

PERSONALITY PROFILES OF PATIENTS WITH DYSTHYMIC AND PANIC DISORDER

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SUMMARY

Background: The research objective was to identify personality characteristics as well as similarities between, and differences in personality profiles of persons suffering from Dysthymic (DD) and Panic Disorder (with/without Agoraphobia) (PD/PDA).

Subjects and methods: Three groups (N=120) were analysed: DD, PD/PDA, and a healthy control group, matched by socio-demographic characteristics and classified in sub-groups according to gender. Diagnoses were made using the Structured Clinical Interview for DSM-IV DD and PD/PDA, and the personality assessment was made using the Minnesota Multiphasic Personality Inventory 201 (MMPI-201).

Results: MMPI-201 profile of DD and PD/PDA groups has been characterised by a global increase of "neurotic triad" scales (Depression-Hypochondriasis-Hysteria) (D-Hs-Hy), more expressed in the DD group. Sub-groups of women and men with DD, when compared to the healthy control group, have a significant ($p < 0.01$) increase on the F, Hs, D, Pd, Pa, Pt and Sc scales, and sub-groups with PD/PDA a significant ($p < 0.01$) increase on the F, Hs, D, Hy, Pa, Pt and Sc scales. Scores on the F, D, Hy, Hs, Pt, and Sc scales were significantly higher ($p < 0.05$), as well as on the scale Pa ($p < 0.01$) in men suffering from DD than in the PD/PDA sub-group. Women suffering from DD, when compared to the PD/PDA women, showed a significant increase ($p < 0.05$) on the F and Hy scales.

Conclusion: Personality profiles of persons suffering from DD and PD/PDA are very similar, with differences being more dimensional than qualitative. Theoretical and practical implications of these findings have been discussed.

Key words: personality profiles - dysthymic disorder - panic disorder - MMPI-2

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INTRODUCTION

Personality traits are dimensions of personality that influence an individual's thoughts, feelings and behaviour (Costa & McCrae 2006, Pervin 2003) in a consistent manner, across a variety of situations (McAdams & Pals 2006).

According to the Five Factor model, neuroticism is defined as a basic personality characteristic (dimension), and is one of the best empirically confirmed characteristics along with extraversion (Digman 1990). It is commonly described as emotional instability, stress intolerance and inaptitude, and a tendency to destabilise under stressful circumstances. It represents a general tendency to experience negative affects (sorrow, anger, fear, agitation, guilt, and similar) (Knezevic et al. 2004).

In meta-analyses of 175 studies published between 1980 and 2007, Kotov et al. (2010) found that common mental disorders (specific anxiety, depressive and substance use disorders) are strongly linked to personality and have similar trait profiles, with neuroticism in the strongest correlation. The results from numerous studies (Costa et al. 2005, Cuipers et al. 2005, Bienvenu & Stein 2003, Bienvenu et al. 2004, 2001, Widiger & Trul 1992) have consistently shown that the mutual characteristic of persons with various anxiety and depressive disorders is high neuroticism, both in the acute and remission phase, associated with disorder

course, comorbidity and treatment results. The general conclusion is that the neuroticism is one of the key factors of vulnerability, a disposition for the development of these disorders.

In the study of Tyrer et al. (1986), neurotic patients (anxiety-phobic and depressive) had significantly higher scores for the personality characteristics of anxiousness, vulnerability, resourcelessness, hypochondriasis and other features commonly described as oral and hysterical, when compared to normal subjects. Schizoid features were absent in the neurotic group. The results suggest that there are common personality attributes in neurotic disorders which have clinical significance.

In the 20th century, a concept of "neurosis" has usually been applied to emotional and behavioural disorders arising from the impact of stress factors on particularities of character. It has been known that diagnosis within the neurotic spectrum of disorders is temporally unstable, and also that life events can be major precipitants of change in symptoms. Current classification systems (DSM-IV, ICD-10) differentiate specific conditions from the body of neurosis, on the basis of particular physiological characteristics, responses to drugs, genetic heritability and even neuropathology (such as dysthymia, generalised anxiety disorder, panic disorder, agoraphobia, etc.). These categories present a high rate of comorbidity and a poor longitudinal consistence, with frequent sequential

diagnostic changes around the course, and different prominent symptomatology in each transversal cutting. Reasons for this instability and diagnostic shift could include an inadequacy of current diagnostic systems, an influence of life events as a major precipitant of change in symptoms, and an innate course of disorder with features dependent on the stage at which the disorder presents itself (e.g. development of panic to agoraphobia) (Seivewright et al. 2000).

