Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

# Does Vocabulary Influence Word Recognition and Reading Comprehension Through Set for Variability?

A thesis presented in partial fulfilment of the

requirements for the degree of

Master of Education

at Massey University, Manawatū, New Zealand

**Cheryl-Anne Mackay** 

2017

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

#### **Abstract**

Vocabulary is recognised as a key contributor to literacy development and comprehension. Children cannot make meaning from text if they lack the vocabulary to support what is being read. This study investigated the independent contribution of vocabulary to word recognition, and whether the contribution was direct or indirect through set for variability. A second aim of the study was to determine if a direct relation exists between vocabulary knowledge and reading comprehension. Unpublished data from the longitudinal study (Chapman, Arrow, Tunmer, & Braid, 2016) were analysed to find predictive links between vocabulary and later reading outcomes, for a cohort of 374 5-year-old children in New Zealand primary schools. The results identified that word recognition and vocabulary both directly contributed to reading comprehension for these children in the middle of their second year at school. Word recognition explained a greater amount of the shared variance of reading comprehension in the middle of Year 2 as the children were at the stage of still trying to read a range of unfamiliar words. Set for variability was found not to directly contribute to reading comprehension when word recognition was added to the model. This finding suggests that set for variability mediates the relationship between vocabulary and word recognition but not for overall reading comprehension. In terms of practical teaching, it is suggested that language comprehension abilities should be acquired alongside the development of word recognition skills.

**Keywords:** alphabetic principle, decoding, language comprehension, lexicon, morphology, oral vocabulary, orthography, orthographic representation, phonological awareness, phonological recoding, phonological representation, phonology, reading

comprehension, semantics, set for variability, sight words, Simple View of Reading, syntax, word recognition.

### Acknowledgements

I would like to take this opportunity to acknowledge the support and contribution made by my supervisors Dr Alison Arrow, Professor Margaret Walshaw and Dr Tara McLaughlin. Their guidance has encouraged me to delve deeply into new areas of learning and I have acquired so much through the process. All three supervisors have helped to broaden my knowledge and thinking in ways I could have never imagined possible.

I am grateful to Massey University for the Masterate Scholarship and the Institute of Education for the Pathway Scholarship. This funding has been beneficial in assisting in the implementation and completion of this study.

I wish to acknowledge the leaders of the Early Literacy Project, Professor James
Chapman, Dr Alison Arrow, Distinguished Professor William Tunmer and Christine
Braid, for sharing their unpublished data with me.

I would also like to thank my amazing family and friends for their ongoing support.

Their presence and encouragement has been immense, especially during the difficult times. Finally, I would like to thank Danielle and Brayden for the extra effort and help they gave around home which enabled me to concentrate on my study. Without all the incredible support, this would never have been completed.

# **Contents**

Abstract	
Acknowledgements	v
Contents	vi
List of Tables	vii
Chapter One	1
Introduction	
Rationale	
The Present Study	
Key Terms and Definitions	
Thesis Overview	
Chapter Two	
Literature Review	
Introduction	
Theories of Early Reading Development and Acquisition	
Decoding	
Language Comprehension	13 18
Vocabulary	
Reading Comprehension	
Set for Variability	
Aotearoa, New Zealand Research: Tunmer and Chapman (2012)	
The Present Study	
Chapter Three	
Methodology	
Research Design	
Sampling	ا ک
Setting and Participants	
Data Collection Procedures	
Measures	
Ethics	
Summary	
Chapter Four	
Results	
Descriptive Results	40
Contributions to Word Recognition	
Contributions to Reading Comprehension	
Summary	
Chapter Five	
Discussion	
The Direct and Indirect Influence of Vocabulary on Word Recognition	50
The Direct Influence of Vocabulary on Reading Comprehension	52
Limitations	
Future Research	
Implications for Practical Applications	
Conclusion	
References	65

# **List of Tables**

able 1 <i>Gender and Ethnicity</i>	33
Table 2 Correlations, Means and Standard Deviations for all Measures	
Table 3 Model Summary and Coefficients	44
Table 4 Model Summary and Coefficients	