psychologist*, 62, 71-83.
- Wiggins, J. S. (2003). *Paradigms of personality assessment*. New York: The Guilford Press.
- Zanarini, M., Frankenburg, F. R., Dubo, E. D., Sickel, A. E., Trikha, A., Levin, A., & Reynolds, V. (1998). Axis I comorbidity of borderline personality disorder. *American Journal of Psychiatry*, 155, 1733-1739.
- Young, J. E. (1999). *Cognitive therapy for personality disorders*. Florida: Professional Resource Press.