EPV0631

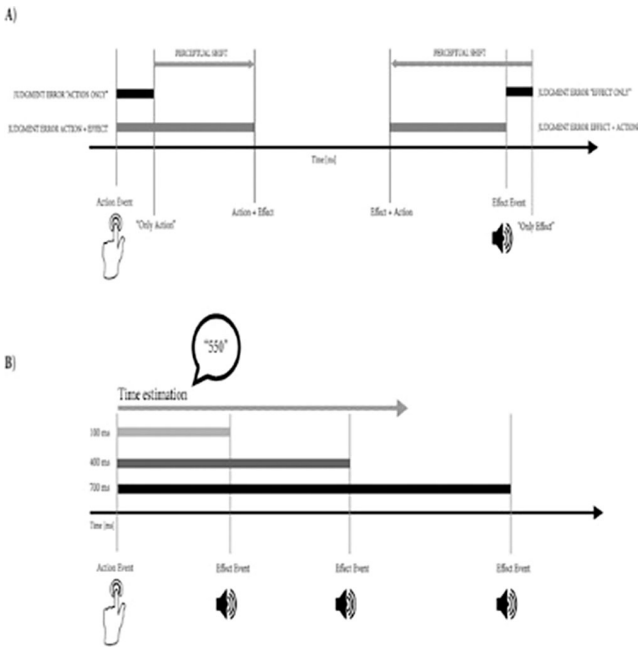
Sense of Agency and Its Disturbances: A Systematic Review Targeting the Intentional Binding Effect in Neuropsychiatric Disorders.

M. Di Luzio[1]*, L. Moccia[2,3], E. Conte[2], M. Modica[2], M. Ambrosecchia[4], M. Ardizzi[4], P. Lanzotti[2], G. Kotzalidis[2,4], D. Janiri[2,3], M. Di Nicola[2,3], L. Janiri[2,3], G. Sani[2,3] and V. Gallese[5,6]

[1]Child and Adolescent Neuropsychiatry Unit, Bambino Gesù Children's Hospital, IRCCS; [2]Department of Neuroscience, Section of Psychiatry, Università Cattolica del Sacro Cuore; [3]Department of Psychiatry, Fondazione Policlinico Universitario Agostino Gemelli IRCCS; [4]NESMOS Department, University of Rome La Sapienza, Faculty of Medicine and Psychology, Sant'Andrea University Hospital, Rome; [5]Department of Medicine and Surgery, Unit of Neuroscience, University of Parma, Parma, Italy and [6]Italian Academy for Advanced Studies in America at Columbia University, New York, United States
*Corresponding author.
doi: 10.1192/j.eurpsy.2024.1290

Introduction: The sense of agency (SoA) indicates a person's ability to feel her/his own motor acts as actually being her/his, and through them to exert control over the course of external events. Disruptions in SoA may profoundly affect the individual's functioning, as observed in several neuropsychiatric disorders.
Objectives: This is the first article to systematically review studies that investigated intentional binding (IB), a quantitative proxy for SoA measurement, in neurological and psychiatric patients.
Methods: Eligible were studies of IB involving patients with neurological and/or psychiatric disorders. The research adhered to the guidelines outlined in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).
Results: We included 15 studies involving 692 individuals. Risk of bias was low throughout studies. Eligible studies dealt with data from 357 patients with neuropsychiatric disorders matched with 335 HCs. Of included patients, 95 were with schizophrenia (SCZ), 30 with a putative prodromal psychosis (PP), 21 with borderline personality disorder (BPD), 66 with Parkinson's disease (PD), 38 with an autism spectrum disorder (ASD), 29 with functional movement disorders (FMDs), 25 with Gilles de la Tourette syndrome (GTS), 52 with anorexia nervosa (AN; 22 with active disorder and 30 after they had recovered), and 10 with Cortico-Basal syndrome (CBS).
Temporal binding was calculated in eleven studies using variations of the experimental procedure introduced by Haggard et al. (Haggard et al. *Nat Neurosci* 2002;5 382-385)(Figure 1, A), while four studies utilized a different paradigm named interval estimation (IE)(Figure 1, B).

Image:



Conclusions: Abnormally increased action-outcome binding was found in schizophrenia and in patients with Parkinson's disease taking dopaminergic medications or reporting impulsive-compulsive behaviours. A decreased IB effect was observed in Tourette's disorder and functional movement disorders whereas increased action-outcome binding was found in patients with cortico-basal syndrome. The extent of IB deviation from healthy control values correlated with the severity of symptoms in several disorders. Inconsistent effects were found for autism spectrum disorders, anorexia nervosa, and borderline personality disorder. Findings pave the way for treatments specifically targeting SoA in neuropsychiatric disorders where IB is altered.

Disclosure of Interest: None Declared

EPV0633

Anterior insular cortex and the perception of internalized stigma and its components: a scoping review.

N. Lutova[1], E. Gerasimchuk[1], M. Khobeysh[1], M. Bocharova[1,2]*, O. Makarevich[1] and M. Sorokin[1]

[1]V.M. Bekhterev National Medical Research Centre for Psychiatry and Neurology, St.Petersburg, Russian Federation and [2]King's College London, London, United Kingdom
*Corresponding author.
doi: 10.1192/j.eurpsy.2024.1291

Introduction: Personality neuroscience employs a broad range of methods to identify the neurobiological mechanisms of complex psychological phenomena. The role of the insula is often associated with its involvement in emotion processing.

