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.

The effects of book reading over the summer holidays on the reading skills of Year 3 students

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

Doctor of Philosophy in Education

At Massey University, Albany Campus, New Zealand

Mary Louise Turner

2013

ABSTRACT

The existence of an achievement gap between high- and low-performing students is neither unique nor new to New Zealand. Such differences have been documented since the 1930s, and despite decades of reforms and initiatives these disparities persist. Results from the most recent PIRLS study (Chamberlain & Caygill, 2012) showed no narrowing of the margin since the early 2000s, and patterns evident in previous PIRLS studies continue.

A growing body of international research into achievement gaps has focused on summer learning loss and the different impact this has on students from low and high socioeconomic backgrounds. Some argue that even small differences in summer learning amass over the years, and by the end of elementary school the achievement gap is substantially larger than at the beginning (Kim & White, 2011). Further, this cumulative summer learning effect is the primary cause of the widening achievement gap between students from high and low socioeconomic levels (Terzian, Moore, & Hamilton, 2009). Various strategies have been implemented to try to counter this, including summer schools, reading programmes offered by public libraries, and reading books at home.

Although summer learning loss and differential growth in learning when school is closed is well- documented in international studies, little is known about this effect on student achievement in New Zealand. This study addresses the gap in knowledge for the New Zealand context by examining whether encouraging young children to read books over the summer vacation helps stem the summer slide. Using a randomized control group experimental design, a sample of 583 year 3 children in ten schools, seven of them low SES and three of them high SES in South and East Auckland were randomly

ii

assigned to four different groups over the summer break: a books group, a books plus quizzes group, a treatment control group that received math books, and a no-treatment control group that received books only after the study was completed. All groups were pre and post tested with a range of reading measures. The results showed a significant effect of the summer books programme but only for one reading measure while a number of other measures showed no clear effect. The home literacy measures used in the study showed large differences in home literacy resources between high and low SES families such as number of books and access to the computer and to libraries. The study showed that a summer books programme is workable and was much enjoyed by children but that more research is needed to establish the benefits of summer books.

DEDICATION

This thesis is dedicated to my mother, Mary Tonks Turner (July 3rd 1938 – April 22nd 2013)

You are forever in my heart

ACKNOWLEDGEMENTS

I wish to express my gratitude to my supervisors, Professor Tom Nicholson, Professor Bill Tunmer, and Dr Keith Greaney for their guidance and encouragement in completing this thesis. Their knowledge and constructive feedback have been invaluable and their involvement is greatly appreciated.

I am particularly grateful to the Principals, Boards of Trustees, staff, students, and parents of the 10 schools that participated in this study. Without their enthusiasm and co-operation, this research could not have been conducted.

My heartfelt thanks go to Pat Chamley, Julie Shirley, Anne Vaka, Tofa Paniani and the staff, students and parents at Flat Bush School, Otara. It is a joy working with you all. I could not have undertaken and completed this study without your enduring support and willingness to "fill in" when I have not been there. I am indebted to you all.

Special thanks to Dr Heidi Leeson for her infinite knowledge and ability to explain the most complicated statistical procedures in ways I can understand.

This study would not have been possible without the incredible generosity of the MSA Charitable Trust. Your actions have touched the lives of many and helped to make reading accessible to all. My sincerest thanks for the countless coffees and encouraging pep talks.

Finally, I thank my family for their unwavering love and confidence in me. Credit for this achievement belongs to us all.

TABLE OF CONTENTS

ABSTRACT	ii
DEDICATION	Error! Bookmark not defined.
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
CHAPTER ONE	1
INTRODUCTION	1
The Reading Gap	2
Reforms and interventions	
The Summer Slide as a Contributor to the Reading Gap	
The Present Study – and Research Questions	
Pilot study	16
Main study	
Chapters Two to Five	
CHAPTER TWO	
LITERATURE REVIEW	
Introduction	
Reasons for Summer Learning Loss	
Summer Learning Loss in New Zealand	
Summary	
CHAPTER THREE	
METHODS	75
Preview of Study	
Participants	
Ethics	
Pilot Study	

Design	84
Measures	89
Procedure	94
Data Analysis	99
Summary	101
CHAPTER FOUR	103
RESULTS	103
Data Analysis	103
Part 1 – Assessment Results	110
Summary of Results	130
Part 2 – Survey Measures	133
Summary of Results	138
CHAPTER FIVE	143
DISCUSSION	143
Chapter Overview	143
The Nature of the Study	143
Pilot Study	145
Main Study	146
The Research Hypotheses	147
Theoretical Implications	149
Future Research and Practical Implications	152
Limitations and Suggestions for Research Design Improvement	155
Contribution and Conclusion	157
REFERENCES	159
APPENDIX A	
Pilot Study Results	186
Data Analysis	186
APPENDIX B	197

Math Log	
Reading Log	
APPENDIX C	
Reading Log Quiz	
APPENDIX D	
Reading Log Dolch Word List	
APPENDIX E	
Vocabulary Quiz	
APPENDIX F	
ETHICS – Pilot Study	
APPENDIX G	
ETHICS – Main Study	

LIST OF TABLES

Table 1	Number of Participants According to Ethnicity and Gender.	80
Table 2	Number of Participants According to Group.	86
Table 3	Group Allocation Across Schools With Mean Pretest Reading Ages.	87
Table 4	Means and Standard Deviations Across Times 1 and 2 for the YARC, Burt, Bryant, PROBE, and WRAT measures.	105
Table 5	PROBE Means and Standard Deviations Across the Four Reading Ability Groups Across Times 1 and 2.	105
Table 6	WRAT Means and Standard Deviations Across the Four Reading Ability Groups across Times 1 and 2.	106
Table 7	BURT Means and Standard Deviations Across the Four Reading Ability Groups Across Times 1 and 2.	106
Table 8	Bryant Means and Standard Deviations Across the Four Reading Ability Groups Across Times 1 and 2.	107
Table 9	YARC Accuracy Means and Standard Deviations Across the Four Reading Ability Groups Across Times 1 and 2.	107
Table 10	YARC Comprehension Means and Standard Deviations Across the Four Reading Ability Groups Across Times 1 and 2.	108
Table 11	Means, Standard Deviations, Correlations, and Reliabilities for the STAR, and STAR Subtests Pre- (Time 1) and Postintervention.	109
Table 12	Sample Distribution of Poor and Good Readers Across the Four Groups	112
Table B1	Mean, Standard Deviation, Correlation, and Reliability for the Neale Analysis of Reading Ability	186
Table B2	Mean, Standard Deviation, Correlation, and Reliability for the PROBE Measure	187
Table B3	Mean, Standard Deviation, Correlation, and Reliability for the WRAT Math Test	187
Table B4	Sample Distribution of Reading Ability Across the Three Groups	188