

## EPP0698

**Short-term memory depends on the level of emotional burnout**S. Tukaiev<sup>1,2\*</sup>, I. Zyma<sup>1</sup> and M. Makarchuk<sup>1</sup><sup>1</sup>Institute of Biology and Medicine, Taras Shevchenko National University of Kyiv, Kyiv, Ukraine and <sup>2</sup>Faculty of Communication, Culture, and Society, Institute of Public Health, Università della Svizzera italiana, Lugano, Switzerland

\*Corresponding author.

doi: 10.1192/j.eurpsy.2024.780

**Introduction:** Emotional burnout refers to a syndrome caused by chronic stress. The formation of emotional burnout may lead to persistent changes in cognitive activity and particularly in memory and attention.**Objectives:** As the power of human EEG-spectrum components varies significantly under cognitive testing, the aim of our study was to investigate the dynamics of changes of EEG parameters under a memory task depending on the severity of burnout.**Methods:** 42 healthy volunteers (students aged 18 to 24 years) participated in this study. EEG was registered over a period of 3 minutes during the rest state and 10 minutes during a verbal memory task. The spectral power density (SPD) of all frequencies from 0.2 to 35 Hz was estimated. The Mann-Witney criterion was carried out for the comparison of the independent data samples. The correlations were estimated using the Spearman's coefficient correlation. In order to determine the stages of burnout we used the test "Syndrome of emotional burnout" (by Boyko), adapted for students.**Results:** We observed variations in parameters of EEG during memorizing and retention phases depending on the intensity of the burnout. The intensity of the Exhaustion stage varied inversely with SPD in alpha3 (parietal and temporal regions), beta1 (parietal regions) and beta2 (parietal, right occipital and temporal regions) during the memorizing phase. The formation of the Exhaustion stage of burnout was accompanied by a decrease in alpha3 (parietal, left occipital and right temporal regions), beta1 (parietal, occipital and left temporal regions) and beta2 (parietal regions) during the retention phase.**Conclusions:** Our data indicate that short-term memory depends on the emotional state of subjects.**Disclosure of Interest:** None Declared

## EPP0700

**Influence of Ovocystatin on A $\beta$ 42 soluble oligomeric and fibril formation in in vitro studies**B. Stańczykiewicz<sup>1\*</sup>, M. Piksa<sup>2</sup>, T. Goszczyński<sup>3</sup>, K. Gołąb<sup>4</sup>, B. Konopska<sup>4</sup> and A. Zabłocka<sup>2</sup><sup>1</sup>Department of Psychiatry, Wrocław Medical University; <sup>2</sup>Department of Microbiology; <sup>3</sup>Department of Experimental Oncology, Hirsfeld Institute of Immunology and Experimental Therapy, Polish Academy of Sciences and <sup>4</sup>Department of Pharmaceutical Biochemistry, Wrocław Medical University, Wrocław, Poland

\*Corresponding author.

doi: 10.1192/j.eurpsy.2024.781

**Introduction:** Alzheimer's disease is characterized by the presence of  $\beta$ -amyloid deposits in senile plaques and brain vessels.  $\beta$ -amyloid stimulates the glial release of proinflammatory cytokines, reactive oxygen species (ROS), or nitric oxide (NO), which are potentially toxic to neurons. One potential therapy for Alzheimer's disease is the use of agents that inhibit the aggregation and formation of insoluble  $\beta$ -amyloid deposits in the brain, or break down the aggregates that have already formed, thus preventing their toxicity.**Objectives:** This study aimed to evaluate the effect of ovocystatin on the formation and destabilization of  $\beta$ -amyloid aggregation.**Methods:** The effect of ovocystatin on  $\beta$ -amyloid aggregation was determined by Thioflavin T (ThT) Assay and Transmission Electron Microscopy (TEM). The impact on PC12 cell viability was determined by MTT assay.**Results:** Ovocystatin can interact directly with A $\beta$ <sub>42</sub>, inhibiting its aggregation and reducing the toxicity induced by aggregated forms of  $\beta$ -amyloid. All effects are dose-dependent. Additionally, a significant increase in the PC12 cell viability treated simultaneously with A $\beta$ <sub>42</sub> and ovocystatin was observed.**Conclusions:** Ovocystatin may be an important factor in the prevention and treatment of Alzheimer's disease by regulating the conversion of monomeric  $\beta$ -amyloid into larger and potentially more toxic particles. However, the mechanisms of inhibition of amyloid fibrillar protein formation and/or destabilization by ovocystatin are still unclear and require further investigation.**Disclosure of Interest:** None Declared

## Others

## EPP0701

**Temperamental and Neurocognitive predictors in Korean basketball league draft selection**B. W. Nam<sup>1\*</sup>, D. H. Han<sup>2</sup>, S. M. Kim<sup>2</sup>, J. Hong<sup>2</sup>, H. Hwang<sup>2</sup> and K. J. Min<sup>2</sup><sup>1</sup>Dr. Nam's Psychiatric Clinic, Choongju and <sup>2</sup>Chung Ang University Hospital, Seoul, Korea, Republic Of

\*Corresponding author.

doi: 10.1192/j.eurpsy.2024.782

**Introduction:** The Korean Basketball League(KBL) holds an annual draft to allow teams to select new players, mostly graduates from the elite college basketball teams even though some are from high school teams. In sports games, many factors might influence the success of an athlete. In addition to possessing excellent physical and technical factors, success in a sports game is also influenced by remarkable psychological factors. Several studies reported that elite sports players can control their anxiety during competition, which may lead to better performance. In particular, the temperament and characteristics of players have been regarded as crucial determinants of the player's performance and goal. In this regard, numerous studies suggest that personality is considered to be an important predictor of long-term success in professional sports**Objectives:** Based on previous reports and studies, we hypothesized that physical status, temperament and characteristics, and neurocognitive functions of basketball players could predict the result of KBL draft selection. Especially, temperament and characteristics