

# DIMENSIONAL PERSONALITY CHANGE AFTER COMBINED THERAPEUTIC INTERVENTION IN THE OBSESSIVE - COMPULSIVE PERSONALITY DISORDERS

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**Keywords:** obsessive-compulsive personality disorders, the big five personality factors, cognitive – behavioural therapy, dimensional personality change

**Abstract:** There is an ample debate regarding the influence of psychotherapy and pharmacotherapy in the alteration of some dimensions of the pathological personality. This study was performed on a sample of 31 patients diagnosed with generalised anxiety disorder in comorbidity with obsessive – compulsive personality disorder. The results obtained reveal the fact that after 40 cognitive – behavioural therapy sessions, associated with antidepressant medication, the Extroversion, Agreeableness and Emotional Stability dimensions of the personality are altered for the better. These modifications influence these patients' social, interpersonal and emotional spheres, contributing to an increase in the quality of their life.

**Cuvinte cheie:** tulburare de personalitate obsesiv-compulsivă, cei cinci mari factori de personalitate, terapie cognitiv-comportamentală, modificarea dimensională a personalității

**Rezumat:** Există o dezbatere amplă privind influența psihoterapiei și a farmacoterapiei în modificarea unor dimensiuni ale personalității patologice. Obiectivul studiului: studiul de față s-a desfășurat pe un eșantion cuprinzând 31 de pacienți, diagnosticați cu tulburare de anxietate generalizată în comorbiditate cu tulburare de personalitate obsesiv-compulsivă. Rezultatele obținute relevă faptul că după 40 de ședințe de terapie cognitiv-comportamentală asociată cu medicație antidepresivă, dimensiunile personalității Extraversie, Agreeabilitate și Stabilitate Emoțională se modifică în sens pozitiv. Aceste modificări influențează sfera socială, interpersonală și emoțională a acestor pacienți, contribuind la creșterea calității vieții.

## INTRODUCTION

The theory of the “big five personality factors” (FFM) is based on a system which explains the functioning of personality through dynamic operations and processes of causality. The five personality factors – Openness, Extroversion, Conscientiousness, Agreeableness and Emotional Stability (Neuroticism) – are the factors which form the system's nucleus.(1)

There is an interdependence between anxiety/depression disorders and personality traits belonging to cluster C; this is why a type of psychotherapy focused on the anxious and depressive symptoms, when successful, produces improvements within the dimensions of the personality. This process also works in the opposite direction.(2)

## PURPOSE

The objective of the study is to demonstrate that after the remission of the anxious symptoms and conclusion of psychotherapy in the case of patients presenting a comorbidity of generalized anxiety disorder (GAD) and obsessive-compulsive personality disorder (OCPD), the dimensional personality level changes positively in the case of three dimensions, *Extroversion, Agreeableness and Emotional Stability*, which leads to an improvement in the patients' social, interpersonal and emotional spheres.

## METHODS

The results of this research were obtained in the course of three years, beginning with October 2009 and until September 2012.

A total of 31 patients were included in this study, 16 patients being female (M= 37.29 years old) and 14 male (M= 34.64 years old), the average age was 36.10 years old. The research was performed within the Tîrgu- Mureș Centre for Mental Health, in the Psychiatry Clinic No. 2 Tîrgu-Mureș, as well as in psychotherapy practices in Tîrgu-Mureș, Timișoara and Bucharest. All the 8 psychotherapists involved in this study are licensed in cognitive – behavioural psychotherapy (CBT). The average professional experience of the psychotherapists is of 7.75 years.

The psychometric methods used in this study are the Structured Clinical Interview SCID – II, the Hamilton Anxiety Rating Scale – HARS, as well as the DECAS Personality Inventory. The SPSS – 11 statistic software – Windows version – was used in order to interpret the statistical data.

The Structured Clinical Interview SCID – II was created by First and his collaborators (1997), and the items of the test contain the criteria for diagnosing personality disorders in conformity with DSM – IV. In order to reveal an obsessive-compulsive personality disorder (OCPD), at least 4 items must meet the diagnostic criteria.(3)

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## CLINICAL ASPECTS

The DECAS personality inventory is a modern psychometric instrument designed by Sava (2008), assessing the dimensional sphere of the personality according to the theory of the big five personality factors. The DECAS acronym stands for D - *Deschidere (Openness)*, E - *Extraversie (Extroversion)*, C - *Conștiințiozitate (Conscientiousness)*, A - *Agreeabilitate (Agreeableness)*, S - *Stabilitate Emoțională (Emotional Stability)*.(4) The Hamilton Anxiety Rating Scale – HARS was designed by Hamilton (1959), containing 14 items, and based on the score obtained, it classifies anxiety as slight, moderate and severe.(5)

The first stage of the study consisted of applying the HARS, SCID-II and DECAS tests. Psychotherapeutic intervention was focused on the model of Beck, Fremman and Davis, who recommend that the symptoms generated by GAD be treated in the first stage, followed by the therapy specific for treating OCPD.(6)

The number of sessions necessary in order to obtain remission, in the case of GAD, was the one proposed by Leahy and Holland, namely between 15 and 20.(7) The treatment meant for OCPD varied between 25 and 20 sessions, the last session being reserved for reassessing the final anxiety level by way of the HARS test.

