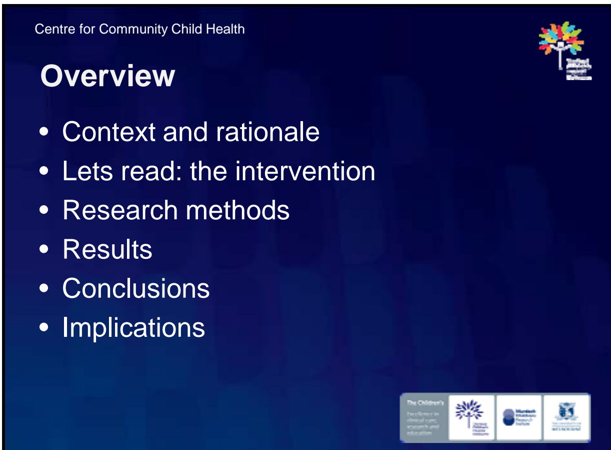


The Current Situation
The Australian Context

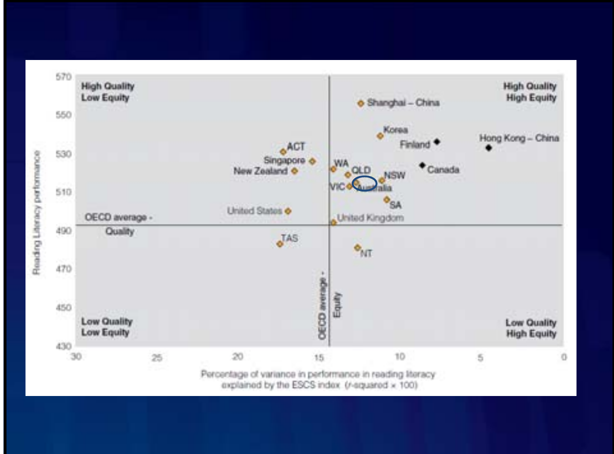
The Adult Literacy and Life Skills Survey 2006
Ages: 15 to 74 years

Domain:	Level 1 / 2 (%)	Level 3 (%)	Level 4 / 5 (%)
Prose Literacy	46	37	16
Document Literacy	47	36	18
Problem Solving	70	25	5
Health Literacy	60	35	6

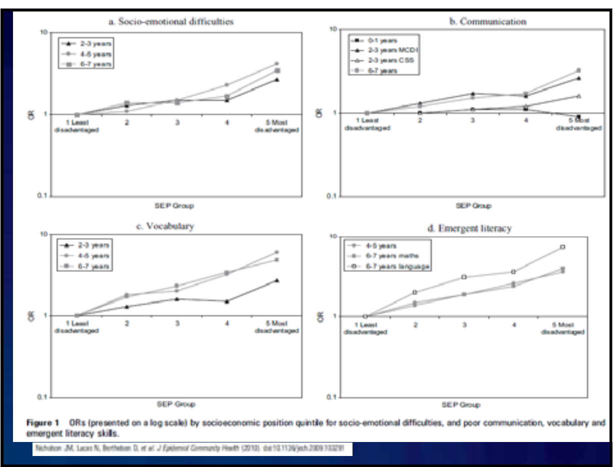
Australia in the international context

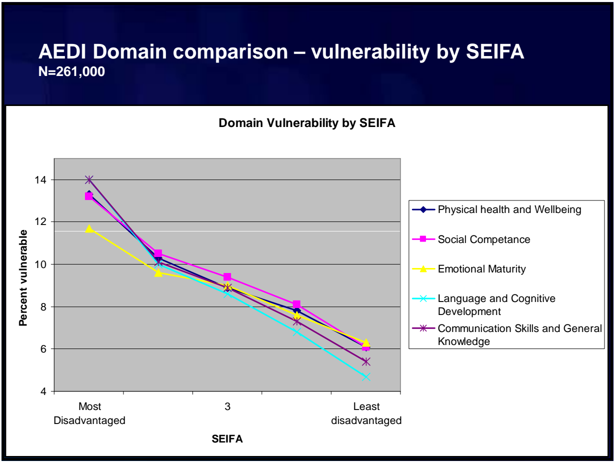
Prose and Document Literacy Scale 2006
Ages: 16 to 65 years

