COMMUNITY MENTAL HEALTH SERVICES -
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FROM THE POINT OF VIEW OF THE ASSOCIATION
OF PERSONALITY DIMENSIONS

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The Treatment of Anxiety and Its Effects from the Point of View of the Association of Personality Dimensions

Cosmin O. POPA1, Aurel NIRESTEAN2, Lucian ILE3, Mihai ARDELEAN4, Theodor MOICA5, Gabriela BUICU 6

Abstract

New theories on psychological and emotional disorders reveal a bio-psycho-social causality as being determinant in the occurrence and development of such disorders. Therefore, therapeutic methods can no longer be limited to separate interventions, only through medication, psychotherapy or social support. This paper assesses the degree of association between two of the personality dimensions, Agreeability and Emotional Stability (as measured by DECAS; Sava, 2008), before and after combined therapy consisting of psychotherapy and an antidepressant (Escitalopram), within a sample of patients (N=32) suffering from generalised anxiety disorder occurring in comorbidity with obsessive-compulsive personality disorder. The results obtained indicate the fact that the association of Agreeability and Emotional Stability in the pre-treatment stage is moderate \((r = .43)\), but it becomes stronger following combined intervention \((r = .53)\). Due to the fact that the two dimensions represent determinants with regard to human and social relationships, as well as an individual’s emotional stability, the positive change in the association contributes to the improvement of social, interpersonal and family relationships and of these patients’ emotional stability.

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Keywords: social benefits; generalised anxiety; agreeability; emotional stability; combined therapy.

Introduction

The influence of the social environment in which a person lives is extremely important in the occurrence and persistence of anxiety symptoms, bearing in mind that genetic influence only predisposes the individual to developing neurotic symptoms and it is actually the negative influences of the social environment which have the role of setting off symptoms specific to generalised anxiety (Rapee & Barlow, 2002). Adaptive mechanisms are the foundation based on which a person is able to deal with rapid changes in the environment. Social influence has a great importance in this case, so that, if a person changes his/her behaviour(s) in an adaptive direction, their chances to adapt increase exponentially, even in the case of environmental influences which cause distress. If this attitudinal and behavioural change persists for a period of several years, these adaptability characteristics can be genetically passed on to future generations (Champagne & Curley, 2005). Therefore, social factors have a great influence, causing changes in the central nervous system or in genetic influence. This plasticity and changeability of the CNS and its genetic influence bears the name of Epigenetics. As psychotherapy also has the role of a social modeler, it can produce in the treated patients epigenetic modifications similar to those caused by psychotropic medication, at a biological, neuro-hormonal and even personologic level (Stahl, 2011, Dumont, 2010, Wright, 2006, Melke, Westberg, Nilsson, Landén, Soderstrom, et al., 2003).

The Association between Generalised Anxiety and Obsessive-Compulsive Personality Disorder

From a social-economic point of view, the highest expenses are incurred by the treatment of Borderline and Obsessive-Compulsive personality disorders, especially when these are associated with depression and anxiety. The costs allocated to these treatments represent 66.5%, the other side of the costs being correlated with loss of productivity. This means: psychiatric medical services, care services, as well as social services. Under these conditions, it is necessary to seek new types of treatment which would efficiently approach individual or associated personality disorders (Soeteman, Hakkaart-van Roijen, Verheul & Busschbach, 2008). Obsessive-Compulsive PT shows an association in comorbidity with other psychological disorders of 6.2% over 12 months and 5.3%
throughout one’s lifetime. The lowest lifetime associations are presented by the comorbidity between generalised anxiety disorder and Antisocial or Obsessive-Compulsive personality disorders (Grant, Hasin, Stinson, Dawson, June Ruan, et al., 2005).

Although it has scientific research at its basis, the theory of the big five personality factors (FFM) is largely related to common sense, as human nature and the person are seen as a continuum in which experiences, life story, thoughts, emotions and behaviours occur. From this point of view, the theory is similar to traditional psychology, which starts from pertinent observations, as it was practiced by its main representatives. FFM is represented by Openness, Extraversion, Conscientiousness, Agreeableness and Neuroticism (McCrae and Costa Jr., 2008). The dimensional system of the FFM is also beginning to be used to approach the pathology of personality, so that, out of the six criteria which have been established in order to define clinical usefulness from the practitioners’ point of view, the dimensional system of the FFM is preferred in four of them (Mullins-Sweatt, Widiger, 2011).

