



Research report

Affective temperaments: Familiarity and clinical use in mood disorders



Alexandre de Aguiar Ferreira^{a,b,c}, Alina Gomide Vasconcelos^a, Fernando Silva Neves^{a,e}, Jerson Laks^d, Humberto Correa^{a,e,*}

^a Neuroscience Program, Federal University of Minas Gerais—UFMG, Belo Horizonte, Brazil

^b Raul Soares Institute—FHEMIG, Belo Horizonte, Brazil

^c Faculty of Medical Sciences of Minas Gerais—FCMMG, Belo Horizonte, Brazil

^d Institute of Psychiatry, Federal University of Rio de Janeiro (IPUB-UFRJ), Rio de Janeiro, Brazil

^e Department of Mental Health, Faculty of Medicine, Federal University of Minas Gerais—UFMG, Belo Horizonte, Brazil

ARTICLE INFO

Article history:

Received 16 November 2012

Accepted 20 November 2012

Available online 11 December 2012

Keywords:

Affective temperament

Mood disorder

TEMPS-A

TEMPS-Rio de Janeiro

ABSTRACT

Background: The affective temperament profiles among patients with mood disorders may be an important parameter in the clinical evaluation of these patients. It has been proposed that temperament traits have familiarity and may represent vulnerability markers to identify the risk to developing specific clinical type of mood disorders. To test these theories, measures of temperament were examined in bipolar patients (BP), unipolar major depressive patients (UP), healthy relatives of these patients (HRP) and normal controls (NC).

Methods: We compared affective temperament scores, using the brief Brazilian version of TEMPS-A—TEMPS-Rio de Janeiro, between 90 BP, 88 UP, 132 HRP and 136 NC. A MANCOVA model was constructed. Dependent variables were the six subscales of the TEMPS-RJ (depressive, cyclothymic, irritable, hyperthymic, anxious and worrying temperaments). The effects of age and gender were adjusted as covariates. Furthermore, we performed a comparison between a subgroup of 68 HRP, relatives of bipolar patients (HRBP), and the remainders 64 HRP, relatives of unipolar patients (HRUP) and controls.

Results: The clinical group (BP, UP) showed higher temperament scores than NC, except for hyperthymic scores. BP showed higher cyclothymic ($p < 0.001$), hyperthymic ($p < 0.001$) and lower anxious ($p < 0.01$) temperament scores than UP. HRP showed lower scores than clinical groups. HRBP scored higher cyclothymic subscale than HRUP and NC groups.

Limitations: Bipolar I and II subjects were placed in the same group.

Conclusions: The cyclothymic and hyperthymic traits were associated with bipolarity in patients and cyclothymic temperament could be a characteristic trait of the healthy relatives of bipolar patients. Our data support that affective temperament might become a useful tool for clinical evaluation and research purposes in mood disorders.

© 2012 Elsevier B.V. All rights reserved.

1. Introduction

The DSM-IV and the ICD-X conceive mood disorders as a set of independent diagnostic categories. However, Akiskal (1983) conceptualized these disorders as a clinical continuum termed bipolar spectrum, extending from subclinical mood manifestations to bipolar I disorder and encompassing major depression, dysthymia, cyclothymic disorder, and beyond. Consistent with this approach, clinical follow-up investigations have demonstrated that

there is a continuum between cyclothymic disorder and bipolar disorder (Akiskal et al., 1977; Klein et al., 1985) and between subsyndromal depression, dysthymia and unipolar major depression (Judd and Akiskal, 2000; Lewinsohn et al., 2003), indicating that patients with milder forms of mood disorders have high risk for developing its more severe forms (Rihmer et al., 2010). Furthermore, family studies suggest that some healthy relatives of bipolar probands exhibit a subclinical instability in mood (Evans et al., 2005; Kesebir et al., 2005; Mendlowicz et al., 2005b).

About ninety years ago, Kraepelin (1921) described four basic affective dispositions (depressive, manic, cyclothymic and irritable), as subclinical forms of major affective psychosis. This kraepelinian concept has fundamental importance for describing these personal affective dispositions like “temperament”, leading to the development of diagnostic instruments (Akiskal and Mallya, 1987). At first,

* Corresponding author at: Federal University of Minas Gerais, Department of Mental Health, Faculty of Medicine, Alfredo Balena Avenue, 190, CEP 30130-100 Belo Horizonte-MG, Brazil. Tel.: +55 31 3248 9785.

E-mail addresses: alex.ferreira@yahoo.com.br (A.d. Aguiar Ferreira), correa@task.com.br (H. Correa).

only the four types originally described by Kraepelin were operationalized but in 1998 the generalized anxious temperament was added to the roll (Akiskal, 1998). In this conceptual framework, the temperament could be viewed as different modalities of subclinical long-term traits of mood disorders (Mendlowicz et al., 2005a).

The operationalization of the diagnostic criteria for the temperament types led to the development of the Temperament Evaluation of Memphis, Pisa, Paris, and San Diego (TEMPS), an instrument designed for measuring affective temperaments (Akiskal et al., 2005). The autoquestionnaire version (TEMPS-A) is a yes-or-no type instrument which contains 110 items and assessed dysthymic (items 1–22), cyclothymic (items 23–42), hyperthymic (items 43–63), irritable (items 64–84) and anxious (items 85–110) temperaments.

Over the last ten years, the TEMPS-A was translated into more than 25 languages, including the brief Brazilian version (TEMPS-Rio de Janeiro), a validated compact scale with a total of 45 items, with eight items being assigned to each of the five original subscales and five items to the “worrying” subscale, that corresponds to the “general distress factor” (Woodruff et al., 2011).