The medication prescribed was Escitalopram, 10mg/day. The frequency of the meetings for the psychotherapy sessions was twice a week until GAD remission, then the frequency was reduced to one session a week. After 40 sessions/6 calendar months from the treatment initiation, the DECAS Personality Inventory was applied again.

**The inclusion criteria were:** the diagnosis of GAD in comorbidity with OCPD, established by the psychiatric medical specialist, and, from a psychometric point of view, scoring at least 14 points on the HARS scale and at least 4 positive items in the OCPD of the SCID – II.

**The exclusion criteria were:** the presence of psychotic symptoms and severe personality disorders.

### RESULTS

Before the therapeutic intervention, a level of anxiety was revealed, where  $M = 20.97$ ,  $SD = 4.07$ , and after the therapeutic intervention, an anxiety level of  $M = 7.55$ ,  $SD = 4.29$ , with a difference of 13.42. The 95% confidence interval for this difference is from 12.14 to 14.70. The means of the pre-test and post-test scores differ in a strongly significant statistic manner,  $t = 21.40$ ,  $DF = 30$ , two-tailed .000, where  $p < 0.001$ . As for interpreting the HARS test, one can state that the anxiety level per sample was moderate before the beginning of the intervention ( $M = 20.97$ ), falling to a subclinical level after the treatment was ended ( $M = 7.55$ ).

Investigating the *Extroversion* personality dimension within the sample under analysis ( $N = 31$ ) before the therapeutic intervention reveals  $M = 7.10$ ,  $SD = 4.11$ , while after combined therapeutic intervention,  $M = 9.13$  and  $SD = 3.86$ , with a difference of -2.03. The 95% confidence interval for this difference is between -3.30 and - .77. The means of the pre-test and post-test scores differ in a statistically significant manner  $t = - 3.28$ ,  $DF = 30$ , two-tailed .003, where  $p < 0.01$ . Table no. 1 illustrates the transformation of raw scores into T scores and percentiles, for the *Extroversion* personality dimension, in relation with the DECAS test standard.

Thus, one could state that from a dimensional point of view, *Extroversion* before the therapeutic intervention had a low level, but it improved after the therapeutic intervention, reaching an average level.

**Table no. 1. Transformation of raw scores into T scores and percentiles, *Extroversion***

<i>Extroversion</i>	<i>Masculine (N=14)</i>	<i>Feminine (N=17)</i>
Pre-test results	$M = 7.43$ $SD = 5.25$ . $T = 44$ , percen. 25	$M = 6.82$ $SD = 3.02$ $T = 43$ , percen. 25
Post-test results	$M = 8.43$ $SD = 4.18$ $T = 47$ , percen. 37	$M = 9.71$ $SD = 3.54$ $T = 51$ , percen. 52

Investigating the *Agreeableness* personality dimension within the sample under analysis before the therapeutic intervention ( $N = 31$ ) reveals  $M = 10.03$   $SD = 3.22$ , while after combined therapeutic intervention,  $M = 11.58$ ,  $SD = 3.67$ , with a difference of -1.55. The 95% confidence interval for this difference is from - 2.71 to - .39. The means of the pre-test and post-test scores differ in a statistically significant manner  $t = - 2.72$ ,  $DF = 30$ , two-tailed .011, where  $p < 0.01$ . Table no. 2 illustrates the transformation of raw scores into T scores and percentiles, for the *Agreeableness* personality dimension, in relation with the DECAS test standard.

**Table no. 2. The relation between the raw scores and the T scores and percentiles, *Agreeableness***

<i>Agreeableness</i>	<i>Masculine (N=14)</i>	<i>Feminine (N=17)</i>
Pre-test results	$M = 11.14$ $SD = 2.47$ $T = 60$ , percen. 85	$M = 9.12$ $SD = 3.53$ $T = 54$ , percen. 63
Post-test results	$M = 13.14$ $SD = 3.97$ $T = 67$ , percen. 95	$M = 10.29$ $SD = 2.93$ $T = 57$ , percen. 75

The *Agreeableness* dimension before the therapeutic intervention had a high level in the case of male patients and an average level in female patients. After the conclusion of therapy, the *Agreeableness* dimension gained a very high level in the male patients and a high level in the case of female patients. Thus, a positive modification of this dimension can be inferred for the entire sample.

