

Studies 1 and 2. In phase 3, participants made food choices while downregulating the negative affect caused by the induction. In phase 2, participants placed less importance on health ( $b=-0.15$ ,  $z=-5.99$ ,  $p<.001$ ) when making food choices than under neutral conditions (phase 1). In phase 3, participants successfully downregulated their negative affect ( $b=-1.2$ ,  $t=-22.01$ ,  $p<.001$ ) and placed the same level of importance on health when making food choices as in phase 1, indicating that AR applied to incidental affect is an effective method for improving eating behavior. In Study 4 ( $n=120$ ), we pre-registered and replicated our findings from Study 3. In addition, we fit drift-diffusion models to participants reaction time data and show that these results extend to the by-participant weights participants place on health when making food choices.

**Conclusions:** These results are a step towards scalable AR interventions to improve eating behavior.

**Disclosure:** No significant relationships.

**Keywords:** dietary food choice task; affect regulation; eating behavior; negative affect

## O126

### Alexithymia and cortisol awakening response in people with eating disorders

G. Cascino<sup>1\*</sup>, A.M. Monteleone<sup>2</sup>, F. Marciello<sup>1</sup>, V. Ruzzi<sup>2</sup>, F. Pellegrino<sup>2</sup> and P. Monteleone<sup>1</sup>

<sup>1</sup>Department Of Medicine, Surgery And Dentistry, University of Salerno, Baronissi/Salerno, Italy and <sup>2</sup>Department Of Psychiatry, University of Campania "Luigi Vanvitelli", Naples, Italy

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.326

**Introduction:** Alexithymia, that is the inability to recognize and describe one's own emotions, is a transdiagnostic feature across eating disorders (EDs) and it has been associated to a prolonged stress exposure.

**Objectives:** Therefore, we evaluated whether alexithymia affects the hypothalamus-pituitary-adrenal (HPA) axis functioning in patients with anorexia nervosa (AN) or bulimia nervosa (BN).

**Methods:** Twenty-six women with AN and 26 with BN participated in the study. Alexithymia was evaluated by the Toronto Alexithymia Scale-20 and eating-related psychopathology was measured by the Eating Disorder Inventory-2. The activity of the HPA axis was assessed by the salivary cortisol awakening response (CAR). Group differences in saliva CAR were tested by repeated measures 3-way ANOVA with diagnosis and alexithymia as between-subject factors.

**Results:** The prevalence of alexithymia did not differ significantly between the two diagnostic groups ( $\chi^2=1.24$ ,  $p=0.26$ ). Alexithymia was associated with more severe eating-related psychopathology in AN women but not in BN women. A significant reduction in the magnitude of CAR occurred in alexithymic patients with BN compared to non-alexithymic patients with BN ( $t = 3.39$ ,  $p = 0.008$ ), but not in alexithymic women with AN ( $t = 0.67$ ,  $p = 0.54$ ).

**Conclusions:** These results confirm the presence of a more severe eating-related psychopathology in alexithymic individuals with AN and show, for the first time, an association between alexithymia and a dampened basal activity of the HPA axis in BN.

**Disclosure:** No significant relationships.

**Keywords:** eating disorders; alexithymia; cortisol; stress

## O128

### Cortisol, anxiety and cognitive responses to trier social stress test: The first multiple levels assessment of the RDoC "system for social process" in eating disorders

V. Ruzzi<sup>1\*</sup>, G. Cascino<sup>2</sup>, M. Raia<sup>1</sup>, V. Sollo<sup>1</sup> and A.M. Monteleone<sup>1</sup>

<sup>1</sup>Department Of Psychiatry, University of Campania "Luigi Vanvitelli", Naples, Italy and <sup>2</sup>Department Of Medicine Surgery And Dentistry - Section Of Neuroscience, University of Salerno, Salerno, Italy

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.327

**Introduction:** Social dysfunction is a putative risk and maintaining factor for Eating Disorders (EDs).

**Objectives:** We aimed to assess biological, emotional, and cognitive responses to a psychosocial stressor, in order to provide a multilevel investigation of the RDoC social process system in EDs.

