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Application of the MMPI-2 inventory in the differential diagnosis of psychotic disorders – based on profile analysis of a patient diagnosed with persistent delusional disorder and personality disorder

Zastosowanie inwentarza MMPI-2 w diagnozie różnicowej zaburzeń psychotycznych – na przykładzie analizy profilu pacjentki z rozpoznaniem uporczywych zaburzeń urojeniowych oraz zaburzeń osobowości

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Abstract

Aim: Paranoid states or traits can be present in various mental disorders; hence, their clarification is valuable for establishing a reliable nosological diagnosis. Clinical practice and literature on the subject highlight a range of defence mechanisms specific to the discussed nosological group. These mechanisms can impede the process of psychiatric and psychotherapeutic diagnosis and treatment. In contemporary evidence-based medical practice, the prevalent clinical approach is based on qualitative methods (e.g. free interviews and observations) complemented by standardised diagnostic tools. This approach assists the clinician in supplementing, organising, and objectifying clinical data related to the patient's mental state. It is particularly beneficial for handling data that may be uncertain or unavailable in an observational study for various reasons. The article presents insightful and pragmatic theoretical, empirical, and case-related information on the potential application of the Minnesota Multiphasic Personality Inventory (MMPI-2) in the psychological diagnosis of patients with persistent delusional disorders. **Methods:** The paper explores theoretical issues and analyses a case study involving a female patient with a suspected diagnosis of delusional disorder and co-occurring personality disorder. In the case study, the authors employed qualitative methods, including observation and free psychological interview, and supplemented clinical data with insights gained through the use of a standardised psychometric method: the MMPI-2. **Reflections and practical recommendations** are divided into two groups. One group comprises the potential applications of the MMPI-2 in clinical psychological diagnosis. The other focuses on the importance of the diagnostic alliance and its roles in the process of planning the psychological diagnosis in patients with delusional disorders.

Keywords: MMPI-2, psychosis, differential diagnosis, delusional disorders, personality disorders

Streszczenie

Wprowadzenie i cel: Stany lub cechy paranoiczne występują w różnych zaburzeniach psychicznych, dlatego ich klaryfikacja jest przydatna do celów rzetelnej diagnozy nozologicznej. Praktyka kliniczna i literatura przedmiotu wskazują na specyficzne dla omawianej grupy nozologicznej mechanizmy obronne, które utrudniają proces diagnozy i leczenia psychiatrycznego i psychoterapeutycznego. Uzupełnienie w badaniu klinicznym metod jakościowych (swobodnego wywiadu i obserwacji) wystandaryzowanymi narzędziami diagnostycznymi wpisuje się w nurt praktyki medycznej opartej na dowodach naukowych. Pomaga klinicyście uzupełniać, porządkować i obiektywizować dane kliniczne na temat stanu psychicznego pacjenta – szczególnie dane z różnych przyczyn niepewne lub niedostępne w badaniu obserwacyjnym. Artykuł dostarcza ciekawych i pragmatycznych danych teoretycznych, empirycznych i kazuistycznych dotyczących możliwości zastosowania Minnesockiego Wielowymiarowego Inwentarza Osobowości (Minnesota Multiphasic Personality Inventory, MMPI-2) do

diagnozy psychologicznej u osób prezentujących uporczywe zaburzenia urojeniowe. **Metody:** W pracy omówiono zagadnienia teoretyczne i dokonano analizy studium przypadku pacjentki z podejrzeniem uporczywych zaburzeń urojeniowych oraz współwystępującymi zaburzeniami osobowości. W przedstawionym studium przypadku autorzy odwołali się do metod jakościowych (obserwacji, swobodnego wywiadu psychologicznego) i uzupełniania danych klinicznych przez zastosowanie wystandaryzowanej metody psychometrycznej – inwentarza MMPI-2. **Refleksje i rekomendacje praktyczne** zostały podzielone na dwie grupy. Pierwsza dotyczy możliwości wykorzystania testu MMPI-2 w psychologicznej diagnozie klinicznej. Druga odnosi się do znaczenia sojuszu diagnostycznego w procesie planowania diagnozy psychologicznej pacjenta z zaburzeniami urojeniowymi.