With regard to the treatment of these disorders, efficient psychotherapy contributes to the global reduction of the personality’s psychopathological symptoms; a decrease in hypochondriac tendencies, depressive/anxious symptoms, conversion and psychological conflicts can be observed. Accordingly, social alienation decreases significantly and one can observe an improvement in social adaptation and interpersonal relationships (Terlidou, Moschonas, Kakitsis, Manthouli, Moschona, et al, 2004). An integrative/combined treatment can contribute to an increase in the flexibility of the treatment, and becomes an advantage in the case of some clinical difficulties, due to readapting the treatment plan in a very short time (Nelson, Beutler & Castonguay 2012). The combined treatment consisting of psychotherapy and antidepressant medication is recommended for comorbidities of anxious/depressive disorders and personality disorders. Combined therapy is efficient in the comorbidity of anxiety/depressive disorders and personality disorders of the anxious cluster, compared to a sole form of treatment. Besides clinical remission of the anxious/depressive disorders, improvements have also been found in the dimensional sphere of the personality. Post-treatment, social relationships improved significantly and patients had a positive self image and a better quality of interhuman relationships (Kool, Dekker, Duijsens, Jonghe & Puite, 2003; Glinski & Page, 2004; By De Fruyt, Van Leeuwen, Bagby, Rolland, Rouillon, 2006; Quilty, De Fruyt, Rolland, Kennedy, Rouillon, et al, 2008; Tang, DeRubeis, Hollon, Amsterdam, Shelton, et al., 2009; Du, Ravindran & Hrdina 2002).
Research objectives and hypotheses

This study has the purpose of establishing the association between personality dimensions before and after the combined intervention consisting of cognitive-behavioural therapy (CBT) and Escitalopram (10mg) in GAD occurring comorbidly with OCPD. Thus, we followed the effect of the association of the five personality dimensions, both pre- and post- treatment, in order to show which of these are interdependent; we also investigated the psycho-social effects produced by these associations. The research is based on the premise that, out of the five investigated personality dimensions, there is an association only between Emotional Stability and Agreeability. This association is weaker in the pre-treatment stage than in the post-treatment stage, when it becomes stronger, creating social and emotional benefits. A similar study which deals strictly with combined therapy in treating GAD is the one carried out by Schneier, Belzer, Kishon, Amsel and Simpson (2010), where the authors created and interventional program with CBT associated with Escitalopram, and the results indicated that the patients included in the study sample (N=24) presented a significant reduction of clinical symptoms in the post-treatment stage. Moreover, improvements in their quality of life also occurred.

Method

Participants

The main socio-demographic characteristics of the sample are those referring to: sex, age, educational level and the diagnosis of generalised anxiety (GAD) in comorbidity with OCPD. A total of 32 patients were included in this study, 18 of them being females (56.3%), $M_{age} = 36.83$, $SD = 11.8$ years, and 14 males (43.8%), $M_{age} = 34.64$ $SD = 11.8$ years; the general average of the entire sample was $M_{age} = 35.9$, $SD=11.7$ years. With regard to education, 26 (79.9%) of the patients had a Bachelor’s degree, 4 (20%) had graduated from high school and 2 (3.1%) had graduated from a vocational school. All 32 subjects have been diagnosed with GAD in comorbidity with OCPD.

Material and Procedure

*The SCID-II Structured Clinical Interview.* This assessment tool was designed by First, M and colab. (1997) and its items contain the criteria for diagnosing personality disorders in conformity with DSM–IV. SCID-II for personality disorders on Axis II of the DSM-IV is a structured diagnostic interview which investigates the 10 personality disorders on Axis II of the DSM-IV. SCID-II can be used
both for diagnosing a personality disorder following the categorical system, i.e. by indicating the presence or absence of a certain disorder, as well as for diagnosing by way of the dimensional system, for instance by indicating the criteria coded “3” which correspond to personality disorders. In order to reveal OCPD, the diagnostic criteria for at least 4 items must be met. Applying this test had the goal of performing a psycho-diagnostic identification of the Obsessive-Compulsive Personality Disorder (First, Gibbon, Spitzer, Williams and Benjamin, 2007).

