

## THE IMPORTANCE OF THE INDIVIDUAL CHARACTERISTICS IN THE ESTABLISHMENT OF THE DIAGNOSIS FOR THE PSYCHO-SOMATIC AFFECTIONS

ANGELA DUMITRESCU<sup>1\*</sup>, EDUARD CRAUCIUC<sup>1</sup>, DAN MARIAN DUMITRESCU<sup>1</sup>, DANIELA LEPĂDATU<sup>1</sup>, VLAD ALEXANDRU MOLFEA<sup>2</sup>, OVIDIU TOMA<sup>3</sup>, GEORGE IOAN PANDELE<sup>1</sup>

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**Abstract:** Starting from the statement that in the onset of the psycho-somatic disorders an important role is played by psychological factors and the personality of the patient together with cardiovascular risk factors, we believe that it is important to highlight and correlate all the possible aspects. Aim: The objectives of the study are to stress the differences in the structure of personality between the patients with arterial hypertension (AHT) and depression and the ones diagnosed only with depression syndrome. Material and methods: the 200 patients studied were divided in two groups: 100 patients with depression and 100 with depression + AHT. Results: After processing the data obtained by anamnesis and questionnaires focused on the individual characteristics of the patients, we observed that the group diagnosed with depression and AHT has a significantly increased level in dynamism, domination, perseverance and meticulousity while the group with depression has a significantly increased level of cooperation, amiability and openness for culture. Conclusions: There are important differences between the two study groups regarding their personality traits.

### INTRODUCTION

The personality trait is the concept highlighting those characteristics or individualities of a person or psychological process which are relatively stable. In G.W.Allport's opinion, the personality is a structure formed by hierarchically organized features, with each individual having 2 or 3 cardinal qualities that dominate and control the others (Allport, 1991).

A consensus was reached regarding the evaluation methods for personality traits, by the elaboration of a model integrating the basic characteristics of personality, some researchers using the phrase “the five greats”. The model proposed by Costa and McCrae represents the foundation for a widely used measurement scale – NEO-Personality Inventory-Revised (De Raad, 2000). The five large dimensions of personality are called “neurosis”, “extraversion”, “openness”, “agreeability” and “consciousness” (tab.1).

Table 1. The facets of the traits associated with the five domains in the personality model

<b>Neurosis (N)</b>	Anxiety, furious hostility, depression, self-consciousness, impulsivity, vulnerability
<b>Extraversion (E)</b>	Warmth, assertion, active spirit, looking for sensation, positive emotions prevail
<b>Openness (O)</b>	Fantasy, esthetic sense, feelings, actions, ideas, values
<b>Agreeability(A)</b>	Confidence, direct behavior, altruism, flexibility, modesty, sensitivity
<b>Consciousness (C)</b>	Competence, order, sense of duty, makes all efforts to achieve success, self-discipline, carefulness

It has been noted that tiredness, stressful work-environment (Serrats et al., 2005), psychological and social stress etc., psychic trauma, negative emotions such as anxiety (Clemett et al., 2000), depression (Frazer et al., 2002), alexithymia (Grewen et al., 2004), rage and hostility (Kowalik, 2004, Larkin et al., 2004) lead to a decrease in the functional ability of the brain, with interferences in the function of the hypothalamus resulting in hyper excitability and important instability of the blood-flow regulating function. The literature shows that individuals with choleric temperament present a certain degree of hostility, and these aggressive hostile persons have increased levels of nor-epinephrine hormone (nor-adrenaline) in their blood. This hormone is released in correlation with various stress factors,

indicating an internal imbalance, frequently encountered in cardiovascular pathology and in the general predisposition for illness.

Our paper concentrates on two disorders with raised incidence in the general population, having direct implications in mortality and morbidity and long-term economic consequences – arterial high blood-pressure and depression syndrome (Gallo et al., 2003, Jonas et al., 1997). A very important role is played in the onset of these affections by the psychological factors and the personality of the patient together with cardio-vascular risk factors. Thus, we believe that it is important to highlight and correlate all the possible aspects.

The aims of our study are (i) to emphasize the differences in the structure of the personality between the patients with AHT and depressive syndrome and those diagnosed only with depression; (ii) to identify the modifications determined by the depression level on the personality features; (iii) to detect the modifications determined by the level of blood-pressure on personality traits.