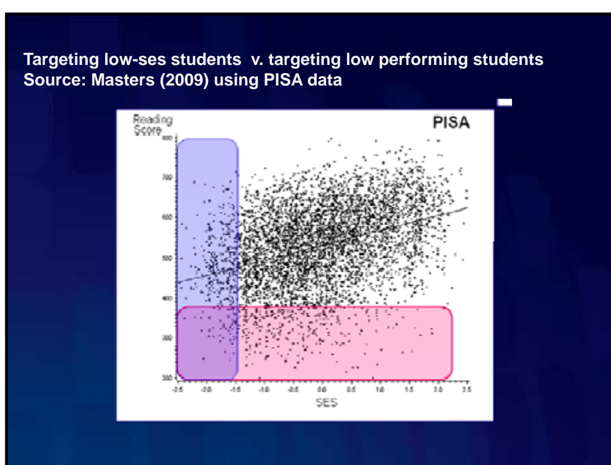
Country:	Level 1 / 2		Level 3		Level 4 / 5	
Domain:	Prose (%)	Doc (%)	Prose (%)	Doc (%)	Prose (%)	Doc (%)
Australia	44	44	39	37	18	19
Norway	34	32	45	40	21	28
Canada	42	43	39	37	20	21
United States	53	53	35	33	13	15
Italy	78	81	17	16	4	4


High Quality
Low Equity
High Quality
High Equity
Shanghai – China
Korea
Finland
Hong Kong – China
ACT
Singapore
New Zealand
WA
QLD
NSW
VIC
Australia
Canada
SA
United States
United Kingdom
OECD average - Quality
TAS
NT
OECD average - Equity
Low Quality
Low Equity
Low Quality
High Equity
Reading Literacy performance
Percentage of variance in performance in reading literacy explained by the ESCS index (r-squared × 100)

Language, literacy and social gradients in Australia

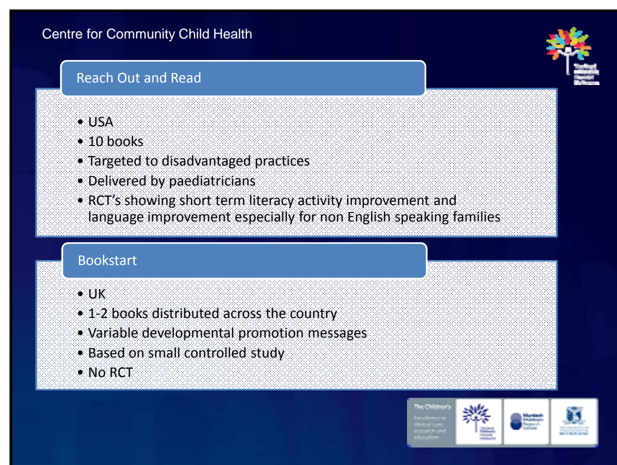

a. Socio-emotional difficulties
b. Communication
c. Vocabulary
d. Emergent literacy
OR
SEP Group
1 Least disadvantaged
5 Most disadvantaged
Figure 1 ORs (presented on a log scale) by socioeconomic position quintile for socio-emotional difficulties, and poor communication, vocabulary and emergent literacy skills.