The DECAS Personality Inventory. This is a psychometric instrument developed by Sava A. (2008), which assesses 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 (Extraversion), C-Constinciozitate (Conscientiousness), A-Agreabilitate (Agreeability), S-Stabilitate Emoțională (Emotional Stability). Thus, Openness as a personality dimension reveals aspects related to culture, the person’s intellectual preoccupations as well as their openness to experience. Extraversion indicates sociability, energy, enthusiasm, task perseverance and orientation towards others. Conscientiousness is the personality dimension which generates the person’s desire for recognition, the need for order and structure, cautiousness, responsibility and perseverance in action or moral integrity. Agreeability means the impact on inter-human relationships and it consists of trust in people, direct behaviour, selflessness, good will, modesty and kindness. Emotional Stability (Neuroticism) represents tendency to worry, depression, anxiety, impulsivity and vulnerability. The SD (Social Desirability) validation scale, known in most personality questionnaires and tests as the “lie scale”, is a factor which measures the subjects’ tendency to put themselves in a favourable light by the answers they give to the items of the questionnaire. A score higher than 65 on T quotients automatically leads to the test’s invalidation. The RD (Random Answers) validation scale is a factor which is sensitive to the subject’s tendency to offer random answers; a score higher than 70 on T quotients leads to the invalidation of the protocol. The AP (Approval) validation scale is a factor which is sensitive to the subject’s tendency to give more “True” answers or, conversely, more “False” answers; a score higher than 65 or lower than 35 on T quotients leads to the invalidation of the protocol. The Cronbach alpha internal consistency quotient was calculated depending on each personality dimension, on a representative sample of 1552 people, and it ranged between .70 and .82. There is a good concurrent validity between the DECAS Personality Inventory and the NEO PI-R Personality Inventory, as they range between .57 and .81. (Sava, 2008). The psychometric tests used in this research are calibrated, standardized and validated on the Romanian population. In this research, the SCID-II Structured Clinical Interview was used alongside the DECAS Personality Inventory.
Experimental design

This study respects the clinical criteria developed by the International Conference of Harmonization – Good Clinical Practice, as well as the ethical principles stipulated in the Code of Nurnberg. The results were collected in the period October 2009 – October 2012. The data comes from the Mental Health Centre of Tirgu-Mures, Psychiatry Clinic no. II, as well as from psychotherapy practices in Tirgu-Mures, Timisoara, Bucuresti and Cluj-Napoca. The eight therapists’ team consists of four psychiatrists and four clinical psychologists, with a general average clinical experience of 10.12 years and an average experience of 7.75 years in cognitive-behavioural therapy.

In the first stage, the patients were administered the Structured Clinical Interview (SCID-II) in order to psychometrically identify OCPD, and then the DECAS Personality Inventory. Ever since the beginning of therapy, the medication prescribed was Escitalopram, 10mg/day. CBT was used for the psychotherapeutic intervention. The total number of CBT sessions was 40/6 calendar months from the initiation of the treatment. The patients included in the study had real support from their families, and psycho-education sessions were carried out on request with members of the families.

Results

In the pre-treatment stage, the Openness dimension received a general score where $M = 6.81$ and $SD = 2.83$ for the entire sample (See the Table 1).