Słowa kluczowe: MMPI-2, psychoza, diagnoza różnicowa, zaburzenia urojeniowe, zaburzenia osobowości

INTRODUCTION

In the ICD-11 (International Classification of Diseases, 11th Revision), delusional disorder is classified in the category of Schizophrenia or Other Primary Psychotic Disorders (Gałecki, 2022; Reed et al., 2019). Delusional disorder is characterised by the development of a delusion or a set of related delusions, typically persisting for at least 3 months and often much longer, in the absence of a depressive, manic, or mixed mood episode. In some cases, specific hallucinations typically related to the content of the delusions may be present (World Health Organization, 2019). A key feature differentiating delusional disorder from other primary psychotic disorders is that – aside from delusional content – the behaviour of patients typically does not deviate significantly from the norm (Morrison, 2016).

IMPORTANCE AND AREAS OF PSYCHOLOGICAL DIAGNOSIS IN DELUSIONAL DISORDERS

Paranoid states or traits accompany a range of psychiatric disorders, which underscores the importance of clarifying them for a reliable differential diagnosis (Soroko, 2017). The diagnostic work-up must exclude other primary psychotic disorders, bipolar affective disorders, obsessive-compulsive disorders or symptomatic paranoid syndromes, i.e. symptoms of paranoia stemming from organic brain damage, effects of medications or psychoactive agents (Gałecki, 2022). Paranoid symptoms can also arise as a temporary adaptive response to stressful factors, such as social stigmatisation.

Delusional disorders are more prevalent among patients with severe personality psychopathology (Lingiardi and McWilliams, 2019). The category comprises paranoid, schizoid, schizotypal, borderline, and antisocial personality disorders (Kernberg, 2005). The assessment of psychopathological personality mechanisms and psychosocial factors influencing mental health remains within the domain of clinical psychology. Objectification of the diagnostic process in clinical psychology is an integral aspect of evidence-based practice (Soroko and Cierpiałkowska, 2020). The traditional approach to mental health assessment has been critically reassessed, with a growing preference for standardised methods (Wciórka and Pużyński, 2010). Hence, it appears reasonable to incorporate standardised tests into the diagnostic process.

In summary, the psychological examination of patients with a delusional disorder serves multiple purposes. It helps to gather insights into symptoms and their classification (nosological and differential diagnosis), identifies factors triggering, exacerbating, and sustaining delusional disorders, such as personality-related, psychosocial, and neuropsychological determinants (epigenetic diagnosis), and provides essential information for constructing a treatment plan (prospective diagnosis). Potential problems that may hinder the clinical diagnosis of patients with persistent delusional disorder are outlined in Tab. 1.

PERSISTENT DELUSIONAL DISORDER ASSESSED BY MMPI-2

The Minnesota Multiphasic Personality Inventory (MMPI-2) is one of the most widely researched psychological assessment instruments, commonly used for clinical diagnosis. Since its publication in 1989, the MMPI-2 has been employed in over 2,000 research papers (Graham, 2015). Thus, the MMPI-2 is a tool with a well-established and empirically supported research tradition (Butcher et al., 2004; Graham, 2015; Levak et al., 2011). It is suitable for the diagnosis of psychopathologies and personality disorders. The Polish adaptation of the MMPI-2 was published in 2012 (Butcher et al., 2012; Polish standardisation: Urszula Brzezińska, Marta Koć-Januchta, Joanna Stańczak).

It is important to highlight that – from the perspective of diagnostic nosology – elevated scores on the MMPI scales do not pinpoint a specific psychiatric disorder. Instead, they indicate a resemblance between the individual being

Egosyntonic symptoms (lack of insight into the delusional process)
Dissimulation attitude
Distrust or hostility
Personality psychopathology and associated patterns of interpersonal relationships
Coexistence of other psychiatric disorders impacting the overall clinical presentation

Tab. 1. Challenges involved in diagnosing individuals with delusional disorders (own elaboration)

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examined and patients with a particular type of psychiatric disorder. This provides a relatively broad framework for understanding and interpreting the results in conjunction with other diagnostic findings. Analysis of the MMPI-2 protocol is thus a complex task that demands the integration of clinical data with extensive knowledge and practical experience (Graham, 2015; Matkowski, 1992).

