gene exposed to Nicotine durig a critical neurodevelopmental window ( adolescence) show a loss of familiarity in the social memory test and a loss of cognitive flexibility at the set shifting test, similar to what is found in schizophrenia.

**Conclusions:** TBetter characterization of patients with schizophrenia is necessary to better understand the physiopathology of this disease and explore new personalized preventive and therapeutical targets. We show that tobacco is associated with cognitive disturbances in schizophrenia patients, against selfmedication hypothesis; and in our animal model, that nicotine exposition during the adolescence combined to a moderate cortical and limbic hyperdopaminergia, is associated with persistent cognitive and social deficits, in favor of a gene environment interaction.

Disclosure of Interest: None Declared

#### **EPV0627**

# Diagnostic Challenges of Functional Cognitive Disorders

J. Petta\*, A. L. Falcão, G. Soares and A. Lourenço Centro Hospitalar Psiquiátrico de Lisboa, Lisboa, Portugal \*Corresponding author. doi: 10.1192/j.eurpsy.2023.1947

**Introduction:** Functional cognitive disorders (FCD) denotes a complaint about memory function or, less commonly, another cognitive process, in the absence of relevant neuropathology and with evidence of inconsistency between symptoms reported and signs identified at assessment.

Increasing numbers of people with FCD are being identified.

Most are discharged back to primary care without a diagnosis or are given the label of mild cognitive impairment, which is not a synonym for FCD.

**Objectives:** There is a multitude of terms in the clinic and in the research to describe this kind of complaints. Some terms seem to minimize and normalize the state, whereas others posit an underlying cause.

Given this lack of order, it is a challenge to diagnose it and give it the proper clinical guidance.

This literature-based review aims to fill this gap.

**Methods:** Data was obtained through an internet-based literature search, using the databases PubMed, Cochrane Library and NCBI. The World Health Organization was also utilized. Nine articles from the last two years were included.

**Results:** It is listed a nosology in six categories and a selection of clinical features which may help with the discrimination of functional and neurological disease causes of memory disorders.

**Conclusions:** Patients presenting with complaints about memory function require standard psychiatric and neurological history and examination.

It should be emphasized that these conditions are not diagnoses of exclusion but have positive symptoms and signs that should become well-known.

Nevertheless, we remain uncertain about prognosis and treatments, both psychological and pharmacological. Its development would reduce the burden of patients in the healthcare systems.

Disclosure of Interest: None Declared

#### **EPV0628**

## The Effects of Serotonergic Psychedelics on Neural Activity: A Meta-Analysis of Task-Based Functional Neuroimaging Studies

J. H. Shepherd<sup>1\*</sup>, C. Baten<sup>1</sup>, A. Klassen<sup>1</sup>, G. Zamora<sup>1</sup>, S. Saravia<sup>1</sup>, E. Pritchard<sup>1</sup>, Z. Ali<sup>1</sup>, S. K. Kahlon<sup>1</sup>, K. Whitelock<sup>2</sup>, F. A. Reyes<sup>1</sup>, D. W. Hedges<sup>3</sup>, J. P. Hamilton<sup>4</sup>, M. D. Sacchet<sup>5</sup> and C. H. Miller<sup>1</sup> <sup>1</sup>Department of Psychology, California State University, Fresno; <sup>2</sup>Department of Psychology, University of California, San Diego; <sup>3</sup>Department of Psychology, Brigham Young University, Provo, United States; <sup>4</sup>Department of Biomedical and Clinical Sciences, Linköping University, Linköping, Sweden and <sup>5</sup>Meditation Research Program, Department of Psychiatry, Massachusetts General Hospital, Harvard Medical School, Boston, United States \*Corresponding author.

doi: 10.1192/j.eurpsy.2023.1948

**Introduction:** Curiosity toward the effects of psychedelic drugs on neural activation has increased due to their potential therapeutic benefits, particularly serotonergic psychedelics that act as 5-HT2A receptor agonists such as LSD, psilocybin, and MDMA. However, the pattern of their effects on neural activity in various brain regions in both clinical and healthy populations is still not well understood, and primary studies addressing this issue have sometimes generated inconsistent results.