**Methods:** Cortisol response to Trier Social Stress Test (TSST) was measured in 105 subjects: 35 women with anorexia nervosa (AN), 32 with bulimia nervosa (BN) and 38 healthy women. In a subgroup of them (23 AN, 21 BN, and 25 control women) anxiety, hunger, and desire to eat throughout the TSST were also rated.

**Results:** Compared to healthy women, AN and BN women showed reduced cortisol reactivity that disappeared after controlling for trait anxiety and ineffectiveness. They also displayed increased anxiety response, while only people with AN reported greater decrease in hunger and desire to eat. Baseline ineffectiveness predicted post-stress body dissatisfaction through the mediation of post-stress anxiety while no significant correlations were found between cortisol and anxiety, hunger, or desire to eat responses

**Conclusions:** People with EDs are characterized by blunted cortisol reactivity and greater anxiety, hunger, and desire to eat responses to a psychosocial stressor. We show a relationship between socio-emotional distress and ED-related attitudes without an association between biological and emotional or cognitive changes. This study provides the first empirical and multilevel support to a deranged functioning of the RDoC "system for social process" in EDs.

**Disclosure:** No significant relationships.

**Keywords:** psychosocial stressor; cortisol reactivity; emotional distress; eating disorders

## O129

### COVID-19 pandemic and eating disorders: What impact on specific and general psychopathology?

E. Barone<sup>1</sup>, F. Marciello<sup>2</sup>, G. Cascino<sup>2</sup>, G. Abbate-Daga<sup>3</sup>, S. Anselmetti<sup>4</sup>, M. Baiano<sup>5</sup>, M. Balestrieri<sup>6</sup>, S. Bertelli<sup>7</sup>, B. Carpiniello<sup>8</sup>, G. Castellini<sup>9</sup>, G. Corrivetti<sup>10</sup>, S. De Giorgi<sup>11</sup>, A. Favaro<sup>12</sup>, C. Gramaglia<sup>13</sup>, E. Marzola<sup>3</sup>, F. Monaco<sup>14</sup>, M. G. Oriani<sup>15</sup>, P. Federica<sup>8</sup>, M. Rania<sup>16</sup>, C. Renna<sup>11</sup>, V. Ricca<sup>17</sup>, P. Salvo<sup>18</sup>, C. Segura-Garcia<sup>19</sup>, F. Scarabel<sup>18</sup>, P. Todisco<sup>20</sup>, U. Volpe<sup>21</sup>, P. Zeppego<sup>13</sup>, P. Monteleone<sup>22</sup> and A. M. Monteleone<sup>23</sup>

<sup>1</sup>Department Of Psychiatry, University of Campania "Luigi Vanvitelli", Napoli, Italy; <sup>2</sup>Department Of Medicine, Surgery And Dentistry, University of Salerno, Baronissi/Salerno, Italy; <sup>3</sup>Department Of Neuroscience, Eating Disorders Center for Treatment and Research, torino, Italy; <sup>4</sup>Nutrimente Onlus, Nutrimente Onlus, Milan, Italy; <sup>5</sup>Department Of Psychiatry, Centro Unico Disturbi Comportamento

