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## Psychosomatics and psychical tension (clinical research)

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### Abstract

Psychological implications derived from an organic disease are already well known by a large number of researchers. We have based our study on the existence of a common profile of the psychosomatic patient and not several profiles based on the illness. We believe that this profile will have as central markers tension, insecurity, need of others' approval, non-adaptive coping. We also believe there is a close link between personality factors, defence mechanisms and social, economic, environment factors. The operational highlight of these elements refer to the adaptive incapacity and the recovery index for these patients.

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### 1. Introduction

The premises of our study are based on the postulates of modern psychosomatics (Flanders Dunbar 1947), which admit the existence of some vulnerability traits in the psychosomatic patient as regards the management of psychic tension and anxiety, beside certain functional fragility of some organs, systems, which are prone to fail more easily, becoming pathologic in character. (Sivik & Schoenfeld, 2006) . Researchers have tried over time to identify the connections between the psychological traits of personality and certain psychosomatic diseases. (Ruesch, 1948).

The sample consisted of 386 subjects among the psychosomatic patients registered with the National Institute for Medical Expertise, between 2000 and 2005. They have been examined by a multidisciplinary team formed of psychiatrists, psychologists, somatic physicians, social assistants and sociologists, who established the relevant diagnosis and the indubitable link between the psycho traumas suffered by

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patients and the psychosomatic disease due to which they retired for medical reasons. One also considered the influence of the psychotherapeutic treatment on the evolution of their disease.

The subjects were asked to complete the CAQ personality questionnaire (Krug, 2000), close in value terms to the MMPI multiphasic inventory (Hathaway & McKinley, 1930), a questionnaire assessed depending on the Romanian environment, the Szondi test (Deri, 1949), in order to identify the impulse structure, the Holmes and Rahe scale (Holmes & Rahe, 1967) in order to assess the psychotraumatic events – slightly adapted to the list of events inventoried within our group of patients and, finally, the DSQ test (Gavin, Singh, & Bond, 1993) in order to identify the defensive style and mechanisms used.

## 2. General Hypotheses

**1:** We assume that there is a common profile of the psychosomatic patient and not differentiated profiles depending on the disease, namely that there are no significant differences between the results obtained by using the four diagnostic tools depending on the 10 disease categories.

**2:** We assume that this profile shall have as central traits tension, insecurity, the need for receiving others' approval, namely aspects within the range of anxiety and dependence and misadjusting coping and, to a smaller extent, aspects related to independence, emotional stability and adjusting coping.

**3:** We assume that there is a close connection between personality factors, defensive mechanisms and styles and environment, social, economic, constitutive factors, in other words, that the appearance and evolution of the disease, as well as recovery possibilities are the result of their common interaction.

### 2.1. Our working hypotheses are:

**1:** We assume that there are no significant differences between the results obtained by using the four diagnostic tools (namely Holmes and Rahe stress scale coefficient, the Szondi test, the CAQ questionnaire and the DSQ questionnaire) depending on the 10 disease categories.

**2:** We assume that both the patient's age and their age when the disease appeared, the length of disease and the number of retirement years shall differ significantly from a disease category to another.

**3:** We assume that there are significant differences between the score earned by women regarding the Szondi factors S h, CAQ emotional warmth, CAQ sensitivity, also the depression factors, as well as regarding the DSQ defensive style – distorted self-image, and those earned by men concerning the same scales, women tending to get higher scores than men in these areas.

**4:** We assume that tension, insecurity, the constant need for the others' approval, preoccupation and dependence are the characteristic traits of the profile of the psychosomatic patient (namely the factors CAQ tension, CAQ insecurity, CAQ emotional warmth and CAQ radicalism shall have scores above average).

**5:** We assume that "protective" traits such as emotional stability, dominance and self-sufficiency shall characterize to a smaller extent the profile of the psychosomatic patient, namely shall have scores below average.

**6:** We assume that, at a deeper level, namely the level of the Szondi test results, we shall find higher scores as regards factors such as Szondi S s, Szondi SCH p and Szondi C d and scores below average as regards the factor Szondi C m or Szondi S h (namely a situation apparently opposed to the one at a conscious level).

**7:** We assume that there will be no significant correlations between the length of disease and the results obtained by patients as regards the four psycho-diagnostic tools used (namely Holmes and Rahe stress scale coefficient, the Szondi test, the CAQ questionnaire and the DSQ questionnaire), namely we

cannot find a direct causal link between the appearance of disease and the personality structure preceding and following the time when getting sick.

**8:** We assume that there are significant correlations between Holmes and Rahe's stress scale coefficient and the CAQ and Szondi factors indicating tension, as well as the misadjusting DSQ defence mechanisms and styles.

