

by observing regularities in affective experiences (DOI: 10.1073/pnas.1616056114) and a failure in this regard can produce maladaptive behaviors, one of the hallmark features in several psychiatric conditions.

**Objectives:** To investigate whether MMET are stable over time and which emotion dimensions (e.g., valence, dominance) influence MMET over time.

**Methods:** We selected thirty-seven emotion categories (DOI: 10.1177/0539018405058216) and five different time intervals (from 15 minutes to 4 days). Sixty-two healthy participants rated the likelihood of transition between all possible pairs of affective states at each time interval.

**Results:** As expected, we observed a trend toward uncertainty as the timescale increased. In addition, the probability of shifting between two affective states having the same valence (e.g., happiness and contentment) was rated higher than for emotions with opposite polarity (e.g., happiness and sadness). Even though this pattern becomes gradually noisier for predictions far in the future, it is still present for infradian intervals (Fig.1).

**Conclusions:** Our results suggest that MMET are informed by the valence dimension and moderately influenced by the timescale of the prediction. These findings in the healthy population may prompt the exploration of emotion dynamics in psychiatric conditions. Future studies could leverage the MMET approach to test whether specific psychiatric disorders (e.g., bipolar disorder) are associated with abnormal patterns of emotion transitions.

**Disclosure:** No significant relationships.

**Keywords:** emotion; Emotion Dynamics; social cognition; theory of mind

## O185

### Correlation of neurotrophic and neuropsychological parameters in alzheimer's disease

A. Sidenkova

Psychiatry, Ural State Medical University, Yekaterinburg, Russian Federation

doi: 10.1192/j.eurpsy.2021.371

**Introduction:** Alzheimer's disease (AD) is a neurodegenerative pathology that develops mainly in elderly and senile people. Disruption of BDNF transport or suppression of its production appears to be typical for people of old age.

**Objectives:** Objective: To investigate the influence of Alzheimer's disease on the secretion of brain factors and correlate with neuropsychological profiles.

**Methods:** 12 men (2) and women (10) with Alzheimer's disease were examined. The average age of the subjects was 76.25 + 4.89. Methods: MMSE, ADAS-COG, laboratory - BDNF was performed using the G7611 BDNF Emax (R) ImmunoAssaySystem 5 x 96 wells, BDNF Emax® Immunological test.

**Results:** 2 patients have mild dementia, 8 patients have moderate dementia, 2 patients have severe dementia. The average age of patients with mild dementia was 72.0 + 1.0. The average MMSE score is 16.7 + 3.4. Correlation analysis showed a close relationship between a pronounced decrease in memory in memory tests (ADAS-COG) and a pronounced decrease in blood BDNF content ( $r = 0.676$ ). A close statistically significant relationship was found between a low result of the recognition test and a low blood BDNF content ( $r = 0.598$ ).

**Conclusions:** we assume that blood BDNF is a marker of pathologically accelerated aging of the central nervous system, since low test results for mnemonic function are an indicator of severe degeneration in Alzheimer's disease

**Disclosure:** No significant relationships.

**Keywords:** blood BDNF and dementia; BDNF; Alzheimer's disease

## O186

### With both eyes open – translational research using eye-tracking combined with performance-based evaluation among people with severe mental illness

S. Regev<sup>1\*</sup>, N. Josman<sup>1</sup> and A. Mendelsohn<sup>2</sup>

<sup>1</sup>Occupational Therapy, University of Haifa, Haifa, Israel and

<sup>2</sup>Neurobiology, University of Haifa, Haifa, Israel

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.372

**Introduction:** Individuals with severe mental illnesses (SMI) often find it hard to perform daily activities such as grocery shopping, which require intact executive functions. The use of performance-based evaluations is valuable, but lacks the subjects' point of view during task performance.

**Objectives:** The aim of the current presentation is to bring together performance-based observation and cognitive science methods to provide insights regarding real-life behavior and problem solving in SMI populations.

**Methods:** In this quasi-experimental study, forty-three individuals performed the Test of Grocery Shopping Skills (TOGSS) while wearing an eye-tracking device. Eye-movement patterns served as a proxy of executive functions in people with and without SMI during a real-life ingredient selection task. We hypothesized that significant differences will be found between people with SMI and controls in TOGSS sub-outcomes as well as in eye-fixation durations.

**Results:** TOGSS sub-outcomes indicative of performance efficiency (time and redundancy) were significantly higher in the research group compared to matched controls ( $P < 0.01$ ). Average fixation duration was found to be significantly higher for the research group compared to matched controls ( $P < 0.05$ ) for two of the four item-selection tasks.

**Conclusions:** These preliminary findings indicate that when confronted with a selection task, individuals with SMI spend more dwelling time while selecting ingredients. Further analyses on these data will examine how this time is spent (e.g. focusing on irrelevant information). The outlined approach may prove beneficial in illuminating specific behavioral and physiological difficulties in individuals with SMI, particularly in the evolving Covid-19 situation, which poses novel social and health-related challenges on real-life tasks.

**Disclosure:** No significant relationships.

**Keywords:** real-life; daily activities; efficiency; Executive functions

## O187

### Neuropsychological profile and correlation with outcomes in patients admitted to spdc

M. Benassi<sup>1</sup>, F. Ambrosini<sup>2</sup>, R. Raggini<sup>3</sup>, G. Piraccini<sup>3</sup> and R. Sant'Angelo<sup>3\*</sup>

<sup>1</sup>Department Of Psychology, University of Bologna, Cesena, Italy;  
<sup>2</sup>Psychologist, Independent Researcher, Savignano, Italy and <sup>3</sup>Mental Health Department, AUSL ROMAGNA, Cesena, Italy  
 \*Corresponding author.  
 doi: 10.1192/j.eurpsy.2021.373

**Introduction:** Literature showed that patients suffering from disorders belonging to the schizophrenic (SZ) and bipolar (DB) spectrum have a qualitatively similar but quantitatively different neurocognitive impairment that correlates with the outcomes. However, the majority of former studies are conducted on patients in remission phase.