Seivewright et al. (2000) studied the influence of life events and personality status on diagnostic change in three neurotic disorders – two hundred and ten patients diagnosed as dysthymic, generalised anxiety, and panic disorder were followed for diagnostic changes over a two year period. There was no difference in the number of diagnostic changes between the three diagnostic groups, but dysthymic disorder changed more frequently to a major depressive episode than did generalised anxiety or panic disorder (20%; 11%; 12%), and panic disorder changed more frequently to agoraphobia (with or without panic) than did dysthymia or GAD (18%; 8%; 6%). A greater number of conflict events was associated with diagnostic change. More life events were associated with the flamboyant and dependent personality disorders, reinforcing evidence that many life events are internally generated by personality characteristics and cannot be regarded as truly independent.

Tyrer (1985) has argued that labelling episodes of illness purely in terms of current symptomatology is misleading, and that such cases are better understood, both clinically and nosologically, as a general neurotic syndrome with a prolonged course and varying presentations over time. Overall, concepts such as “neurosis”, “pan-neurosis”, “general neurotic syndrome”, and “neuroticism” show that the distinctive determination of depressive, anxiety disorders and personality characteristics is unsustainable. They represent an attempt to create a unitarian model that would give a better description and explanation of these entities and of the relation between them.

The unifying concept of neurosis is not, however, absolute. The biological evidence for discrete disorders needs to be reinterpreted in the light of clinical and epidemiological evidence that within individuals, and over time, there is considerable comorbidity and interchangeability between these disorders. In this respect, the intention of this exploratory pilot study is to contribute to a better understanding of the relationships among anxiety, depressive disorders and personality characteristics. Its aim was to identify personality characteristics, as well as similarities and differences in the personality profile of persons suffering from Dysthymic Disorder and Panic Disorder (with/without Agoraphobia). As Karen Hornay (1937) has said, personality is a volcano, and the symptoms of the variety disorders are eruptions of the volcano. Greater attention should be paid to the concurrent treatment of personality traits and personality disorders, as these may

be the real cause of the symptoms’ chronicity. Addressing therapeutical efforts to dysfunctional personality traits would be beneficial in reducing relapses and recurrences, which lead to great personal suffering and dysfunctionality.

SUBJECTS AND METHODS

Sample

The research has been undertaken among the outpatients treated at the Clinic of Psychiatry of the Clinical Centre of Serbia. At the time the study was conducted, there was no need for approval from an Ethics Committee for such research led by doctors within the institution. The sample consisted of three groups (N=120): two groups of 40 patients fulfilled the DSM-IV (1994) diagnostic criteria for Dysthymic disorder and Panic disorder (with/without Agoraphobia), matched by socio-demographic characteristics with a control group of 40 healthy subjects. The healthy group was selected from five firms in Belgrade. Their psychopathologies were excluded by the Structured Clinical Interview for DSM-IV Axis I Disorders (First et al. 1995), and the Structured Clinical Interview for DSM-IV Axis II Personality Disorders (First et al. 1990). The rate-person was not blind. The groups were divided into a total of 6 subgroups according to gender. All participants have given their informed consent.

Measures

The following study instruments were applied in the study:

1. MMPI-201 adapted version

The Minnesota Multiphasic Personal Inventory 201 (MMPI-201) – a shorter and adapted Serbian version (Biro & Berger 1986) of the original MMPI self-descriptive personality inventory (Hathaway & Konley 1942) has been applied in the personality characteristics assessment. The questionnaire consisted of 201 items, where a subject was required to choose between two alternatives: “true”-“false”. The items were grouped into 11 scales. Three scales were validity scales:

- L – rigidity or naiveté in the approach to the test material; naïve self-presentation in a socially desirable light;
- F – confused thinking, lack in material understanding or self-underestimation – emphasising one’s own pathology; and
- K – the degree of psychological defensiveness.

