

STRESS, BRAIN AND BEHAVIOR

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previous preclinical studies and clinical trials in animals a novel drug for veterinary use Anole has been registered. The experience of the released-active antibodies to the S100 protein usage in human healthcare further supports the promising therapeutic approach for the veterinary behavioral medicine. RASS and CSS used in this study can also be introduced into veterinary clinical routine. **RESEARCH SUPPORT:** Research and Production Company "Materia Medica Holding".

INFLUENCE OF SHORT-TERM PHYSICAL EXERCISES ON THE STRENGTH OF VISUAL ILLUSIONS. VA Lyakhovetskii, VJu Karpinskaia, II Shoshina, Pavlov Institute of Physiology RAS, Russian Scientific Center for Radiology and Surgical Technologies, St. Petersburg State University, St. Petersburg, Russia

INTRODUCTION: The influence of stress or physical tiredness onto the perception of visual illusions is rarely studied leading to contradictory results. The mechanism of influence of such factors can be based on the changes in attentional processes. The physical arousal influences the attentional processes by narrowing of attention to the central components of the task, and the changes in attentional pattern, in turn, may change the illusion's strength. The aim of the present study was to check the dependence of the illusion's strength on the short-term physical exercise, Harvard step test, using as verbal as sensorimotor responses. **METHODS:** The control and experimental groups have a three-stage testing twice, before and after 5-min rest or Harvard step test respectively. These testing consists of measurement of the heart rate with the help of pulsometer, "verbal response" and "sensorimotor response" stages. At "verbal response" stage the participants had to tell on how many percent differs the length of the central shafts of the stimuli. At "sensorimotor response" stage the participant moved his right hand across the touch screen monitor; then the stimulus disappeared and the participant repeated such movements over the empty touch screen. The relative strengths of the illusions and the mean movements speed were calculated. The same 15 stimuli were used at "verbal response" and at "sensorimotor response" stages. At first, we present to participants five neutral stimuli consisting of two shafts without any flanks, then five stimuli eliciting Müller-Lyer illusion (upper shaft looks longer), then five stimuli eliciting classical Ponzo illusion. **RESULTS AND DISCUSSION:** We failed to find the influence of fatigue elicited by short-term physical exercise onto the illusion's strength. The similar results were obtained in (Lybrand et al., 1954) with the help of Müller-Lyer illusion though the physical load of their participants was much higher. We should underline that even the researches of sensory deprivation performed approximately in the one experimental design with the help of the one Müller-Lyer illusion lead to very different results. E.g., Freedman et al. (1961) claimed that the variability of the individual alignments was significantly greater for the control subjects while the mean strength of the illusion stayed unchanged. In contrast, Ueno and Tada (1965) obtained an increase in average magnitude of the illusion, and Suzuki et al. (1965) had received its decrease. **RESEARCH SUPPORT:** Russian Humanitarian Scientific Fund 16-36-01008.

DAILY HASSLES, STRESS AND PSYCHOLOGICAL WELL-BEING: GENDER DIFFERENCES. S Savenysheva, St. Petersburg State University, St. Petersburg, Russia

Contemporary studies of psychological stress showed that the high level of perceived stress, accumulation of daily hassles have a strong negative impact on the physical health and well-being. The gender analysis indicated a higher level of both general stress and everyday stress in women. However, gender differences in relationship structure of daily hassles, perceived stress and psychological well-being less studied. **THE AIM** of our study was to investigate and compare level and relations of daily hassles, perceived stress, life event and psychological well-being in women and men.

