

Early Parental Responsiveness in Relation to Child Language  
Development: A Systematic Review and Conceptual Framework

Melissa Saliba

Bachelor Speech Pathology (Hons)

A thesis submitted in total requirements in April 2016 for the degree of

Master of Clinical Science

School of Translational Health Science, Faculty of Health Sciences,

The University of Adelaide

# Table of Contents

	Page
<b>Glossary of main terms</b>	iii
<b>Abstract</b>	iv
<b>Declaration</b>	v
<b>Dedication</b>	vi
<b>Acknowledgements</b>	vii
<b>Preface</b>	viii
<b>Section One</b>	1
Chapter 1: Context and Significance	1
Chapter 2: The value of a flexible systematic review protocol* (p. 1-20 of 20)	7
Chapter 3: A conceptual framework for maternal responsiveness and directiveness* (p. 1-43 of 43)	9
<b>Section Two</b>	11
Chapter 4: Associations between children’s language outcomes and contingent responsiveness: A systematic review* (p. 1-61 of 61)	11
Chapter 5: Discussion	13
Concluding remarks	22
<b>Appendices</b>	
Appendix A. The original systematic review protocol	23
Appendix B. Studies included for critical appraisal	38
Included following critical appraisal	
Excluded following critical appraisal	
Appendix C. Statements of Authorship	48
Flexible research protocols	
The conceptual framework	
The systematic review	
Appendix D. Systematic review appraisal instruments	51
Appendix E. Data extraction instrument	54
Appendix F. Excluded following full text review	55
<b>References</b>	71

\*These Chapters are presented as research papers

## Glossary

This list aims to define the acronyms used in this thesis.

**Contingent responsiveness (CR):** The degree or frequency of responsiveness to a child's target activities, including promptness and appropriateness of parental reactions, as well as appropriate pace that fits the child's abilities.

**Maternal directiveness (MD):** This term (i.e., *maternal*) is used when *only mothers* are implicated. Directiveness involves attempts to supportively or intrusively control or redirect children's behaviour or attention.

**Maternal responsiveness (MR):** This term (i.e., *maternal*) is used when *only mothers* are implicated. Involves only responsive behaviours (i.e., not directive behaviours). Responsiveness refers broadly to mothers' prompt appropriate and contingent responses to children's behaviours, and includes a range of behaviour types (such as responses relating to emotional support, language modelling, or maintaining children's focus of attention – see conceptual framework, Chapter Three, for more detail).

**Maternal responsiveness and directiveness (MRD):** This term (i.e., *maternal*) is used when *only mothers* are implicated. Encompasses both responsive and directive behaviours.

**Maternal sensitivity (MS):** Mothers' ability to perceive and interpret their infant's signals accurately and then respond appropriately.

**Parental responsiveness and directiveness (PRD):** This term (i.e., *parental*) is used when *both* mothers and fathers are implicated. Encompasses both responsive and directive behaviours.

# **Abstract**

## **Background**

Parental responsiveness and directiveness, (PRD) to infants' and toddlers' communicative and exploratory acts can facilitate or limit child language development; skills which are critically important to success throughout life. The association between PRD and language development has been researched over decades, and translating this research knowledge into practice will help to reduce the rates of childhood language delay/disorder. However, it is difficult to distil the effects of PRD on child language development, due to the richness and diversity of PRD conceptualisation and measurement across the empirical research.

## **Aims and Method**

This thesis sets out to investigate the association between a specific description of PRD, *Contingent Responsiveness (CR)*, and children's language development via systematic review methodology, including two meta-analyses. In order to achieve this aim, a conceptual framework was developed, and offers a new perspective and clarity to understanding the complex PRD construct. The conceptual framework vitally informed and justified adaptations to an original systematic review protocol, enabling a meaningful systematic review of CR in relation to a variety of children's language outcomes.

## **Results**

Results from the systematic review suggest an overall moderate to strong, positive, and statistically significant association between CR and child language; results from meta-analyses indicates statistically significant associations between parents' CR and children's expressive and receptive vocabulary status (pooled effect sizes:  $SMD = .81, p = .01$ ;  $r = .22, p = .001$ , respectively), and narrative syntheses support associations between CR and early vocalizations, attention, and expressive and receptive vocabulary and syntax. Information was limited for associations with pragmatics and phonological awareness.

## **Conclusions**

This thesis provides greater confidence in the association between parental CR and children's pre-linguistic and linguistic development, based on research synthesis that was supported by a clear conceptualisation of PRD. This research can be used to inform practice and policy regarding the parent's role in facilitating children's language development.

## **Declaration**

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

I give consent to this copy of my thesis when deposited in the University Library, being made available for loan and photocopying, subject to the provisions of the Copyright Act 1968.

I acknowledge that copyright of published works contained within this thesis resides with the copyright holder(s) of those works.

I also give permission for the digital version of my thesis to be made available on the web, via the University's digital research repository, the Library Search and also through web search engines, unless permission has been granted by the University to restrict access for a period of time.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

## **Dedication**

This work is dedicated to my two children, Mia and Clara, who have endured a studying mother for most, or all of their early childhood, and my husband Michael, who has patiently supported my academic goals at the expense of time spent together, or on other aspirations. I would not have been able to complete this work if it were not for Michael's committed and unconditional support, and trusted parenting to our girls, which gave me the time and space I needed to study. Conducting research about parental responsiveness whilst doing my best to apply it on a day-to-day basis has been an interesting and insightful process. I hope that my children will be able to look back and remember mostly the warm and positive responsive interactions we have had, rather than the harsher and more directive parenting behaviours that occurred during stressful study periods! I love you, Mia and Clara, to the moon and stars and planets and back, times infinity.