It was argued that the profiles of psychotic patients in MMPI- and MMPI-2-based examinations would be characterised by high scores on the scales evaluating psychotic symptoms, such as the Schizophrenia (Sc) and Paranoia (Pa) scales, and specific configurations of the clinical scales (Matkowski, 1992; Meyer and Weaver, 2007; Wetzler et al., 1998). Patients with persistent delusional disorder were expected to primarily exhibit high scores on the clinical Paranoia (Pa) scale. However, as observed in real-life practice, examined individuals may obtain average or even reduced scores on the Pa scale due to dissimulation (Matkowski, 1992; Meyer and Weaver, 2007). Furthermore, higher Pa scores may be indicative of patients exhibiting paranoid personality traits as well as individuals belonging to historically socially stigmatised groups (Dahlstrom et al., 1986). Empirical data indicates that individuals with persistent delusional disorder may have moderately elevated scores on the Paranoia scale and the Psychopathy scale. These scores reflect the presence of the delusional system along with associated hostility and social alienation (Meyer and Weaver, 2007). To conclude, the higher the score on the Paranoia scale, the greater the likelihood of psychotic disorders (Graham, 2015).

The literature shows that restructured clinical (RC) scales can be highly valuable in differential diagnosis, for they are more effective in identifying and isolating psychotic symptomatology compared to stand-alone clinical scales and content scales (Hoelzle and Meyer, 2008). Consequently, examining the RC scores in conjunction with the basic clinical scale scores can be highly significant in drawing diagnostic conclusions about the presence of psychotic disorders or psychotic traits associated with other disorders (Hoelzle and Meyer, 2008). The Ideas of Persecution (RC6) scale and the Aberrant Experiences (RC8) scale exhibit a closer association with the psychotic factor than the Paranoia (Pa) and Schizophrenia (Sc) scales. The specified scales isolate psychotic symptoms, including persecutory ideas and bizarre sensory experiences such as hallucinations (Hoelzle and Meyer, 2008).

PURPOSE OF PSYCHOLOGICAL EXAMINATION

The objective of the study was to identify or exclude psychotic symptoms using standardised psychological measurement methods. Furthermore, the study sought to diagnose personality psychopathology to assess how personality mechanisms affected the symptoms presented. The application of the MMPI-2 in the psychological diagnosis was prompted by the necessity to elucidate to what extent the patient's reported experiences are due to significant distortions induced by personality psychopathology and to what degree they can be attributed to the potential delusional process. The patient's chaotic nature of presenting information, lack of clarity, and dramatic style of self-presentation observed during the psychological interview posed challenges in organising and collecting clinical data. Objectification of the patient's mental state was further hindered by the inability to conduct a diagnostic interview with members of her family.

BRIEF HISTORY AND CHARACTERISTICS OF THE PATIENT

The patient is a 49-year-old woman, a graduate of a secondary school of general education, an only child, daughter of parents with a high social status. She was cared for by a nanny from a young age. She described the relationship with her parents and her childhood in a very general and idealised manner. According to the patient's account, she did not have many household responsibilities and she was frequently relieved of chores. When she was in secondary school, she began to experience learning difficulties. The patient believed she lacked proper parental care or supervision during that period. In the year of her secondary school graduation, she met her future husband. At the age of 21, she became pregnant with him and they got married. The marriage proved to be unsuccessful due to the husband's struggle with alcohol abuse. The divorce took place when the patient was 29 years old. During her marriage, the patient enrolled at a university but was unable to continue her studies. Following the divorce, the lack of financial security compelled the woman to return to the family home. In adulthood, she relied on financial support from her parents and engaged in short-term romantic relationships with men. She had no long-term work experience, which she explained by the need to raise her daughter and dissatisfaction with her previous job experiences. She described herself as "sensitive" and "rebellious," and as an "independent spirit". The contrast between the patient's generational family history and her personal failures was evident.

