ACTA PHYSIOLOGICA

OFFICIAL JOURNAL OF THE FEDERATION OF EUROPEAN PHYSIOLOGICAL SOCIETIES

Turkish Society of Physiological Sciences 44th National Physiology Congress 01 – 04 November 2018 Port Nature Resort Hotel Congress Centre, Antalya (Turkey)





PUBLICATION HISTORY

Acta Physiologica 2006-

Acta Physiologica Scandinavica 1940-2005

Skandinavisches Archiv für Physiologie 1889-1939

Turkish Society of Physiological Sciences 44th National Physiology Congress 01 – 04 November 2018, Antalya (Turkey)

PC034

Investigation of the Influence of Music on Behavioral Findings by Valproic Acid-Induced Autism Model in Rats

<u>Mustafa Titiz</u>¹, Sümeyye Çilingir¹, Gülşah Beyza Ertosun¹, Dilan Acar², Mehmet Şerif Yavuz², Gamze Kırıkçı³ and Güldal Güleç-Süyen¹

¹ Acıbadem Mehmet Ali Aydınlar University, Faculty of Medicine, Department of Physiology, İstanbul, Turkey ² Acıbadem Mehmet Ali Aydınlar University, Faculty of Science and Literature, Department of Psychology, İstanbul, Turkey ³Acıbadem Mehmet Ali Aydınlar University, Faculty of Medicine, Department of Anatomy, İstanbul, Turkey

Aim: Autism is a disorder characterized by problems in socialinteraction, repetitive behaviors. In the study, the healing effect of music on autistic symptoms was investigated in the autism model formed by Valproic-Acid (VPA).

Methods: Sprague-Dawley rats were administered VPA (500 mg/kg) and saline-solution (%0,9-NaCl) subcutaneously on 12.5th day of gestation. VPA-Music-Group (VMG, n=8): Mozart's K448 piano sonatas were played at 65 dB an hour a day for 14 days. VPA-Cage-Group (VCG, n=8) and Control-Cage-Group (CCG, n=8): They stayed in cages for 14 days in the meditation room. From P40, open-field, social-interaction, Y-maze and tail-flick tests were applied to animals.

Results: In the open field, the number of frames passed and distance traveled in VCG rats were significantly higher than those of CCG rats (p<0.001, p<0.05, respectively). In the social-interaction, the sociability-index decreased significantly in the VCG compared to KKG (p<0.05). The percentage of spontaneous alterations of VCG rats in the Y-maze was lower than in the CCG rats (p<0.05). In the tail-flick, pain sensitivity was reduced in VCG rats (p<0.05). The parameters assessed in all the tests did not show any significant difference between VMG and CCG group. In the analysis, One Way-ANOVA is used followed by Tukey test.

Conclusions: Our results suggest that the music may have a healing effect on the symptoms of autism.

PC035

Examination of Cognitive Skill Levels and Emotional Status in Chess Players Classified by Their Experiences

Elif Sümeyra Erdemir¹, Şüheda Alpay¹, Necip Kutlu¹ and Erol Ozan²

¹Manisa Celal Bayar University, Medical School, Department of Physiology, Manisa, Turkey

² Manisa Celal Bayar University, Medical School, Department of Psychiatry, Manisa, Turkey

Aim: In this study, it was aimed to compare the performance and the emotional states of the response speed and quality (DT), continuous attention/problem solving ability (COG), reasoning ability (SPM) and visual perception (TAVTMB) under stress of different levels of chess players.

Methods: A total of 105 girls and boys aged 7-16 years were classified into 3 groups according to their experience, professional, middle and beginners. Vienna Test System. CDI, CADSI and Kruskal-Wallis tests were applied.

Results: The response time of mid-level players was shorter than that of the professionals. Reaction quality was higher and more significant when compared to beginners in mid-level players.

There was no significant difference in COG, SPM, TAVTMB scores between the groups due to the non-homogeneous distribution of the groups.

Conclusion: Middle-level players have a good response speed and quality under stress and the response rate is due to the fact that the speed of the professional players is short compared to the mid-level players, and that they react with careful thought in the experience of being a chess player. As the chess experience of the players increases, depression and anxiety decrease.

PC036

Is Hypnosis Innocent? Physiopathological Evaluation of Effect on Vital Findings

Füsun Sunar¹ and Serkan Küççüktürk²

¹ KTO Karatay University, Faculty of Medicine, Department of Medical Education, Konya, Turkey

² Necmettin Erbakan University, Meram Faculty of Medicine, Department of Biostatistics, Konya, Turkey

Aim: Hypnosis is used in Complementary Medical Treatments. Our aim is to assess whether hypnosis is a side effect by evaluating effect in vital signs. Vital signs change in pathologic conditions. Fever, pulse, blood pressure and number of breaths is a good indicator of side effect evaluation.

Methods: Healtly Twelve volunteers, six women and six men aged between 18 - 65 years who had received the necessary permits and consent. The hypnosis room was quiet and at room temperature to minimize the effect of vital signs. Participants used rapid hypnosis technique. Measurements were made under the hipnonik trans of 10-15 minute. They were awakened by the countdown method. The non-parametric Wilcoxon Signed Tanks test was used as the statistic to chary comparison test. P<0.05 was accepted as significant.

Results: The statistical result of all changes made by measurement of vital findings was found to be p>0.05. Changes in the vital signs pre-hypnosis and hypnosis didn't show any significant difference.

Conclusions: No significant difference in changes in vital signs in pre-hypnosis and hypnosis can show physiopathological well as the credibility of this treatment and without side effect. Our work may be a preliminary study for other research.