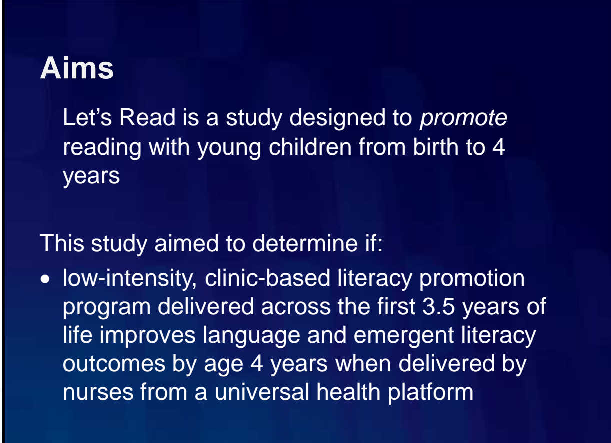

AEDI Domain comparison – vulnerability by SEIFA
N=261,000
Domain Vulnerability by SEIFA
Percent vulnerable
14
12
10
8
6
4
Most Disadvantaged
3
Least disadvantaged
SEIFA
Physical health and Wellbeing
Social Competance
Emotional Maturity
Language and Cognitive Development
Communication Skills and General Knowledge

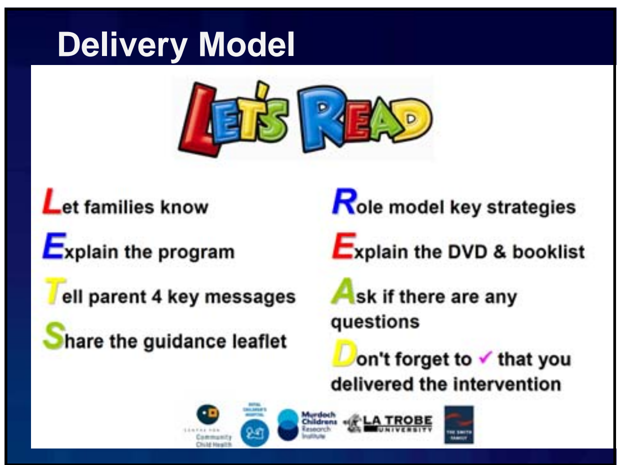

Targeting low-ses students v. targeting low performing students
Source: Masters (2009) using PISA data
Reading Score
PISA
SES

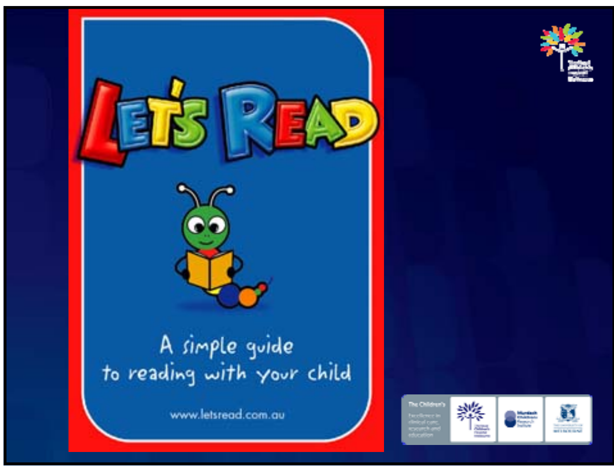
Centre for Community Child Health
Rationale
Literacy acquisition is one of the most important developmental milestones for young children and a key to their educational success, health and life outcomes
Whitehurst GJ, & Lonigan C. J. Child development and emergent literacy. Child Development. (1998).69
Children who are read to more often when young develop important emergent literacy skills that lead to better school outcomes
Duursma E, Augustyn M, Zuckerman B. Reading aloud to children: the evidence. Archives of disease in childhood 2008;93(7):554.
World wide there has been a rapid spread of community based early literacy promotion programs , despite limited evidence of their effectiveness

International literacy promotion program context: a tale of 2 approaches


Centre for Community Child Health
Reach Out and Read
• USA
• 10 books
• Targeted to disadvantaged practices
• Delivered by paediatricians
• RCT's showing short term literacy activity improvement and language improvement especially for non English speaking families
Bookstart
• UK
• 1-2 books distributed across the country
• Variable developmental promotion messages
• Based on small controlled study
• No RCT