The remaining eight scales were clinical scales:

- Hs – hypochondriasis: narcissism of body, hypochondriac preoccupations;
- D – depression: pessimism, lack of self-confidence, self-disappointment;

- Hy – hysteria: suppressing and denial, conversion of feelings into body symptoms;
Pd – psychopathic deviation: immaturity, impulsiveness, inclination to antisocial behaviour;
Pa – paranoia: sensitivity, hostility, inclination to paranoid interpretations;
Pt – psychasthenia: anxiety, tension, concern, decrease of vital dynamism;
Sc – schizophrenia: confused, bizarre thinking;
Ma – hypomania: hyperactivity, euphoria.

Six personality profiles were obtained: healthy women and men profiles, profiles of women and men suffering from dysthymia, and profiles of women and men suffering from panic disorder (with/without agoraphobia).

Even though MMPI-201 has been construed to differentiate clinical entities on the basis of single scales increase, it has been proven as serviceable and valid in the description of personality profiles, based on the scale relation analysis. In relation to that, the authors offer 16 “typical” personality profiles that are encountered in the psychiatric population.

2. *DSM-IV (APA 1994) diagnostic criteria for Panic disorder (with/without Agoraphobia).*

3. *DSM-IV (APA 1994) diagnostic criteria for Dysthymic disorder.*

4. *Structured Clinical Interview for DSM-IV Axis I Disorders (First et al. 1995).*

5. *Structured Clinical Interview for DSM-IV Axis II Personality Disorders (First et al. 1990).*

Data analysis

Qualitative analysis has been performed, as well as a profiles comparison of the three examined groups divided according to gender. Group profiles have been presented graphically on standard forms of graphic data presentation for the applied questionnaire. Subsequently, the groups have been compared on single scales: T-test has been applied in the analysis of the statistical significance of the arithmetic mean differences for small, independent samples, and the results were presented in tables.

RESULTS

Socio-demographic characteristics of the sample

There were no statistically significant differences in the socio-demographic status between the three groups of subjects. The gender ratio and mean age did not differ (dysthymic disorder group: 19 males / 21 females; panic disorder group: 19 males / 21 females; healthy controls: 20 males / 20 females ; $p=0.967$; dysthymic disorder group: mean age 40.65, SD 3.70; panic

disorder group: M 39.25, SD 6.96; healthy controls: M 37.50, SD 8.05; $p=0.100$). There were no differences in marital status (married/single/divorced/widow (err.): 27/9/4/0 vs. 24/14/2/0 vs. 24/11/4/1; $p=0.655$), education (elementary/secondary school/higher: 5/32/3 vs. 4/33/3 vs. 3/34/3; $p=0.997$), employment status (unemployed/employed/retired: 8/30/2 vs. 11/28/1 vs. 12/28/0; $p=0.569$), housing (unresolved/resolved: 9/31 vs. 12/28 vs. 5/35; $p=0.163$), and the number of children in the families of the dysthymic disorder, panic disorder patients and the healthy subjects (M 1.90, range 0–3, vs. M 1.89, range 1–3, vs. M 1.52, range 0–3; $p=0.066$).

Qualitative analysis of personality profiles (MMPI-201) of the group of healthy subjects and PD/PDA and DD groups

As shown in Figure 1, personality profiles of the healthy women group are balanced as expected: the arithmetic means on all scales are within the limits of average values ($40 < T < 60$). The profiles of women with dysthymic disorder and women with panic disorder are, however, generally increased towards pathological values. In dysthymic women most of the clinical scales (6 out of 8), and in women with panic disorder half of them (4), are on or above the critical score T-70. Typologically, both profiles are characterised by a neurotic triad (D-Hs-Hy) with a peak on the Pa scale. Such profiles describe pessimistic persons, with low self-confidence, depressive mood with emphasised somato-vegetative difficulties and a concern for their body. They are frustration intolerant, disposed to passivisation and escape to illness. At the same time, these persons are sensitive, suspicious, and inclined to project their responsibility on others. Despite the diagnosis of “neurotic” disorder, they show a certain degree of cognitive-perceptive distortions and problems in reality testing (Sc), traditionally attributed to psychotic persons. Compared to healthy persons, they are more hostile, impulsive and egocentric (Pd).