## MATERIAL AND METHODS

There were investigated 200 patients admitted in the Departments of Psychiatry and Internal Medicine at several Clinical Hospitals in Romania, diagnosed with raised blood pressure according to the values of ESH/ESC guides and with depression disorder according to DSM-IV TR criteria, 71 males and 129 females. The age varied between 20 and 80 years; 99 patients came from the urban environment and 101 from the rural one. They presented different degrees of education, as follows: 14 attended only elementary school, 28 – middle school, 64 – technical school, 21 graduated high-school, 11 obtained the bachelor's degree, 45 underwent college and 17 accomplished their undergraduate studies.

The study protocol recorded the following factors: name/surname, gender (male/female), environment (rural/urban), education degree (elementary, middle or technical school, superior studies). There were evaluated several dimensions of the personality features: a. five fundamental factors: energy, kindness, conscious character, emotional stability, and openness of spirit; b. 10 specific personality traits: dynamism, dominance, cooperation, friendly attitude, meticulousity, perseverance, emotion control, impulse control, openness towards culture, openness towards experiencing – all of them evaluated with the Alter Ego questionnaire.

With respect to the application order of these instruments, we pursued a progressive particularity degree, beginning with anamnesis and continuing with Alter Ego personality inventory. For the completion of the investigation we used the observation charts and the questionnaires and for the statistical processing of the data we appealed to the SPSS (Statistical Package for the Social Sciences) program version 15.0 and to the Microsoft Office XP package as well.

## RESULTS AND DISCUSSIONS

In this section we will present all the dimensions included in the Alter Ego questionnaire for the entire investigated group and we will make comparisons between the two groups of patients: with depression and with depression + AHT.

The Alter Ego questionnaire is organized on three levels which at their turn present three progressive stages, thus: the inferior level comprises stages 1, 2 and 3, the medium level presents stages 4, 5 and 6 and the superior level contains stages 7, 8 and 9. We present below the personality features graded according to the score obtained on the three stages. Thus:

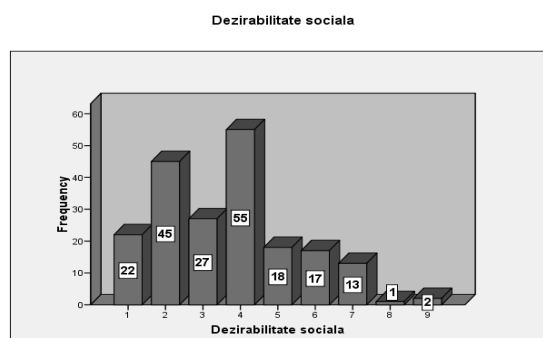
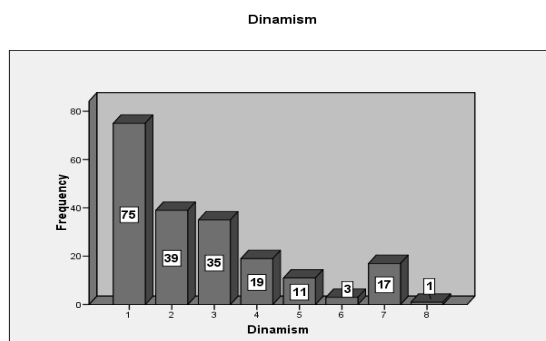


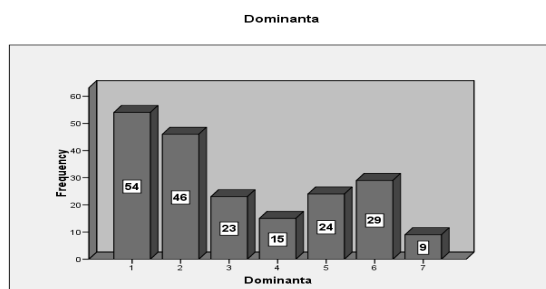
Fig. 1. Repartition of social desirability in the studied population

Social desirability (fig.1) recorded higher values in stage 4 and 2, the inferior level prevailing, followed by the medium level, while the lowest scores belonged to the superior level. In the depression+ AHT group there were recorded higher scores for stage 2 and 4 as opposed to the depression group where the scores for stage 1 and 5 predominated.