PRESENTED SYMPTOMS AND REPORTED DIFFICULTIES

The patient asserted that she had been a victim of a conspiracy for a period exceeding 4 years. She spoke of associated mood swings and reported consulting a psychiatrist a few months earlier. Persecutory delusions about the identified topic remained plausible, while the number of individuals mentioned by the patient as potentially involved in the conspiracy, along with an elaborate system of alleged links between them, indicated an ongoing presence of delusional ideation. Throughout the psychological evaluation, the patient's responses were logically consistent, except for the

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Abbreviated name of scale	VRIN	TRIN	F	Fb	Fp	FBS	L	K	S
k-corrected T-score	44T	47T	67T	56T	52T	55T	49T	50T	41T

VRIN – Variable Response Inconsistency; **TRIN** – True Response Inconsistency; **F** – Infrequency; **Fb** – Back F; **Fp** – Infrequency – Psychopathology; **FBS** – Symptom Validity; **L** – Lie; **K** – Correction; **S** – Superlative Self-Presentation.

Tab. 2. Recalculated control scale scores (with k-correction)

presence of delusional beliefs. There was no formal thought disorder. Her affect was appropriate to the context. She was able to fully connect emotionally with the psychologist during the diagnostic interview. The psychiatrist's records revealed that the patient been treated with risperidone, an antipsychotic drug, for 6 months (Gałecki and Szulc, 2018). Pharmacotherapy was aimed at reducing potential psychotic symptoms and achieving emotional stability. After the initiation of treatment, the patient reported an improvement in her well-being, yet she continued to uphold her prior convictions. The psychological interview indicated that some of the patient's experiences – such as the belief of being stigmatised in her home town – were distorted by delusional ideation. Other events, like the partner's decision to end the relationship with the patient, stemmed from actual negative reactions from the people around to the patient's psychotic manifestations and behaviours influenced by her personality disorder. Differentiation of the indicated correlates proved challenging at times, resulting in uncertainty regarding the actual state of the patient's mental health.

EVENTS PRECEDING THE ONSET OF SYMPTOMS

The patient linked the onset of her problems to her return to university. She struggled to grasp the study material, though in conversation she admitted being aware of age-related limitations. She did not form any closer relationships with other, much younger students. She often found herself in conflicts, and she engaged in arguments with her lecturers.

INTERPRETATIVE ANALYSIS OF THE MMPI-2 PROFILE

The analysis presented below focuses on four main areas: the patient's attitude towards the examination, patterns of symptoms, level of adjustment, and personality diagnosis.

ATTITUDE TOWARDS THE EXAMINATION

Examination of the control scales (Tab. 2) shows that the patient provided consistent responses to the questions. This is indicated by the Variable Response Inconsistency scale (VRIN = 44T) and the True Response Inconsistency scale (TRIN = 47T). The patient's scores on the Infrequency (F = 67T) and Infrequency – Psychopathology (Fp = 52T) scales rule out simulation tendencies. This conclusion is corroborated by the Gough's F-K dissimulation index (F-K = +4). The clinical presentation of the disorder and the mean scores on the F (Infrequency) scale imply that the patient may lack awareness of certain psychological issues. The authors believe that these findings could be attributed to both the delusional process and the personality psychopathology exhibited by the patient. The Infrequency scale score (F = 67T) in the outpatient group indicates the possibility that the individual concerned may have social, political, or religious beliefs that deviate from the norm. The Symptom Validity scale (FBS = 55T) confirms the absence of a tendency to exaggerate neuropsychological deficits. Because minimising symptoms is more difficult to identify than exaggerating symptoms, measures of defensiveness were analysed. In addition to the previously mentioned scores on the Infrequency scale, the scores obtained on the Lie scale (L = 49T), Correction scale (K = 50T), and Superlative Self-Presentation scale (S = 41T) hold major importance as well. The scores achieved by the patient on these scales are not indicative of dissimulation. At present, the Lie (L) and Correction (K) scales are considered the most effective in detecting the minimization of symptoms. Based on studies evaluating the effectiveness of these scales, whenever there is uncertainty about potential dissimulation, it is advisable to conduct a more in-depth analysis of data obtained from interviews, behavioural observation, and other inventory-based methods (Baer and Miller, 2002).