As well as in the female healthy sub-sample, the profile of healthy men is balanced, while the profiles of the clinical groups are globally deviating from normal towards pathological values (on all scales except Ma) (Figure 2.). Pathological characteristics are more expressed in dysthymic men (generally higher profile, 6 out of 8 clinical scales are above critical score) than in those with panic disorder (4 out of 8 scales above critical score). Beside a general increase, they also differ in the “psychotic” scales (Pa-Sc), which are clinically significantly elevated in dysthymic men, while this is not the case in the panic disorder sub-group. Men’s profiles of these disorders are mutually very similar, as was the case with women’s ones, with a predominance of neurotic vulnerability (D-Hs-Hy). In contrast with the case of women, neurotic triad scales in men are followed by a peak on the Pt scale (instead on the Pa one).

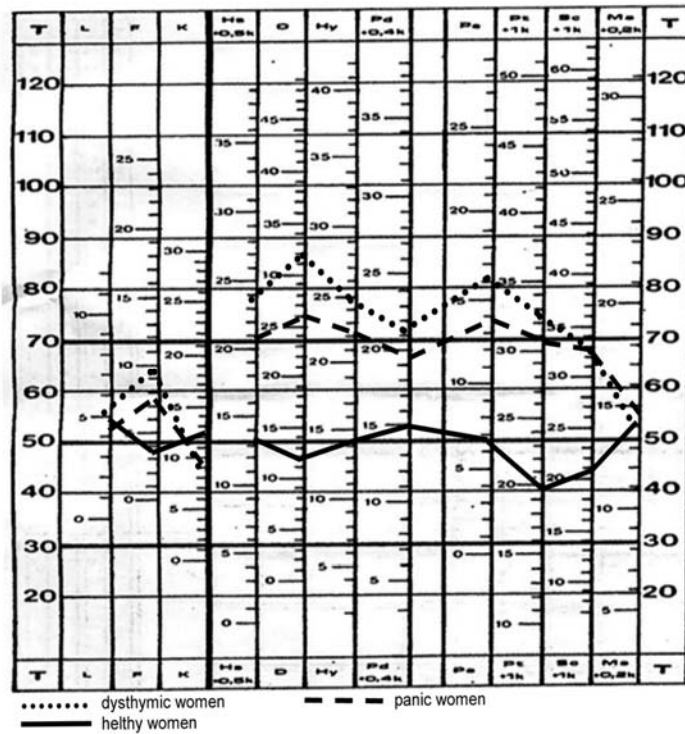


Figure 1. Graphic presentation of MMPI-201 group profiles of women (healthy, dysthymic and panic)

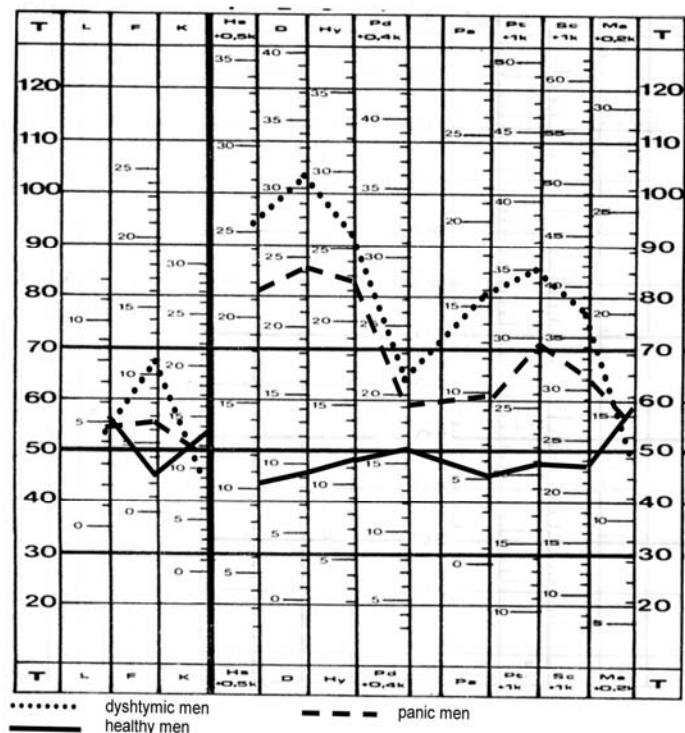


Figure 2. Graphic presentation of MMPI-201 group profiles of men (healthy, dysthymic and panic)

