(n = 314; adolescents only) and SPD503-316 (n = 338) were 10–13 week studies of dose-optimized GXR (1–7 mg/day).

In fixed-dose studies, pooled incidences of sedative Results TEAEs with GXR were highest at week 1 (GXR, 13.9–18.7%; placebo, 8.7%) and decreased to placebo levels at week 8 (0–1.4%; placebo, 0%). In contrast, proportions of responders (> 30% reduction from baseline in ADHD Rating Scale IV [ADHD-RS-IV] total score) increased from week 1 (GXR, 29.6-34.8%; placebo, 25.0%) through endpoint (GXR, 66.7-72.2%; placebo, 42.6%). Incidences of sedative TEAEs, but not proportions of responders, increased with GXR dosing. GXR was associated with a statistically significant reduction in ADHD-RS-IV total score from baseline to endpoint in patients without sedative TEAEs in both fixed-dose and dose-optimized studies (GXR versus placebo, effect size=0.49 and 0.67, respectively; *P*<0.001). GXR was associated with statistically significant improvements compared with placebo in both ADHD-RS-IV Hyperactivity/Impulsivity and Inattentiveness subscale scores (P < 0.001). Conclusion These data from pooled GXR clinical trials indicate that incident sedative TEAEs do not contribute to increased treatment response over time, and that sedation and symptomatic improvement are distinct effects of GXR.

*Disclosure of interest* The authors have not supplied their declaration of competing interest.

#### http://dx.doi.org/10.1016/j.eurpsy.2016.01.018

# FC15

## Suicidality and psychiatric comorbidities among adults with childhood identified ADHD: Gender differences – a population-based longitudinal study

K. Yoshimasu<sup>1,\*</sup>, W.J. Barbaresi<sup>2</sup>, R.C. Colligan<sup>3</sup>, R.G. Voigt<sup>4</sup>, J.M. Killian<sup>5</sup>, A.L. Weaver<sup>5</sup>, S.K. Katusic<sup>5</sup>

<sup>1</sup> Wakayama Medical University, Hygiene, Wakayama city, Japan

<sup>2</sup> Boston Children's Hospital, Medicine, Boston, USA

<sup>3</sup> Mayo Clinic, Psychiatry and Psychology, Rochester, USA

<sup>4</sup> Baylor College of Medicine, Pediatrics, Houston, USA

<sup>5</sup> Mayo Clinic, Health Sciences Research, Rochester, USA

\* Corresponding author.

*Objective* To evaluate the effect of comorbid psychiatric disorders (PD) on the association between childhood ADHD and suicidality and the effect of gender on the association between PDs and suicidality among adults with childhood ADHD.

Method Subjects were recruited from a birth cohort of all children born 1976-1982 remaining in Rochester, MN after five years of age. Participating subjects with research-identified childhood ADHD (n = 232; mean age 27.0 years; 72% men) and non-ADHD controls (n = 335; mean age 28.6 years; 63% men) were administered a structured psychiatric interview (MINI International Neuropsychiatric Interview) to assess suicidality and psychiatric comorbidities. Compared to controls, ADHD cases were significantly Results more likely to meet criteria for suicidality [odds ratio (OR)=2.7, 95% CI 1.7–4.5]. Although this association was not moderated by the presence of PDs (P=0.63 for interaction effect), the association between ADHD and suicidality was partially mediated by the presence of PDs [OR decreased from 2.7 to 2.1 (95% CI 1.2-3.5)]. Among adults with childhood ADHD, there was no significant moderating effect of gender on the association between suicidality and PD (P=0.26 for interaction effect). However, the odds of suicidality was 6.1 (95% CI, 2.3–15.9) times higher among males with both externalizing and internalizing PDs compared to males with no disorders; among females the corresponding odds ratio was 3.4 (95% CI, 0.7-16.6).

*Conclusion* Childhood ADHD is significantly associated with adult suicidal risk. Among those with ADHD, associations between suicidality and comorbid psychiatric disorders are more apparent

in men among those with comorbid externalizing and internalizing disorders.

*Disclosure of interest* The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.019

#### **Cognitive neuroscience**

## FC16

#### A novel protocol to assess dual task cost as a potential measure of cognitive reserve

A. Oliveira-Maia<sup>1,\*</sup>, I. Coelho<sup>1</sup>, J.B. Barahona-Corrêa<sup>1</sup>, V. Paixão<sup>2</sup>, M. Camacho<sup>1</sup>, R.M. Costa<sup>2</sup>

<sup>1</sup> Champalimaud Clinical Centre, Champalimaud Centre for the Unknown, Neuropsychiatry Unit, Lisbon, Portugal

<sup>2</sup> Champalimaud Centre for the Unknown, Champalimaud Research, Lisbon, Portugal

\* Corresponding author.

*Introduction* Methods for measuring cognitive reserve (CR) are limited and controversial. Dual task cost (DTC) paradigms, assessing links between gait and cognition, are increasingly regarded as robust measures of CR.