Sample: 190 women and 108 men aged 20-60 years with different marital and educational status lived in Russia. **METHODS:** Questionnaire of everyday hassles, The Life events scale, The Scale of perceived stress-10, The Scales of psychological well-being, Satisfaction with Life Scale. **RESULTS:** A comparative analysis of the level of well-being in men and women revealed no differences in overall index of psychological well-being and satisfaction with life, but analysis of separate components showed that the level of autonomy and competence is higher in men ($p < 0,01$). A comparative analysis of the level of perceived stress and general indicators of daily hassles demonstrated higher level of perceived stress ($p < 0,001$), intensity ($p < 0,01$) and frequency of daily stressors ($p < 0,01$) in women, especially personal daily stressors ($p < 0,001$) and daily stressors associated with the household ($p < 0,001$). Regression analysis of the relation between psychological well-being, satisfaction with life and everyday stressors in women has shown that only personal daily hassles predict satisfaction with life ($p < 0,001$), whereas predictors of psychological well-being were daily hassles associated with the household ($p < 0,01$) and relationship with friend and relatives ($p < 0,05$). Regression analysis of the relation between psychological well-being, satisfaction with life and perceived stress in women indicated that it depends both on stress experience ($p < 0,01$) and resistance to stress ($p < 0,01$). Analysis of the relation between psychological well-being, satisfaction with life and overall stress indicators in men didn't reveal any links, only with separate ones. **CONCLUSION:** Results of our study is consistent with previous results about higher level of perceived stress and daily stressors in women compared to men. Our research showed that daily hassles and perceived stress play a key role in psychological well-being, satisfaction with life in women, but not in men. **RESEARCH SUPPORT:** Grant of RSF 16-18-10088.

MODERATING ROLE OF SELF-ACCEPTANCE FOR PERCEIVED STRESS AND LOCUS OF CONTROL IN ADULTS. O Strizhitskaya, L Golovey, St. Petersburg State University, St. Petersburg, Russia

Modern life of adults implies a variety of situations that can cause overload allostatic load, daily and overall stress. Stress can be associated with a variety of factors and predictors, including physiological, psychological, social and economic variables. Solid body of psychological research uncovered a significant role of various psychological and subjective factors that can be associated with experiences of stress. The questions for stress mechanisms would be if stress can affect relatively stable psychological characteristics or those stable characteristics determined stress resistance and severity of stress experiences. The aim of the study was to investigate associations between

perceived stress (PS) (Perceived stress scale), self-acceptance (SA) (psychological well-being scale) and locus of control (LC) (Rotter's Internal-External Locus of Control Scale). We controlled for education and material satisfaction. We tested 4 alternative models: (1) SA predicts both PS stress and LC that are intercorrelated; (2) SA is affected by both PS and LC that are intercorrelated; (3) LC affects SA that in turn affects PS; (4) PS affects SA that in turn affects LC. These models were based on two major beliefs that stress, LC and SA are affecting each other (models 1 and 2), or there is a pathway between those three characteristics (models 3 and 4). Participants were 336 adults aged 20 – 60 (119 males, 227 females). Correlation analysis showed that PS, LC and SA were correlated. Thus we tried structural analysis to test our models. We added education as an additional variable to fix the models with an objective nonreversible parameter and material satisfaction as it could affect well-being scale (SA). Structural analysis showed that models 1 had good model fit (Chi-square=4.933, df=5, p=.424, RMSEA=.000, PCLOSE=.785) but the association between LC and PS was not significant. Model 2 showed low data fit (Chi-square=11.717, df=5, p=.039, RMSEA=.063, PCLOSE=.268) and the association between LC and PS was not significant. Thus models 1 and 2 were rejected. Model 3 also showed bad model fit (Chi-square=11.808, df=6, p=.066, RMSEA=.054, PCLOSE=.386). Model 4 showed acceptable fit indexes (Chi-square=8.322, df=6, p=.215, RMSEA=.034, PCLOSE=.638). Education and material satisfaction were significant predictors of SA. With material satisfaction excluded significance of the effect for education decreased. Our results add to the field new data on the associations between PS, SA and LC. We showed that stress can affect relatively stable personality characteristics such as SA and LC. These data broadens understanding of psychological component of stress and proves the destructive role of stress for personality. Research was supported by RSF grant 16-18-10088.

