

Original article

Temperament and character dimensions of the relatives of schizophrenia patients and controls: The relationship between schizotypal features and personality

Emre Bora*, Baybars Veznedaroglu¹

Medical School of Ege University, Psychiatry Department, 35100 Izmir, Turkey

Received 11 February 2006; received in revised form 25 July 2006; accepted 26 July 2006

Available online 28 November 2006

Abstract

Purpose. — Previous findings indicated that schizophrenia patients might have a different personality structure from the general population on several dimensions of temperament and character. Some authors proposed that HA might be a marker of underlying genetic vulnerability to schizophrenia. Studies on high-risk subjects and first degree relatives of patients is essential to test the value of a measure as a marker of genetic vulnerability to a disease. Few studies tested the biopsychosocial model of personality on unaffected relatives of schizophrenia.

Subjects and methods. — We compared the Temperament and Character (TCI) profiles of 94 first degree relatives of schizophrenia and 75 controls. We also investigated the relationship between schizotypal and TCI dimensions in the study sample.

Results. — The harm avoidance scores of the relatives of schizophrenia patients with schizotypal features were significantly higher. Self transcendence scores were also significantly higher among relatives with schizotypal features. In contrast, the relatives of the patients with schizophrenia who did not have schizotypal features had higher SD and C scores than the control group.

Discussion and conclusion. — This finding is consistent with the previous findings which suggested harm avoidance as a vulnerability indicator of schizophrenia. Some character features like self transcendence might be also associated with schizotypal features.

© 2006 Elsevier Masson SAS. All rights reserved.

Keywords: Temperament; Character; Schizotypy; Relative

1. Introduction

Schizophrenia is a highly familial neuropsychiatric disorder which influences 1% percent of the population. Despite some progress, the genetic factors contributing to the expression of the disorder are not clear yet. The heterogeneous and complex nature of schizophrenia can be one of the major difficulties for genetic studies. Many investigators have proposed that searching for and defining endophenotypes might be critical step for genetic analysis of schizophrenia. Some neurophysiological and cognitive deficits have been suggested as potential

endophenotypes of the disorder [8,25]. Personality traits may also be associated with vulnerability to schizophrenia [14].

The biopsychosocial model of personality developed by Cloninger [9,11] is based on four temperament and three character dimensions. Temperament factors-harm avoidance (HA), novelty seeking (NS), reward dependence (RD), persistence (P)- are considered to be biologically based and highly heritable individual differences in percept-based habits and skills. Temperament dimensions, except persistence dimension, have been associated with different neurotransmitter systems and neurophysiological variables. Character is a developmental construct consisting of self-concepts about the values and goals that influence the significance of what is experienced. Character dimensions-self directedness (SD), cooperativeness (C), self transcendence (ST)-mature in response to learning and life experiences and can influence the expression of temperament. Although influence of biological factors was also

* Corresponding author. Present address: Melbourne Neuropsychiatry Centre, Department of Psychiatry, Alan Gilbert Building, NNF level 3, University of Melbourne, Victoria 3053, Australia. Tel.: +90 232 3903402.

E-mail address: emrebora@hotmail.com (E. Bora).

¹ Tel.: +90 232 3903401.

demonstrated for character [1], environmental factors, compared to temperament, are much more critical for the development of character. Character is the product of social adaptation and of interaction between environment and heritable factors.

Previous research indicated that schizophrenia patients might have been different from the general population on several dimensions of temperament and character. Higher HA scores than controls is the most consistent finding of these studies [15,18,24,27,28]. Several of these studies also reported low scores on RD factor [18,24,28] and a few of them on NS [15] and P [15] factors in schizophrenia. Some authors proposed that HA might be a marker of underlying genetic vulnerability to schizophrenia [27]. Few studies investigated character profiles of schizophrenia patients [13,15]. Low SD and C [15] scores were reported. Cloninger proposed that a specific configuration of character (high ST, low C and SD) may be indicator of proneness to psychosis [6,11].