From the perspective the authors of the article, it is important to evaluate the coherence between the clinical presentation and the MMPI-2 results. Any observed discrepancies need to be clarified. In individuals with suspected dissimulation, it is essential to diagnose attitudes towards the test being administered. In the clinical case presented, insights into the patient's mental health obtained through qualitative methods were compared with the results of the MMPI-2. The MMPI-2 scores corresponded to the clinical findings, and the control scale scores provided evidence that the patient had given a truthful account of her attitude and psychopathological symptoms.

ASSESSMENT OF PSYCHOPATHOLOGY AND SYMPTOM PATTERNS

Interpretive strategies show that elevated scores on the clinical scales should first be analysed on the basis of their components: the Harris and Lingoes subscales. Their analysis helps determine why a patient scored higher on a particular clinical scale. In the next step, the scores are analysed in relation to the restructured clinical scales.

Abbreviated name of clinical scale	k-corrected T-score	Abbreviated name of restructured clinical (RC) scale	k-corrected T-score
		RCd	66T
Hs	33T	RC1	45T
D	72T	RC2	60T
Hy	58T	RC3	48T
Pd	69T	RC4	49T
Mf-m	30T	No parallel scale	–
Pa	77T	RC6	80T
Pt	50T	RC7	51T
Sc	55T	RC8	56T
Ma	50T	RC9	48T
Si	53T	No parallel scale	–

Hs – Hypochondriasis; **D** – Depression; **Hy** – Hysteria; **Pd** – Psychopathic Deviate; **Mf-m** – Masculinity/Femininity; **Pa** – Paranoia; **Pt** – Psychasthenia; **Sc** – Schizophrenia; **Ma** – Hypomania; **Si** – Social Introversion; **RCd** – Demoralization; **RC1** – Somatic Complaints; **RC2** – Low Positive Emotions; **RC3** – Cynicism; **RC4** – Antisocial Behavior; **RC6** – Ideas of Persecution; **RC7** – Dysfunctional Negative Emotions; **RC8** – Aberrant Experiences; **RC9** – Hypomanic Activation.

Tab. 3. Clinical scale scores along with restructured scale (RC) scores (with k-correction)

BASIC CLINICAL SCALES AND SUBSCALES, AND RESTRUCTURED SCALES (RC)

The patient scored high (starting with the highest scores) on the Paranoia (Pa) scale, the Depression (D) scale, and the Psychopathic Deviate (Pd) scale. Her scores on the remaining clinical scales were within the normal range. The patient's scores on the basic clinical scales, along with corresponding values on the restructured clinical scales, are listed in Tab. 3, while the scores obtained in the Harris and Lingoes subscales are shown in Tab. 4. Analysis of the Pa subscales revealed a very high score on the Persecutory Ideas scale (Pa1 = 80T). However, the scores on the other subscales were within the normal range (<65T). Elevated scores (>80T) on the Ideas of Persecution (RC6) restructured scale are indicative of a paranoid thinking style, which may be a symptom associated with schizophrenia or delusional disorder (Tellegen et al., 2003). In the presented case, this is especially relevant, considering the patient's high baseline score on the Paranoia scale. Taking into account the data from the clinical interview, the analysis of the profile configuration substantiated the hypothesis of an ongoing and persistent psychotic process.

Scale name and abbreviation	T-score
Pa1 – Persecutory Ideas	84T
Pa2 – Poignancy	59T
Pa3 – Naïveté	55T
D1 – Subjective Depression	68T
D2 – Psychomotor Retardation	61T
D3 – Physical Malfunctioning	62T
D4 – Mental Dullness	70T
D5 – Brooding	65T
Pd1 – Familial Discord	43T
Pd2 – Authority Problems	57T
Pd3 – Social Imperturbability	50T
Pd4 – Social Alienation	75T
Pd5 – Self-Alienation	73T

Tab. 4. Recalculated scores for the subscales: Paranoia (Pa), Depression (D), and Psychopathic Deviate (Pd)

With regard to the Depression (D) scale, the Harris–Lingoes subscales showed high scores on the Mental Dullness scale (D4 = 70T), Subjective Depression scale (D1 = 68T), and Brooding scale (D5 = 65T). After examining the patient's elevated score on the Depression scale in conjunction with her moderate score on the Low Positive Emotions restructured scale (RC2 = 60T), the profile did not indicate a higher likelihood of depressive disorder. The difference in scores between the clinical scale and the RC scale shows that personality factors play a more substantial role in the elevated score on the Depression scale than clinically recognized depression. This observation is consistent with the behavioural findings: the patient did not display typical symptoms of depressive syndrome, denied disruptions in diurnal rhythms, and – aside from the delusional content – maintained a stable mood and drive.