Using the TEMPS-A, some studies found that the cyclothymic subscale is significantly elevated in the bipolar versus the unipolar depressive patients (Mendlowicz et al., 2005a) and that cyclothymic traits may represent vulnerability markers found in clinically healthy relatives of bipolar patients (Mendlowicz et al., 2005b). Data from another family study showed that the hyperthymic subscale of TEMPS-A distinguished unaffected relatives of bipolar patients from controls, supporting the theory that some dimensions of temperament are transmitted in families as quantitative traits that are part of a broader bipolar spectrum (Evans et al., 2005). Recently, Mechri et al. (2011) showed that cyclothymic temperament was associated with some clinical predictive factors of bipolarity in recurrent depressive patients. Another study presents findings suggesting that cyclothymic and hyperthymic temperaments may predict bipolarity in major depressive disorder (Goto et al., 2011).

In the present study, using the TEMPS-Rio de Janeiro in a Brazilian sample, we investigated the temperament profiles of bipolar and unipolar major depressive patients, healthy relatives of these patients and normal controls to examine differences in temperament dimensions among these groups.

2. Methods

The patients for the study were recruited from Mental Health Treatment Unit of the Medical Sciences Faculty of Minas Gerais (FCMMG) and from Mood Disorders Treatment Units of UFMG (Federal University of Minas Gerais) and Raul Soares Institute/FHEMIG. In our study, 178 patients were selected and divided into two groups: (1) Bipolar I/II patients (BP) [$n=90$; 35.5% men; mean age=38.38 (11.97) years]; (2) Major Depressive Disorder patients (UP) [$n=88$; 25% men; mean age=46.78 (11.91) years]. Diagnosis was made by a trained psychiatrist using a structured interview, MINI-PLUS, following DSM-IV criteria (Amorim, 2000) as well as a complete review of medical records and an interview with at least a close relative member. Severity of mood symptoms was evaluated using the HDRS-17 (Hamilton, 1960) and the YMRS (Young et al., 1978) and only patients who scored less than 8 in these scales were accepted.

Healthy first-degree relatives of these patients were invited to participate. A number of 132 relatives did not meet criteria for any psychiatric diagnosis, according to MINI-PLUS. Only one relative per patient was accepted. These clinically healthy relatives constituted the HRP group [$n=132$; 34.10% men; mean age=36.55 (12.47) years]. In this group, there were 68 relatives of

bipolar patients (HRBP subgroup) and 64 relatives of unipolar major depressive patients (HRUP subgroup).

Normal control subjects (NC) [$n=136$; 35.5% men; mean age=33.43 (12.18) years] were recruited by advertisements or word of mouth. Subjects reporting personal or first degree family history of mental disorders were excluded. All volunteers were interviewed using MINI-PLUS criteria by research assistants.

Written informed consent was signed by all participants and was obtained using procedures approved by each institutional Ethics Committee, in accordance with Helsinki Declaration.

The TEMPS-Rio de Janeiro was administered to all participants. These described groups were compared to examine differences in temperament dimensions. A MANCOVA model was constructed. Dependent variables were the six subscales of the TEMPS-Rio de Janeiro (depressive, cyclothymic, hyperthymic, irritable, anxious and worrying temperaments). The effects of age and gender were adjusted as covariates. The Tukey HSD for unequal n 's was utilized as a post-hoc test to compare specific groups.

Furthermore, one-way ANOVA tests were done comparing the sub-groups of healthy relatives between them and with the normal controls. Tukey's HSD post-hoc test were used to investigate which groups differ from each other.

3. Results

Using MANCOVA, the interactions among the covariates (age, gender) and the groups in the prediction of the temperament scores were not significant, Hotelling's Trace considering age ($F=0.93$, $p=0.55$) and for gender ($F=1.10$, $p=0.35$). It indicated that the differences on temperaments scores among groups did not vary as a function of these covariates.

MANCOVA showed overall group effect on the dependent variables (Hotelling's $F=3.10$, $p<0.001$). All temperament variables showed significant between-group differences. We might conclude that the effects of group membership on the temperament scores were still significant, even after controlling for the effects of gender and age. The one-way ANOVA results indicated that significant differences were found across the four groups on all six TEMPS-Rio de Janeiro subscales (depressive $F=72.65$, $p<0.001$; cyclothymic $F=33.08$, $p<0.001$; irritable $F=24.70$, $p<0.001$; hyperthymic $F=10.41$, $p<0.001$; anxious $F=42.02$, $p<0.001$; worrying $F=42.91$, $p<0.001$), as we can see in Fig. 1.

The clinical group scored higher than healthy groups in five of the TEMPS-Rio de Janeiro subscales. Specific post-hoc comparisons using the Tukey HSD are summarized in Table 1.

Patients also showed significantly higher temperament scores than NC, except for hyperthymic scores. The performance on hyperthymic subscale was quite different from other scales, with controls scoring similar to bipolar patients and higher than UP and HRP groups. The healthy relatives showed significantly lower temperament scores than BP, but no significant differences in the cyclothymic and hyperthymic scores comparing to UP. Comparing the clinical groups, BP showed higher cyclothymic ($p<0.001$),

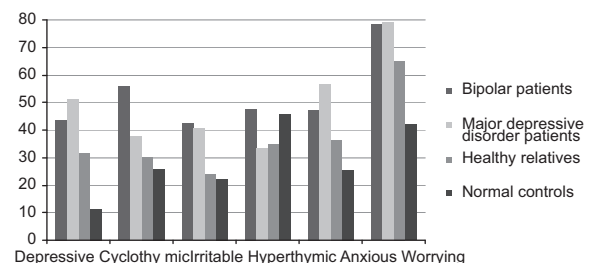


Fig. 1. Mean temperament scores on the TEMPS-A by group.

Download English Version:

<https://daneshyari.com/en/article/6234518>

Download Persian Version:

<https://daneshyari.com/article/6234518>

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