

Poor Premorbid School Performance Predicts Decline of Cognition in Schizophrenia in Midlife - a Nine-year Follow-up in the Northern Finland Birth Cohort Study 1966

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Introduction. Though neurocognitive dysfunctions are common in schizophrenia, the course and predictors of change of cognition remain uncertain.

Objectives. To understand the longitudinal changes and their predictors in cognition, which is important for the etiological investigation of schizophrenia.

Aims. To analyse if premorbid school performance, age of illness onset and the severity of illness predicts change in cognition in schizophrenia in a general population sample.

Methods. The sample included cases with schizophrenia spectrum disorder from the Northern Finland 1966 Birth Cohort. Data on school marks at age 16 years and severity of symptoms and occupational functioning around first episode and after years of illness were gained from national registers, hospital notes and interviews. Verbal and visual memory and executive functioning were measured twice, at ages 34 and 43 years. The number of cases varied in analyses from 29 to 41, depending on the analysed cognitive test.

Results. Association between lower school marks at age 16-years and decrease in executive functioning ($p=0.032$) and visual learning and memory ($p=0.039$) was found, even when adjusted by age of illness onset and cognitive functioning at age 34-years. Change of cognition was not predicted by severity of symptoms nor occupational functioning. Male gender associated to decrease of executive functioning ($p=0.032$) and earlier age of illness onset to decrease of visual learning and memory ($p=0.045$).

Conclusions. School performance at age 16 years associates to later longitudinal change of cognition. Based on our results, later cognitive functioning may reflect the evolution of schizophrenia illness.