

statistical analyses have been proposed: Admixture analysis and Maximum Covariance Analysis. The latter approach was developed by Meehl and Golden (1982) and comprised several taxometric methods for the purpose of detecting the existence of a latent class variable. No previous studies have been reported on symptoms of psychosis.

In the current study taxometric procedures were applied to 10 psychotic symptoms from the SAPS and the SANS symptoms. A sample of 660 consecutive admissions for acute psychotic episode was analyzed. The results are more consistent with the hypothesis that symptoms of psychosis are better characterised as a dimensional construct.

### S39.2

Evidence that three dimensions of psychosis have a distribution in the general population

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**Background:** The aims of the study were: i) to examine, using clinical symptoms of patients as a template, whether the correlated but independent dimensions of positive, negative and depressive symptoms that have been identified in clinical psychosis, also have a distribution as non-clinical experiences in the general population, and ii) to establish to what degree population variation in experience of positive and negative features of psychosis is actually independent of experience of depression.

**Method:** In a representative population sample of 932 young men, we measured experiences of positive, negative and depressive features of psychosis, using a 40-item self-report instrument. Confirmatory factor analysis was used to compare the fit of hypothesised one-, two- and three factor solutions.

**Results:** A three-factor model of separate depressive, positive and negative dimensions provided a better fit to the data than either a two-factor or unidimensional model. All three dimensions were correlated with each other, but also showed good discriminant validity in relation to established scales, confirming their relative independence.

**Conclusion:** The data suggest that the correlated dimensions of clinical psychosis also have a distribution in the general population, and that depressive symptoms may form an integral part of the experience of psychosis.

### S39.3

Schizotypy and neurocognitive deficits in a non-clinical population

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Weaker phenotypes of psychosis exist in the general population. It would be therefore of interest to explore the potential association between sub-clinical dimensions of schizotypy and neurocognitive markers for schizophrenia in non-clinical populations. As part of the ASPIS (Athens Study of Psychosis Proneness and Incidence of Schizophrenia), 1413 apparently healthy young conscripts undergoing their obligatory military service completed two self-rated schizotypy scales, the SPQ (Schizotypal Personality Questionnaire) and the PAS (Perceptual Aberration Scale). Neurocognitive performance was evaluated with computerised tasks of sustained

attention ability (CPT-IP), verbal and spatial working memory (N-BACK). Regression analysis revealed that state psychopathology (SCL 90R) and deficits in CPT-IP performance, but not deficits in working memory, had a significant effect on the "negative" schizotypy factor scores of the SPQ. This may indicate that young adults, who experience severe interpersonal difficulties and social isolation, have primarily an encoding cognitive impairment in information processing. In contrast, deficits in spatial working memory, but not in sustained attention, or verbal working memory had a significant effect on PAS, indicating subtle functional prefrontal cortex impairment in apparently healthy young males who endorse aberrant body perceptual experiences.

### S39.4

Antisaccade and smooth eye pursuit in a sample of 2000 young males

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During the last 30 years a growing literature has focused on the study of eye movements in schizophrenic patients. Smooth eye pursuit and antisaccade abnormalities in these patients as well as in their first-degree relatives resulted in the consideration of eye movement performance indexes as potential biological markers for the identification of psychosis prone individuals. We have concluded the first part of a prospective study measuring eye movement indexes in a sample of 2000 conscripts of the Greek Air Force with the aim of identifying their potential as predisposing factors for the later development of psychosis. The conscripts also completed a battery of cognitive and psychometric evaluation tests. The analysis of the database so far showed that antisaccade as well as smooth eye pursuit performance was very weakly if at all correlated with schizotypy in this population as this was measured using the Perceptual Aberration Scale (PAS) and the Schizotypal Personality Questionnaire (SPQ) and the Symptom Checklist 90-R. The large variability of the normal performance and its implications in the study of eye movements in psychosis is discussed.

### S39.5

Developmental instability in schizotypy and psychosis

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It has been suggested that presence of markers of prenatal disturbance as minor physical anomalies and alteration of expected symmetries in schizophrenia should be understood from the perspective of developmental instability. Genes and intrauterine environmental factors have been involved in the origin of the disturbed neurodevelopment of these patients. Study of dermatoglyphic variables (a-b ridge count and fluctuating asymmetry from the a-b) and dermatoglyphic abnormalities may constitute enduring evidence of a prenatal insult occurred during the first or second trimester of intrauterine life. The aim of the communication is to present some recent studies showing the relation found between these markers and i) psychosis, in samples of psychotic and healthy twins, ii) schizotypy, in individuals from the general population. The high frequency of dermatoglyphic anomalies found in the affected twins compared to the healthy suggested that environmental factors acting early during pregnancy contribute towards the liability to develop psychosis later. High levels of fluctuating asymmetry were associated with the negative dimension of schizotypy suggesting early developmental instability. It is interesting to remark the detection of