Aims
Let's Read is a study designed to promote reading with young children from birth to 4 years
This study aimed to determine if:
• low-intensity, clinic-based literacy promotion program delivered across the first 3.5 years of life improves language and emergent literacy outcomes by age 4 years when delivered by nurses from a universal health platform

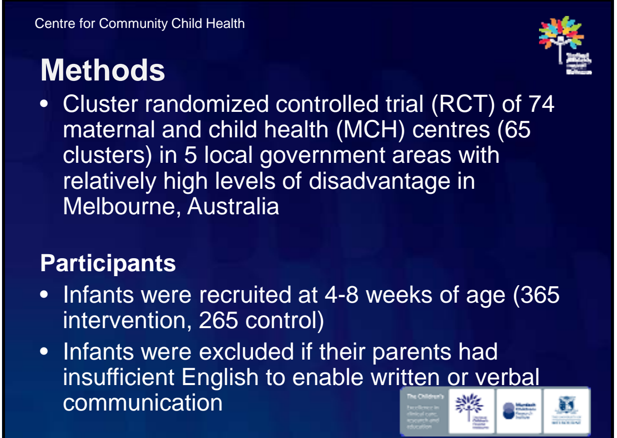

Delivery Model
LET'S READ
Let families know
Explain the program
Tell parent 4 key messages
Share the guidance leaflet
Role model key strategies
Explain the DVD & booklist
Ask if there are any questions
Don't forget to ✓ that you delivered the intervention
LA TROBE UNIVERSITY

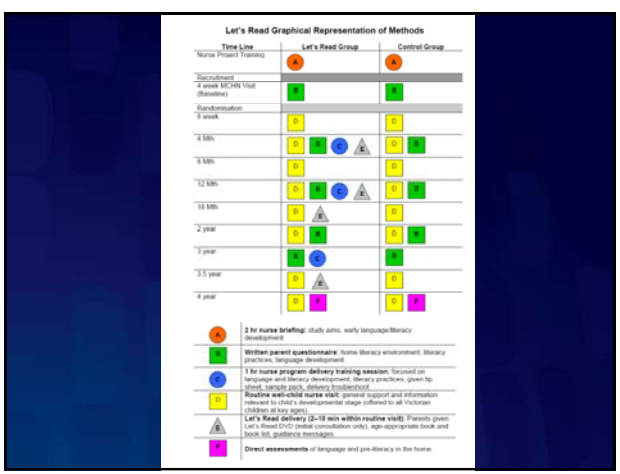

LET'S READ
A simple guide to reading with your child
www.letsread.com.au

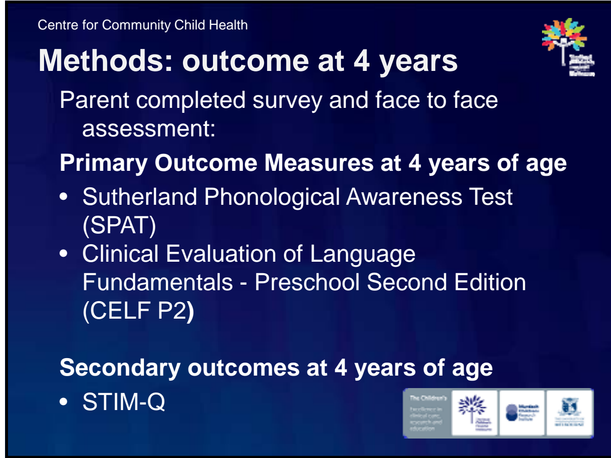
LET'S READ Resources
From 4 months
From 12 months
From 18 months
From 3½ years