EVALUATION OF DENTAL ISSUES IN ADMITTED PATIENTS IN PSYCHIATRIC EMERGENCY: ALBANIAN EXPERIENCE. F Elezi, S Tomori, A Braho, E Sotiri, E Myslymi, Emergency Unit, Psychiatric Service, Neuroscience Pole, Neuropediatrics Service, University Hospital Center "Mother Teresa", Tirana, Albania

BACKGROUND: most of people suffering from psychiatric disorders fail to take care for personal hygiene and especially in relation to oral hygiene. For these reasons is very important to help and encourage them for the prevention and ongoing dental monitoring during the follow up. **OBJECTIVE:** assessing and understanding the oral issues that affect psychiatric patients admitted to Psychiatric Emergency Unit in Psychiatric Service of University Center of Tirana "Mother Teresa", during September 2017. **Methodology:** Are included all patients admitted during the September 2017. The DMFT index was used for evaluation of dental caries and the CPI index for periodontal evaluation. The statistical analyzes were performed with SPSS (Statistical Package for the Social Sciences), using a descriptive statistics to determine averages, standard deviations and frequencies. **Result:** patients had contact with dentist very rarely, 45% performed their own oral hygiene and 65% did not use dental floss. Some patients had great problems and needed of restorations of one surface and some of them needed dental prosthesis. **Conclusion:** in our study most of patients have a high risk of developing oral disorders, however, few carriers visite a dental professional regularly. In addition, the delay to seek treatment and lack of staff training, lead to solutions often crippling.

RELATIONS BETWEEN HAIR CORTISOL AND SELF-REPORTED CHRONIC STRESS AND HEALTH IN YOUNG AND AGE WOMEN. OM Razumnikova, AE Ilinykh, AA Yashanina and NV Asanova, Department of Psychology and Pedagogic of Novosibirsk State Technical University, Scientific Research Institute of Physiology and Basic Medicine, Novosibirsk, Russia

Understanding mechanisms of illnesses under stress has received considerable research attention, but the relations between biologically measured and self-reported chronic stress are characterized by heterogeneous results. It seems that chronic stress leads to a higher sensitivity for negative experiences and more negative assessment of different health states. Hair cortisol is a stable measure of chronic HPA axis activity that can provide a retrospective biomarker of accumulated stress effect. So, the aim of this pilot study was to investigate associations between concentrations of cortisol in hair and self-assessments of perceived stress, emotional intelligence components, and health status in young and age women. The groups of healthy older (66±4 years, n=13) (OW) and young (22±1 years, n=12) women (YW) were involved in the study. The Russian versions of the Trier Inventory for the Assessment of Chronic Stress (TICS) during the last three months, the Emotional Intelligence trait measures (EI-IPIP), and the 36-Item Health Survey (SF-36) (QoL) were used. The hair samples were collected in order to quantify determine an accumulation of the cortisol using a commercially available immunoassay with chemiluminescence detection in the biochemical laboratory of the University of Dresden (Germany). Mean cortisol level was not significantly differed between OW and YW. Whereas YW compared with OW had higher level of the integral index of physical health but lower score of the social functioning scale of the QoL; higher indices of both EI-IPIP and TICS components. Cortisol concentrations tended to negatively correlate with the QoL scale: role limitations caused by emotional problems, and EI scale: empathic concern in OW. Whereas in YW cortisol concentrations significantly and negatively related with vitality and integral index of mental health ($R_s < -0.61, p < 0.05$). Moreover, in YW cortisol in hair positively related with integral score of EI and a scale of "social isolation" as TICS component ($0.70 < R_s < 0.52, 0.03 < p < 0.09$). The groups of OW and YW differed with regard to varied patterns of the EI, QoL, and TICS components. YW is characterized by more multitudinous associations between self-reported stress and emotional intelligence, whereas in OW associations were found between stress and health status components. In summary, results of pilot study show that in different age groups cortisol in hair is specifically related with different self-reported stressors and has specific associations with their emotional regulation and quality of life. This research was funded by the Russian Foundation for Basic Research, grant number 17-06-00166.

OBJECTIVE TOTAL SLEEP TIME IS LONGER THAN SUBJECTIVE TOTAL SLEEP TIME IN PATIENTS WITH SLEEP DISORDERS. J-S Lee, Pusan National University Yangsan Hospital, Yangsan, South Korea