**Objectives:** The present meta-analysis aims to advance our understanding of the most widely used serotonergic psychedelics – LSD, psilocybin, and MDMA – by examining their effects on the functional activation throughout the whole brain among both clinical and healthy participants.

**Methods:** We conducted this meta-analysis by applying multilevel kernel density analysis (MKDA) with ensemble thresholding to quantitatively combine existing functional magnetic resonance imaging (fMRI) studies that examined whole-brain functional activation of clinical or healthy participants who were administered a serotonergic psychedelic.

**Results:** Serotonergic psychedelics, including LSD, psilocybin, and MDMA, exhibited significant effects ( $\alpha$ =0.05) on neural activation in several regions throughout the cerebral cortex and basal ganglia, including effects that may be common across and unique within each drug.

**Conclusions:** These observed effects of serotonergic psychedelics on neural activity advance our understanding of the functional neuroanatomy associated with their administration and may inform future studies of both their adverse and therapeutic effects, including emerging clinical applications for the treatment of several psychiatric disorders.

Disclosure of Interest: None Declared

### EPV0630

## Neuropsychological diagnosis of impaired mental functions in alcoholic disease of the second stage

L. T. Baranskaya\*, E. I. Babushkina and V. I. Potapov

Psychiatry, Psychotherapy and Narcology, Ural State Medical University, Yekaterinburg, Russian Federation \*Corresponding author. doi: 10.1192/j.eurpsy.2023.1949 **Introduction:** In the global practice and in Russia, alcohol abuse in the population remains one of the main risk factors for disability and premature death of the able-bodied population

**Objectives:** Systemic neuropsychological study of impaired mental functions caused by the toxic effects of alcohol.

**Methods:** The study was in the substance use unit. Patients over the age of 24 years, with a period of abstinence from alcohol of at least 7 days before the study. The experimental group included 24 patients diagnosed with "Chronic alcoholism" stage II, (including 23 men and 1 woman). The age of patients was 47.1 $\pm$ 4.5. The research method was standardized neuropsychological technique by A.R. Luria

**Results:** In the study group, a direct relationship was found between disorders in the mental functions (frontal lobe of the brain) and the age of patients suffering from alcohol dependence (r = 0.477; p<0.05). This indicates premature cognitive aging, which manifested in a decrease in the processes of processing new information and working memory. With age, such patients become emotionally labile, impulsive, with behavioral disorders, similar to what occurs in different types of dementia and is the result of damage to the prefrontal lobe of the brain

**Conclusions:** Because of the study, moderate and / or pronounced impaired of mental functions revealed in most patients: impaired of dynamic praxis in all processes deployed in the time; impaired of voluntary regulation of behavior and regulatory aspects of memory, attention, thinking, speech; impaired of orientation in space and in performing operations with spatial characteristics

Disclosure of Interest: None Declared

#### EPV0631

## VITAMIN D – A KEY FACTOR IN THE TREATMENT OF ASD PEOPLE?

## M. A. Robea<sup>1</sup>\*, M. I. Balmus<sup>1,2</sup>, M. Nicoara<sup>3</sup> and A. Ciobica<sup>3</sup>

<sup>1</sup>Biology, Doctoral School of Biology, Faculty of Biology, "Alexandru Ioan Cuza" University of Iasi; <sup>2</sup>Exact Sciences and Natural Sciences, Institute of Interdisciplinary Research, "Alexandru Ioan Cuza" University of Iasi and <sup>3</sup>Biology, Faculty of Biology, "Alexandru Ioan Cuza" University of Iasi, Iasi, Romania

\*Corresponding author.

