EV1111

Benefits of the functional ensemble of temperament framework in assessment of mental disorders: Examples

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Introduction   An integration between psychiatry, neurochemistry and differential psychology gives an evidence-based framework for the diagnosis of mental illness rooted both in modern neurophysiology and clinical observations.

Objectives   To investigate whether, a neurochemical model of temperament might (FET) provide a better discrimination between major depression (MD), anxiety (GAD), co-morbid depression and anxiety and delusional disorders than existing emotionality-based temperament models.

Methods   Three studies compared the profiles on temperament and personality disorder inventories in patients who were diagnosed and treated for named disorders across four adult age groups (17–24, 25–45, 46–65, 66–84).

Results   The FET distinguished between MD and GAD in line with the DSM descriptors and showed significant differences for the traits of motor endurance and motor tempo (much lower values in MD), and neuroticism (much higher value in GAD). The results showed benefits of differentiation between physical and social types of fatigue as a symptom of MD and that high impulsivity and low plasticity can be also considered symptoms differentiating between mental disorders. Moreover, high sociability appeared as a symptom associated with high dominance–mania tendencies. The FET framework appeared to be sensitive to age and sex differences: higher anxiety and anti-social symptoms appeared to be more prominent in the younger age (unlike depression symptoms), and declined with age.

Conclusions   This study suggest the utility of using a functional approach to both taxonomy of temperament and classification of mental disorders and the benefits of systemic differentiating between 12 functional aspects of behavior, with special attention to non-emotionality-related aspects of behavior.

Disclosure of interest   The author has not supplied his/her declaration of competing interest.

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Self-transcendence and excessive TV commercial viewing in senior pupils

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Self-transcendence is an important component of mental health and emotional well-being, and associates with everyday stress. The aim of this study was to reveal the relationships between excessive TV commercial viewing and self-transcendence. Forty-two healthy senior pupils aged 14–17 years participated in the study. We used the temperament and character inventory by cloninger, cloninger tridimensional personality questionnaire, the school anxiety test by Philips, Maddi Hardiness survey, and the emotional intelligence self-evaluation by Hall. We found that excessive TV commercial viewing has been linked to self-transcendence, which directly correlates with empathy and school anxiety. There was an inverse correlation between self-transcendence and self-directedness. We also found interrelations between self-transcendence and reward dependence, mediated by the noradrenergic brain system. We argue that the propensity for watching TV commercials and self-transcendence may determine the activity of monoaminergic brain systems along with the constitutional traits and personality characterics.

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EV1113

Association of behavioral "Theory of Mind" Test performance with neurophysiological and vegetative parameters in schizophrenia patients and healthy subjects

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Introduction   Theory of Mind (ToM) deficit is investigated by psychological and neurobiological methods using a range of social cognitive tests, including the verbal test Hinting Task. However, it remains unclear whether there is a connection between ToM results and the physiological characteristics in norm and in pathology.

Objectives   We performed the comparison of Hinting Task performance in patients with schizophrenia and healthy subjects; analysis of correlations between Hinting Task performance with physiological parameters; discriminant analysis in order to classify subject groups according to predictors, including psychological and physiological parameters.

Methods   We measured Hinting Task, spectral power of the EEG mu-rhythm (SP) and heart rate (HR) at rest and during a motion imagery task in 114 right-handed subjects, 1st episode patients with schizophrenia (SCH1) $n = 29$, chronically ill patients with schizophrenia, duration of illness more than 5 years, (SCH2) $n = 23$, and healthy subjects (HC) $n = 62$.

Results   Hinting Task rate: HC > SCH2 ($P < 0.01$), HC $\geq$ SCH1 ($P = 0.07$), SCH1 = SCH2 ($P = 0.3$). Only SCH1 Hinting Task score was associated with a complex of physiological parameters in the resting state [Multiple R = 0.78, F (3.25) = 13.31, $P < 0.0001$]. Discriminant function analysis of HC and the combined SCH group [F (7.106) = 7.078, $P < 0.0000$]. The samples were classified at 89% and 71%, respectively, including HR ($P < 0.000001$), SP in the resting state in C4 ($P < 0.001$), C3 ($P < 0.01$), SP changes in C3 ($P < 0.05$) and Hinting Task ($P = 0.2$).

Conclusions   Hinting Task Hinting Task is a part of classification model of norm and schizophrenia. Patients with first episode and chronically ill patients with schizophrenia do not differ in the studied parameters.