As demonstrated in the Harris–Lingoes subscales, the patient's high score on the Psychopathic Deviate scale (Pd = 69T) was primarily attributed to the elevated scores on the Social Alienation scale (Pd4 = 75T) and the Self-Alienation scale (Pd5 = 73T). In the remaining Pd subscales, the patient achieved average scores, similarly to the Antisocial Behavior scale (RC4 = 49T). The Psychopathic Deviate scale can also be thought of as a measure of rebelliousness. Furthermore, interestingly, high Pd scores may be prevalent among patients with delusional disorders, reflecting their psychotic conflicts with the environment, as suggested by Meyer and Weaver (2007). In the reported patient, it was consistent with her proclivity to engage in interpersonal conflicts, stemming from both persecutory delusions and rebellious attitudes dating back to early adulthood, as identified in the psychological interview.

CONTENT SCALES

In the content scales, which are listed in Tab. 5, the patient's scores were moderately high on the Depression

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Scale name and abbreviation	T-score
ANX – Anxiety	64T
FRS – Fears	54T
OBS – Obsessiveness	51T
DEP – Depression	68T
HEA – Health Concerns	44T
BIZ – Bizarre Mentation	64T
BIZ1 – Psychotic Symptomatology	65T
BIZ2 – Schizotypal Characteristics	60T
ANG – Anger	56T
CYN – Cynicism	46T
ASP – Antisocial Practices	48T
TPA – Type A	48T
LSE – Low Self-Esteem	52T
SOD – Social Discomfort	47T
FAM – Family Problems	52T
WRK – Work Interference	65T
TRT – Negative Treatment Indicators	63T

Tab. 5. Recalculated content scale scores

(DEP = 68T) and Work Interference (WRK = 65T) scales, and borderline on the Anxiety scale (ANX = 64T) and the Bizarre Mentation scale (BIZ = 64T). Looking at the score on the DEP scale can be beneficial in the diagnostic reasoning process (Wetzler et al., 1998). Taking into account the patient's history and observational data, it is probable that the elevated DEP score reflects her adaptive response to prolonged delusion-associated stress. The patient's score on the Bizarre Mentation (BIZ) scale was borderline. Subscale analysis revealed that the patient obtained an elevated score on the Psychotic Symptomatology scale (BIZ1 = 65T) and an average score on the Schizotypal Characteristics scale (BIZ2 = 60T). According to the interpretative strategies, high BIZ1 scores are more consistent with psychotic symptoms, particularly with regard to the perception of other people's influence on the patient's mental state.

Scale name and abbreviation	T-score
A – Anxiety	62T
R – Repression	59T
Es – Ego Strength	44T
Do – Dominance	50T
Re – Social Responsibility	42T
Mt – College Maladjustment	67T
PK – Post-Traumatic Stress Disorder	65T
MDS – Marital Distress	62T
Ho – Hostility	48T
O-H – Overcontrolled Hostility	40T
MAC-R – MacAndrew Alcoholism Scale – Revised	Raw score: 20
AAS – Addiction Admission	55T
APS – Addiction Potential	43T
GM – Gender Role – Masculine	52T
GF – Gender Role – Feminine	43T

Tab. 6. Recalculated additional scale scores

Throughout the interview, the patient highlighted the impact of alleged "conspirators" on various institutions and people in her immediate environment. The patient's moderate score on the Antisocial Attitudes and Antisocial Behavior scale (ASP = 48T) supported clinicians in the differential diagnosis of personality psychopathology. According to the literature on the subject, the ASP scale is particularly useful for differentiating antisocial personality disorder from other types of personality disorders (Smith et al., 1999).