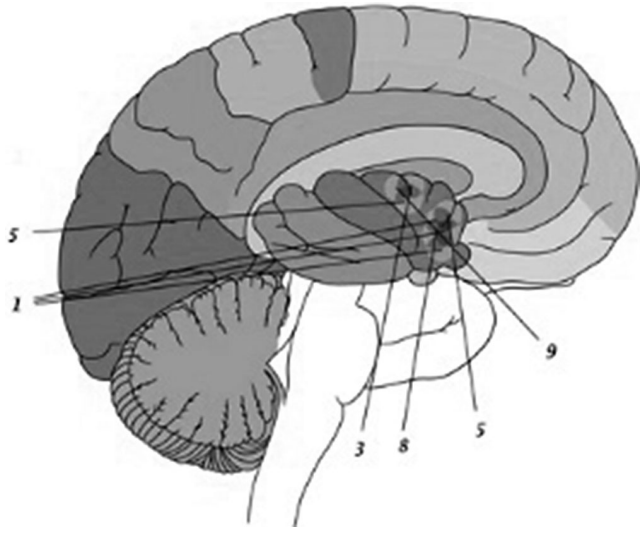
Objectives: The study aims to identify the associations between neural activity in the anterior insula cortex (AInC) and self-stigma (or its components) in a scoping review.
Methods: We searched in PubMed (MEDLINE), PsychINFO, EMBASE via the Ovid platform through September 21st, 2022. Included studies had to use fMRI to assess neurophysiological markers in AInC, and to include a measure of association between fMRI results and a measure of self-stigma and/or its components as assessed by a scale or questionnaire in participants aged 18-65 y.o. The PRISMA-ScR checklist was used.
Results: After full-text screening 10 of 206 original researches were chosen for the final analysis (Table 1).

Table 1: Included studies in the analysis.

1	DeWall et al. Soc Cogn Affect Neurosci. 2012; 7(2): 184-192.
2	Masten et al. Neuroimage. 2011; 55(1): 381-388.
3	Kross et al. Proceedings of the National Academy of Sciences. 2011; 108(15): 6270-6275.
4	Bolling et al. Neuroimage. 2011; 54(3): 2462-2471.
5	Lindner et al. PLoS One. 2014; 9(1): e85014.
6	Achterberg et al. Soc Cogn Affect Neurosci. 2016; 11(5): 712-720.
7	Muscatell et al. Brain Behav Immun. 2016; 57: 21-29.
8	Sankar et al. Front Behav Neurosci. 2019;13.
9	Cáceda et al. Clin Neurosci. 2020; 270(5): 619-631.
10	Landa et al. J Psychosom Res. 2020; 128: 109881.

In 5 studies, the results were presented with MNI-space coordinates. Figure 1 illustrats the regions of local activity change maxima according to MNI-space coordinates based on the results of the included studies in the analysis.
Neural activation in the regions of the AInC was positively associated with greater levels of social rejection sensitivity and other components of self-stigma in 9 studies. Reduced activity was observed in only one study (Lindner et al., PLoS One. 2014; 9(1): e85014) among highly self-stigmatized patients with schizophrenia. This finding may reflect a biological manifestation of deficits in self-awareness and affective processing in schizophrenia.

Image:



Conclusions: Associations between neural activity changes in specific brain regions and levels of self-stigma and/or its components, as reported in included neuroimaging studies, have the potential to shed light on the neurobiological mechanisms underlying such a complex psychological phenomenon as stigma.

Disclosure of Interest: None Declared

EPV0634

Use of low-dose Aripiprazole to lower the antipsychotic medication - induced hyperprolactinemia.

P. Argitis[1]*, A. Karampas[2], M. Peyioti[1], T. Koukouras[1], M. Demetriou[1], S. Karavia[1] and Z. Chaviaras[1]
[1]Psychiatric, General Hospital of Corfu, Corfu and [2]Psychiatric, General Hospital of Ioannina, Ioannina, Greece
*Corresponding author.
doi: 10.1192/j.eurpsy.2024.1292

Introduction: Hyperprolactinemia (HPL) is a condition associated with disturbing consequences. Antipsychotic medications are one of the main causes of nontumoral hyperprolactinemia. Prolactin release in the hypothalamic tuberoinfundibular tract is increased through dopaminergic inhibition, which occurs more frequently with high- potency typical antipsychotics (40%–90%). Less commonly than typical antipsychotics, atypical antipsychotics can also result in hyperprolactinemia. In the presence of symptoms, clinicians frequently struggle with the decision of whether to stop using the suspected offending agent, lower the dosage, switch to another medication, or even add a full or partial dopamine agonist to the patient's current treatment. The issue is exacerbated by the fact that finding a suitable agent for each patient is sometimes a challenging task.
Objectives: Due to the partial D2 receptor agonistic activity of aripiprazole, there is enough dopaminergic tone to continue the inhibition of prolactin release. Aripiprazole has been recommended in literature either as an adjunctive treatment in low doses or as a switch in therapy.
Methods: In the Psychiatric clinic of the General Hospital of Corfu, a low-dose (5mg/day) of aripiprazole is being used as adjunctive therapy in patients with antipsychotic-induced hyperprolactinemia. More specifically in total 42 subjects, 19 male and 22 female, with a mean prolactin level of 862ng/ml, were introduced to the prior therapy. We whereupon conducted prolactin measurements to evaluate the response at the first, the third, and the sixth month of treatment.
Results: Of the 42 subjects, 38 responded with an average reduction of prolactin to the level of 530ng/ml (mean reduction 38,5%).
Conclusions: Having noticed the beneficial effect of low-dose Aripiprazole in patients with antipsychotic-induced hyperprolactinemia, we consider it appropriate that the literature recommendations concerning this additional use of aripiprazole should not be overlooked in clinical practice.

Disclosure of Interest: None Declared