**9:** We assume that the results as regards the adjusting incapacity coefficient shall correlate significantly negatively with the DSQ mechanism of affiliation and positively with an undeveloped defensive mechanism (DSQ cleavage or DSQ retroactive obliteration).

**10:** We assume that tension, being a basic characteristic of the profile of the psychosomatic patient, shall show an increasing sensitivity to the influence of social, environment and economic factors.

**11:** We assume that the presence of the social factor (namely the presence or absence of the social support, of the relationships more or less satisfactory with the others, etc.) shall cause significant differences as regards the characteristic traits of the profile of the psychosomatic patient (namely CAQ tension, CAQ insecurity, CAQ sensitivity, CAQ radicalism) as well as regards the maturity level of defensive mechanisms and styles used (DSQ affiliation, DSQ distorted self-image).

**12:** We assume that affiliation, as an adjusting defensive mechanism, shall get significantly lower scores exactly as regards those factors that represent the reduction of social interactions: decreasing relationships with friends, decreasing social skills, decreasing interest and adjusting activities, etc

**13:** We assume that the elements of the affective component analyzed (traumas, milieu, EE, etc.) shall cause significant differences both as regards personality factors in the emotional field (for example, CAQ sensitivity, CAQ impulsiveness, etc) and as regards characteristic traits of the profile of the psychosomatic patient and defensive mechanisms and styles (namely DSQ affiliation etc.).

**14:** We assume that as regards the symptoms in the depression area, the CAQ tension factor shall have significantly higher values in patients that have these symptoms by comparison with patients that do not have these symptoms.

**15:** We assume that less adjusting defensive styles such as DSQ distorted self-image and DSQ self-sacrifice are extremely sensitive to the influence of environment, social, economic factors.

**16:** We assume that the factors resulting from factor-related analysis shall show both the depressive image characteristic to the psychosomatic patient (implicitly an increasing emotional component) and the structure of misadjusting defence mechanisms and styles in action.

**17:** We assume that the personality traits that involve a misadjusting management of stress (namely irritability, isolation, introversion, apathy, anxiety, absence of a sense of continuity, poor emotional control) shall cause significant differences both as regards poorly adjusted defensive mechanisms and styles (DSQ distorted self-image, DSQ self-sacrifice, DSQ misadjusting behaviour, DSQ apathetic withdrawal) and as regards personality factors (CAQ tension, Szondi C m, Szondi SCH k).

The results obtained using the four working psycho-diagnostic tools were subject to a proper statistic processing in order to identify the significant correlations between them, a fact that justifies us in saying that the premises we started from, the general and working hypotheses, have been fully confirmed, enabling us to fulfil the objectives set with a view to capitalize on those mentioned above.

The results obtained as regards the stress scale coefficient, the Szondi test, as well as the ones obtained at the CAQ questionnaire and DSQ questionnaire were subject to a one-way ANOVA analysis in order to see whether there were significant differences as regards every factor/mechanism/defensive style of these tools, depending on the ten categories of psychosomatic diseases.

The illness length in years was subject to a one-way Anova analysis in order to see whether there were significant differences as regards these years, depending on the ten categories of disease. The same applied to the age when the disease started, the number of retirement years and the patient's age.

The scores obtained at the four psycho-diagnostic tools, namely the stress scale coefficient, Szondi test, CAQ questionnaire and DSQ questionnaire by men were compared with the scores earned at the same tools by women. In order to process the data, we used the Independent Samples T test.

As regards the invalidity degrees and their distribution to the two genders, we applied the square Chi test of association (independence), initially in order to determine the incidence of invalidity degrees as regards the two genders and then the incidence of genders as regards the invalidity degrees.

Concerning the CAQ factors average values, we used the following procedure: we calculated the average value of all the factors' average values for every separate tool and then we calculated the differences between the average value of all the factors and the average value of every separate factor. This procedure was carried out in order to underline the difference between every separate factor and the general average value of the relevant tool (as regards the investigated people).

The scores earned for every Szondi factor were compared with the scores earned for each of the other factors in order to see whether there were significant differences between each of them taken in pairs. In order to process the data, we used the paired Samples T test. The same procedure was applied to the CAQ questionnaire factors. The results outlined values above the average value obtained by the general population as regards the factors Szondi Sh, Szondi SCH p, Szondi C d, CAQ tension, CAQ insecurity, CAQ emotional warmth and CAQ radicalism, and scores below the average value as regards factors such as CAQ emotional stability, CAQ self-assertion, CAQ self-sufficiency, Szondi C m and Szondi S h, which means that the working hypotheses 4,5 and 6 are true. The results obtained at the four psycho-diagnostic tools (stress scale coefficient, Szondi test, CAQ questionnaire and DSQ questionnaire) and the length of illness were subject to a Pearson two-way correlation in order to see whether there were significant correlations between them.