ADDITIONAL SCALES

Additional scales with corresponding scores listed in Tab. 6 will be discussed in the context of the patient's adjustment diagnosis and in the framework of personality diagnosis.

ADJUSTMENT DIAGNOSIS

The clear difference (F > F = 17) between the Infrequency scale (F) and the Correction scale (K) suggests the long-term nature of the problems experienced by the patient. The patient's elevated score on the Demoralization scale (RCd = 66T) confirms her adaptation problems, reflecting chronic stress mechanisms. This is consistent with the patient's elevated scores on the College Maladjustment scale (Mt = 67T). Multiple studies have found that the Mt score remains elevated especially in patients experiencing emotional turmoil (stress, anxiety, mood disorders, etc.) (Graham, 2015). The patient had an increased score on the Post-Traumatic Stress Disorder scale (PK = 65T), which has a documented association with general distress, not just specifically post-traumatic stress. This means that elevated PK scores can occur in patients across various clinical groups. This is especially relevant for individuals reporting a higher number of symptoms of mental maladjustment and stress (Lyons and Wheeler-Cox, 1999).
In summary, the delusional system had a detrimental impact on the patient's adaptive processes. The woman's suspiciousness and hostility, distortion of other people's intentions, and an unyielding and demanding attitude, significantly disrupted her social functioning.

ASSESSMENT OF PERMANENT PSYCHOPATHOLOGICAL PREDISPOSITIONS OF PERSONALITY

The patient obtained elevated scores on two out of the Personality Psychopathology Five (PSY-5) scales (Tab. 7): on the Introversion/Low Positive Emotionality scale (INTR = 68T) and the Psychoticism scale (PSYC = 65T). Taking into account the potential for measurement error, caution should be exercised in interpreting the results obtained on the PSYC scale (borderline score). The PSYC-5 scales serve as a model capturing individual differences that are relevant to the adaptive functioning of subjects in both clinical and non-clinical populations. The PSYC scale

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Scale name and abbreviation	T-score
AGGR – Aggressiveness	51T
PSYC – Psychoticism	65T
DISC – Disconstraint	52T
NEGE – Negative Emotionality/Neuroticism	60T
INTR – Introversion/Low Positive Emotionality	68T

Tab. 7. Recalculated scores for the personality psychopathology (PSYC-5) scales

reflects a predisposition to detachment from reality rather than a specific disease entity (Harkness et al., 2012). It encompasses beliefs that are not commonly shared by others and infrequent perceptual and sensory experiences, along with feelings of alienation and an unrealistic sense of harm (resentment) (Graham, 2015). The INTR scale reflects the patient's affective disposition characterized by introversion, pessimism, and diminished ability to experience pleasure (Graham, 2015). The patient's score on the Ego Strength scale (Es = 44T) did not provide clear interpretive possibilities. It was important to analyse the patient's personality determinants, including her rebellious attitude (Psychopathic Deviate scale) and paranoid orientation characterised by distrust, hostility, excessive argumentativeness, and a tendency to attribute failures to others (Paranoia scale), in the context of the psychological interview. PSY-5 scores refer to enduring personality traits, which implies that they should exhibit relative stability over time. It is difficult to determine to what extent the scores reflect the patient's baseline personality psychopathology and to what degree they remain secondary to personality changes occurring in the course of a long-term delusional process. In this case, diagnostic interview evaluating the patient's functioning from early adulthood until the onset of the delusional disorder proved to be beneficial.