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Treatment</td>
<td>3</td>
<td>16</td>
<td>6.81</td>
<td>2.83</td>
</tr>
<tr>
<td>Post-Treatment</td>
<td>1</td>
<td>16</td>
<td>6.88</td>
<td>3.20</td>
</tr>
<tr>
<td>Extroversion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Treatment</td>
<td>0</td>
<td>16</td>
<td>7.19</td>
<td>4.08</td>
</tr>
<tr>
<td>Post-Treatment</td>
<td>1</td>
<td>15</td>
<td>9.22</td>
<td>3.81</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Treatment</td>
<td>1</td>
<td>17</td>
<td>10.22</td>
<td>4.01</td>
</tr>
<tr>
<td>Post-Treatment</td>
<td>2</td>
<td>16</td>
<td>10.19</td>
<td>3.68</td>
</tr>
<tr>
<td>Agreeability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Treatment</td>
<td>1</td>
<td>15</td>
<td>9.81</td>
<td>3.40</td>
</tr>
<tr>
<td>Post-Treatment</td>
<td>3</td>
<td>17</td>
<td>11.72</td>
<td>3.70</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Treatment</td>
<td>0</td>
<td>18</td>
<td>5.75</td>
<td>3.53</td>
</tr>
<tr>
<td>Post-Treatment</td>
<td>3</td>
<td>18</td>
<td>10.69</td>
<td>4.31</td>
</tr>
</tbody>
</table>
In the post-treatment stage, for the entire sample, the Openness dimension received a general score where $M = 6.88$ and $SD = 3.20$. In the pre-treatment stage, the Extraversion dimension received a general score per whole sample where $M = 7.19$ and $SD = 4.08$. In the post-treatment stage, for the entire sample, the Extraversion dimension received a general score where $M = 9.22$ and $SD = 3.80$. In the pre-treatment stage, the Conscientiousness dimension received a general score per whole sample where $M = 10.22$, $SD = 4.01$. In the post-treatment stage, for the entire sample, the Conscientiousness dimension received a general score where $M = 10.19$ and $SD = 3.67$. In the sample under investigation, the scores obtained by the patients ($N = 32$) indicate in the pre-treatment stage an Agreeability score where $M = 9.81$ $SD= 3.4$, while in the post-treatment stage it was $M = 11.72$, $SD = 3.70$. In the pre-treatment stage, the Emotional Stability dimension received a general score per whole sample where $M = 5.75$ and $SD = 3.52$. In the post-treatment stage, for the entire sample, the Emotional Stability dimension received a general score where $M = 10.69$ and $SD = 4.30$ (See the Table 1).

There is a significant positive relationship between the Emotional Stability and the Agreeability dimensions, where $r = .43$, $N=32$, $p< 0.05$. One can state that this is a light correlation between the scores of the Emotional Stability dimension and the scores of the Agreeability dimension, obtained by patients in the pre-treatment stage (See the Table 2). The other personality dimensions show no statistically significant associations.

**Table 2. Correlations for the DECAS Measurement: Pre-treatment ($N = 32$)**

<table>
<thead>
<tr>
<th>Personality Factors</th>
<th>Openness</th>
<th>Extraversion</th>
<th>Conscientiousness</th>
<th>Agreeability</th>
<th>Emotional Stability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td>1</td>
<td>.254</td>
<td>.120</td>
<td>-.138</td>
<td>.102</td>
</tr>
<tr>
<td>Extraversion</td>
<td>.254</td>
<td>1</td>
<td>-.288</td>
<td>-.172</td>
<td>.053</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.120</td>
<td>-.288</td>
<td>1</td>
<td>.093</td>
<td>-.003</td>
</tr>
<tr>
<td>Agreeability</td>
<td>-.138</td>
<td>-.172</td>
<td>.039</td>
<td>1</td>
<td>.439*</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>.102</td>
<td>.053</td>
<td>-.003</td>
<td>.439*</td>
<td>1</td>
</tr>
</tbody>
</table>

*Correlation is significant at the $p<.05$ (2-tailed).

There is a significant positive relationship between the Emotional Stability and the Agreeability dimensions, where $r = .53$, $N=32$, $p< 0.01$. One can state that this is a strong correlation between the scores of the Emotional Stability dimension and the scores of the Agreeability dimension, obtained by patients in the post-treatment stage (See the Table 3). The other three personality dimensions show no statistically significant associations.
Table 3. Correlations for the DECAS Measurement: Post-treatment (N = 32)

<table>
<thead>
<tr>
<th>Personality Factors</th>
<th>Openness</th>
<th>Extroversion</th>
<th>Conscientiousness</th>
<th>Agreeability</th>
<th>Emotional Stability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td>1</td>
<td>.230</td>
<td>.276</td>
<td>.207</td>
<td>-.059</td>
</tr>
<tr>
<td>Extroversion</td>
<td>.230</td>
<td>1</td>
<td>-.021</td>
<td>.041</td>
<td>.166</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.276</td>
<td>-.021</td>
<td>1</td>
<td>.175</td>
<td>-.076</td>
</tr>
<tr>
<td>Agreeability</td>
<td>.207</td>
<td>.041</td>
<td>.175</td>
<td>1</td>
<td>.539**</td>
</tr>
<tr>
<td>Emotional Stability</td>
<td>-.059</td>
<td>.166</td>
<td>-.076</td>
<td>.539**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. **Correlation is significant at the p<.01 (2-tailed).

