# GIRLS WITH SOCIAL AND/OR ATTENTION IMPAIRMENTS

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#### ABSTRACT

Background: This study set out to increase knowledge about the clinical presentation, impairment level, associated problems, and screening/identification of girls coming to clinics with non-specified social and/or attention deficits. Material and methods: An in-depth case study of six girls presenting to clinicians with social deficits had showed that they all met criteria for autism, in spite of the fact that this diagnosis had not previously been considered. This led to the planning of a much bigger study including in-depth assessment of one hundred girls referred for social and/or attention/academic problems and a matched group of sixty girls from the community. The clinical assessments were all performed by the author and a small group of paramedical colleagues, consisting of neuropsychologists, educationalists, physiotherapists, and a social worker. A new autism spectrum screening instrument (the ASSQ-REV, an expanded version of the well validated autism screening tool ASSQ) aimed at identifying girls with previously unrecognised features of autism was developed and tested among school age girls from the Clinic group, and among matched Clinic boys and Community girls, Results: The main results indicated that when girls present with impairing social and/or attention deficit problems, they usually (in more than ninety per cent of the cases) have autism spectrum disorder (ASD), attention-deficit/hyperactivity disorder (ADHD) or both. Community girls meet criteria for such disorders only in a few per cent of all cases. Parents had usually noticed deviant development or behavioural problems before child age three years, and 47% had consulted a professional before age four (without being adequately helped or understood). The mean child age for a main diagnosis of ASD or ADHD was 8.8 years and 13.0 years, respectively. Clinic girls with ASD usually have co-existing symptoms of ADHD, amounting to full clinical diagnostic status, and at least one of four Clinic girls with ADHD show autistic traits. The ASD and ADHD groups had the same high rates of psychiatric comorbidity, including oppositional defiant disorder, anxiety and/or depressive conditions as well as impairing sleep problems. In addition, they very often have mild-moderate motor control problems, amounting to impairing developmental coordination disorder in a large minority of all cases. Other frequently experienced consequences for school-age girls with ASD and/or ADHD are underachievement and bullying in school settings. Girls with ASD had more problems with global functioning and adaptive levels of daily living skills than girls with ADHD. The ASSO-REV screening tool does not appear to work better than the ASSO in identifying girls with ASD. However, certain individual items from the ASSQ-REV seem to work well in separating boys and girls with ASD. Discussion: Most girls with clinically relevant social and/or attention deficits (presenting at clinics before adult age) usually have ASD, ADHD or a combination of the two. Taking into account the early (or very early) onset of a variety of symptoms and the severe consequences of them, every girl assessed for such problems or "unexplained" low global functioning should promptly be worked up from the point of view of confirming or refuting diagnoses of these disorders. In addition, once the ASD and/or ADHD has been identified, it is essential to continue with a broad assessment battery including motor control tests, reading and writing tests, and interview and observation with a view to identifying co-existing psychiatric disorders such as oppositional defiant disorder, anxiety disorder, depressive states, obsessive-compulsive disorders and sleep disorder. The ASSQ-REV did not increase precision in targeting girls with ASD, but individual items from this instrument clearly separated girls with ASD from boys with ASD (and Community girls without psychiatric problems). These items should be considered for inclusion together with existing screening instruments for ASD and other neuropsychiatric disorders so that more girls with "hidden" neurodevelopmental impairment might be recognised at early school age at the very latest. A better understanding of girls' neuropsychiatric symptoms is needed in health care and in school settings. Key words: Autism Spectrum Disorder (ASD), Attention-Deficit/Hyperactivity Disorder (ADHD), girls, psychiatric comorbidity, Developmental Coordination Disorder (DCD), Reading/Writing Disorder (RWD), school situation, Autism Spectrum Screening Questionnaire (ASSQ), ASSQ-REV

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- Kopp, S., and Gillberg, C. (1992). Girls with social deficits and learning problems: autism, atypical Asperger syndrome or a variant of these conditions. *European Child and Adolescent Psychiatry*, 1, 89-99.
- II. Kopp, S., Berg-Kelly, K., and Gillberg, C. (in press). Girls with social and/or attention deficits: a descriptive study of 100 clinic attenders. *Journal of Attention Disorders*.
- III. Kopp, S., Beckung, E., and Gillberg, C. (2010). Developmental coordination disorder and other motor control problems in girls with autism spectrum disorders and/or attention-deficit/hyperactivity disorder. Research in Developmental Disabilities, 31, 350-361.
- IV. Åsberg, J., Kopp, S., Berg-Kelly, K., and Gillberg, C. (2010). Reading comprehension, word decoding and spelling in girls with autism spectrum disorders (ASD) or attention-deficit/hyperactivity disorder (AD/HD): performance and predictors. *International Journal of Language and Communication Disorders*, 45, 61-71.
- V. Kopp, S., and Gillberg, C. (2010). The Autism Spectrum Screening Questionnaire (ASSQ) - Revised Extended Version (ASSQ-REV): an instrument for better capturing the autism phenotype in girls? Manuscript submitted for publication.

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