REFLECTIONS AND PRACTICAL RECOMMENDATIONS

Evaluation of the utility of the MMPI-2 as a diagnostic tool

With regard to the differential and nosological diagnosis, the psychological interview coupled with the analysis of the MMPI-2 profile contributed to corroborating the hypothesis of a chronic and persistent delusional process rather than a transient paranoid reaction. In the presented case, the most effective interpretative approach for identifying delusional symptoms was found to be the strategy integrating the patient's clinical scale and subscale scores in the context of restructured clinical (RC) scales, and analysis of content scales focusing on psychotic symptoms. The interpretation of the MMPI-2 presented in this article reinforces the notion that formulating diagnostic hypotheses is best achieved through a comprehensive interpretation of the patient's profile rather than focusing on individual scales. Subsequently, these hypotheses can be verified using psychological interviews and observational data. The patient scored high on the clinical Paranoia (Pa) scale and the restructured clinical Ideas of Persecution (RC6) scale. The resulting profile configuration indicated the presence of an active delusional system rather than merely personality traits. The patient's elevated score on the clinical Psychopathic Deviate (Pd) scale was indicative of her rebellious tendencies – noted since early adulthood – as well as her psychotic conflict with her environment. The Pd subscales confirmed the patient's social problems and alienation, influenced by both personality disorders and the delusional process. In the realm of epigenetic diagnosis, the psychological examination yielded insights into the potential situational and personality-related correlates of delusional disorders. The impact of the chronic delusional process on the patient's personality at the time of establishing diagnosis is not clearly understood. By analysing qualitative data from the psychological interview and information derived from the MMPI-2, it is possible to hypothetically reconstruct how personality disorders revealed in early youth evolved into a matrix for delusional disorders in middle age, under the influence of accumulating life failures. One of the psychological interpretations proposed to explain the development of delusional psychosis suggests that the patient's consecutive educational and relational setbacks in the latter part of life triggered a delusional defence mechanism. Based on primitive projection, the mechanism led to the attribution of failures to persecutory external factors.

Reflections on the role of diagnostic alliance with delusional patients

Considering the challenges highlighted in the article regarding working with patients with persistent delusional disorders, we view the establishment of a strong diagnostic alliance as central to the process of determining diagnosis. Establishing a diagnostic alliance with delusional patients depends on a variety of factors, the identification of which requires further clinical research in the specific diagnostic group. The authors believe that the patient's treatment with a neuroleptic agent contributed to making a psychological diagnosis. The patient's emotional stabilisation supported the development of rapport and the application of psychometric methods, while her entrenched delusional symptoms were evident in the MMPI-2 profile. Discussing the results of the psychological examination with the patient served as a foundation for prospective diagnosis and helped to build the relationship required for the subsequent treatment process. The patient expressed an interest in psychotherapy targeting emotion regulation. Given the nature of persistent delusional disorder, recognizing the origins of certain symptomatic problems has therapeutic value for the patient (Gabbard, 2009).

Analysis of the presented case study, combined with the authors' practical experience, implies that psychological tests

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in a group of delusional patients should be conducted after establishing collaboration with the patient through qualitative methods. These may include a free or structured interview focusing on psychopathological symptoms. This should be followed by a gradual progression towards compiling a complete psychological history and reconstruction of the anamnestic line. Furthermore, it is crucial to openly discuss the purpose of psychological testing with the patient. According to the subject literature, when establishing a clinical diagnosis in a delusional patient, it is advisable to avoid arousing additional suspicion and ensure that the patient retains a sense of control (Gabbard, 2009). We recommend incorporating the MMPI-2 at the conclusion of the diagnostic process, and allocating sufficient time to discuss the results together with the patient. In our perspective, this approach offers an opportunity to relieve the patient's persecutory anxiety and the accompanying resistance to psychological testing. This extends to communicating with the patient about the symptoms of personality disorders and delusions. In the reported case, adopting a neutral and empathetic yet clear attitude proved beneficial in reducing the patient's fear of exposure. Our clinical observations show that – aside from the distorted delusional interpretations typically seen in the discussed clinical group – some of the reported events are real and arise in response to the patient's abnormal behaviour, whether psychotic or otherwise. Neglecting these factors and relational variables may undermine the diagnostic alliance, heightening the patient's sense of harm or injustice, and increasing psychotic resistance throughout the examination.

Conflict of interest

The authors do not declare any financial or personal links with other persons or organisations that might adversely affect the content of the publication or claim any right to the publication.

Author contribution

Original concept of study: AZJ. Collection, recording and/or compilation of data: AZJ. Analysis and interpretation of data: AZJ, BI. Writing of manuscript: AZJ. Critical review of manuscript: BI. Final approval of manuscript: BI.

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