Discussion

If in the pre-treatment stage we obtained a moderate correlation between the two personality dimensions, in the post-treatment stage we noted a strong correlation of the two personality dimensions. We draw the conclusion that there is an interdependence, so that Agreeability is sensitive to changes in the level of Emotional Stability, while at the same time Emotional Stability is sensitive to changes in Agreeability. If we look at the meaning of the two dimensions, Agreeability is responsible for inter-human relationships, while Emotional Stability is responsible for the way in which a person feels emotionally or interprets social and life events. Post-treatment, we see a very high level of Agreeability compared to the average pre-treatment level, and a high level of Emotional Stability compared to an average-low pre-treatment level. This result indicates the efficiency of psychotherapy and medication in the treatment of this comorbidity (Foa, Franklin & Moser, 2002, Covin, Ouimet, Seeds & Dozois, 2008, Pollack, Kinrys, Krystal, McCall, Roth & Schaef er, 2008).

A low level of Extraversion, Agreeability and Emotional Stability may indicate the presence of anxiety, hypochondriac, nutrition or somatoform disorders (Mallouf, Thorsteinsson and Schutte, 2005). Based on these studies, we can state that in the pre-treatment stage, the relationship between Agreeability and Emotional Stability in our study corresponds to the anxious typology. This is because Agreeability has a high level, whereas Emotional Stability is borderline low. After the combined therapeutic intervention, both levels changed positively in the post-treatment stage, so that Agreeability was now at a very high level, while Emotional Stability reached a high level. Based on the DECAS Personality Inventory, this shows a better social adaptability in these patients, the basic feature of this interrelationship being lack of anxiety, aggressiveness and anger. This is due to the fact that the interdependence between Agreeability and Emotional stability, when both are at a low level, indicates the presence of irritability or anger. This can also be interpreted through the presence of impulsive-explosive personality traits (Ode, Robinson, & Wilkowski, 2008; Axelrod, Widiger, Trull & Corbitt, 1997).
The association of the two personality dimensions becomes strong in the post-treatment stage, as psychotherapy contributes to the modification of some facets of the N factor (Emotional Stability). Its therapeutic action has beneficial effects on cognitive distortions, emotions and behaviours and implicitly on hypervigilance and physiological reactivity (Zinbarg, Uliaszek & Adler, 2008). Patients who manifest GAD in comorbidity with other disorders experience, in the case of an efficient psychotherapeutic intervention, a significant reduction both of anxious symptoms and of associated comorbidities (Borkovec, Abel & Newman, 1995). Also, in affective/anxious episodes, psychotherapeutic intervention associated with antidepressant medication produces changes in the sphere of the personality as well (Clark, Vittengl, Kraft, & Jarrett, 2003). One must not forget the fact that these dimensional changes in personality can have an effect on the pathology of the personality as well.

Monsen and colab. (1995) previously showed in a prospective study that 75% of patients who were initially diagnosed with an Axis I disorder no longer had this diagnosis after 25.4 months of psychotherapy. Also, of these patients, 72% also showed a decrease in the intensity of Axis II personality disorders. The follow-up average for the entire sample was 5.2 years and the results remained stable in time (Monsen, Odland, Faugli, Daae & Eilertsen, 1995).

It is interesting to note that following combined treatment, the association between the two variables became stronger \( r = .53, p<0.01 \) and, besides the fact that the two are related, the therapeutic technique used has a beneficial effect on the association. This shows that in the pre-treatment stage, according to the factor analysis \( (D=, E-, C=, A+, S=) \), patients showed censorship of emotional expression, social inhibitions and behavioural restrictions, while in the post-treatment stage, factor analysis \( (D=, E=, C=, A+, S+) \) shows a high degree of adaptability, optimism, social assertiveness, self confidence and a certain degree of autonomy (Sava, 2008).

**Conclusion**

The strong association of the Agreeability and Emotional Stability personality dimensions which resulted from combined therapy with CBT and medication can produce social and emotional benefits in the patients’ lives. These benefits consist of improvements in human relationships, a warmer and kinder attitude towards others, significant improvements in social abilities, as well as a higher degree of orientation to the needs of others. On the other hand, one can observe the lack of pathologic worry, cooperation in the detriment of competition, a better capacity for emotional control, tolerance to frustration but also rational thinking in the detriment of momentary impulses. We can state that combined therapy is an intervention which acts upon the biological (medication), psychological
(psychotherapy) and social (social support) levels and it is efficient and beneficial in the case of this disorder by generating new adaptive emotional and social behaviours.

References