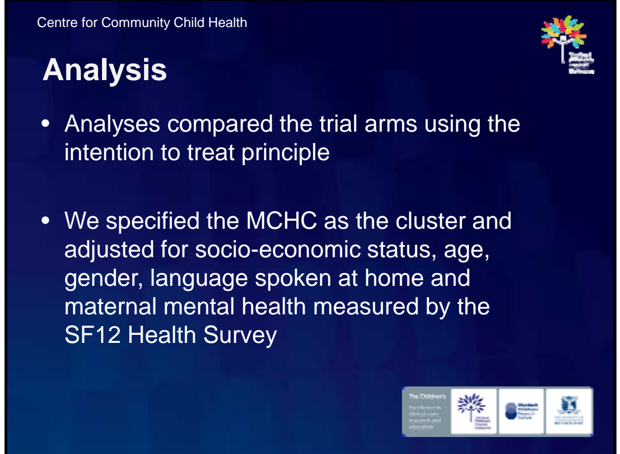
Let's Read
What toddlers like
from 12 months
All toddlers are different. They move through the same stages of development but not always at the same pace.
What toddlers like:
Let's Read
What you can do
from 12 months
off
ball
tree
1 Day = 1

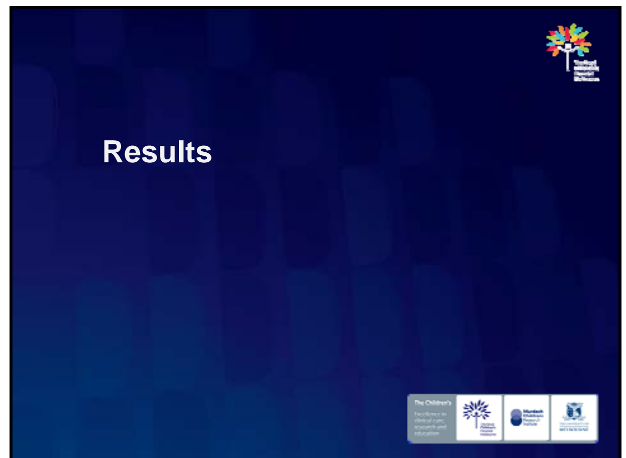
Let's Read
www.letsread.com.au
Let's pick a book
Look for rhyme, rhythm and repetition in books.
Children like the same book read over and over.
•Babies like pictures of babies.
•Toddlers like bright colours and pictures of everyday things.
•Older toddlers like alphabet and counting books and a story.
Let your child choose the books.
Let's Read
www.letsread.com.au
Things to do when you are reading
Let your child turn the pages.
Point to words as you read.
Point to pictures and say what you see.
Ask questions and talk about things you see.
Try funny voices and sounds; play and have fun!

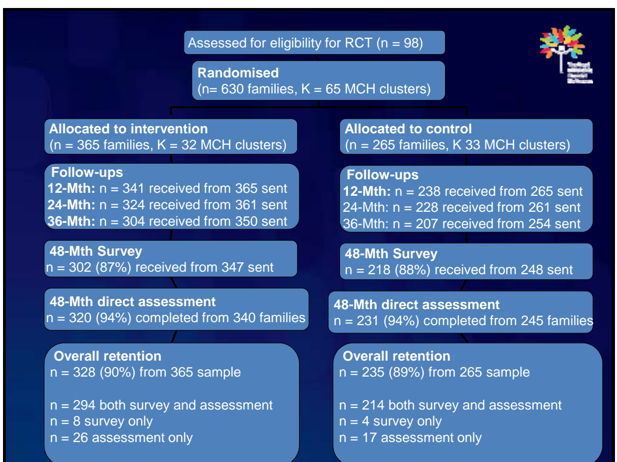

Centre for Community Child Health
Methods
• Cluster randomized controlled trial (RCT) of 74 maternal and child health (MCH) centres (65 clusters) in 5 local government areas with relatively high levels of disadvantage in Melbourne, Australia
Participants
• Infants were recruited at 4-8 weeks of age (365 intervention, 265 control)
• Infants were excluded if their parents had insufficient English to enable written or verbal communication