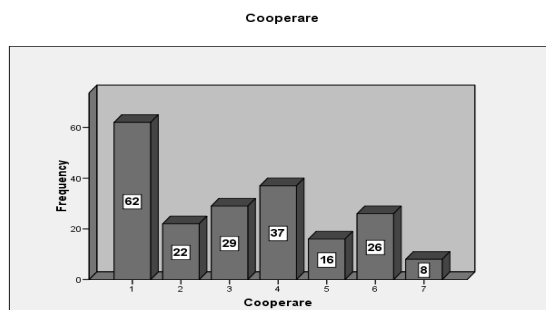
**Fig. 2.** Repartition of dynamism in the studied population

Dynamism (fig.2) recorded increased values in stages 1, 2 and 3, the inferior level outweighing in the entire group while the superior level was situated at the opposed pole. The depression group presented high scores for stage 1 and 2 as compared to depression+ AHT group which had higher values for stage 3, 4 and 7.



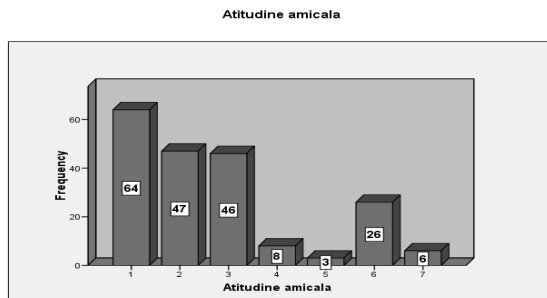
**Fig. 3.** Repartition of dominance in the studied population

Dominance (fig.3) had higher scores in stage 1, 2 and 5, the inferior and medium level obtaining significant values. The depression group presented increased values in stage 1 and 2, while in the depression+ AHT group the values for stage 3, 4, 5 and 6 were in the majority.



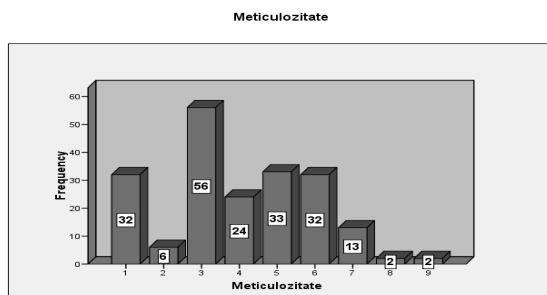
**Fig. 4.** Repartition of cooperation in the studied population

Cooperation (fig.4) presented raised scores for stage 1, 4 and 3, the inferior and medium level dominating. In the depression+ AHT group we noted slightly raised values for stage 1, 3 and 4, as compared to the depression group where stage 2, 5 and 7 obtained increased scores.



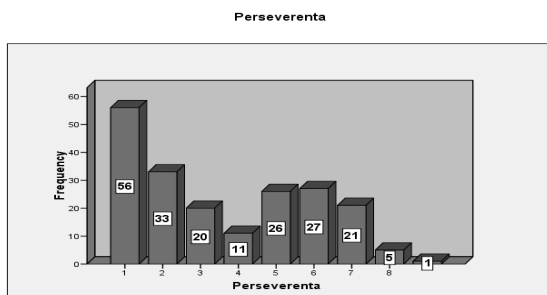
**Fig. 5.** Repartition of friendly attitude in the studied population

Friendly attitude (fig.5) recorded increased values in stage 1, 2 and 3, the inferior level registering maximum grades while the superior level was insignificant. In the depression+ AHT group there were higher values for the above mentioned stages (38, 24, 25) in comparison with the depression group (26, 23, 21), stage 6 being here better placed (17) than in the other group (9).



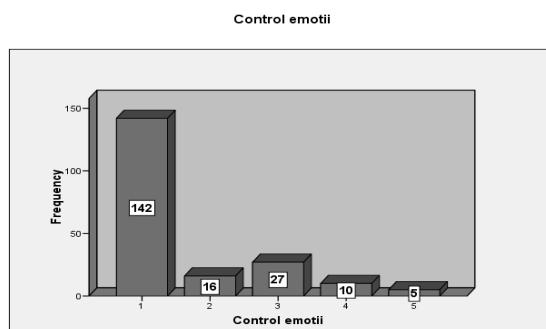
**Fig. 6.** Repartition of meticulousity in the studied population

Meticulousity (fig.6) presented high scores for stages 3, 5, 6, 4 and 1, which means that the inferior and medium level predominated, the superior level being very faintly represented. In the depression group stage 1, 3 and 5 recorded higher values than for the group with depression+ AHT, where stage 4 and 6 had increased marks.



