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.
A comparison of the reading miscues of older struggling readers with younger but typically developing readers: Are they different?

A thesis presented in partial fulfilment of the requirements for the degree of

Master of Education (Inclusive Education)

at Massey University, Albany,
New Zealand.

Beverley Margaret Lang
2018
Abstract

Do struggling readers rely too much on context cues or not enough? This is a long-standing debate. The present study revisited this debate by comparing the oral reading miscues of 39 children aged 8-10 who were matched for reading age (8 years) and divided into three groups: younger typical readers (YT, n = 13), older struggling decoders with average or better listening comprehension who fitted the dyslexia profile (OSD, n = 13), and older struggling readers with mixed difficulties (OMD, n = 13). Miscues were compared using three taxonomies based on miscue analysis procedures that analysed miscues in terms of surface structure and deep grammatical structure. Multivariate analyses were conducted for the miscue data to find between-group differences. The study found that the miscues of the three groups of readers did not differ in graphemic or phonemic similarity but the OSD and OMD groups made proportionately more miscues that were not semantically or syntactically acceptable than did the YT group. At deep structure level the YT group made proportionately more miscues at phrase level than did the OSD and OMD groups. The OSD and OMD groups made proportionately more miscues that were real word substitutes than did the YT group, e.g., read “skates” as “snakes”. The YT and OMD groups made proportionately more miscues that were likely to be nonwords than did the OSD group, e.g., read “parcel” as “parl”. The study contributes to the literature by providing insights into how struggling readers process print in comparison with their typically developing peers – insights which can be translated into more effective differentiation and instruction. The findings suggest that, compared with younger typically achieving readers, struggling readers could make better use of context cues; that those in the dyslexia category could make better use of graphemic cues. The pedagogical implications are that teachers could work to help struggling readers use these cues more effectively, by combining phonics instruction with book reading; for example rather than make a global guess at an unknown word, readers could look carefully at graphemic information then use context to support those cues.
Acknowledgements

This thesis has been completed against the backdrop of two contrasting environments: Firstly, the busy Auckland schools where I was welcomed and introduced to the children of this study, and provided with space to work; secondly, the land- and seascapes of the Mahurangi peninsula where I found the solitude to read, think and write. From the first environment, I thank the children who took risks to read aloud in front of a stranger, the parents who allowed them to do so, and the school principals and teachers who were keen to have research carried out in their schools and who were passionate about their students’ reading. From the second environment, I thank Dr Valerie Green for her open home, encouragement, and help with the final edit. From the spaces in between, I thank my supervisors: Professor Tom Nicholson generously shared his expertise with me and guided me through the project, helping me to meet the many unexpected challenges along the way; Dr Alison Arrow contributed insights about the New Zealand context with me and prompted me toward conceptual clarity. I also thank Ron Lang for his meticulous attention to the coding of miscues for inter-rater agreement. Lastly I thank Jeff Lang for the many hours given in checking data and helping me to understand some of the intricacies of statistics and spreadsheets.

Ethical approval

This project was reviewed and approved by the Massey University Human Ethics Committee: Northern, Application NOR 17/13. Any questions about the research can be directed to Dr Brian Finch, Acting Chair, Massey University Human Ethics Committee: Northern, email: humanethicsnorth@massey.ac.nz
# Table of Contents