Analysis of personality profiles differences between healthy, PD/PDA and DD group

Women sub-group

As shown in Table 1., women with dysthymic and panic disorder do not show significant differences in terms of readiness to present themselves in a socially

desirable light, when compared to healthy women (L scale). Also, their general level of activity and energy is similar to the one in healthy women (Ma scale). On all other scales, both clinical groups have significantly higher scores than the healthy women group. The exception is the K scale, where women with panic disorder do not differ significantly from healthy ones.

Table 1. Differences between women subgroups personality profiles per single MMPI-201 scales

Scale	Dysthymic women		Panic women		Healthy women		Mean differences between groups of women		
	M	SD	M	SD	M	SD	DM1	DM2	DM3
L	5.1	2.42	4.15	2.25	4.76	2.25	0.95	0.34	-0.61
F	10.8	3.36	7.55	4.29	3.12	2.03	3.25*	7.68**	-5.57
K	8.1	3.90	9.45	4.29	12.20	4.70	-1.35	-4.10	-2.75
Hs	23.8	6.05	20.60	5.97	13.20	3.77	3.20	10.60**	7.40**
D	31.9	6.57	25.70	10.00	11.50	4.56	6.20	20.40**	14.20**
Hy	25.9	4.68	22.10	4.47	14.00	4.17	4.80*	11.90**	8.10**
Pd	21.3	3.65	19.60	4.07	14.70	2.73	1.70	6.60**	4.90**
Pa	16.0	4.50	13.70	7.69	6.53	3.00	2.30	9.47**	7.17**
Pt	32.8	6.18	30.90	6.85	19.80	3.54	1.90	13.00**	11.10**
Sc	33.0	4.76	32.40	6.95	21.20	4.04	0.60	1.80**	11.20**
Ma	14.0	1.76	14.60	2.42	14.00	2.47	-0.60	0.00	0.60

M - mean; SD - standard deviation; DM1 - mean difference dysthymic/panic groups; DM2 - mean difference dysthymic/healthy groups; DM3 - mean difference panic/healthy groups; *p<0.05; **p<0.01

Table 2. Differences between men subgroups personalities profiles per single MMPI-201 scales

Scale	Dysthymic men		Panic men		Healthy men		Mean differences between groups of men		
	M	SD	M	SD	M	SD	DM1	DM2	DM3
L	4.42	1.68	4.07	1.07	5.13	1.75	0.35	-0.71	-1.06
F	10.70	3.34	6.39	4.39	3.44	2.03	4.31*	7.26**	2.95*
K	8.42	1.68	10.10	3.79	13.50	3.69	-1.68	-5.08	-3.40
Hs	25.30	5.25	21.60	3.34	10.30	2.29	3.70*	15.00**	11.30**
D	30.50	10.10	24.10	5.20	9.25	3.38	6.40*	21.25**	14.85**
Hy	25.60	3.22	22.60	3.48	11.40	2.50	3.00*	14.20**	11.20**
Pd	21.00	4.18	19.10	4.82	16.50	4.02	1.90	3.50**	2.60
Pa	15.50	3.90	9.93	5.70	5.00	3.10	5.57**	10.50**	4.93**
Pt	34.90	5.79	29.40	5.50	20.90	3.93	5.50*	14.00**	8.50**
Sc	37.20	6.73	30.10	6.51	22.40	3.77	7.10*	14.80**	7.70**
Ma	12.80	1.53	14.50	2.50	15.30	3.20	-1.70	-2.50	-0.80

M - mean; SD - standard deviation; DM1 - mean difference dysthymic/panic groups; DM2 - mean difference dysthymic/healthy groups; DM3 - mean difference panic/healthy groups; *p<0.05; **p<0.01

Dysthymic women and women with panic disorder differ only in two scales. On the T scale, dysthymic women show a slightly higher cognitive confusion and inclinations to self-underestimation (DM=2.25, p<0.05). Also, this group has a significantly higher score on the Hy scale – dysthymic women are more inclined to deny psychological problems and to convert them into body symptoms (DM=4.6, p<0.05).

