### EPP0967

## N-acetyl-cysteine administration during foetal life improves social behaviour and restores hippocampal bdnf levels in adolescent mice prenatally exposed to a high-fat diet

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**Introduction:** Maternal obesity may affect foetal programming representing a risk for adult mental health. Oxidative stress and inflammation associated with maternal obesity can alter the maturation of neuronal circuits affecting behaviour and mood.

**Objectives:** We investigated the emotional phenotype of male and female mouse offspring born from a high-fat diet (HFD) fed dams. We also tested the efficacy of N-acetyl-cysteine (NAC – an antioxidant) in preventing the negative effects of HFD. We focused on adolescence, an age of main vulnerability for the onset of psychopathology.

**Methods:** Female C57BL/6N mice were fed HFD for 13 weeks and, after 5 weeks, were also exposed to NAC (1 g/kg b.w.) via drinking water, until delivery. The neurodevelopment of offspring was assessed through the homing test. Emotionality was assessed in 35-45-day-old adolescent mice through elevated-plus-maze (EPM) and social interaction tests (SIT). Transcriptomic analysis of hippocampal tissue were performed to identify mechanisms of action of both HFD and NAC. **Results:** NAC was effective in moderating body weight gain in HFD-fed dams. Neither HFD or NAC affected offspring development. Regardless of sex, prenatal HFD reduced exploration and decreased sociability, in EPM and SIT respectively. Prenatal HFD decreased hippocampal levels of BDNF in female offspring. Prenatal NAC administration prevented social anxiety and restored BDNF levels in the HFD group.

**Conclusions:** Data indicate long-term effects of maternal obesity on dams' weight, offspring's behaviour and hippocampal BDNF levels. These effects may be mediated by changes in oxidative stress as NAC was effective as a preventive agent. ERANET-NEURON-JTC 2018 (Mental Disorders) Project "EMBED".

**Keywords:** foetal programming; social anxiety; N-acetyl-cysteine; maternal obesity

#### **EPP0966**

## Emotional eating as a risk factor for body image and life satisfaction

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**Introduction:** Previous studies have shown that emotional eating is associated with binge eating disorder, body image disturbances and depression.

**Objectives:** In this study we wanted to find out if there is a relationship between emotional eating and body image and life satisfaction in non-clinical sample.

**Methods:** The study involved 182 normal participants (153 Female, 29 Male, mean age 22,6  $\pm$  7,3), which were recruited in Moscow, Russia. Emotional eating was measured by the opposite pole of Eating for Physical Rather Than Emotional Reasons subscale of Intuitive Eating Scale-2 (IES-2), body image was measured by Multidimensional Body-Self Relations Questionnaire (MBSRQ), Satisfaction with Life Scale (SWLS) was used to measure the corresponding construct. Correlation analysis was performed in IBM SPSS Statistics 22.0.

**Results:** Emotional eating was associated with the following MBSRQ subscales: lower appearance evaluation (-0,431, p<0,0001), lower body areas satisfaction (-0,335, p<0,0001), as well as lower fitness evaluation (-0,208, p=0,005) and lower health evaluation (-0,182, p=0,014), but higher overweight preoccupation (0,279, p=0,0001) and overestimation of body weight (0,362, p<0,0001). It was also connected to lower satisfaction with life (-0,195, p=0,008).

**Conclusions:** The results of the study allow us to conclude that emotional eating may pose risks to psychological health of a normal individual. It was shown that emotional eating is connected to negative evaluation of one's body appearance, fitness and health state, weight and shape concerns, and even to the lower level of satisfaction with one's life.

Keywords: body image; satisfaction with life; emotional eating

#### **EPP0967**

#### Disordered eating and BMI predict negative body image

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**Introduction:** It is known that negative body image can cause significant emotional distress for an individual and thus lead to lower subjective well-being. Previous research has shown that both disordered eating and body mass are connected to negative body image.

**Objectives:** To examine how disordered eating and BMI can predict different aspects of body image.

**Methods:** A sample of 180 healthy respondents (152 Female, 28 Male, mean age  $22,62\pm7,35$ ) were recruited in Moscow. Disordered eating was measured by Eating Attitude Test (EAT-26; Garner D. et al., 1982), body image was measured by Multidimensional Body-Self Relations Questionnaire (MBSRQ; Cash T. F., 1990). Body mass index (BMI) was calculated on the basis of self-reported data (height and weight). Multiple linear regression analysis was performed in IBM SPSS Statistics 22.0.

**Results:** Regression model with both predictors determined selfclassified weight (SCW; R<sup>2</sup>=0,569, p<0,0001), overweight preoccupation (OWP; R<sup>2</sup>=0,497, p<0,0001), body areas satisfaction (BASS; R<sup>2</sup>=0,259, p<0,0001), and appearance evaluation (R<sup>2</sup> = 0,229, p<0,0001), but only disordered eating symptoms predicted appearance (R<sup>2</sup> = 0,193, p<0,0001) and health (R<sup>2</sup> = 0,036, p<0,05) orientation, and none of the predictors affected fitness or health evaluation and fitness orientation.

