S326 e-Poster Presentation

**Conclusions:** Findings suggest that peer-led interventions concerning wine and other drinking products, narrated in their cultural dimension (e.g. their story, identity, local traditions, practices and the tacit knowledge implied in their production), may encourage a limited and competent consumption among young people.

Disclosure of Interest: None Declared

#### **EPP0404**

# The role of temperamental self-regulation in predicting relapse in Alcohol Use Disorder

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**Introduction:** Alcohol Use Disorders (AUDs) are highly prevalent psychiatric disorders with often a poor treatment outcome in terms of high dropout rates and relapses. A vulnerability to disinhibition or a lack of self-regulation/low Effortful Control (EC) seems to be a core risk factor associated with both the initiation and continuation of AUDs. EC is the regulative dimension of temperament that involves attentional control, inhibitory control and activation control, and reflects self-regulation abilities that develop later in life parallel with the maturation of the prefrontal cortex.

**Objectives:** In this study we want to investigate whether EC, operationalised in terms of self-report and in terms of behavioral measures, can predict relapse. When a low EC indeed turns out to be a significant contributor to relapse, treatment interventions aiming at strengthening EC could result in better treatment outcomes and less relapse in AUD patients.

Methods: The sample consisted of 75 adult patients with AUD (68.9% males, mean age 47,4y) admitted at a specialized, inpatient treatment unit for addiction. To assess the regulative temperament dimension, we used the Effortful Control Scale (ECS) from the Adult Temperament Questionnaire Short-Form), a self-report questionnaire as well as five behavioral/neuropsychological tasks using the Cambridge Neuropsychological Test Automated Battery: Cambridge Gambling Task (CGT), Stop-Signal Task (SST), Intra-Extradimensional Set Shift (IED), Spatial Working Memory (SWM) and Spatial Span (SSP).

Results: We performed binary logistic regression analyses with EC/CANTAB measures as predictors and relapse/no relapse (during treatment and after 3 months follow up) as dependent variable. According to these analyses, the self-report measure of EC nor the behavioral tasks CGT, SST, SWM and SSP (CANTAB) were able to significantly predict relapse neither during treatment nor after 3 months follow-up. Only the IED (outcome measure stages completed) was significant in predicting relapse (p<0.05) during follow-up. Conclusions: In our study we investigated whether self-regulation as measured by self-report questionnaires and behavioral tasks could predict relapse during treatment and after 3 months follow-up in a sample of inpatients with AUD. In contrast to some findings in literature, in our sample most of the used measures were not able to predict relapse. One hypothesis for these findings is that our sample of inpatients at a specialized addiction treatment unit is

too homogeneous, all presenting lower levels of self-regulation. Future research should thus focus on larger samples and less homogeneous population. Only the IEC (outcome measure stages completed) was able to predict relapse during follow-up.

Disclosure of Interest: None Declared

### **EPP0405**

# Cortical folding complexity and attentional impulsivity in chronic cocaine users: an MRI study

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**Introduction:** Cocaine use is a worldwide health problem with psychiatric, somatic, and socioeconomic complications, being the second most widely used illicit drug in the world. Despite several structural neuroimaging studies, the alterations in cortical morphology associated with cocaine use and addiction are still poorly understood. Interestingly, findings from human studies and animal models examined how impulsivity is a risk factor for the emergence of substance use disorders.

**Objectives:** In this study we aimed at investigating the complexity of cortical folding (CCF) in patients with cocaine addiction using fractal dimension (FD). Since the frontal, parietal, temporal and insular cortices have been shown to play an important role in decision making and impulsivity, we hypothesized that CCF in the brain of patients would be altered in these regions. Furthermore, we predicted the association between CCF changes and 1) the duration of cocaine use for its widespread neurotoxic effects and 2) impulsivity characteristics in those regions implicated in the predisposition to addiction. **Methods:** We compared the CCF between patients with cocaine addiction (n=52) and controls (n=36) and correlated it with characteristics of addiction and impulsivity. Demographic data, history, and current substance use were collected. Furthermore, the Barratt Impulsivity Scale (BIS-11) was administered.

