

Asperger syndrome and schizophrenia Psychiatric and social cognitive aspects

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- II. Lugnegård, T., Unenge Hallerbäck, M., Gillberg, C. (2011). Personality disorders and autism spectrum disorders: what are the connections? *Comprehensive Psychiatry* (in press)
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Background: Asperger syndrome (AS) and schizophrenia are psychiatric disorders often implying low global social functioning and a life-long course. Both disorders are of neurodevelopmental origin and genetic factors are prominent. Diagnostic criteria concerning age of onset, life course and the presence of psychotic symptoms differ markedly across the two disorders. However, considerable similarities regarding social cognitive and neurocognitive deficits as well as developmental delays have been noted. The boundaries between AS and schizophrenia are still not clear, and particularly not between the broader concepts of autism spectrum and schizophrenia spectrum. This thesis aims to explore similarities and differences between AS and schizophrenia by using a cross-sectional approach. Psychiatric comorbidity in young adults with AS was studied, as well as occurrence of personality disorders according to DSM-IV. Social cognitive ability and self-report of autistic traits were compared across a group with AS, a group with schizophrenia and a non-clinical comparison group. **Method:** Fifty-four individuals (26 men, 28 women) with a clinical diagnosis of AS were given the Structured Clinical Interview for DSM-IV Axis I Disorders and the Structured Clinical Interview for DSM-IV Axis II Disorders. The clinical AS diagnosis was confirmed by performing the Diagnostic Interview for Social and Communication Disorders with a parent. The same AS study group, another group of 36 individuals (22 men, 14 women) with schizophrenic psychosis (schizophrenia, schizoaffective disorder, schizofreniform psychosis, psychotic disorder NOS) and a non-clinical comparison group (19 men, 30 women) were compared regarding self-report of autistic traits measured by the Autism-Spectrum Quotient (AQ) and as regards social cognition, as indexed by the Animations Task and the Reading the Mind in the Eyes Test. **Results:** Of the individuals with AS, 70% had experienced at least one episode of major depression and 50% had suffered from recurrent depressive episodes. Anxiety disorders were present in about 50%. No one fulfilled criteria for schizophrenia, and other psychotic disorders and substance-induced disorders were uncommon. Approximately half of the group fulfilled diagnostic criteria for a personality disorder, all within cluster A or cluster C according to the DSM-IV. Comparison on social cognitive ability across AS, schizophrenic psychosis and the non-clinical sample, demonstrated significant impairments in the two clinical groups, the schizophrenia group being the most impaired. Both clinical groups demonstrated significantly higher total AQ scores than the non-clinical group. The difference across the AS and schizophrenia groups was small, but significant, with the AS group demonstrating higher scores. **Conclusions:** The phenotypes of AS and schizophrenia show considerable overlap regarding both social cognitive impairments and self-report of autistic traits. Nevertheless, among young adults with a clinical diagnosis of AS, schizophrenia does not appear to be overrepresented. However, other psychiatric disorders, particularly related to mood and anxiety, are common in AS, and about half meet criteria for personality disorders. Future research on genetic susceptibility and the etiology of neurodevelopmental disorders will benefit from approaches based on more refined endophenotypes as well as including several diagnostic domains, rather than being based solely on established diagnostic criteria.

Keywords: Asperger syndrome, autism spectrum, schizophrenia, Autism-spectrum Quotient, Animations Task, Reading the Mind in the Eyes Test, personality disorder

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