

Results: Although there were differences between volumes in the first analyzes with Student's t test, they were not statistically significant.

Age and gender variables, which were determined by the literature to have an effect on volume measurements, were re-evaluated with the ANCOVA test. When the effects of age and gender variables were removed in the evaluation, the right hippocampus volume was found to be significantly reduced in the AUD group compared to the control group ($F=5.26$, $p=0.03$). Again, no significant difference was observed in the two groups in terms of areas other than the volume of the right hippocampus. Pearson correlation analysis was used to evaluate the relationship between scale scores, duration of alcohol use and amount taken, and volumetric measurements, but no statistically significant relationship was found.

Conclusions: Different findings have been reported in the literature regarding the examined region volumes. Our study found volumetric changes consistent with most previous studies. For more generalizable results, studies with a large number of participants are needed.

Disclosure of Interest: None Declared

EPV0616

Heavy and Chronic Cannabis Use Impact on Human Emotions: BOLD-fMRI Study

S. Boujraf*, M. Jaafari, A. Houate, R. Aalouane, M. Maaroufi and I. Rammouz

Clinical Neurosciences Laboratory, Faculty of Medicine, Fez, Morocco

*Corresponding author.

doi: 10.1192/j.eurpsy.2023.1936

Introduction: Long term cannabis use has been expanding drastically over the last two decades and has become a major health issue worldwide. Recent studies demonstrate that brain complications in adults with cannabis use are associated with cognitive and emotional impairments, but little is known about the relationship between structural alterations and behavioral manifestations. Therefore, studying the relationship between alterations of emotional system, in parallel with structural degenerative phenomena is very critical.

Objectives: Hence, the aim of this study is to demonstrate such alterations by making use of appropriate paradigms during BOLD-fMRI scans. Positive, negative and neutral emotions were examined, in relations with DTI and functional connectivity.

Methods: 11 cannabis addicted patients volunteered for the study. Volunteers were fully healthy. However, any additional comorbidity was a strict criterion of exclusion, and a healthy general state was an indispensable criterion of inclusion. Additionally, it was excluded any patient that have any additional substance use such as tobacco, alcohol, cocaine, etc. And strict use of cannabis was a must.

All patients underwent blood and urine assessments to ensure the selection criteria.

All patients underwent BOLD-fMRI and anatomical MRI using both motor and emotional paradigm.

The motor task consisted of rest alternating with finger tapping. The emotional task included 3 conditions. Positive, neutral and negative were each alternating with silent mental counting. The

fMRI data was processed using SPM12 package. A sample of 12 age-matched controls was also included.

Results: The present results are based on analysis of behavioral and BOLD-fMRI data of 11 patients and similar age-matched controls. Analysis of behavioral data showed an alteration of emotional abilities in cannabis addicted patients compared to controls. Analysis of fMRI data revealed significant changes of activation within a large cortical network including prefrontal cortex and parietal cortex, and that emotional responses and BOLD signal were inversely correlated.

Conclusions: These findings demonstrate that the brain of cannabis addicted patients undergoes and emotional alterations that parallel silent structural degenerative phenomena. Although the causal mechanisms are still to be investigated, the fact that functional impairments can be detected in emotional, cognitive and motor domains calls for the development of preventive measures using neurobehavioral tools for this population of patient, and even in at risk users.

Disclosure of Interest: None Declared

Neuroscience in Psychiatry

EPV0617

Cognitive functions in people with mental disorders: focus on self-reflection, insight and mindwandering

A. Natale^{1*}, L. Fusar-Poli^{1,2}, S. Sturiale¹, V. Placenti^{3,4}, M. Marino^{3,4}, A. Amerio^{3,4}, A. Rodolico¹, C. Concerto¹, A. Aguglia^{3,4}, A. Petralia¹, M. S. Signorelli¹, G. Serafini^{3,4}, M. Amore^{3,4} and E. Aguglia¹

¹Department of Clinical and Experimental Medicine, University of Catania, Catania; ²Department of Brain and Behavioral Sciences, University of Pavia, Pavia; ³Department of Neuroscience-Rehabilitation- Ophthalmology- Genetics- Maternal and Child Health- Section of Psychiatry, University of Genoa and ⁴IRCCS Ospedale Policlinico San Martino, Genoa, Italy

*Corresponding author.

doi: 10.1192/j.eurpsy.2023.1937

Introduction: People with mental disorders may present impairments in cognitive and metacognitive functions. Self-reflection is the ability to reflect on oneself (specifically on one's behavior, emotions, and thoughts) and insight is the awareness of one's internal experience. Mindwandering (MW) is defined as the tendency to divert attention from current reality without a clearly defined intention. It can be spontaneous or deliberate. Several studies have investigated these alterations in patients with schizophrenia (SZ), while less is known for people with substance use disorder (SUD).

Objectives: The aim of the present study was to explore self-reflection, insight and MW in a group of patients with SZ and SUD.

Methods: The Self-reflection and Insight Scale (SRIS) and the spontaneous (MW-S) and deliberate (MW-D) mindwandering scales were administered to 25 patients with SZ, 21 patients with SUD, and 21 healthy controls (HC). Linear regressions were performed to evaluate the associations between the variables under study.