

same time, Social Functioning Scale (SFS) and SFAS was given to the relatives of the patients who live together. For reliability analyses; internal consistency coefficient, item-total correlation, and split-half reliability was assessed. For validity analyses; explanatory factor analysis, and convergent validity were examined via Spearman correlation.

**Results:** The data from 104 patients with schizophrenia and 26 with schizoaffective disorder whose 75% were males, 69% were single, mean age was 37, the level of education was 10 years was examined. The average onset of the illness was 23 years, and the duration of illness was 14 years. Cronbach's alpha coefficient for SFAS total score was .83, and for factors were between .69 and .77. Split-half reliability coefficient of SFAS was .73. There was a satisfactory correlation between SFAS filled by patients and by relatives ( $r=.60$ ,  $p<0.001$ ). For factor analysis, Kaiser-Meyer-Olkin value was .78, and Bartlett test was significant ( $p<0.001$ ). In explanatory factor analysis, SFAS was found to be composed of three factors (self-care, interpersonal relationships and recreation, independent living) and that they can explain 45% of the total variance. Nine items were omitted because of having lower factor value than .40. Self-care factor had 7-item, interpersonal relationships and recreation factor had 7 items and independent living factor had 4 items. Occupational life could not get in any of factors; however, since it was very important for social functioning, it was added to the scale as fourth factor.

SFAS total score was correlated with PANSS negative subscale ( $r=-.35$ ,  $p<0.001$ ), PANSS-total ( $r=-.29$ ,  $p<0.001$ ), CGI-S ( $r=-.33$ ,  $p<0.001$ ), GAF ( $r=.28$ ,  $p<0.001$ ) and SFS total score ( $r=.52$ ,  $p<0.001$ ).

**Discussion:** Regarding the findings of the study, SFAS was considered a culturally-sensitive, easy-to-use, and valid instrument that objectively assesses the social functioning of the patients with schizophrenia in Turkey.

#### F242. CHILDHOOD ADVERSITY AND PSYCHOTIC EXPERIENCES IN THE GENERAL POPULATION: WHAT IS THE PREDICTIVE ROLE OF RESILIENCE, COPING STYLE AND SOCIAL SUPPORT?

David Mongan<sup>\*1</sup>, Ciaran Shannon<sup>2</sup>, Donncha Hanna<sup>3</sup>, Adrian Boyd<sup>4</sup>, Ciaran Mulholland<sup>2</sup>

<sup>1</sup>Belfast Health and Social Care Trust; <sup>2</sup>Northern Health and Social Care Trust/ Queens University Belfast; <sup>3</sup>Queens University Belfast; <sup>4</sup>Northern Health and Social Care Trust

**Background:** A history of childhood adversity is known to be associated with psychotic disorder as well as subclinical psychotic-like experiences. This study aimed to examine the relationship between specific types of childhood adversity and psychotic-like experiences in a general population sample, and to determine the predictive role of psychological resilience, coping style and perceived social support.

**Methods:** An online survey was conducted with a US-based general population sample of 748 participants (aged 18 – 35 years) using Amazon's Mechanical Turk (an online crowd-sourcing service). Participants completed the following validated measures: the Adverse Childhood Experiences Questionnaire (ACE-Q) as a measure of childhood adversities, the Prodromal Questionnaire (PQ-16) as a measure of psychotic experiences, the Brief Resilience Scale (BRS) measuring level of psychological resilience, the Brief COPE Scale as a measure of predominant coping style, the Multidimensional Scale of Perceived Social Support and the Neighbourhood Cohesion Scale. A series of backwards stepwise hierarchical regression analyses was employed to determine predictors of PQ-16 score.

