**Title: Comparison of Social Cognitive profiles across assessment models in Treatment-resistant Schizophrenia**

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**Abstract**

**Methodological Question:** Social cognition is linked to functional outcome and has become an important treatment objective. Clarifying the specificity of social cognitive deficits to schizophrenia is an important step in improving behavioral and pharmacological interventions.

**Introduction**: The aims of the study were to assess the social cognition profiles of inpatients and outpatients with treatment-resistant schizophrenia, and to characterize the demographic and clinical illness features associated with social cognitive functioning by comparing deficits observed across a number of rating scales.

**Methods:** Stable schizophrenia patients (n = 120) who fulfilled the DSM-V criteria for schizophrenia or schizoaffective disorder were tested with the Penn Emotion Recognition Test (ER-40), Facial Emotion Identification Task, Facial Emotion Discrimination Task, Dynamic Social Cognition Battery (assessing verbal, non-verbal, facial recognition, Theory of Mind), and the MSCEIT from the MATRICS Consensus Cognitive Battery (MCCB). Cross-sectional characteristics for patients were compared using *t*-tests and analysis of variance for continuous, and chi-square test for categorical variables. Correlation and multiple linear regression analyses were performed between social cognition measures and demographic variables (gender, age, education), course of illness (duration of illness, number of hospitalizations, comorbid substance abuse, and comorbid anxiety), and current symptoms (PANSS).

**Results:** Social cognition impairments were marked in patients within all emotion recognition tasks and within the MCCB-MSCEIT domain. 76.56% patients had clinically significant impairment (>1.5 SD below normal mean) in non-verbal emotion recognition, facial emotion identification and social cognition as measured by the MCCB-MSCEIT ($p=0.040$). The global neurocognitive score as measured by the MCCB composite score correlated positively with social cognitive impairment ($r = 0.569$, $p = 0.020$). Higher age was associated with greater social cognition deficits compared to age-adjusted norms. Results of impairment differed across scales.

**Conclusions:** A large proportion of patients with schizophrenia exhibited significant social cognitive impairments in emotion identification and recognition, and theory of mind, associated with clinically significant severity. These pervasive deficits support a strong emphasis on the need for effective treatment interventions for patients with social cognition impairments and for refinement and standardization of existing tools.