*Objectives* Here, we aimed to validate a simplified methodology for a DTC paradigm in healthy volunteers for application in clinical settings as a measurement of CR.

*Methods* We tested if subtracting by 7's (cognitive task) while walking (motor task) induced a DTC in a sample of 39 healthy young adults. For the cognitive task, we recorded the number of correct and incorrect subtractions, as well as the latency between subtractions. Gait parameters were recorded on a tri-axial accelerometer fixed to the left ankle. Both tasks were performed separately (single task) and simultaneously (double task) to assess the DTC. A battery for neuropsychological assessment and questionnaires to assess quality of life and affective symptoms were also applied, to measure possible correlations with the DTC.

*Results* Subtracting 7's while walking caused significant changes in gait parameters and in cognitive task performance. A significant decrease in the autocorrelation of the accelerometer signal during the dual task was also found (DTC= $37.92 \pm 7.56\%$ ; *P*<0.0001). This measure has not been previously used and may be a more sensitive measure of the dual task induced disturbance of the gait periodic signal pattern. Correlations between DTC and quality of life, affective or cognitive measures were not significant.

*Conclusion* Our study provides an effective, portable and nonintrusive DTC experimental protocol that can be easily applied in clinical settings.

*Disclosure of interest* The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.020

### FC17

# Cortisol, life events and cognition in non-demented subjects: A population-based study

S. Ouanes<sup>\*</sup>, E. Castelao, A. Von Gunten, M. Preisig, J. Popp CHUV, Department of Psychiatry, Lausanne, Switzerland \* Corresponding author.

*Background* Older people are particularly exposed to stressful events, known to activate the hypothalamus-pituitary-adrenal axis. Many studies highlighted the possible deleterious effects of elevated cortisol on cognition, assuming a likely role of stressful events. Yet, very few studies actually examined these assumed links between life events, cortisol and cognition.

Objective To examine associations between salivary cortisol, cognition and life events in a population of non-demented old individuals.

Methods A cross-sectional analysis was conducted using data from Colaus/PsyColaus, a longitudinal population-based study involving 6733 Lausanne residents. Salivary cortisol samples (upon waking, 30 minutes after waking, at 11 am and at 8 pm) were obtained from 799 non-demented participants aged at least 60.

Life events, activities of daily life along with depressive symptoms were assessed using a standardized questionnaire. A comprehensive neuropsychological test battery was used to determine the Clinical Dementia Rating (CDR).

For multiple comparisons, P values were adjusted (P') according to Holm-Bonferroni's method.

Results Cortisol at 11 am and cortisol area under the curve (AUC) were positively correlated with CDR sum of boxes (CDRSOB) scores (P' = 0.035; Rho = 0.097 and P' = 0.024; Rho = 0.110, respectively).The association between cortisol AUC and CDRSOB remained significant after controlling for age, sex, body mass index, education, smoking and depression (P = 0.001;  $\beta = 0.001$ ;  $R^2$  change = 0.016).

The number and the total impact of life events were associated neither with cortisol nor with CDRSOB.

Elevated cortisol was associated with poorer cogni-Conclusions tive functioning yet independently of life events. This suggests that the increased cortisol associated with poorer cognition might be not a mere reflection of stressful events but rather explained by other factors, yet to be elucidated.

Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.021

#### FC18

# The EVACO Project: A new battery for assessing social cognition disorders and related psychiatric disability in schizophrenia

P. Roux<sup>1</sup>,\*, M. Urbach<sup>1</sup>, S. Fonteneau<sup>1</sup>, B. Aouizerate<sup>1,3,4,5,6,7,8</sup>,

F. Berna<sup>1,6,7,8</sup>, L. Brunel<sup>1,9</sup>, D. Capdevielle<sup>1,10</sup>, I. Chereau<sup>1,11</sup>,

F. Berna 45, 15, L. Brunet 4.5, D. Capdeviene 4.5, I. Chereau 4.4
J. Danion <sup>1,7</sup>, J. Dorey <sup>1,12</sup>, C. Dubertret <sup>1,13</sup>, J. Dubreucq <sup>1,14</sup>, C. Faget <sup>1,15</sup>, F. Gabayet <sup>1,14</sup>, P.M. Llorca <sup>1,11</sup>, J. Mallet <sup>1,13</sup>, D. Misdrahi <sup>1,3,4,5,6,7,8,16</sup>, R. Rey <sup>1,12</sup>, R. Richieri <sup>1,15</sup>, F. Schürhoff <sup>1,9</sup>, H. Yazbek <sup>1,10</sup>, C. Passerieux <sup>1,2</sup>, E. Brunet-Gouet <sup>1,2</sup>, FACE-SCZ-Group<sup>16</sup>

