#### EW111

# Temporal correlates of intuition and cognitive control in moral decision, making in different social contexts

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In the stream of flurry of publications grappling different paradigms to tackle underlying mechanisms of moral decision-making, EVENT RELATED POTENtial (ERP) studies is beginning to explore psychophysiological components in the moral domain, focused on observing various moral behaviors in the experimental situations. This research was aimed at providing a new method of study investigating neural correlates of subjective moral decision-making in which we hypothesize that the social congruent or in-congruent context, could emerge a salience brain response in intuitive or cognitive control related responses toward moral dilemmas. Electrophysiological data were recorded from the scalp a 32-channel recording system complying with the international 10–20 system. The average N2 (175-300 ms) and LPP (300-600 ms) amplitude and latency were measured after the onset of putative counterpart response. Repeated measure ANOVA revealed that there was a difference between congruent versus in-congruent social response to high conflict scenarios in LPP amplitude in right lateral and frontal electrodes  $F_{(4, 174)} = 5.812$ , P < 0.001 (Fig. 1). The findings also, suggest that N2 latency in less conflict moral scenarios may appear earlier compared with high conflict moral scenarios during in congruent social response in frontal electrodes especially left area  $F_{(3.174)}$  = 3.013, P < 0.05 (Fig. 2, figures are not available for this abstract). In conclusion, these results were either extend previous neurophysiological findings on classic moral scenarios and consistent with the notion that right hemisphere would be much more representative of cognitive control process during high conflict moral decision-making, while left frontal electrodes engaged in early intuitive process.

*Keywords* Moral decision-making; Cognitive control; Intuition; Social context; Late positive potential; N2

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#### EW112

# Depressive pseudodementia in Greek patients: How differential diagnosis can lead to early diagnosis

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Background The term Pseudodementia, as presented by Kiloh, is being used to describe the clinical image characterized by depression combined with impairment in cognitive functions which reacts positively in treatment with antidepressants.

Aim To explore the aspects that make this condition unique, so that mental health professional will be able to use the proper psychometric tools when they face patients with confusing symptoms. Method Hundred and thirty-one participants were recruited from the B' Psychiatric Clinic of G.H.N.P "Agios Panteleimon" and Day Center of Alzheimer's Disease in Amarousion, with 56 (42.7%)

males and 75 (57.3%) females. All participants were administered the MoCA and the DASS21 questionnaires. Statistical analysis was performed with SPSS21.

Results The findings reported a significant difference in the scores of MoCA done by patients with dementia (M=13.9, SD=5.4) and patients with depression (M=20.5, SD=4.9) while both groups scored below the accepted scores indicating cognitive impairment [CI]. However, analysis showed that in the following sectors of MoCA, depressive patients scored significantly higher than demented ones: visuospatial (MD=0.651), clock (MD=1.288), orientation (MD=1.212) and delayed recall (MD=1.329).

Conclusion Findings shows a significant pattern in the difference between depressed and patients with cognitive impairment. These findings suggest that mental health professionals should use neuropsychological measurements like MoCA when evaluating such cases in order to be able to diagnose effectively cases of pseudodementia.

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#### EW114

## Do patients with better neuro-cognition have better theory of mind?

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Introduction Theory of mind (ToM) has repeatedly been shown to be compromised in many patients with schizophrenia (SCZ). By contrast, the association between ToM deficits and neuro-cognitive functioning (NF) remains uncertain.

*Objectives* To investigate the association between ToM functioning and neuro-cognitive functioning in SCZ.

Methods Fifty-eight outpatients with stable SCZ completed the intention-inferencing task (IIT), in which the ability to infer a character's intentions from 28 short comic strip stories is assessed. They also completed a neuro-cognitive battery comprising the following tests: the Hopkins Verbal Learning Test–Revised (HVLT-R), the Letter Digit Substitution Test (LDST), the Stroop Test (ST), the "Double Barrage" of Zazzo (DBZ), the Modified Card Sorting Test (MCST), Verbal Fluency (VF), the Trail Making Test-Part A (TMT-A) and the Digit Span (DS).

Results The performance in the IIT significantly correlated with performance in some neuro-cognitive tests including efficiency in DBZ, number of uncorrected mistakes in ST, number of correct categories in MCST and the time needed to succeed the TMT-A. No correlations were found between performance in the ITT and in memory tasks (HVLT-R and DS).

Conclusions ToM may rely on some neuro-cognitive functions (mainly attention and executive functioning). Elucidating the exact relationship between ToM and NF may be useful as both are targeted in specific psychotherapeutic interventions.

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### EW116

### Neurocognitive and functional performance in psychotic and non-psychotic bipolar patients and schizophrenia patients

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Introduction It has been suggested that psychotic bipolar patients have more severe cognitive deficits and lower functioning that non-psychotic bipolar patients.

Objectives To evaluate neurocognitive and functional performance in stabilized psychotic bipolar patients (BP+), non-psychotic bipolar patients (BP-) and schizophrenia patients (SZ).