**Results:** Participants reported an average of 2.99 attenuated psychotic symptoms (from a total of 16 on the PQ-16), and an average of 2.77 childhood adversities (from a total of 10 on the ACE-Q). In the final regression model, which explained 33% of the variance in PQ-16 score, the specific types of childhood adversity which significantly predicted PQ-16 score

were verbal abuse, sexual abuse and physical neglect. Level of resilience and coping via emotional support were significant negative predictive factors of PQ-16 score. The coping styles of self-distraction, denial, substance use, venting, religion and self-blame were significant positive predictors of PQ-16 score. Perceived social support and neighbourhood cohesion were not significant predictors.

**Discussion:** The results of this study add support to the relationship between history of childhood adversity and psychotic-like experiences in the general population. Our data suggest that a differential effect exists dependent on the specific type of adversity (the strongest observed effect was for physical neglect). These findings highlight the need for routine clinical enquiry regarding childhood trauma for patients experiencing attenuated psychotic symptoms. We also found that psychological resilience and coping style were important predictive factors in this relationship (whilst perceived social support and neighbourhood cohesion were not). These may represent possible avenues for psychosocial augmentative interventions in the early stages of the psychosis continuum.

#### F243. INFLUENCE OF METACOGNITION AND IRRATIONAL BELIEFS ON SOCIAL FUNCTIONING IN PSYCHOSIS OF RECENT ONSET

Helena García-Mieres<sup>\*1</sup>, Raquel López-Carrilero<sup>2</sup>, Jordi Cid<sup>3</sup>, Esther Pousa<sup>4</sup>, Ana Barajas<sup>5</sup>, Eva Grasa<sup>6</sup>, Maria Luisa Barrigon<sup>7</sup>, Isabel Ruiz-Delgado<sup>8</sup>, Ana de Apraiz<sup>2</sup>, Fermín González-Higueras<sup>9</sup>, Esther Lorente Rovira<sup>10</sup>, the Spanish Metacognition Study Group, Susana Ochoa<sup>2</sup>

<sup>1</sup>Universitat de Barcelona; <sup>2</sup>Parc Sanitari Sant Joan de Deu; <sup>3</sup>Salut Mental Girona; <sup>4</sup>Institut de Neuropsiquiatria i Addiccions, Hospital del Mar; <sup>5</sup>Centro de Higiene Mental Les Corts, Research Unit; <sup>6</sup>IIB-Hospital Santa Creu I Sant Pau; <sup>7</sup>Fundación Jiménez Díaz Hospital; <sup>8</sup>Servicio Andaluz Salud Málaga; <sup>10</sup>Servicio Andaluz de Salud; <sup>10</sup>ADIRM

**Background:** Social functioning is affected in early psychosis stages. This affection has multiple domains, such as vocational functioning or performance of independent living skills. These different domains are also linked; so elucidating differential or generalized determinants on specific areas and global outcomes is thus a critical step in case conceptualization and the development planning of effective early interventions. The aim of this study was to test the influence of specific domains of metacognition in different and global areas of social functioning.

**Methods:** A cross-sectional study was performed based on baseline data from a main multicenter clinical trial. The sample was composed of 122 patients with psychosis of recent onset treated at one of the nine participating mental health centers from diverse regions of Spain. The order of assessment was a sociodemographic questionnaire, the Positive and Negative Syndrome Scale (PANSS), the Social Functioning Scale (SFS), the Hinting Task (Theory of Mind, ToM), the Beck Cognitive Insight Scale (BCIS), the Internal, Personal and Situational Attributions Questionnaire (IPSAQ), the Irrational Belief Test (TCI) and the Emotional Recognition Test Faces. Pearson correlations and multiple regression analysis were performed.

**Results:** In the first models, results showed that social engagement/withdrawal was explained by Helplessness (9.2% of the variance). Interpersonal communication was explained by Emotional Irresponsibility, internal attribution of negative events, affective JTC and emotion recognition (17.5% of variance). Independence-competence was explained by Helplessness, Emotional Irresponsibility and ToM (16% of variance). Independence-performance was explained by Helplessness (8.2% of variance). Employment/occupation was explained Emotional Irresponsibility (12.4% of variance). Prosocial Activities was explained by Helplessness and

Emotional Irresponsibility (14.4% of variance). Finally, the total score of the SFS was explained by Helplessness and self-reflectiveness (16% of variance). Subsequently, in a second analysis, negative symptoms emerged as a significant mediator for most domains of social functioning.