Studies on high-risk subjects and first degree relatives of patients is essential to test the value of a measure as a marker of genetic vulnerability to a disease. Few studies tested the biopsychosocial model of personality on unaffected relatives of schizophrenia. The findings of these studies [18,26] did not supported the idea that personality features may be the vulnerability indicators of schizophrenia. In both of the studies, the temperament scores were essentially similar to controls. Character profiles of the relatives of the schizophrenia patients is largely unknown.

Genetic vulnerability to psychosis can manifests its self by schizotypal personality features in unaffected relatives of patients with schizophrenia. Elevated levels of schizotypal features have been reported in the relatives of the patients. Although the findings were not always consistent, elevated scores on all three dimensions of schizotypy (negative, positive and disorganized) have been reported among the relatives of schizophrenia patients [2,17,19,23,30].

The schizotypal personality features, neurocognitive and other potential vulnerability indicators of schizophrenia were reported in only some of the relatives of schizophrenia patients. The failure of previous studies to support the role of temperament dimensions as vulnerability indicators of psychosis may be explained by this finding. We think that only the personality profile of the relatives with schizotypal features may be similar to schizophrenia patients. The goals of the current study were (1) Comparing the temperament and character dimensions of the relatives of schizophrenia patients with controls. We hypothesized that temperament scores of the relatives on all dimension would be similar to controls. (2) Investigating the relationship between schizotypal features and temperament and character profiles. We hypothesized that the relatives with schizotypal features would have similar temperament (elevated harm avoidance scores) and character (high ST, low C and SD) profiles with schizophrenia patients.

2. Subjects and methods

The participants of the study were 94 first-degree biological relatives of 52 patients with schizophrenia and 75 healthy

subjects. All of the probands were recruited from the outpatient clinic of our psychotic disorders unit. The relative group was consisted of 68 parents and 26 siblings of the patients who had no history of psychiatric treatment. The potential probands and at least one of their relatives were interviewed about the psychiatric history of their selves and other family members by a psychiatrist or nurse who is actively participating in the patient and family psychoeducational programs of the unit. The patients and controls with any history for psychiatric disorders or undiagnosed DSM-IV psychotic and affective disorders were excluded. The presence of psychotic spectrum disorder history in one of the parents was an exclusion criteria also for the other. Relatives and controls with depressive mood (Beck Depression Inventory score >16) and participants who filled in TCI incorrectly (more than 10 omitted answers) were also excluded [7]. Non-psychiatric control group had no history of psychiatric disorders and had no relative with schizophrenia spectrum disorders. The control group was matched to relative group for the age, education and gender. All participants gave a written informed consent for the study.

2.1. Schizotypal Personality Questionnaire Brief Form (SPQ-B)

SPQ-B is a 22-question, self report measure used to screen schizotypal personality features. The questionnaire was developed by Raine and Benishlay [22]. SPQ-B is a forced choice instrument that has been developed from SPQ [21] and has three subscales: (1) Interpersonal deficits (negative dimension); (2) Cognitive or Perceptual Deficits (positive dimension); and (3) Disorganisation. A total score is also generated by summation of these three subscales. SPQ-B was also shown to be a reliable and valid instrument for Turkish population [4].

2.2. Temperament and Character Inventory (TCI)

The personality was assessed using the TCI [10]. The TCI is administered through a self-report questionnaire based on 240 items requiring a true/false item. Only the main scores of the 4 temperament and 3 character dimensions of the scale was reported in this study. The TCI was also reported to be a valid and reliable instrument for Turkish healthy and psychiatric populations [3,16].

2.3. Statistical analysis

Normality of variables were checked with kurtosis and skewness of the distribution. The mean scores of TCI of the groups were compared by parametric tests. Since SPQ scores were not normally distributed, between group differences were compared with Mann–Whitney *U*-test. The Spearman rank correlation coefficients were calculated to analyse the relationship between TCI and SPQ scores. We used the general linear model (GLM) to correct the effects of gender on group differences. Alpha level is lowered at 0.01 to decrease type I error. Logistic regression analyses were used to further investigate the relationship between schizotypic features and TCI

Download English Version:

<https://daneshyari.com/en/article/4185757>

Download Persian Version:

<https://daneshyari.com/article/4185757>

[Daneshyari.com](https://daneshyari.com)