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were associated with the result of KBL selection. The basketball performances including average scores and average rebound were associated with emotional perception and mental rotation.

Methods: We recruited the number of 44 college elite basketball players(KBL selection, n=17; Non-KBL selection, n=27), and the number of 35 age-matched healthy comparison subjects who major in sports education in college. All participants were assessed with the Temperament and Character Inventory(TCI), Sports Anxiety Scales(SAS), Beck Depression Inventory(BDI), Perceived Stress Scale (PSS-10), Trail Making Test(TMT), and Computerized Neuro-cognitive Test(CNT) for Emotional Perception and Mental Rotation.

Results: Current results showed that physical status, temperament and characteristics, and Neurocognitive functions of college basketball players could predict the KBL draft selection. Among temperament and characteristics, novelty seeking and reward dependence were associated with KBL draft selection. The basketball performances including average scores and average rebound were associated with emotional perception and mental rotation.

**Conclusions:** In order to be a good basketball player for a long time, it was confirmed that temperamental factors and Neurocognitive factors were very closely related. Furthermore, it is also judged that these results can be used as basic data to predict potential professional basketball players.

Disclosure of Interest: None Declared

## **EPP0702**

## The impact of Extremely Low Frequency Electro-Magnetic Fields on Depression Anxiety and Stress

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**Introduction:** According to World Health Organisation (WHO), Extremely Low Frequency Electro-Magnetic Fields (ELF-EMF) include frequencies ranging from 0 to 300 Hz. They are widespread in our daily life and in the workplace. These fields have an impact on physical and mental health including depression and anxiety.

Objectives: To assess the impact of chronic occupational exposure to ELF-EMF on Depression, Anxiety and Stress among workers in the Tunisian Electricity and GasCompany of Sousse, Tunisia.

Methods: In this cross-sectional study, participants were enrolled into two groups: an "exposed group" including workers in a power plant and an "unexposed group" including administrative workers belonging to the same company. The Exposure to ELF EMFs was assessed by spot measurements using a portable magnetometer. Depression, Anxiety and Stress were assessed by the the Depression, Anxiety and Stress Scale (DASS-21).

Results: This study included 77 exposed subjects and 88 unexposed subjects. The median age was 37 years for the exposed group and 43,5 years for the unexposed ones. Almost half of the exposed group were technicians and had a work experience of 9 years. The median value of EMF was 5,86 uT in the power plant [Min 0,1 Max 40,34 ut]. The interpretation of DASS-21 showed that 24.7% of the exposed group and 3.4% of the unexposed group had depression (p<10-3). Anxiety was reported by, 23.4% of the exposed group and by none of the unexposed group. Stress was observed among 46.8% of the exposed group and by none of the unexposed group. After multivariate analysis, ELF-EMF exposure was significantly associated only with depression (p< $10^{-3}$ ; OR=1,45 [1,17-1,81]) ).

Conclusions: Chronic occupational exposure to ELF-EMF increases the risk of Depression, anxiety and Stress. Underlying mechanisms are not established yet suggesting the need of further studies.

Disclosure of Interest: None Declared

## **EPP0703**

Who moderate the relationship between executive functions and quality of life among adults with and without adhd: structural equation model

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Introduction: Literature evidences indicates that adults with attention-deficit/hyperactivity disorder (ADHD) are struggling with executive functions deficiencies, organization in time deficits, low sleep quality, and poor quality of life (QoL). However, it is not clear how those factors associate and interact with each other.

Objectives: This study aims to compare those factors as well as the relationships between them, among adults with and without ADHD using structural equations modeling (SEM).

Methods: Sixty-nine adults with ADHD and 52 matched controls (ages 20-46) completed the Behavior Rating Inventory of Executive Function-adult version (for executive functions), Time Organisation and Participation Scale (for organization-in-time), Mini Sleep Questionnaire (for sleep quality), and Adult ADHD Quality of Life questionnaire (for QoL).

Results: Compared to adults without ADHD, adults with ADHD showed significantly poorer executive functions, organization-intime, sleep quality and QoL. The SEM indicated that sleep quality and organization-in-time domains mediated the relationship between executive functions abilities and QoL. This SEM explained 79% of the QoL variance for adults with and without ADHD.

Conclusions: Understanding the role of organization-in-time and sleep quality as mediators between executive functions and quality of life emphasize the unique challenges of adults with ADHD, which deals with deficiencies at those factors. Those findings call for including these factors in evaluation and intervention processes to improve QoL and this population's global health.

Disclosure of Interest: None Declared