Men sub-group

As we can see in Table 2., men with dysthymic and panic disorder do not differ from healthy men in terms of readiness to present themselves in a socially desirable light (L scale). Moreover, their general level of activity and energy is similar to the one of healthy men (Ma scale). On all other scales, both clinical groups have significantly higher mean scores than the group of healthy men. The exception is the K scale, where men with panic disorder do not differ significantly from the healthy ones.

Dysthymic men have significantly higher scores on 7 out of all 11 scales, when compared to men with panic disorder. There are no significant differences between these two groups only when it comes to terms of readiness to present themselves in a socially desirable light (L), to the degree of aggressiveness and egocentrism (Pd), and to their energy and activity (Ma).

DISCUSSION

We have analysed personality profiles of the persons with dysthymic and panic disorder, compared them with each other and with the personality profile of healthy persons, on the basis of data obtained by the Personality self-reported inventory MMPI-201. We have tried to identify personality characteristics, as well as similarities and differences between these persons, and to compare them to healthy ones.

Both clinical groups, men and women, have generally higher personality profiles moving towards

pathological values. This finding suggests that psychological systems of persons with dysthymic and panic disorder are more destabilised than is indicated by the symptoms. Dominant deviations are presented in the “neurotic triad” (D-Hs-Hy). This set indicates frustration intolerant persons that react to stress with destabilisation, helplessness and escaping into illness. Being such, they emit a high degree of dependency. The similarity is particularly expressed in women: these subgroups differed only on the F and Hy scales ($p < 0.05$), in favour of the dysthymic one. This similarity can explain a high comorbidity and inconsistency of symptoms in a longitudinal perspective. Both groups are characterised with general vulnerability to stress and an inclination to destabilisation, which is in accordance with data from literature as described in the introduction: Tyrer et al. (1992) states that “general neurotic syndrome” is a combination of anxiety, depression and dependent disorder of personality. The authors describe this syndrome as a personal vulnerability to the development of depressive and anxious symptoms, and emphasise that its expressiveness is in a positive relation with the disorder duration and prognosis.

Unexpectedly, dysthymic persons have not shown a lower level of psychological energy and activity than anxious ones, nor when compared to healthy ones, even though this disorder is defined as a certain apathy, passiveness, and lack of interest for everyday activities. It is possible that dysthymic persons “do not lose energy” as persons with a major depressive disorder, but that they convert this energy into symptoms. However, the fact that makes such persons specific is that they suffer and express a higher degree of global psychological dysfunctionality than persons with panic disorder, and this especially characterises dysthymic men when compared to panic disorder men. The differences between personality profiles of these two groups are more dimensional than qualitative, and from the practical standpoint they indicate the larger pathological burden of dysthymic disorder. The fact is that the capacity for psychological defence in a state of anxiousness is similar to that in a healthy person, while dysthymic persons show a deficit in defensive strength when compared to healthy ones (significantly lower mean score on the K scale also contributes to this). This finding may have implications for a longer duration and worse prognosis of dysthymic disorder, when compared to panic disorder. Data from literature suggests that the dysthymics are under high risk for the development of other depressive and anxious disorders, alcoholism, poor general physical health, and frequent use of medical services (Howland 2008; Haykal & Akiskal 1999, Keller 1994).

