THE UNDERLYING BASIS OF THE COMMUNICATION DIFFICULTIES OF
HIGH FUNCTIONING PERSASIVE DEVELOPMENTAL DISORDER

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School of Human and Community Development, Faculty of Humanities,
University of the Witwatersrand, Johannesburg,
in fulfillment of the requirements for the degreee Doctor of Philosophy

January 2007
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
ACKNOWLEDGEMENTS

I wish to express sincere thanks to the following people for their assistance during the period of the study:

- Professor Claire Penn, Head of the Discipline of Speech Pathology and Audiology, School of Human and Community Development, Faculty of Humanities, University of the Witwatersrand, supervisor and mentor, for her encouragement, guidance and ability to stimulate creative thinking. It is a privilege to work with someone of her knowledge and research ability.

- Peter Fridjhon, School of Statistics and Actuarial Science, Faculty of Science, University of the Witwatersrand, for his help with the evaluation of the research data.

- Eugenius Senaoana, statistician, for the statistical analysis of the research data. Also to Fred Shaw for assisting with the statistical analysis and interpretation of the statistical analyses.

- The raters: Melissa Chonin, Angela Eichstadt, Phillipa Nilsson and Bela Tomlinson who gave so willingly of their time and expertise.

- The speech-language therapists at The Centre for Language and Hearing Impaired Children for helping compile the template used to score the understanding emotions task.

- Fred Shaw and Andrew Shaw for their assistance with completing the figures.

- Syd Gosher, for the many hours spent assisting with the editing of the final manuscript. The expertise and skill brought to this task, as well as the dedication and care taken with this process, are much appreciated.

- Jonathan Ridley, for assisting with the collation of the reference list.
- My post-graduate friends and colleagues, particularly Dilys Jones, Heila Jordaan and Nola Watt for their support, valuable input and encouragement. Particularly to Nola Watt for her sharing of information and ideas and valuable suggestions.

- Lesley Rosenthal, educational psychologist, for her special interest in the study, sharing of her knowledge and for the training given on the administration and scoring of the cognitive processing measure.

- The participants from the HFPDD, SLI and NDD groups, and their families, for their time, interest, and commitment to the study.

- To the staff of the various schools who assisted in identifying participants, obtaining case history information and who allowed me to conduct assessments at their facilities. In particular, a sincere thank you to The Centre for Language and Hearing Impaired Children, Bellavista Remedial School, Crossroads Remedial School, The Key School, UNICA School, Pridwin Preparatory School, Elma Park Nursery School and Jacobs Ladder Nursery School.

Finally special thanks go to:

- My parents, Joan and Fred, for their constant encouragement and support. Dad, your ability to grasp novel learning material and to learn new things never ceases to amaze me. Thank you for teaching me that learning is a life long process and for always being so willing to help. Mom, thank you for always being a tower of strength and assistance in more ways than I could begin to list and for always being there for me. Thank you especially, Mom and Dad for the many hours of baby-sitting in the final stages of compilation.

- My mother-in-law, Carol, my brothers and my sisters-in-law for their support. Thank you, especially, to my mother-in-law, Carol, and sister-in-law, Kerry, for the many hours of baby-sitting during the final writing up. Thank you to my brothers, Andrew and Mark, for who they are, for their encouragement and for helping me to try and maintain a sense of humour during the final compilation.
- My friends Julia Hutcheon, Belinda Johnston and Stacey Lawlor, for their special friendship, support and encouragement, and for providing Christopher with many lifts and play-dates when the going was tough.

- Most importantly, my husband, Jonathan, for his endless love, constant support, understanding, patience and encouragement. Thank you for putting up with all the disruptions to our home life and so capably taking over so many of my family and home responsibilities during the final stages of the write-up. I could never have completed this without you.

- To Christopher, my son, for bringing absolute joy to my life and for giving up so much play-time with Mom so that I could complete this dissertation. I cannot wait to have more time to spend with you again.
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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