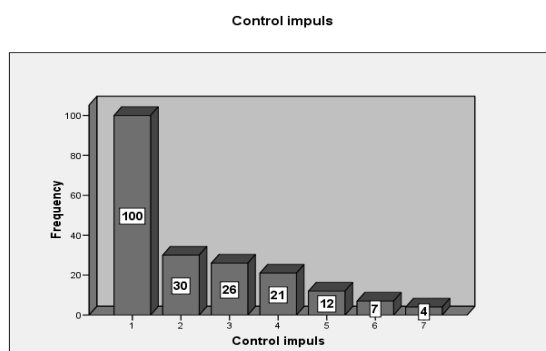
**Fig. 7.** Repartition of perseverance in the studied population

Perseverance (fig.7) recorded raised scores for stages 1, 2, 5, 6 and 3, meaning that the medium level was secondary to the inferior one. In the comparison of the two groups we observed that the inferior level was better represented for the depression group while for the depression+ AHT group the medium level had higher values.



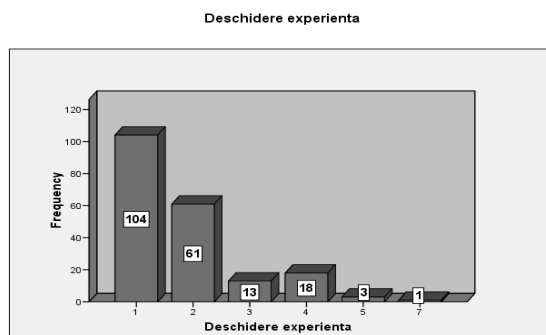
**Fig. 8.** Repartition of emotion control in the studied population

Emotion control (fig.8) registered maximum values for stage 1, the medium and superior level being extremely faintly represented. In the depression+ AHT group 73 points were accumulated in comparison with 69 for the depression group.



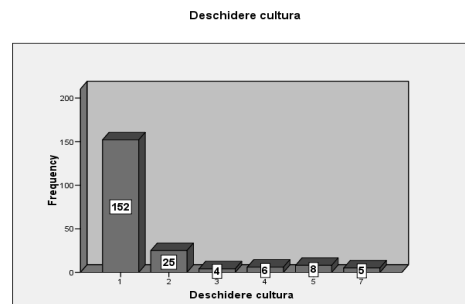
**Fig. 9.** Repartition of impulse control in the studied population

Impulse control (fig.9) recorded a maximum score for stage 1, followed by the scores for stage 2 and 3, meaning that the inferior level prevailed. The depression+ AHT group presented slightly raised values for stage 1 than the depression group.



**Fig.10.** Repartition of openness towards experiencing in the studied population

For the openness towards experiencing item (fig.10) stages 1 and 2 present high values, which indicates that the inferior level preponderates. The depression group has slightly increased values than the depression+ AHT group for the above-mentioned stages.



**Fig. 11.** Repartition of openness towards culture in the studied population

Regarding the openness towards culture (fig.11) stage 1 presented maximum values, the other being insignificant. The same thing was noticed in the comparison of the two patient groups, the depression (73) and depression+ AHT (79) study lots.

For the “social desirability” dimension we can state that the depression+ AHT study group has an increased tendency towards supplying the others with a falsely positive profile as opposed to the depression study group. Regarding “dynamism” we noted that the patients from depression+ AHT group with low depression level and first degree AHT tend to describe themselves as dynamic, active, energetic and dominant while those with third degree AHT are devoid of energy, quiet, deprived of the capacity to impose themselves and influence the others. In the depression study group, those diagnosed with mild and medium depression present acceptable values, these individuals having still some degree of energy and elocution facility.

The number of patients from the depression study group with a very low and low level of “dominance” is high, in contrast with the patients from depression+ AHT study group, these (presenting with severe and medium depression) being deprived of competitive spirit, the tendency to impose or influence other’s decisions. In depression+ AHT (patients with first and second degree of AHT) the level of “dominance” characteristics is medium and low.