Aims To examine whether BP+ might be defined as a more homogenous subtype of bipolar disorder with more severe cognitive deficit and more severe functional impairment.

Methods Fifty TB+, 50 TB-, 50 SZ and 51 controls were evaluated with a comprehensive neurocognitive battery (WCST, FAS, TMT-A and B, Stroop Test, Digits span, letters and numbers – WMS-III-, CVLT, ROCFT, CPT-DS). Moreover, patients were evaluated with clinical scales (PANSS, MADRS, YMRS) and functionality scales (WHOs Disability Assessment Scales, QLS and GAF). IBM SPSS Statistics (version 19.0) was used to the data analysis.

Results No significant differences were found between three patients' samples (P < 0.0001). No significant differences in neurocognitive measures were found between BP+ and BP-. Significant differences were found between both groups of bipolar patients and schizophrenia in working memory measures (P < 0.0001). BP+ and BP- showed significant higher functionality than SZ (P < 0.0001), without significant differences in functionality between BP+ and BP-.

Conclusions The pattern of neurocognitive and functional deficit is similar in BP+ and BP-. The neurocognitive deficit is very similar in both groups of bipolar patients groups in comparison to SZ; functionality is better in both bipolar groups than in schizophrenia patients.

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#### EW118

# Is empathy correlated to patients' level of cognitive impairment in schizophrenia?

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Introduction Empathy, which refers to the ability to understand and share the thoughts and feelings of others, may be compromised in schizophrenia (SCZ). Yet the relationship between empathy and neurocognitive functioning remains unclear.

*Objectives* To explore whether cognitive and affective empathy are associated with the neurocognitive functioning in SCZ.

Methods Fifty-eight outpatients with stable SCZ completed the Questionnaire of Cognitive and Affective Empathy (QCAE) comprising five subscales intended to assess cognitive and affective components of empathy. They also completed a neurocognitive battery comprising the following tests: the Hopkins Verbal Learning Test–Revised (HVLT-R), the Letter Digit Substitution Test (LDST), the Stroop Test (ST), the "Double Barrage" of Zazzo (DBZ), the Modified Card Sorting Test (MCST), Verbal Fluency (VF), the Trail Making Test-Part A (TMT-A) and the Digit Span (DS).

Results Better affective and cognitive empathy correlated with better performance in the ST (less hesitations and less errors). Patients with better cognitive empathy performed better in the MCST (more categories achieved; P=0.029) and in the LDST (more substitutions per minute; P=0.031).

*Conclusions* Our results bolster support for the presence of an association between NF and the decreased cognitive and affective empathy in schizophrenia.

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#### EW119

### Clinical symptomatology and empathy in schizophrenia: Which relationship?

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Introduction The impairment of cognitive and affective empathy among patients with schizophrenia (SCZ) may represent a significant feature of the illness. However, the relationship between those impairment and dimensions of psychosis remains unclear.

*Objectives* To explore whether cognitive and affective empathy are associated with severety of different psychotic symptoms.

Methods Cognitive and affective empathy were evaluated in 58 patients with stable schizophrenia with the Questionnaire of Cognitive and Affective Empathy (QCAE) comprising five subscales intended to assess cognitive and affective components of empathy. Symptomatology evaluation comprised the Positive and Negative Syndrome Scale (PANSS), the Calgary Depression Scale for Schizophrenia (CDSS) and the Clinical Global Impressions Scale Improvement and severity (CGI).

*Results* Patients with better cognitive empathy had less total CDSS scores (P=0.036, r=-0.449) and lower CGI-severity scale scores (P=0.01, r=-0.536). Patients with better affective empathy had lower scores (which means a better improvement) at the CGI-improvement scale (P=0.03, r=-0.461).

Conclusions Our results suggest that empathy with its different component is not totally independent of the clinical state of the patient. Further studies are required to confirm whether empathy deficits are state or trait aspects of SCZ.

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### **Comorbidity/Dual pathologies**

#### EW120

## Depressive symptoms in patients with schizophrenia

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Introduction Depression is common among patients with schizophrenia and is associated with a wide range of poor outcomes, including psychotic relapse and suicide. The aim of the study is to evaluate the presence of depressive symptoms in patients with schizophrenia and to compare depression intensity in schizophrenic patients and patients with depressive disorder.

Methods In this cross sectional study were included 40 patients from both genders. Patients were divided in 2 groups: (1) examined group: 20 schizophrenic patients who presented depressive symptomatology. Depressive symptoms-evaluated with the 17-item Hamilton Rating Scale for Depression. Inclusion criteria: schizophrenic disorder by ICD-10 (F20.0-F20.9), total score higher than 7 on the HRSD-17 and age between 25 and 65; (2) control group: 20 patients with depressive disorder. Inclusion criteria: recurrent depressive disorder by ICD-10 (F33.0-F33.9), total score