\$250 Poster Session III

## T49. SOCIODEMOGRAPHIC AND LIFESTYLE FACTORS ASSOCIATED WITH GOOD PERFORMANCE IN PAIRED ASSOCIATES LEARNING TEST IN PATIENTS WITH SCHIZOPHRENIA

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**Background:** Schizophrenia patients have been found to have long lasting, clinical state independent impairments in intellectual abilities as well as in specific cognitive domains of which visual learning and memory are central to our current study.

The main aim of this study was to investigate the sociodemographic and lifestyle factors associated with good visual learning and memory in patients with schizophrenia in a sample of patients.

**Methods:** The basic population for this study consists of Finnish SUPER study on genetic mechanisms of psychotic disorders (SUPER), part of the Stanley Global Neuropsychiatric Genomics Initiative. The Northern Finland Birth Cohort 1966 (NFBC 1966) functioned as a reference group to define good cognitive performance.

The Finnish SUPER study on genetic mechanisms of psychotic disorders is a part of the international Stanley Global Neuropsychiatric Genomics Initiative. The objective of the study is to understand the genetic and biological background of psychotic disorders.

The participants of the present study were patients with clinical diagnosis of schizophrenia who were born between 1950–1979 (N=1,907). The reference group of members of the NFBC 1966 consisted 5,506 individuals aged 46-47 years.

Paired Associates Learning (PAL) was used both in SUPER and NFBC 1966 studies. PAL test measures visual memory and new learning. We used the primary outcome variable of 'total errors adjusted' (TEA) which assesses learning over repeated attempts. Lower than the mean score of TEA of NFBC 1966 was used as cut-off for good performance in PAL test. SUPER participants with good performance in the PAL test were compared to other SUPER participants.

Participants in SUPER study were interviewed and filled in a questionnaire about general mental wellbeing, subjective health and lifestyle factor. The association of following sociodemographic and lifestyle factors were investigated: education, age, marital status, self-rated memory, psychotropic medication use, alcohol consumption and cigarette smoking.

**Results:** Of the SUPER participants, 129 (6,9 %) performed at least on the level on which 50% of the participants of the NFBC 1966 performed. Of SUPER participant males 5,9 % and of the females 8,1 % performed on this level.

Performing above the NFBC 1966 50% level in the PAL test was associated with higher educational level and higher use of alcohol in males, and with higher educational level and being married in females.

**Discussion:** In previous studies age, education, duration of illness, severity of symptoms have been found to count for some of the overall impairments found in schizophrenia. We found a subgroup of schizophrenia patients with good visual learning and memory and sociodemographic and lifestyle factors that were associated with good performance. In our study education and marital status in women and alcohol use in men was associated with better performance in PAL test.

## T50. NEURAL BASIS FOR THE VISUAL WORKING MEMORY DEFICIT IN PEOPLE WITH SCHIZOPHRENIA: MERGING EVIDENCE FROM FMRI AND EEG

Abstract not included.

## T51. VERBAL MEMORY TRAJECTORIES IN CHRONIC INDIVIDUALS WITH SCHIZOPHRENIA ALONG 6 YEARS

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Background: Individuals with schizophrenia (SZ) present different positive, negative and cognitive symptoms that impact psychosocial functioning. Cognitive impairments are shown to be present even in premorbid stages of psychosis, which is related to the neurodevelopmental model of SZ. However, although well described in the literature, the trajectories and mechanisms of cognitive symptoms are still unclear. Some evidence suggest that the deficits may remain stable after the first episode and follow the normal course of aging. Conversely, other studies show a decline in cognitive performance related to the chronicity of the disorder. A central domain widely studied in SZ because of its relationship to functional outcomes is verbal memory (VM), which is particularly vulnerable to aging. Therefore, our aim was to investigate the trajectory of memory performance after 6 years in a sample of chronic individuals with SZ to bring further evidence for the two possible hypotheses (stability vs. progression).

Methods: We recruited 28 individuals with SZ (18 male, 10 female) from an outpatient clinic from a tertiary hospital in Porto Alegre, Brazil. These participants were part of a previous study, resulting in two point assessments of 6 years difference. Patients were stable and receiving pharmacological treatment. We conducted clinical interviews to collect sociodemographic and clinical data. Memory was assessed through the Hopkins Verbal Learning Test Revised (HVLT-R) on the two time points. Scores were transformed to z based on a healthy control sample. Analysis were conducted in the SPSS 18 and included general linear models and other exploratory analysis. The local ethics committee approved this study. Results: On the first assessment, patients had 37.32(±11.28) years old, 10.54(±3.68) years of education, and 13.96 (±10.52) years since disease onset. Patients showed deficits in memory performance in both time points (T1:  $Z = -1.56(\pm 1.19)$ , T2:  $Z = -1.72(\pm 1.19)$ . However, there was no difference between baseline and follow-up after 5.78 ( $\pm 0.9$ ) years for the total immediate recall (p=.516). Additionally, we did not find significant effects of age and years of education to memory performance. Interestingly, duration of illness had a main effect predicting memory performance, however this was independent of time points (p=.003). Interestingly, 53.6% of patients decreased its performance on the follow-up, while 46.4% increased it. When