Alimentare, udine, Italy; <sup>6</sup>University Of Udine, unit of psychiatry, DAME, udine, Italy; <sup>7</sup>Department Of Mental Health, ASST Santi Paolo e Carlo, Milano, Italy; <sup>8</sup>Italian Psychiatric Association; Secretary Of The Epa-council Of Npas, Department of Medical Sciences and Public Health University of Cagliari, Cagliari, Italy; <sup>9</sup>Department Of Health Science, University of Florence, Florence, Italy; <sup>10</sup>Department Of Psychiatry, 10European Biomedical Research Institute of Salerno (EBRIS), salerno, Italy; <sup>11</sup>Mental Health Department, Asl, Center for the Treatment and Research on Eating Disorders, lecce, Italy; <sup>12</sup>Department Of Neuroscience, University of Padova, padova, Italy; <sup>13</sup>Translational Medicine, Università Del Piemonte Orientale Amedeo Avogadro, Psychiatry Institute, Pinerolo, Italy; <sup>14</sup>Department Of Mental Health, ASL Salerno, salerno, Italy; <sup>15</sup>Department Of Mental Health, ED outpatient service, jesi, Italy; <sup>16</sup>Department Of Health Science, university of Magna Grecia of Catanzaro, catanzaro, Italy; <sup>17</sup>Department Of Neuroscience, Psychology, Drug Research, Child Health, University of Florence, Florence, Italy; <sup>18</sup>Eating Disorders Centre Portogruaro, AULSS4 Veneto orientale, portogruaro, Italy; <sup>19</sup>Department Of Medical And Surgical Sciences, university of Magna Graecia of Catanzaro, catanzaro, Italy; <sup>20</sup>Eating Disorders Unit, Casa di cura “villa Margherita”, arcugnano, Italy; <sup>21</sup>Department Of Neurosciences/dimsc, School of Medicine Università Politecnica delle Marche, Ancona, Italy; <sup>22</sup>Department Of Medicine, Surgery And Dentistry “scuola Medica Salernitana”, University of Salerno, Baronissi/Salerno, Italy and <sup>23</sup>Department Of Psychiatry, University of Campania “Luigi Vanvitelli”, Naples, Italy

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.328

**Introduction:** The coronavirus disease 2019 (COVID-19) pandemic and the resulting containment measures, such as “lockdown” and “social distancing”, have had important consequences on people’s mental and physical health.

**Objectives:** We aimed to study the effect of social isolation and subsequent re- exposure and eventual changes in general and ED-specific psychopathology in people with Eating Disorders (EDs).

**Methods:** Three-hundred twelve Italian people with EDs (179 Anorexia Nervosa, 83 Bulimia Nervosa, 48 Binge Eating Disorder and 22 Other Specific Feeding Eating Disorder) were asked to fill-in an online survey to explore several dimensions such as: anxiety, depression, panic, insomnia, suicide ideation, stress, post-traumatic stress and obsessive-compulsive symptoms. Differences in ED specific and general symptoms among the 3 investigated time periods (before, during and after the end of lockdown) were assessed with a one-way ANOVA with repeated measures. Subsequently, ED diagnosis was introduced as covariate in the analysis in order to investigate the possible contribution on psychopathological changes.

**Results:** ED core symptoms increased during the lockdown but most of them returned to pre-COVID19 levels at re-opening. The severity of general psychopathology also increased during the lockdown and persisted high in the following phase, except for depression and suicide ideation. None of this symptoms was affected by ED diagnosis, participants’age and illness duration.

**Conclusions:** People with EDs showed worsening of both general and specific psychopathology; moreover, changes in general psychopathology persisted in the re-opening period suggesting a higher stress vulnerability in this kind of patients.

**Disclosure:** No significant relationships.

**Keyword:** COVID19 and Eating Disorders

## O130

### Peripheral endocannabinoids in eating disorders and obesity and its relationship with clinical and anthropometric variables

I. Baenas-Soto<sup>1\*</sup>, R. Miranda-Olivos<sup>1</sup>, L. Vos<sup>2</sup>, R. Granero<sup>3</sup>, I. Sánchez<sup>4</sup>, N. Riesco<sup>4</sup>, A. Del Pino-Gutiérrez<sup>4</sup>, E. Codina<sup>5</sup>, J. A. Fernández-Formoso<sup>4</sup>, N. Vilarrasa<sup>6</sup>, N. Virgili<sup>7</sup>, R. Lopez-Urdiales<sup>7</sup>, A. Pastor<sup>8</sup>, R. De La Torre<sup>4,8,9</sup>, S. Jimenez-Murcia<sup>10,11</sup>, C. Soriano-Mas<sup>12</sup> and F. Fernandez-Aranda<sup>13</sup>