**Discussion:** In our results, two kind of irrational beliefs, one of the main axes of cognitive therapy, emerged as relevant for social functioning in psychosis of recent onset. However, classic social cognition and metacognition measures were less significant, only ToM and self-reflectiveness influenced some aspects of social functioning. Further analysis of determinants of social functioning in psychosis should explore the role of irrational beliefs and consider them for treatment strategy, along social cognition and negative symptoms.

#### F244. CHILDHOOD PSYCHOTIC EXPERIENCES ARE ASSOCIATED WITH PERSISTENTLY POORER FUNCTIONING INTO YOUNG ADULTHOOD: A 9-YEAR FOLLOW-UP STUDY

Dónal Campbell\*<sup>1</sup>, Colm Healy<sup>1</sup>, Mary Cannon<sup>1</sup>  
<sup>1</sup>*Royal College of Surgeons in Ireland*

**Background:** Psychotic experiences (PEs) are relatively common in childhood and early adolescence, being present in 17% of children aged 9 to 12 (Kelleher et al., 2012). Research suggests that young people who experience PEs are more vulnerable to psychopathology later in life, despite PEs being transient in 78.7% of cases (Zammit et al., 2013). While childhood PEs are associated with poorer functioning (Kelleher et al., 2015), it has not yet been established whether the impact of PEs on functioning persists into later life.

**Methods:** 52 participants from a prospective cohort study (retention rate: 60.4%) of Irish young people were included on the basis that they had completed a clinical interview at all three data-collection time points (T1 mean age: 11.69; T2: 15.80; T3 18.80). Following each interview, participants were scored on the Global Assessment of Functioning (GAF) scale, and given a Current (C-GAF) score and a Most Severe Past (MSP-GAF) score. Fixed-effects repeated-measures models were used to compare the scores of those with a history of PEs at T1 (n=18) to those without (n=34), accounting for age, gender, and childhood functioning. Secondary analyses investigated whether differences in functioning were evident in those who reported transient PEs (only at T1; n=12).

**Results:** Overall, participants who had reported childhood PEs (T1) received significantly lower C-GAF scores ( $F = 31.553, p < .001$ ) and MSP-GAF scores ( $F = 79.377, p < .001$ ) than those without PEs. Simple effects analysis indicated that deficits in the PE group were evident at each time point for both C-GAF scores (T1:  $p = .001$ ; T2:  $p < .001$ ; T3:  $p = .002$ ) and MSP-GAF scores (T1:  $p < .001$ ; T2:  $p = .001$ ; T3:  $p < .001$ ), indicating poorer functioning from childhood, through adolescence, into early adulthood. There was no significant effect of the co-variables.

When the analysis was restricted to a comparison of participants who reported PEs at T1 only (i.e. transient PEs) and those with no history of PEs, the PE group had poorer functioning scoring than their peers across the three time points (C-GAF:  $F = 17.709, p < .001$ ; MSP-GAF:  $F = 32.247, p < .001$ ).

**Discussion:** The analysis provides longitudinal evidence that the presentation of PEs is associated with persistent poor global functioning throughout adolescence and into early adulthood, even when the phenomena are transient. PEs appear to be a marker for vulnerability that extends beyond mental disorder. These results tentatively suggest a causal link between PEs and poorer functioning later in life, as the difference in functioning between the groups in early adulthood was still evident after accounting for childhood functioning. Moreover, the disparity between the groups is clinically relevant, with the PE group scoring one to two categories lower than their peers on the GAF scale even into early adulthood. Childhood PEs are an excellent prognostic marker for future functioning and providing targeted early intervention for these individuals may reduce the likelihood of developing a significant clinical disorder later in life.

