

## Letter to the editor

### Personality dimensions, the TPQ, and depression

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We have read with great interest the article by Hanssene et al regarding the tridimensional personality questionnaire (TPQ) and depression in a recent issue of *European Psychiatry* [3]. The authors have done excellent work, linking personality traits (assessed by the TPQ) with depressive state and with severity of depression (assessed by the Hamilton Scale) in a sample of 53 DSM-IV depressives. Keeping in mind the relevance of the work, we would like to comment on a methodological issue and as well add data from our own previous work.

From a statistical point of view, to assess the relationship between Hamilton scores and the TPQ by Pearson's correlation coefficient is of a doubtful validity. For this, perhaps Spearman's rho or Kendall's tau statistics would be more appropriate, because the measures (Hamilton and TPQ scores) represents ordinal data. It would be interesting to know the results of the comparison using one of these more appropriated tests. The results of the psychometric tests such as the Hamilton or the TPQ do not fit the requirements of an interval level of measurement, and thus do not satisfy the normality assumption.

Discussing the results, we would like to add the findings that we found in another study [4]. We studied a sample of 25 depressive outpatients in their first depressive episode and evaluated their speech contents, personality traits, and the response to a standardised tricyclic treatment. The data collected by the psychiatrist included Eysenck Personality Questionnaire (EPQ), the Stait-Trait Anxiety Inventory (STAI) and the TPQ. Other evaluations included the 17-item Hamilton Depression Scale and the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) interview [8, 9] to ensure a CIE-10 diagnosis of major depression. After the initial interview a trial with imipramine 150 mg per day was initiated. Of the 25 patients referred by the mental health unit, two refused to complete the study, and eight did not fit with the inclusion criteria. Of the remaining 15, the CATEGO 5 program diagnosed five mild, five moderate and five severe depressive episodes.

TPQ Harm Avoidance subscale predicted the number of symptoms spontaneously related in the speech of the patients. Here, the Harm Avoidance did not show a relationship either with total Hamilton scores, nor with degree of improvement. On the other hand, it showed a clear correlation with other measures of personality that also could be state-dependent. In fact, there was found a strong correlation between Harm Avoidance and both EPQ Neuroticism ( $P < 0.01$ ) and STAI Trait Anxiety ( $P < 0.01$ ).

We failed to reach a prediction of the clinical improvement with "personality" measures in a population with a first depressive episode and a controlled treatment. In spite of this, we found that the Harm Avoidance dimension could be linked to the depressive state by a relationship with another psychometric dimensions such as neuroticism and anxiety. It is well known that neuroticism is associated with lifetime diagnosis of major depression [5], predicts the development of depressive episodes [1, 5], predicts the persistence of depressive symptoms [7] and long term prognosis of depression [2]. Interestingly, in non clinical samples it also predicts the development of negative life events [6].

Another follow-up study with more patients and different personality measures are needed in order to reach more statistical power and to study the evolution of these variables with the affective state.

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### A statistician's comment on the above letter

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Quite in general, for each scale of measurement, be it interval, ordinal or nominal, it is recommended that statistical