The results have indicated that there are no significant correlations between the results obtained by subjects at the four psycho-diagnostic tools used and the length of disease, which means that the working hypothesis 7 is true.

The same Pearson two-way correlation coefficient was used as regards the results obtained at the stress scale coefficient and the ones at the Szondi test, the CAQ and DSQ questionnaires. The results have indicated that there are no significant correlations between the results obtained at the stress scale coefficient and the scores obtained at the other three psycho-diagnostic tools by the patients under study, therefore the working hypothesis 8 is not true and the null hypothesis is true.

The results obtained at the four psycho-diagnostic tools (the stress scale coefficient, Szondi test, the CAQ questionnaire and the DSQ questionnaire) and the adjusting incapacity coefficient were subject to a Pearson two-way correlation in order to see whether there are significant correlations between them. The results have indicated that the scores earned by patients at the adjusting incapacity coefficient correlated significantly negatively with the DSQ mechanism affiliation and significantly positively with the DSQ mechanism retroactive obliteration. The working hypothesis 9 is true.

The results obtained at the four psycho-diagnostic tools (the stress scale coefficient, Szondi test, CAQ questionnaire and DSQ questionnaire) by the patients in whom every selected environment, psychological, social and economic factor was present were compared with the results of the subjects in whom that environment, psychological, social and economic factor was not present, by using the procedure Independent Samples T test. The procedure was repeated for all the results for every separate factor. The results indicated that the existence of the social factor determines significant differences as regards the characteristic traits of the psychosomatic patient's profile underlined within the working hypotheses 4 and 5, as well as regards the mechanisms and styles used (namely DSQ affiliation and DSQ distorted self-image), which means that the working hypothesis 11 is true. At the same time, the presence of depression symptoms determined significantly higher scores at the CAQ tension factor, which means that the working hypothesis 14 is true.

The results showed that the presence of vulnerabilities of emotional type (traumas, intense EE climate) causes significant differences as regards personality factors in the emotional field and the factors found in the psychosomatic patient's profile as described above (namely CAQ sensitivity, CAQ impulsivity, etc. (as well as regards the mechanisms and styles used (namely DSQ affiliation, etc.), which means that the working hypothesis 13 is true.

The results showed that the presence of some personality traits related to the misadjusting management of stress (anxiety, irritability, apathy, poor emotional control, isolation, lacking a sense of continuity) causes significant differences both as regards undeveloped defensive mechanisms and styles (apathetic withdrawal, somatisation, self-sacrifice, distorted self-image etc.) and the basic traits of the psychosomatic patient's profile, which means that the working hypothesis 17 is true.

At the same time, the results showed that when there is a diminishing interaction and interest in the social aspect (often correlated with the presence of depressive symptoms), the scores earned by patients as regards the DSQ affiliation mechanism are significantly lower than the ones earned by patients whose contacts and interest in the social aspect are maintained (working hypothesis 12 is true).

The results that proved to be statistically significant following the implementation of the procedure mentioned above were included into a matrix, along an axis - the Szondi factors, CAQ factors, DSQ mechanisms and styles and along the other - the environment, psychological, social, economic and constitutive factors, whose presence caused significant differences as regards the results of the psycho-diagnostic tools. Later, depending on the frequency of variation of the results at the 4 psycho-diagnostic tools, as well as depending on the factors causing significant differences, we made a graphic representation of the results permitting us their comparative analysis, The results showed that the scores earned by the patients investigated as regards the factor CQ tension varied significantly, being influenced by many social, environment, psychological factors (hypothesis 10 is true). At the same time, the results obtained by the patients investigated as regards the DSQ styles distorted self-image and DSQ self-sacrifice varied significantly, being influenced by many social, environment, psychological factors, (working hypothesis 15 is true).

The scores earned following the application of three psycho-diagnostic tools, namely the Szondi test, CAQ questionnaire and DSQ questionnaire, were subject to a confirming factorial analysis. We used the matrix of factorial saturation of the scales of each tool, extracting three important factors and a secondary one, and following the application of the Varimax factorial rotation with Kaiser normalization, three of the initial factors were confirmed and other two principal and three secondary were extracted. The factorial structure obtained by applying the procedure of factorial analysis confirmed the model expected. That is why it is safe to say that the working hypothesis 16 is true.

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