**Objectives:** This study aims to compare cognitive functions between SZ and DB in the acute phase and their possible correlations with treatment outcomes.

**Methods:** In a prospective longitudinal study conducted at the SPDC Ausl unit of Romagna - Cesena, 57 SZ and 82 DB took part in the study. The diagnosis was based on the SCID5 CV and SCID5 DP. Symptom severity was assessed with BPRS and HONOS both at the beginning and at the end of hospitalization. Executive functions were measured with Tower of London (ToL) and Modified Wisconsin Card Sorting Test (MCST), attention with Attentive Matrices (MA) and Stroop Test (ST), non-verbal logic skills with Colored Matrices by Raven (PM47). The statistical analyzes applied are ANOVA and logistic regression.

**Results:** The cognitive tests did not reveal significant differences between SZ and DB. The logistic regression analysis showed that the scores obtained at the MCST and MA positively correlate with the efficacy of the treatment for both groups.

**Conclusions:** Cognition in DB and SZ patients was similarly impaired, supporting recent theories that placed diagnoses on a continuum of severity. Moreover, the results indicated that also in the acute phase the best predictors of the outcome were flexibility in problem solving strategies and visuospatial attention.

**Disclosure:** No significant relationships.

**Keywords:** Neuropsychological profile; cognitive functions; problem solving; outcomes

## Obsessive-compulsive disorder

### O188

#### The role of mood disorders in the longitudinal course of obsessive-compulsive disorder: Preliminary data from a 20-year prospective follow-up study

S. Bramante<sup>1\*</sup>, A. Borsotti<sup>1</sup>, S. Rigardetto<sup>2</sup> and G. Maina<sup>1</sup>

<sup>1</sup>Neuroscience, università degli studi di torino, torino, Italy and <sup>2</sup>Scdu Psichiatria, Azienda Ospedaliero Universitaria San Luigi Gonzaga, Orbassano, Italy

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.374

**Introduction:** Although OCD is believed to have a chronic course, little research has been conducted on this, and there are discrepant findings. Studies over the last years have found that a significant proportion of patients with OCD shows symptomatic remission over long term, however there are significant variations in sampling, clinical characteristics, follow-up, and outcome assessments.

**Objectives:** The present prospective study aims to examine rates of OCD remission after 20 years of follow up and to explore demographic and clinical predictors of remission.

**Methods:** The study sample consists of adult patients with a principal OCD diagnosis and Y-BOCS total score  $\geq 16$ , who have been referred to the Department of Neuroscience, University of Turin (Italy). OCD symptoms were assessed every 5 years over the 20-year follow-up period. Course data were examined using standard survival analysis methods; Cox proportional hazards regression was used to estimate relative hazards for predictors of remission.

**Results:** There were 360 participants in the study. At year 20, the 28.7 % of the total sample showed OCD remission. Predictor of remission were female gender, lower Y-BOCS mean scores at study entry, longer duration of illness and comorbidity with major depressive disorder. No specific predictors of full remission were found. Lower Y-BOCS mean scores and comorbid bipolar disorder predicted partial remission.

**Conclusions:** This study suggests that a significant proportion of patients with OCD shows remission. Future studies are needed to clearly identify predictors of remission.

**Disclosure:** No significant relationships.

**Keywords:** obsessive compulsive disorder; follow-up; mood disorders; remission

### O189

#### White matter disconnection and decreased functional connectivity between orbitofrontal cortex and the contralateral temporo-occipital cortex in adults with obsessive compulsive disorder

J. Queiroz<sup>1</sup>, J. Oliveira<sup>2</sup>, A. Maia<sup>1</sup>, C. Fonseca<sup>3</sup>, T. Quendera<sup>1</sup>, A. Oliveira-Maia<sup>2,4</sup> and B. Barahona-Correa<sup>2,4\*</sup>

<sup>1</sup>Neuropsychiatry Unit, Champalimaud Research, Champalimaud Foundation Centre for the Unknown, Lisbon, Portugal;

<sup>2</sup>Neuropsychiatry Unit, Champalimaud Research and Clinical Centre, Champalimaud Foundation Centre for the Unknown, Lisbon, Portugal; <sup>3</sup>Department Of Physics, Faculdade de Ciências da Universidade de Lisboa, Lisbon, Portugal and <sup>4</sup>Departamento De Psiquiatria E Saúde Mental, NOVA Medical School | Faculdade de Ciências Médicas de Lisboa, Lisbon, Portugal

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.375

**Introduction:** Obsessive compulsive disorder (OCD) affects 2-3% of the general population. The neurobiology of OCD has been linked to dysfunction of cortico-striatal circuits connecting the orbitofrontal (OFC) to the striatum. Recently, this loop has become an approved target for non-invasive neuromodulatory treatment of OCD.

**Objectives:** To explore structural and functional connectivity of the OFC in OCD subjects and healthy controls.

**Methods:** 14 OCD patients and 12 age/sex-matched controls underwent magnetic resonance imaging (MRI) (3T-Philips scanner) for diffusion tensor imaging (DTI) and resting state functional connectivity (rsFC). DTI images were brain extracted and corrected for movement and eddy currents. A diffusion tensor model was fitted to each voxel and used to generate Fractional Anisotropy (FA) maps. Voxel-wise statistical analysis of FA was performed using Tract-Based Spatial Statistics. RsFC images were