

Literacy and comprehension in school-aged children: Studies on autism and other developmental disabilities

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Avhandling för avläggande av filosofie doktorsexamen i psykologi, som med vederbörligt tillstånd av samhällsvetenskapliga fakulteten vid Göteborgs Universitet kommer att offentligens försvaras fredagen den 6 november, 2009, kl. 10.00, sal F1, Psykologiska institutionen, Haraldsgatan 1, Göteborg

Fakultetsopponent: Professor Elena Grigorenko, Child Study Center, Yale University, New Haven, USA samt Moscow State University, Moskva, Ryssland.

This thesis consists of a summary and the following five studies:

- I. Åsberg, J., Dahlgren, SO. & Dahlgren Sandberg, A. (2008). Basic reading skills in high-functioning Swedish children with autism spectrum disorders or attention disorder. *Research in Autism Spectrum Disorders*, 2, 95-109.
- II. Åsberg, J., Kopp, S., Berg-Kelly, K. and Gillberg, C. (In press). 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*.
- III. Åsberg, J. (2009). Patterns of language and discourse comprehension skills in school-aged children with autism spectrum disorders. Manuscript submitted for publication.
- IV. Åsberg, J. & Dahlgren Sandberg, A. (2009). Dyslexic, delayed, precocious or just normal? Word reading skills of children with autism spectrum disorders. Manuscript submitted for publication.
- V. Åsberg, J. & Dahlgren Sandberg, A. (2009). Discourse comprehension intervention for high-functioning students with autism spectrum disorders: Preliminary findings from a school-based study. Manuscript submitted for publication.



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Abstract

Åsberg, J. (2009). *Literacy and comprehension in school-aged children: Studies on autism and other developmental disabilities*. Department of Psychology, University of Gothenburg, Sweden.

The present thesis consists of five studies and addresses literacy and comprehension skills in children with autism spectrum disorders (ASD, including Asperger's disorder) and, to a lesser extent, attention disorders (eg. Attention Deficits Hyperactivity Disorder; ADHD). Although a completely clean and coherent picture of the abilities of these groups was not attained in the studies, the findings indicate that difficulties in reading comprehension and/or listening comprehension of connected discourse are common in children with ASD and children with ADHD at the group level (Study I, II and/or III). For children with ADHD, such difficulties often co-occurred with word decoding and spelling difficulties (Study II). Word decoding skills were more variable for students with ASD, yet typically unimpaired. These findings are broadly consistent with previous research. When difficulties in word decoding were observed in children with ASD, such difficulties appeared to conform to a 'normal pattern' in terms of underlying cognitive and psycholinguistic abilities (e.g. poor phonological awareness and rapid naming) (Study IV). Finally, for children with ASD, discourse-level comprehension appeared to be more difficult than what one would expect from non-verbal cognitive level and basic language comprehension skills (study III). However, there were also initial indications that the discourse comprehension skills in ASD were amenable of positive change through educational intervention in collaboration with school staff (Study V). The results presented in the thesis are of importance for professionals who are concerned with understanding and supporting literacy and comprehension development in all children.

Key words: autism, Asperger's disorder, reading, literacy, language, discourse comprehension, cognition, special educational needs.

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