#### F245. COGNITIVE RESERVE DIFFERENCE IN AFFECTIVE AND NONAFFECTIVE PSYCHOSIS

Silvia Amoretti\*<sup>1</sup>, Bibiana Cabrera Llorca<sup>2</sup>, Gisela Mezquida<sup>2</sup>, Manuel J. Cuesta<sup>3</sup>, Mara Parellada<sup>4</sup>, Ana Gonzalez-Pinto<sup>5</sup>, Iluminada Corripio<sup>6</sup>, Eduard Vieta<sup>7</sup>, Miquel Bernardo<sup>1</sup>

<sup>1</sup>*Hospital Clinic of Barcelona, University of Barcelona*; <sup>2</sup>*Hospital Clinic Barcelona, Institut Clinic Neurociencies*; <sup>3</sup>*Complejo Hospitalario de Navarra, IdiSNA, Navarra Institute for Health Research*; <sup>4</sup>*Hospital General Universitario Gregorio Marañón, Universidad Complutense de*; <sup>5</sup>*Hospital Universitario Araba, Universidad del País Vasco*; <sup>6</sup>*Hospital Santa Creu i St. Pau*; <sup>7</sup>*Institute of Neuroscience, Hospital Clinic, University of Barcelona*

**Background:** The cognitive reserve (CR) refers to the capacity of an adult brain to cope with pathology in order to minimize the symptoms (Stern, 2002). Recent studies have shown that CR is associated with clinical, functional and cognitive outcomes in patients with severe mental illness (de la Serna et al., 2013; Forcada et al., 2015; Anaya et al., 2016; Amoretti et al., 2016; Grande et al., 2017). Higher CR has been related to a later onset of psychosis, greater adherence and fewer psychotic symptoms (Barnett et al., 2006). However, there are no studies that evaluate longitudinally the role of CR depending on the diagnosis.

The objective is to analyze the impact of CR according to the diagnosis and to study whether having a high CR may be associated with better clinical, functional and cognitive outcomes.

**Methods:** We gathered all the relevant clinical and sociodemographic data. All subjects were assessed clinically, neuropsychologically and functionally at baseline and after a two-year follow-up. To assess CR, three proxies have been integrated: premorbid IQ, years of education-occupation and leisure activities. To determine whether the level of CR was associated with clinical, functional and neuropsychological outcomes and whether it was different between diagnoses, a multivariate analysis of variance was used.

**Results:** 285 DSM-IV patients with first episode of psychosis (FEP) were enrolled. The sample was divided into affective and non-affective groups.

In the non-affective group, those with high CR are older and had a better socioeconomic status, better functioning and cognitive performance and lower symptoms, as well as a shorter duration of untreated psychosis (DUP) and a later age of onset. After 2 years of follow-up, they showed significant differences in all the cognitive domains evaluated, except for the executive functions.

In the affective group, the patients with high and low CR showed differences in positive and manic symptoms, as well as in verbal memory at baseline. At 2 years of follow-up the differences were observed in functionality, positive and negative symptoms and in verbal memory. There were no significant differences in terms of age, gender, DUP, or age of onset, although significant differences were found in socioeconomic level ( $p = 0.038$ ).

**Discussion:** Higher CR can result in better recovery and functioning and in higher cognitive performance in patients with a FEP. Therefore, we propose that early interventions focused on the promotion of neuropsychological abilities and CR could reduce the harmful impact of this disease. However, it is necessary that these interventions should be personalized taking into account that CR plays a differential role according to the diagnosis.

#### F246. A SYSTEMATIC REVIEW COMPARING THE NEURAL CORRELATES OF EMPATHY ASSOCIATED WITH THE ONSET AND PROGRESSION OF SCHIZOPHRENIA

Meneshka Ponnampalam\*<sup>1</sup>  
<sup>1</sup>*The University of Birmingham*

**Background:** Empathic deficits present in nearly all Schizophrenia patients (SCZ). These result from impairments in various social cognitive tasks, often leading to social isolation and withdrawal. There is evidence that