doi: 10.1192/j.eurpsy.2023.1950

**Introduction:** Autism spectrum disorder (ASD) is a disorder with social, communication and behavioral disturbances that start from early childhood. There are many difficulties in diagnosing people with ASD. The diagnostic criteria are in terms of behavior descriptions, and as methods of intervention the most used is the applied behavior analysis (ABA). Although, the treatment of autism is not based on drugs, there are a number of reports that sustains the vitamin supplementation. For example, the deficiency of vitamin D (VD) was often outlined in the serum of the ASD people. Nowadays, zebrafish (*Danio rerio*) plays an important role in the modeling era; being one of the main organisms used in animal studies. **Objectives:** In this study, we aimed to describe the influence of VD in autistic people, and the possibility of vitamin investigation through animal models studies.

**Methods:** For analyzing this subject specific scientific databases were screened using certain keywords as: "autism spectrum disorder", "vitamin D", "treatment", "deficiency", "animal models" and "zebrafish". Inclusion criteria were studies that (1) investigated a behavioral intervention, (2) used animal models for ASD modelling, (3) reported vitamin D results, and (4) were published within the last 20 years.

**Results:** The majority of the studies supported the importance of an adequate level of VD in the body, mainly due to its implication during pregnancy and early brain development. The few existing data bring information about the positive impact of its administration in ASD children; in which a considerable improvement in typical symptoms was observed. For further knowledge about VD activity in ASD it was suggested the animal modelling, especially zebrafish organisms due to its numerous advantages (high similarity of its genome with the human one).

**Conclusions:** VD deficiency during pregnancy and early brain development is a real risk factor besides genetic predisposition. Moreover, the use of animal models for investigating the effect of VD is required for a better understanding of the vitamin mechanism in ASD people.

Acknowledgement: \*R. M.-A. and B. M.-I. are supported by the Project POCU/993/6/13/153322 "Suport educațional și formativ pentru doctoranzi și tineri cercetători în pregătirea inserției în piața muncii" of the European Social Fund through the Human Capital Operational Program.

**Disclosure of Interest:** M. Robea Grant / Research support from: Project POCU/993/6/13/153322 "Suport educațional și formativ pentru doctoranzi și tineri cercetători în pregătirea inserției în piața muncii" of the European Social Fund through the Human Capital Operational Program., M. Balmus Grant / Research support from: Project POCU/993/6/13/153322 "Suport educațional și formativ pentru doctoranzi și tineri cercetători în pregătirea inserției în piața muncii" of the European Social Fund through the Human Capital Operational Program, M. Nicoara: None Declared, A. Ciobica: None Declared

#### EPV0632

## Evolution of some liver function markers after treatment in patients with schizophrenia and bipolar disorder

S. Sellami<sup>1,2</sup>, M. Maalej<sup>2,3</sup>\*, M. Ayadi<sup>2,4</sup>, M. Naifar<sup>2</sup>, M. Maalej<sup>3,5</sup> and F. Ayadi<sup>2</sup>

<sup>1</sup>Psychiatry "C" department, Hedi Chaker University Hospital; <sup>2</sup>PsycLaboratory of Research "Molecular Basis of Human Diseases", LR19ES13, Faculty of medecine of Sfax; <sup>3</sup>Psychiatry "C" department, Hedi Chaker University Hospital; <sup>4</sup>Laboratory of Biochemistry, Faculty of Medicine of Sfax & Habib Bourguiba Hospital and <sup>5</sup>Laboratory of Biochemistry, Faculty of Medicine of Sfax & Habib Bourguiba Hospital, Sfax, Tunisia

\*Corresponding author.

doi: 10.1192/j.eurpsy.2023.1951

**Introduction:** The prevalence of alterations of liver function tests in patients with schizophrenia and bipolar disorders is not well known. These alterations are often considered as side effects of medication

**Objectives:** Our study aimed to evaluate and compare liver function before and after treatment in patients with schizophrenia (SCZ), schizo-affective disorder (SCA) and bipolar disorder (BD).