In the female sub-sample, neurotic vulnerability (D-Hs-Hy) is followed by a peak on the scale of paranoid characteristics (Pa), while in the men’s sub-sample the peak is on the psychasthenia scale (Pt). The association of the paranoid type of hypersensitivity with anxious disorder has been also found in other researches, and

those data indicate a significant relation between the histrionic index, panic disorder and the presence of paranoid characteristics, especially among women, as they are more prone to assign the causes of suffering to external stimuli, while men assign their failures to themselves (Hoffart et al. 1994, Reich et al. 1987). Thus, our results indicate certain gender differences, which are not recognisable from the diagnoses themselves, but should be considered in the planning of treatment.

In all clinical groups, when compared to the group of healthy persons, a significant deviation has been also found on scale that describe psychotic features (Sc). Clinical groups are characterised by a certain degree of cognitive-perception problems in reality testing. These persons differ from the healthy ones even when their expressiveness is not clinically significant. The connection between “neurotic” and “psychotic” characteristics is well documented in numerous studies on comorbidity between these groups of disorder (Buckley et al. 2009, Dernovsek & Sprah 2009, Craig et al. 2002). In addition, a well known dimension of schizotypy, originally conceptualised as a disposition for the development of psychotic disorders, has also proved as discriminative for non-psychic disorders, both for affective (Chapman et al. 1994) and for anxious disorders (Lee et al. 2005, Einstein & Menzies 2004, Goodwin et al. 2004, Rossi & Daneluzzo 2002, Norman et al. 1996; Enright & Beech 1990, Stanley et al. 1990).

All clinical groups, with the exception of men with panic disorder, have significantly higher mean scores at the Pd scale when compared to the healthy control group, which means that these persons are more hostile, egocentric and impulsive, less capable or ready for socio-adaptable behaviour than healthy ones. This finding is not in accordance with the pan-neurosis concept or the general neurotic syndrome as stated by Tyrer that excludes the presence of dissocial characteristics (Doblado et al. 2003). Besides, it is not in accordance with the concept of psychopathia that excludes the capacity of these persons for anxiety, negative self-assessment, and guilt. As our results show, dissocial characteristics are not the dominant characteristics of the clinical groups, but among them they are significantly more expressed than in healthy group.

From the practical point of view, the wide scope of psychological dysfunctionality of these persons suggests the need for a careful diagnostic evaluation that should not end with the detection of symptoms of depression and/or anxiety, but should also include the evaluation of reality testing and social perception quality, as well as adaptability. These facts might be significant for the planning of treatment, both in terms of pharmacology and psychotherapy.

From the theoretical standpoint, our results support the idea of a continuum between mental disorders; not only within the “neurotic” spectrum, but also between the traditionally “neurotic” and “psychotic”, as well as

major clinical disorders and personality disorders. The remarkable similarity of personality profiles in persons with dysthymic and panic disorders confirms this attitude: both groups express a wide psychological dysfunctionality, with a predomination of neurotic vulnerability.

The analysis of the latent dimensions that are in the base of these mental disorders (but also in the base of others), which represent a dimensional relation between personality and mental disorder and which have been a relevant topic in the last two decades, could provide a more valid and informative model for understanding the nature of pathological behaviour than the categorical one. This trend in the theoretical and empirical integration of the personality concept and psychopathology has robust empirical arguments, and will play an important role in the psychiatric nosology modifications in the Fifth Revision of the Diagnostic and Statistical Manual of Mental Disorders (Tackett et al. 2008, Krueger & Markon 2006, Widiger et al. 2005, Krueger 2005). Our results are in favour of such reconceptualisation.

CONCLUSION

The personality profile of persons with DD and PD/PDA disorder is characterised by a wide scope of psychological dysfunctionality, with the predomination of the neurotic vulnerability triad (D-Hs-Hy), but also by problems in reality testing, social perception and adaptability. The profiles in these two groups are very similar, and the differences are more dimensional than qualitative: dysthymic persons show a higher level of distortion and dysfunctionality than panic ones, which is particularly expressed in the male sub-group.

There is a complex relation between dysthymia, panic disorder, reality testing quality and personal characteristics such as vulnerability, dependency, hostility and sensitivity. This relation does not justify the distinct definition of these concepts, characteristic for the categorical model of mental disorders, but it implies an identification of mutual latent personal dimensions that lie at their base.

It should replicate these findings with a larger patient sample, including not only the active but also the remission phase of the disorders.

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