

**THE UNDERLYING BASIS OF THE COMMUNICATION DIFFICULTIES OF
HIGH FUNCTIONING PERVASIVE DEVELOPMENTAL DISORDER**

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DEDICATION

Dedicated to all the children with pervasive developmental disorder, with whom I have worked, and their families. I have learnt a tremendous amount from all of you and realize that there is still so much more to learn. Thank you for allowing me into your lives and being my teachers.

DECLARATION

I, Gillian Ridley, declare that this dissertation is my own unaided work, except for technical assistance as detailed in the Acknowledgements; that I am responsible for the text of this study and all conclusions reached; and that no part of this dissertation has been submitted for a degree at any other university.

Gillian Ridley

Date

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ABSTRACT

This study aimed to explore the underlying basis of the communication difficulties in children (between 5.0 and 7.11 years) with high functioning pervasive developmental disorder (HFPDD) (n=26), compared to children with specific language impairment (SLI) (n=26), and children with no history of developmental difficulty (NDD) (n=26). The study looked at: whether different profiles could be obtained for the groups on comprehensive batteries of communication, cognitive processing and theory of mind; which areas measured were best correlated; and which measures best differentiated the groups. Comprehensive communication and theory of mind batteries were devised and conducted. Cognitive processing was measured using the Cognitive Assessment System (CAS) (Naglieri and Das, 1997). Data was analysed using descriptive statistics, analysis of variance, the Kruskal-Wallis test, Bonferroni t tests, frequency distributions, Pearson correlation coefficients and discriminant function analyses. Kappa coefficients and analysis of variance measures were carried out on 23% of the rated data in order to establish inter-rater agreement and acceptable levels of agreement were reached.

On the communication assessment, the HFPDD group experienced the most difficulty on the measures of understanding abstract vocabulary, understanding conversation, pronoun alternation, higher level semantics, narrative ability and pragmatic ability. In contrast, the SLI group experienced the most difficulty on the measures of expressive grammar and narrative clarity. On the cognitive processing assessment, the HFPDD group experienced marked difficulty in the areas of planning and attention, while the SLI group experienced significant difficulty in the areas of successive processing and less marked but still significant difficulty in the area of planning. Within the HFPDD group, a group with simultaneous processing markedly stronger than successive processing, a group with successive processing markedly stronger than simultaneous processing, and a group with simultaneous and successive processing occurring at a similar level, were identified. The HFPDD group experienced significant difficulty on all the measures of theory of mind, although a limited number of HFPDD subjects did not experience difficulty. The SLI group experienced significant difficulty on the two theory of mind measures that were more verbally loaded. Strong correlations were found between receptive language, expressive semantics, narrative ability, pragmatic ability, planning, attention and theory of mind; and between expressive grammar and successive processing. Pragmatic ability, narrative ability, planning, and certain of the theory of mind measures best appeared to discriminate the groups. A combined model of language, cognitive and theory of mind processing is proposed to explain the differences between the HFPDD and SLI groups.

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