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.

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EV1112

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 characteristics.

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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.

e-Poster Viewing: Psychosurgery and stimulation methods (ECT, TMS, VNS, DBS)

EV1114

The legacy of Walter Jackson Freeman II (1896–1972): The lobotomist

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Introduction Walter Jackson Freeman II was born the grandchild of William Williams Keen, one of world's most renowned surgeons from Philadelphia and the son of an otorhinolaryngist, which may have been contributed to his interest in medicine. Freeman started his medical career in a psychiatric hospital and over the years, he operated thousands of patients. He was a protagonist in American psychosurgery and therefore, he often has been referred as the "lobotomist".
Objectives To present the scientific papers of Walter Jackson Freeman on psychosurgery.
Aims To review available literature and to show evidence that Freeman made a significant though controversial contribution to the development of psychosurgery.
Methods A biography is presented and discussed followed by a literature review.
Results In this whole career, "the lobotomist" operated more than 3500 patients and performed mainly operations on the frontal areas. However, he operated human brains without due regard for his patient's mental abilities and emotional well-being after their lobotomy. Despite his work was praised, there was also a lot of criticism on his methods.
Conclusion Despite the dubious reputation, Freeman can be remembered as an ambitious doctor who made a significant contribution to the development of psychosurgery. However, unfortunately he crossed medical and legal boundaries.
Disclosure of interest The authors have not supplied their declaration of competing interest.

EV1115

A systematic review of transcranial magnetic stimulation use for treating autistic spectrum disorders: Preliminary results

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Autistic spectrum disorders (ASD) are a group of neurodevelopmental disorders that manifest as deficits in social communication and interaction, and restricted, repetitive behaviors and interests. ASD affect at least 1% of the population and are associated with lifelong disability and early death. There are no effective biological treatments for ASD, although non-invasive neuromodulation has sparked great interest as a possibly useful therapeutic approach. Here, we present preliminary results of a systematic review on the effectiveness of transcranial magnetic stimulation (TMS) in ASD treatment. Using appropriate syntax we searched Pubmed, Web of Science, Science Direct, and Educational Resources Information Clearinghouse. Following standard PRISMA statement (Preferred Reporting Items for Systematic Reviews and Meta-analyses) procedures, we selected 12 eligible studies, comprising four controlled and four uncontrolled trials on the effects of TMS on ASD core symptoms, and 9 controlled and three uncontrolled trials on TMS effects on cognitive performance in ASD. The 12 studies totaled 233 subjects. Although combined effect sizes favor TMS in all fours groups of studies, conclusions are limited by the high study heterogeneity. Furthermore, only three of the controlled studies used sham TMS as the control intervention, and only two studies followed up the therapeutic effects after the last TMS session. Side effects, none of them serious, occurred in 6.4% of treated subjects. Our main conclusion is that there is currently little evidence that sustains the commercial offer of TMS for treating ASD. Better-designed studies are badly needed to fully elucidate the role of TMS in the treatment of ASD.
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EV1116

Place of electroconvulsive therapy in the treatment of depression in France: A comparative study between clinical practice and international recommendations

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Objectives To study the place of electroconvulsive therapy (ECT) in the treatment of major depressive disorder in France and compare it with international recommendations and algorithms.
Method Multicenter, retrospective study in 12 French university hospitals. Diagnosis, delay between the onset of the episode and the first day of ECT, previous treatments have been identified. Only patients treated for major depressive disorder between 1 January 2009 and 1 January 2014 were included.
Results A total of 754 patients were included (middle age 61.07 years, sex ratio 0.53). The diagnoses listed were: first major depressive episode (14.95%), bipolar depression (38.85%) and unipolar recurrent depression (46.19%). The delay before ECT, was 11.01 months (13,98), and was significantly longer for first episodes (16.45 months, $P < 0.001$) and shorter in case of psychotic symptoms (8.76 months, $P < 0.03$) and catatonic symptoms (6.70, $P < 0.01$).