Following the evaluation of the “cooperation” dimension we observed that the patients in depression group are less cooperative, altruistic, generous or empathic than those in the depression+ AHT group, the latter having a better ability to understand the needs and difficulties of others, to help them and to efficiently cooperate with others (especially those with first and second degree of AHT).

By comparison, we can affirm that the patients associating depression and AHT have a better degree of “openness towards experiencing”, taste for the new, openness towards values, stiles and ways of life and culture than the patients in the depression study group that describe themselves as lacking imagination and ideas, less creative, inventive or curious.

The depression+ AHT group (second and third degree) have a low level for the “friendly attitude” dimension, in other words they do not trust or feel opened towards the others and they lack benevolence as opposed to the depression study group.

Regarding “meticulosity” the patients in the depression group have lost the preoccupation for order, the care for detail in everything, they are less attentive, ordered and precise (especially those with severe and medium depression) than the ones in depression+ AHT

group who possess a better self-regulation ability (regarding the patients with mild depression and first or second degree AHT).

After the analysis of the results, we can state that the depression+ AHT study group has a medium level of ”perseverance”, which indicates a constancy and perseverance in accomplishing tasks and activities and an important care not to fail in the engagements they assume, the depression group recording low values for this dimension.

With respect to “emotion control”, subdimension of the “emotional stability” factor, we noted that the patients associating depression and AHT fail to achieve a good control of emotional tense situations, of self-control as opposed to the patients with depression. Likewise, the patients with depression+ AHT attain a lower level of “impulse control” than the patients in the depression group, these being less calm, emotional, presenting anxiety, depression, irritability, irascibility and impulsivity.

The “openness for culture”, subdimension of “openness of mind” factor that evaluates the desire to be informed, the interest towards accumulating new pieces of knowledge presents decreased values in the entire studied population, more evident for the second and third degree AHT patients associating medium and severe depression.

## CONCLUSIONS

In the onset of some disorders, a very significant role is played by the psychological factors and the personality of the patient. In these cases, a careful clinical examination, with a focus on the importance of anamnesis may reveal the presence of an intra-psychological conflict.

The statistical analysis performed demonstrated significant differences between the two groups regarding the personality traits. Thus, the patients in depression+ AHT group have a significantly increased level of depression and anxiety and also a significantly raised level of dynamism, dominance, meticulousity and perseverance while the patients in depression group have a significantly higher level of cooperation, friendly attitude and openness towards culture.

Moreover, there are highly significant and negative correlations in the case of cooperation, friendly attitude and openness towards culture. Patients with first and second degree of AHT are more active, energetic, meticulous and perseverant than those with third degree AHT. We recorded decreased scores of cooperation, friendly attitude and openness towards culture for increased values of blood pressure.

According to the personality traits, the AHT patients can be divided in several groups: a. patients with first degree AHT and mild depression, who are extraverts, sociable, energetic and communicative; b. patients who are asthenic, introverts, slow, obese, with unhealthy habits and tendencies towards inactivity, irritable, irascible, somatic and impassive; c. patients with mild and medium forms of depression who are energetic, active, involved in their work, with various disease of the cardio-vascular system, having impulsive-explosive tendencies, being hostile and conflictive and d. the group comprising the greatest number of subjects, who are communicative, apparently sociable, with a hidden hostility and aggressivity, competitive, permanently tense, irritable, introverts, cooperating, meticulous and perseverant.

We noted highly significant and negative correlations between depression and personality traits, thus a raised level of depression being associated with a decreased level of social desirability, dynamism, dominance, cooperation, perseverance, emotion and impulse control, openness towards experiencing and culture.

We consider that the somatic, psychic or psycho-somatic disorder represents in the beginning only a morbid manifestation of the personality, of the individual or individuality and that personality and its newer structures are secondary influenced by the pathologic process and at their turn, these personality particularities, the temperamental ones respectively, will influence the manifestations and expressions of the disorder and conversely, in a closed morbid circuit.

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<sup>1</sup> University of Medicine and Pharmacy “Gr.T.Popa” Iasi, Faculty of Medicine

<sup>2</sup> University of Medicine and Pharmacy “Carol Davila” Bucharest, “St. Pantelimon” Hospital, Cardiology Clinic

<sup>3</sup> “Alexandru Ioan Cuza” University of Iasi

\* dmadumitrescu@yahoo.com

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