## **Acknowledgements**

I would first like to sincerely thank my primary supervisor Dr David Tivey, and co-supervisors, Dr Melanie Attard and Dr Debbie James for their valuable methodological, practical, conceptual and personal support, and patience. I am grateful not only for their assistance, but also for their collegiality and friendship. I feel privileged to have had the opportunity to work with such an intelligent and kind-hearted group of mentors. I am also grateful to have been a recipient of the Australian Postgraduate Award research scholarship, which I believe to be an important initiative in supporting Australian research.

Thanks also go to Matthew Kowald, who was a very understanding, tolerant and efficient secondary reviewer for the systematic review, Maureen Bell (Research Librarian, University of Adelaide) for assistance in developing search strategies and logic grids for the systematic review, Dr Stuart Howell (Statistician, University of Adelaide) for support regarding statistical methodologies for meta-analysis, Dr Yee Mei Lee for kindly assisting with the retrieval of full text papers for the systematic review, and Rowan Laubsch for assisting in the visual design of the conceptual framework.

I would also like to thank a long list of family members and friends, who have helped considerably by taking good care of my children while I took the time needed to study. In particular, those who provided repeated support: my parents, Carmen and Tony Saliba; mother-in-law, Connie Villarosa; sisters, Annette Lacar and Jennifer Young; and nieces and nephews. I am very lucky to have such an extensive and amazing support network.

## **Preface**

The idea for this thesis emerged from observations of everyday parent-child interactions, which occurred during a time of personal transition from full-time Speech Pathologist to full-time Stay-At-Home-Mother. Wearing both the Speech Pathologist and ‘new mother’ hats, I observed differences in the ways parents responded to their children in the community, and in the communicative abilities of the children. Some parents showed interest and remained fully engaged with their child, describing the child’s actions (e.g., “Put your foot up on the step”), or noticing and interpreting their child’s verbal or non-verbal bids for attention (e.g., “Oh, you want help?”), or what they showed interest in (e.g., “What are you pointing to? Oh that’s the truck.”). Other parents largely missed or ignored when their child was attempting to communicate something via sounds, words or gestures either on purpose, or because they were not tuned in to their child’s signal; and other parents demonstrated a harsh and directive tone and manner with their children (e.g., ‘No! That’s not right. Give it to me!’). These observations led me to undertake this research in order to better understand the connection between parents’ interactive behaviours with their children and subsequent speech and language development.

## **Thesis Composition and Stylistic Matters**

This thesis is presented in *thesis by publication* format and is organised into five chapters across two sections. Section One of the thesis contains Chapters One to Three. Chapter One provides the context and significance of the thesis, and briefly introduces the methodology. It limits explanation of the theoretical background purposely in order to avoid repetition throughout the thesis. Chapters Two and Three provide further information about the systematic review methodology used for the main body of research, and the constructs of maternal responsiveness and directiveness (MRD), respectively.

Section Two contains Chapters Four and Five; Chapter Four contains the main body of research – a systematic review that investigates the associations between Contingent Responsiveness (CR) and a range of child language outcomes; and Chapter Five consists of an overall discussion and conclusion.

Chapters Two to Four comprise three papers that have been submitted for publication in peer-reviewed journals; therefore, there may be variation in referencing



styles across these chapters, and there is separate pagination to the rest of the thesis. Each of these chapters is preceded by a brief contextual statement.

Some of the work undertaken in this thesis has been presented in either poster or oral format at university faculty and local and national discipline conferences for Speech Pathology and Nursing<sup>1</sup>. A formal application to a research ethics committee was not required for the work undertaken since it did not include any primary research involving animals or humans; only secondary data was utilised.

---

<sup>1</sup> Saliba, M. (2012, Nov). Parental responsiveness and directiveness in relation to children's language development: A comprehensive systematic review. In *Children Communities Connections Conference*. Symposium conducted by Salisbury Communities for Children, Adelaide, Australia.

Saliba, M. (2013, Sept). Responsive parent interactions for children's language development. In *Barossa Hills Fleurieu Rural Region Nursing Allied Health Midwifery Conference*. Mt Barker, South Australia.

Saliba, M., Tivey, D., James, D. G. H., & Attard, M. (2013, Aug). Talk to me baby! Parent responses for child language development (poster). In *Faculty of Health Science Postgraduate Research Conference*. Conducted by The University of Adelaide, Adelaide, Australia.

Saliba, M., Tivey, D., James, D. G. H., & Attard, M. (2015, May). The association between parents' contingent responses and children's vocabulary development: A systematic review (poster). In *Challenge Broaden Revolutionise: Speech Pathology Australia National Conference*. Canberra, Australia.

Saliba, M., Tivey, D., James, D. G. H., & Attard, M. (2015, Aug). Parent's contingent responses predict child vocabulary development (poster). In *Faculty of Health Science Postgraduate Research Conference*. Conducted by The University of Adelaide, Adelaide, Australia.