The investigation of the *Emotional Stability* personality dimension within the sample under analysis ( $N = 31$ ) before the therapeutic intervention reveals  $M = 5.94$ ,  $SD = 3.42$ , while after the combined therapeutic intervention,  $M = 10.58$ ,  $SD = 4.33$ , with a difference of - 4.65. The 95% confidence interval for this difference is from - 5.98 to -3.31. The means of the pre-test and post-test scores differ in a statistically significant manner  $t = - 7.12$ ,  $DF = 30$ , two-tailed .000, where  $p < 0.001$ . Table no. 3 illustrates the transformation of raw scores into T scores and percentiles, for the *Emotional Stability* personality dimension, in relation with the DECAS test standard.

**Table no. 3. Transformation of raw scores into T scores and percentiles, *Emotional Stability***

<i>Emotional stability</i>	<i>Masculine (N=14)</i>	<i>Feminine (N=17)</i>
Pre-test results	$M = 7.29$ $SD = 3.87$ $T = 47$ , percen. 38	$M = 4.28$ $SD = 2.62$ $T = 47$ , percen. 36
Post-test results	$M = 11.93$ $SD = 4.87$ $T = 59$ , percen. 81	$M = 9.47$ $SD = 3.60$ $T = 58$ , percen. 78

Thus, one could state that from a dimensional point of view, *Emotional Stability* before the therapeutic intervention had an average level, but it improved after the therapeutic intervention, reaching a high level. The statistic results obtained for all of the three dimensions for the entire sample are illustrated in table no. 4.

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**Table no. 4. Results obtained in the t test for paired samples, per whole sample, for each personality dimension**

Personality dimension	Difference	Standard deviation	Standard error	95% confidence quotient		t	df.	Sig. (2-tailed)
				Low	High			
<i>Extraversion</i>	- 2.03	3.449	.620	- 3.30	- .77	- 3.280	30	.003
<i>Agreeableness</i>	- 1.55	3.161	.568	- 2.71	- .39	- 2.728	30	.011
<i>Emotional stability</i>	- 4.65	3.629	.652	- 5.98	- 3.31	- 7.127	30	.000

### DISCUSSIONS

After the remission of the GAD specific anxious symptomatology ( $p < 0.001$ ) and conclusion of psychotherapy, the *Extraversion* dimension went from a low to an average level, there being a statistically significant difference between the means of the two assessments ( $p < 0.01$ ), representing an increase in optimism and good humour, as well as more self confidence, for the patients included in the study. Mavissakalian and Hamman (1987), in a study related to agoraphobia, found that after the remission of the anxious disorder, more than half of the subjects no longer met the criteria for a cluster C personality disorder.(8)

The *Agreeableness* dimension went from a high to a very high level in the male patients and from an average to a high level for the female patients, there being a statistically significant difference between the means of the two assessments for the entire sample ( $p < 0.01$ ). Bringing the *Agreeableness* level from high to very high and from average to high respectively, shows a higher degree of social orientation towards the needs of others, choosing cooperation instead of competition, as well as a higher degree of tolerance in human relationships. Glinski and Page, in a study with patients diagnosed with social anxiety comorbidity with an avoidant personality disorder, show that after group CBT, a decrease in *Neuroticism*, an increase in *Extraversion*, as well as a slight change in *Agreeableness* were found.(9)

The *Emotional Stability* dimension increased from an average to a high level for the entire sample, there being a statistically significant difference between the means of the two assessments ( $p < 0.001$ ). Increasing *Emotional Stability* from average to high reveals the patients' better ability to control their emotions, better tolerance to frustration, as well as a higher degree to focus on rational thinking to the detriment of impulses. Some facets of the *Emotional Stability* dimension (neuroticism in NEO-PI-R) are in direct relation with anxious/depressive symptoms and can even anticipate the onset of these disorders.(10) In a research performed by Piemont (2001), after 15 weeks of therapy with patients diagnosed with psycho-active substance addiction, a decrease of *Neuroticism* (increase in *Emotional Stability*) was registered, as well as an increase in *Agreeableness* and *Conscientiousness* ( $d = .38$ ), the effect being still present 15 months later ( $d = .28$ ). (11)

### CONCLUSIONS

Once the anxiety level is reduced and the therapy is ended, starting from the theory of the big five personality factors, based on the results obtained and in accordance with the DECAS test interpretation manual, we can state that combined therapeutic intervention between CBT and antidepressant medication has direct effects both on anxiety as a state (GAD) and on anxiety as a personality dimension (OCPD). Therefore, therapeutic intervention leads not only to a remission in the field of anxiety as a state, but also to a positive modification in the dimensional sphere of the personality, perceived by the patient as a state of well-being

which reflects upon interpersonal relationships and upon the quality of life.

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