<sup>1</sup>Psychiatry, Bellvitge Hospital - IDIBELL, Barcelona, Spain; <sup>2</sup>Medicina, Universidad Barcelona, Barcelona, Spain; <sup>3</sup>Department Of Psychobiology And Methodology, Autonomous University of Barcelona, Barcelona, Spain; <sup>4</sup>Ciber Fisiopatología Obesidad Y Nutrición (ciberobn), Instituto de Salud Carlos III, Madrid, Spain; <sup>5</sup>Department Of Public Health, Mental Health And Perinatal Nursing, School Of Nursing, University of Barcelona, Barcelona, Spain; <sup>6</sup>Ciberdem-ciber De Diabetes Y Enfermedades Metabólicas Asociadas, Instituto de Salud Carlos III, Madrid, Spain; <sup>7</sup>Department Of Endocrinology And Nutrition, University Hospital of Bellvitge-IDIBELL, Barcelona, Spain; <sup>8</sup>Integrative Pharmacology And Systems Neuroscience Research Group, Hospital del Mar Research Institute (IMIM), Barcelona, Spain; <sup>9</sup>Department Of Experimental And Health Sciences, Universitat Pompeu Fabra (CEXS-UPF), Barcelona, Spain; <sup>10</sup>Psychiatry, University Hospital Bellvitge-IDIBELL and CIBEROBN, Barcelona, Spain; <sup>11</sup>Department Of Psychiatry, University Hospital of Bellvitge-IDIBELL, CIBEROBN, University of Barcelona, Barcelona, Spain; <sup>12</sup>Psychiatry, Bellvitge University Hospital-IDIBELL, Barcelona, Spain and <sup>13</sup>Psychiatry, University Hospital Bellvitge-IDIBELL and CIBEROBN, Barcelona, Spain

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.329

**Introduction:** Anandamide (AEA) and 2-Arachidonoylglycerol (2-AG) play a pivotal role in food intake and reward aspects of feeding. Aberrant functioning in the endocannabinoid system has been observed in patients with eating disorders (EDs). This dysfunction may influence the incentive processes stimulating behaviors towards food acquisition or the hedonic evaluation of ingested food.

**Objectives:** The aims of this study are to compare fasting peripheral levels of AEA and 2-AG in ED patients, obese subjects (OB) and healthy controls (HCs), and to explore their association with clinical and anthropometric variables.

**Methods:** The sample included a total of 63 adult women. Peripheral blood samples were collected to investigate fasting levels of AEA and 2-AG in 31 ED patients: 22 Anorexia Nervosa (AN) and 9 Binge Eating Disorder (BED), compared to 21 OB and 11 HCs. Several clinical and anthropometric variables were also assessed.

**Results:** Comparing groups, significant differences in AEA levels were found ( $p=0.001$ ). Specifically, individuals with AN exhibited lower AEA than OB ( $p<0.001$ ) and BED ( $p=0.007$ ), while OB showed higher AEA than HCs ( $p=0.015$ ). 2-AG was positively correlated with hostility dimension in EDs and negatively associated with impulsive traits in OB. AEA showed a direct association with body dissatisfaction in AN, contrary to OB. Finally, in AN, AEA negatively correlated with the body mass index, while 2-AG was positively associated with the fat mass.

**Conclusions:** These results suggest an interaction between biological and clinical factors defining a vulnerability pathway that could help fitting personalized therapeutic approaches in each condition.

**Disclosure:** No significant relationships.

**Keywords:** Anandamide; eating disorders; obesity; 2-Arachidonoylglycerol