<sup>1</sup> Fondation FondaMental, Créteil, France

<sup>2</sup> Service de psychiatrie d'adulte, Centre Hospitalier de Versailles, UFR des Sciences de la Santé Simone Veil, Université Versailles

Saint-Quentin-en-Yvelines, Versailles, France

<sup>3</sup> Centre Hospitalier Charles-Perrens, 33076 Bordeaux, France

<sup>4</sup> Université de Bordeaux, Bordeaux, France

<sup>5</sup> Inserm, Neurocentre Magendie, Physiopathologie de la Plasticité Neuronale, U862, 33000 Bordeaux, France

<sup>6</sup> Hôpitaux Universitaires de Strasbourg, Université de Strasbourg, Inserm U1114, Fédération de Médecine Translationnelle de Strasbourg, Strasbourg, France

<sup>7</sup> Inserm U955, Translational Psychiatry team, Créteil, France

<sup>8</sup> Paris Est University, DHU Pe-PSY, Pôle de Psychiatrie des Hôpitaux Universitaires H.-Mondor, Créteil, France

<sup>9</sup> Service Universitaire de Psychiatrie Adulte. Hôpital la Colombière. CHRU de Montpellier, Université Montpellier 1, Inserm 1061, Montpellier, France

<sup>10</sup> CMP B, CHU, EA 7280 Faculté de Médecine, Université d'Auvergne, BP 69, 63003 Clermont-Ferrand cedex 1, France

<sup>11</sup> Université Claude-Bernard Lyon 1, Centre Hospitalier Le Vinatier Pole Est, BP 300, 39-95, boulevard Pinel, 69678 Bron cedex, France

<sup>12</sup> AP–HP, Department of Psychiatry, Louis-Mourier Hospital, Inserm U894, Université Paris Diderot, Sorbonne Paris Cité, Faculté de médecine. Colombes. France

<sup>13</sup> Centre Référent de Réhabilitation Psychosociale, Centre Hospitalier Alpes Isère, Grenoble, France

<sup>14</sup> Assistance publique des Hôpitaux de Marseille (AP–HM), pôle universitaire de psychiatrie, Marseille, France

<sup>15</sup> CNRS UMR 5287-INCIA, France

<sup>16</sup> FondaMental Academic Centers of Expertise for Schizophrenia (FACE-SZ) group, France

Corresponding author.

The relation of social cognitive disorders and schizophrenic symptoms are well-established. Yet, assessment methods have not reached a consensus. In addition, causal paths between neurocognition, social cognition, symptoms and functional expression are not clearly understood. During the past few years, some authoritative accounts proposed specialized batteries of tests and emphasized theory of mind, emotion recognition, and interpretation bias constructs:

NIMH's "Social cognition psychometric evaluation" battery (Pinkham AE, Penn DL, Green MF, Harvey PD. Schizophrenia Bulletin, 2015):

- "Social cognition and functioning in schizophrenia" (Green MF, Lee J, Ochsner KN. Schizophrenia Bulletin, 2013).

Interestingly, these accounts stemming either from expert consensus and psychometric considerations or from neuroscience knowledge recognized some difficulties in providing a fully usable set of instruments. The project described here (EVACO protocol, funded by the Programme Hospitalier de Recherche Clinique national) follows an alternative approach and aims at providing a psychometrically validated battery. Based on a cognitive neuropsychology view on schizophrenic functional disability, several tests were gathered and are assessed in a 12-months multi-center follow-up of 160 individuals with schizophrenia. The FondaMental foundation network of Expert Centers is involved in recruiting patients from eight centers (Clermont-Ferrand, Colombes, Créteil, Grenoble, Marseille, Montpellier, Strasbourg, Versailles). To-date, the first evaluation of the population has been achieved. Experience reports and inclusions follow-up demonstrate the good acceptability of this battery both on the patients and the evaluator's side. We emphasize the usefulness of this project to meet the clinicians' needs of validated social cognition tools, by describing different scenarios of use.

Disclosure of interest The authors have not supplied their declaration of competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2016.01.022

#### FC19

### The relationship between premorbid adjustment and cognitive dysfunction in schizophrenia

P. Stefanatou<sup>1,\*</sup>, C.S. Karatosidi (MSc)<sup>2</sup>, E. Kattoulas<sup>1</sup>, N. Stefanis<sup>1</sup>, N. Smyrnis<sup>1</sup>

<sup>1</sup> Eginition Hospital, Medical School, University of Athens, 1st Department of Psychiatry, Athens, Greece

<sup>2</sup> Eginition Hospital, Medical School, University of Athens, Clinical Neuropsychology, Athens, Greece

Corresponding author.

Introduction Premorbid adjustment (PA) is one of the main prognostic indicators of schizophrenia. Both social and cognitive deficits observed during the premorbid period hold a predictive value for the onset of schizophrenia.

*Objectives* To investigate how cognitive functions are related to aspects of PA.

To examine the relationship of each PA domain (academic Aims and social) at each of the three developmental stages (childhood,