**Conclusions:** Symptoms of disordered eating and body mass index in normal population can predict self-evaluation of one's

appearance as less attractive, body size as bigger and weight as heavier. Only symptoms of disordered eating predicted higher extent of investment in one's appearance and health. And neither IBM, nor disordered eating predicted self-evaluation of one's health and fitness or the extent of investment in fitness.

Keywords: body image; Body Mass Index; disordered eating

#### **EPP0968**

# Time perspective and psychological hardiness mediate a COVID-19 related life threat

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**Introduction:** Unpredictable risks of COVID-19 morbidity and mortality make people suffer from threats and fears. Are there any psychological personality traits that correlate with a decrement in such feelings?

**Objectives:** To specify the relationship between psychological characteristics of time perspective, hardiness and COVID-19-related life threat.

**Methods:** We used Zimbardo Time Perspective Inventory, Maddi Hardiness Scale and a 17-point Attitude towards COVID-19 Questionnaire to question 327 Russian university students on social networks. The survey was carried out in the second half of May 2020 in the period of increasing COVID-19 morbidity and mortality rates. The mean age of the respondents was  $21.24\pm2.84$ ; most of them were females (61.16%).

**Results:** The survey showed that every fifth respondent had a high level of COVID-19-related life threat (21.10 %). At the same time, every tenth of the respondents (10.09%) saw no threat to their life in the situation of a fast spreading dangerous novel coronavirus infection. According to the correlation analysis, decrement in feeling personal threat related to the spread of COVID-19 was directly associated (p<0.05) with low indicators on the scales of Negative Past (r=0.16), Hedonistic Present (r=0.13) and Fatalistic Present (r=0.17). Certain inverse relation was found between the level of COVID-19 related life threat and such indicators as psychological hardiness – commitment (r=-0.16), and challenge (r=-0.23).

**Conclusions:** Dispositional orientation to the present and future, as well as psychological characteristics of hardiness may mediate COVID-19 related life threat; therefore, these may be used as a possible basis for preventing stress and mental disorders in population.

**Keywords:** time perspective; psychological hardiness; life threat; COVID-19

#### **EPP0969**

# Mental health conditions in people searching for aesthetic treatments: The importance of early detection.

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**Introduction:** It's established that aesthetic dysfunctions can be associated with psychiatric conditions. In present times, considering the exponential growth of minimally invasive and accessible techniques, alongside with ideals of beauty present in everyday life through exposure in social media, the importance of early detection of mental illness and its impact on the respective outcome should be emphasized. **Objectives:** To review evidence regarding psychiatric disorders in people searching for aesthetic treatments and their impact on the outcome.

Methods: Literature review using Medline database.

**Results:** Around 50% of individuals seeking aesthetic procedures fulfill the diagnostic criteria for psychiatric disorders. The prevalence of Body Dysmorphic Disorder (BDD) can vary from 5-15%, with some studies showing a prevalence of more than 50%. Patients with heightened BDD symptoms are less satisfied with the outcomes of aesthetic procedures which could result in exacerbation of said symptoms. With regards to eating disorders, evidence suggests the initial satisfaction following aesthetic procedures, when observed, is usually transitory, not leading to long-term changes in self-perception relating to body image, nor improving prognosis or quality of life. There's also some evidence suggesting that personality disorders may be a predictor of poor satisfaction with the results of aesthetic treatments.

**Conclusions:** Awareness should be raised in this matter, since psychiatric conditions are more common in patients seeking aesthetic treatments and early identification can lead to a better prognosis by providing patients with the mental health treatment they need; this could also reduce the probability of dissatisfaction and subsequent aggravation of psychiatric symptoms following aesthetic interventions.

**Keywords:** psychiatric conditions; aesthetic; early detection; prevention

## EPP0971

# The relationship between self-disorders (SDS) and depressive/anxious symptoms in a clinical sample of adolescents

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**Introduction:** Self-disorders (SDs) have been described as a core feature of schizophrenia-spectrum disorders. Previous studies conducted on heterogeneous clinical adult and adolescents samples demonstrated that SDs aggregate selectively in the schizophrenia spectrum disorders compared to other disorders.

**Objectives:** To examine the specificity of SDs for schizophrenia spectrum disorders in adolescent inpatient sample.

**Methods:** Fifty-five adolescent inpatients admitted to the Child Psychiatry Unit at the Sapienza University in Rome were assessed for psychopathology using Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS-PL), Structured Interview for Prodromal Syndromes (SIPS/SOPS),Examination of Anomalous Self-Experiences (EASE), Multidimensional Anxiety Scale for Children (MASC), Calgary depression scale for schizophrenia (CDSS)