## **EPP0446**

## A pilot add-on Randomized-Controlled Trial evaluating the effect of binaural beats on study performance, mind-wandering, and core symptoms of adult ADHD patients

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**Introduction:** ADHD is a neurodevelopmental disorder that frequently persists throughout adulthood. Binaural Beats (BB) are auditory perceptions occurring when two soundwaves of slightly different frequency are carried separately to the ears; they might modulate brain activity and performance.

**Objectives:** To evaluate BB efficacy on studing performance, mindwandering, and core symptoms of a sample of adult ADHD outpatients

**Methods:** In this randomized-controlled trial we recruited a sample of University students in pharmacological treatment for adult ADHD. A track with 15 Hz BB (415 Hz to right and 400 Hz to the left ear) was delivered to the intervention group; whereas, a placebo track consisting of two identical frequencies (400 Hz) was administered to control group. The RCT consisted of a baseline assessment (T0) and two fortnightly follow-ups (T1-T2). Each time, the patient filled the ADHD-RS-5 (ADHD Rating Scale-5) and the MEWS (Mind Excessively Wandering Scale) and executed an online version of SART (Sustained Attention to Response Task). The effect of self-administered acoustic stimulation during individual studying sessions was estimated by a subjective studying performance (SSP) evaluation questionnaire.

**Results:** A significant improvement of SSP from baseline assessment (T1) to the last observation (T3) was detected in BB group only (mean differences= 2.7, p<.001). A significant between-group contrast for SSP was also found at T3. No other significant changes were detected for ADHD-RS, MEWS and SART at p<.05 level.

**Conclusions:** BB seem to improve subjective studying performance and ADHD symptoms severity. These preliminary findings must be confirmed in larger sample.

**Disclosure:** No significant relationships. **Keywords:** adhd; Binaural beats; Non-pharmachological intervention; Brain stimulation

## **EPP0447**

## Psychopathology and problematic social media use among children and adolescents: what possible links?

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**Introduction:** Social Media (SM) have recently gained substantial popularity among youth. However, the relationship between problematic use of social media (PUSM) and psychopathology in children and adolescents remains unclear.

**Objectives:** To study in a population of children and adolescents followed in outpatient psychiatry unit, the prevalence, and psychopathological factors linked to PUSM.

**Methods:** A descriptive study was led among child and adolescent's psychiatry patients. Parents were asked to provide answers for the Child Behaviour Checklist (CBCL). PUSM was assessed using the Bergen Social Media Addiction Scale (BSMAS). Mental disorders' related data were extracted from patients' medical records.

**Results:** Our study included 76 patients with a mean age of  $14.2 \pm 2.6$  [11,18] years and a sex-ratio of 1. The prevalence of PUSM was estimated at 9.2% in our population according to the conservative approach, rising to 48.7% according to the liberal approach. Anxiety (32.4%) and depressive disorders (24.3%) were most prevalent among patients with PUSM. BSMAS scores were significantly higher among patients with smoking habits (p=0.03). CBCL T-scores interpretation showed internalizing and externalizing disorders among 80.3% and 64.5% patients respectively. BSMAS scores were significantly higher among patients belonging to the clinical range of all the CBCL syndrome scales, except for social problems, and among patients suffering from both internalizing and externalizing disorders (p=0.005).

**Conclusions:** PUSM was shown to be more prevalent among clinical populations compared to healthy controls. Research has indicated a potential link between PIUSM and psychopathology; however, the significance of the correlation remains unclear.

Disclosure: No significant relationships.

**Keywords:** Bergen Social Media Addiction Scale; Child behaviour checklist; Psychopathology; problematic use of social media

#### **EPP0448**

# Experience in the Child/Youth Mental Health Centre of Leganés (Madrid) during the first lockdown

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**Introduction:** The municipality of Leganés has been very vulnerable to the effects of the crisis derived from the COVID-19 pandemic (both due to the incidence of the infection and the socioeconomic situation). Multiple studies show that children and adolescents, especially those with a psychiatric background, have been one of the most affected groups during the confinement. **Objectives:** Firstly, to describe the characteristics of clinical care at the Child/Youth Mental Health Centre of Leganés (Madrid) during