### **Results:**

	Patients with cocaine addiction (N=52)	Healthy controls (N=36)	χ2 or t	p
Age (M±SD, years)	$\textbf{31.3} \pm \textbf{6.51}$	$\textbf{30.1} \pm \textbf{7.62}$	0.795	0.429
Education (M±SD, years)	$\textbf{10.9} \pm \textbf{2.9}$	$\textbf{13.2} \pm \textbf{3.53}$	-3.276	0.002
Total intracranial volume $(M\pm SD,\mu I)$	$1442.7 \pm 104.6$	$1460.4 \pm 98.31$	-0.796	0.428
BIS Total score (M±SD)	$\textbf{61.1} \pm \textbf{14.6}$	$40.2 \pm 10.4$	6.52	<0.001
BIS Attentive score (M±SD)	$17.1 \pm 5.23$	$11.6 \pm 5.23$	4.79	<0.001
BIS Motor score (M±SD)	$\textbf{18.4} \pm \textbf{7.79}$	$\textbf{13.3} \pm \textbf{5.72}$	2.97	0.004
BIS NonPlanning score (M±SD)	$\textbf{25.6} \pm \textbf{6.82}$	$\textbf{15.3} \pm \textbf{5.29}$	6.70	<0.001
Duration of cocaine use (M±SD, years)	10.8 ± 6.4			
Age of onset of cocaine use (M±SD, years)	20.7 ± 4.99			

European Psychiatry \$327

We found that patients with cocaine addiction had greater attentional impulsivity compared to HC. In addition, they showed reduced CCF in a cluster that encompassed the left insula and the supramarginal gyrus (SMG) and in one in the left medial orbitofrontal cortex. Moreover, the CCF in the left medial orbitofrontal cortex was correlated with the age of onset of cocaine addiction and with attentional impulsivity.

#### Image:

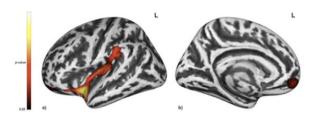


Figure 1. Increased cortical complexity in patients with cocaine addiction (CA) in the left lateral (a) and medial (b) hemispheres. Fractal dimension (FD) was reduced in patients with CA in a cluster that extends across the left insula and the left part of the supramarginal gyrus (a) and in the left medial orbitofrontal cortex (b) when compared to healthy controls (HC). Statistical maps are displayed at p<0.001 uncorrected and p<0.05 FWE cluster-level corrected. The color bar represents the p-value.

#### Image 2:

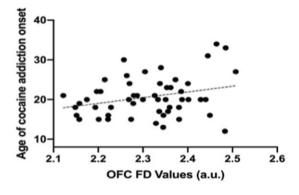


Figure 2. Scatter plot of cortical complexity and the age of onset of cocaine addiction. The fractional dimension (FD) in the left medial orbitofrontal cortex was positively correlated with the age of onset of cocaine addiction. Age is measured in years, FD in arbitrary units (a.u.). The line represents the best fit.

Conclusions: Overall, our findings suggest that chronic cocaine use is associated with changes in the cortical surface in the fronto-parieto-limbic regions that underlie emotional and attentional regulation, and these changes are associated with prolonged cocaine use. Future longitudinal studies are warranted to unveil the association of these changes with the diathesis for the disorder or with the chronic use of this substance.

Disclosure of Interest: None Declared

#### **EPP0406**

## Gender Differences in the abuse of new technologies, and other addiction problems of patients from primary care

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Introduction: The use/abuse of Information and Communication Technologies (ICT) has become a topic of great interest in recent years. With advances in technology, today's population spends a great deal of screen time (ST) making watching television (TV), using computers, smartphones, or playing video games a central component of their daily lives. These studies have analyzed the psychological impact of technological exposure or abuse, such as aggressive behaviors, anxiety, depression and other mental problems.

**Objectives:** The main objective of this study is to explore the differences between men and women and the abusive use of social networks, technologies, pathological gambling and other addiction problems in primary care.

Methods: This study is an observational study conducted within the framework of primary care in the Spanish region of Aragon. The population of the study were participants of 35-74 years old, had been receiving care from the Aragon Health Service. Recruitment is shown at figure 1. Sociodemographic, quality of life, personal factors on health behaviour, social support, lifestyle patterns and chronic comorbid pathology variables were collected during the period 2021–2023. The project was approved by the Clinical Research Ethics Committee of Aragon N° PI20/302. The comparisons by sex were carried out using a Student T-test or chi squared test to analyse differences.

**Results:** There are significant differences in the abuse of new technologies between men and women. 25.20% of men (CI 95% 18.26-33.25) compared to 13.41% of women (CI 95% 8.85-19.25) make abusive use of the Internet, with statistically significant differences. In the same way, men present greater abuse of video games (6.25% of men (CI 95% 3.0-11.45) compared to 3.05% of women (CI 95% 1.17-6.55).

Analysing the differences by sex in dependence if it is an urban or rural population. Significant differences in the abuse of new technologies between men and women are present in the urban population, while in the rural population these differences are not observed