Abstract ............................................................................................................................................... ii
Acknowledgements ........................................................................................................................ iv
Table of Contents .............................................................................................................................. v
List of Tables ......................................................................................................................................... vii
List of Figures ......................................................................................................................................... viii
Chapter 1: Introduction ..................................................................................................................... 1
Chapter 2: Literature Review ............................................................................................................. 4
  Theoretical Positions .......................................................................................................................... 4
    Context-driven models .................................................................................................................... 5
    What context-driven models predict about miscues .......................................................................... 6
    Print-driven models ....................................................................................................................... 7
    What print-driven models predict about miscues ............................................................................ 8
    The simple view model .................................................................................................................. 8
    What the simple view model predicts about miscues ..................................................................... 10
    Summary of what each theoretical position predicts about miscues ............................................. 11
Miscue Analysis as a Research Tool ............................................................................................... 12
  Taxonomies ....................................................................................................................................... 12
  What the studies have found .......................................................................................................... 13
  Summary of the studies .................................................................................................................... 17
Research Questions for This Study ................................................................................................. 17
Chapter 3: Method .............................................................................................................................. 19
  Outline of the Chapter ..................................................................................................................... 19
  Design ........................................................................................................................................... 19
  Participants ..................................................................................................................................... 20
  Instruments ..................................................................................................................................... 24
    WIAT-II Listening Comprehension and Pseudoword subtests ....................................................... 25
    Neale Analysis of Reading Ability ................................................................................................. 25
    Non-standardised reading task ....................................................................................................... 26
    Miscue analysis ............................................................................................................................ 26
  Setting ........................................................................................................................................... 29
  Procedure ....................................................................................................................................... 29
  Data analysis ................................................................................................................................... 30
  Interrater reliability ......................................................................................................................... 31
  Summary ......................................................................................................................................... 31
Chapter 4: Results ............................................................................................................................... 32
  Overview ......................................................................................................................................... 32
  Results ........................................................................................................................................... 32
    Screening measures ....................................................................................................................... 32
    Difficulty level of passages used for the study and self-correction rates ........................................ 34
    NARA-III error categories ............................................................................................................. 35
    Follow-up analysis to control for differences in pretest reading skills ....................................... 35
Surface level miscues .......................................................................................... 36
Follow-up analysis to control for differences in pretest reading skills ............. 36
Deep structure miscues ...................................................................................... 38
Follow-up analyses to control for differences in pretest reading skills ............ 39
Follow-up of the nature of the deep structure miscues in terms of substitutions, omissions, insertions, and reversals ........................................... 39
Summary ............................................................................................................ 41
Screening measures ............................................................................................ 41
Miscue categories ............................................................................................... 41
Chapter 5: Discussion ....................................................................................... 43
Overview ............................................................................................................ 43
Research questions ............................................................................................. 43
Discussion .......................................................................................................... 43
Were the reading passages of similar difficulty for all three groups? ............... 44
Were there differences for NARA-III coding? .................................................. 45
Were there differences for surface level coding? ............................................. 45
Were there differences at deep structure level? .............................................. 45
How the findings link to theoretical models ..................................................... 46
How did the findings relate to previous studies? ............................................. 48
Limitations and suggestions for future research .............................................. 48
Illustrating the findings – a brief look at some miscues made during the study ................................................................. 49
Practical implications in the New Zealand context ........................................... 50
Conclusions ...................................................................................................... 53
References ....................................................................................................... 55
Appendix A ....................................................................................................... 67
Appendix B ....................................................................................................... 70
Appendix C ....................................................................................................... 73
Appendix D ....................................................................................................... 74
Appendix E ....................................................................................................... 75
List of Tables

Table 1 Definitions of key terms used in this study ..........................................................3

Table 2 Chronological age means, WIAT-II Listening Comprehension subtest means, and NARA-III Reading Accuracy means and standard deviations for YT, OMD and OSD groups, and number of bilingual students in each group ..........................................................................................................................................................23

Table 3 Raw score means, standard deviations and summary group differences between the WIAT-II Listening Comprehension and Pseudoword subtests and the NARA-III Accuracy, Comprehension and Rate subtests for groups YT, OMD, and OSD ..................................................................................................................................................33

Table 4 Means, standard deviations and summary group differences for percentage of errors self corrected, nonfiction accuracy rates and NARA-III passage level reached to produce 25 miscues for groups YT, OMD and OSD ..................................................................................................................................................35

Table 5 Means, standard deviations and summary group differences for the NARA-III error categories for YT, OMD and OSD .................................................................36

Table 6 Means, standard deviations and summary group differences for surface level error categories, for YT, OMD and OSD ........................................................................37

Table 7 Means, standard deviations and group differences for deep structure levels submorpheme, word, bound morpheme, phrase, clause/sentence, allolog and intonation for YT, OMD and OSD ..................................................39

Table 8 Percentage of errors for substitution, omission, insertion and reversal within each deep structure category for the groups YT, OMD, OSD ..............40
List of Figures

Figure 1. The simple view of reading (as in Stuart & Stainthorp, 2015)...........10

Figure 2. Percentile means for the WIAT-II Listening Comprehension and Pseudoword subtests and the NARA-III Reading Accuracy, Reading Comprehension and Reading Rate subtests for the YT, OMD and OSD groups. Note: YT=younger, typically developing; OMD=older, mixed difficulty; OSD=older, struggling decoder. Percentiles are for age (WIAT-II) and year level (NARA-III).........................................................................................................34

Figure 3. Percentage of miscues that are high, partial or none for the surface-level categories graphemic and phonemic similarity, and syntactic and semantic acceptability, for the groups YT, OMD and OSD.........................38

Figure 4. Percentage of miscues at each of the deep structure levels submorpheme, word, bound morpheme, phrase, allolog and intonation for the groups YT, OMD and OSD. Note: YT=younger, typically developing; OMD=older, mixed difficulty; OSD=older, struggling decoder.........................41