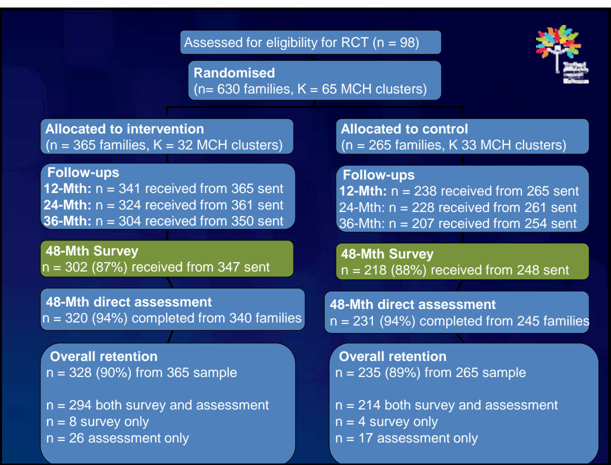

Let's Read Graphical Representation of Methods
Time Line
Let's Read Group
Control Group
Nurse Project Training
Recruitment
4 week MCHN Visit (Baseline)
Randomisation
4 Mth
12 Mth
18 Mth
2 year
3 year
3.5 year
4 year
2 hr nurse briefing: study aims, early language/literacy development
Written parent questionnaire: home literacy environment, literacy practices, language development
1 hr nurse program delivery training session: focused on language and literacy development, literacy practices, given tip sheet, sample pack, delivery troubleshoot
Routine well-child nurse visit: general support and information relevant to child's developmental stage (offered to all Victorian children at key ages)
Let's Read delivery (2–10 min within routine visit): Parents given Let's Read DVD (initial consultation only), age-appropriate book and book list, guidance messages
Direct assessments of language and pre-literacy in the home

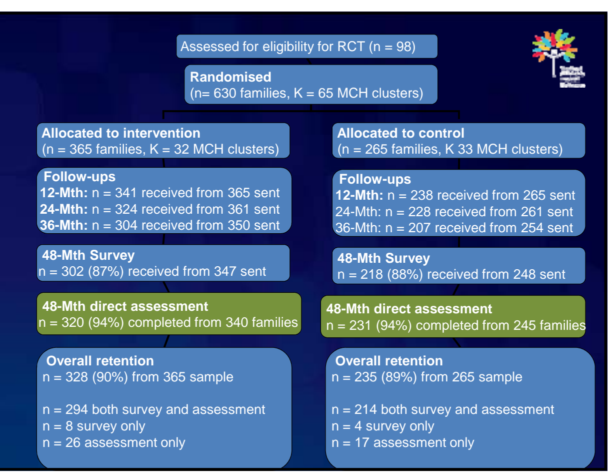

Centre for Community Child Health
Methods: outcome at 4 years
Parent completed survey and face to face assessment:
Primary Outcome Measures at 4 years of age
• Sutherland Phonological Awareness Test (SPAT)
• Clinical Evaluation of Language Fundamentals - Preschool Second Edition (CELF P2)
Secondary outcomes at 4 years of age
• STIM-Q

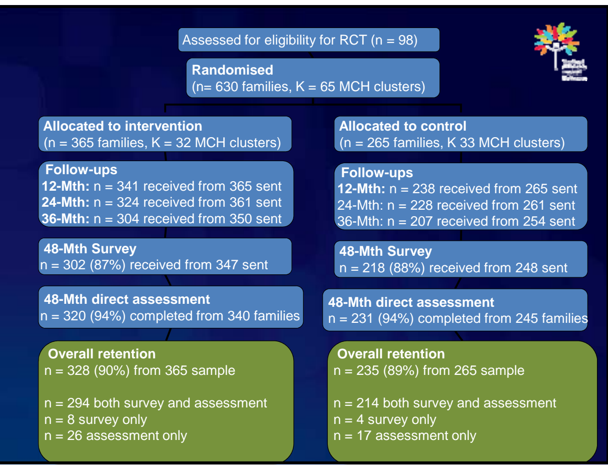

Centre for Community Child Health
Analysis
• Analyses compared the trial arms using the intention to treat principle
• We specified the MCHC as the cluster and adjusted for socio-economic status, age, gender, language spoken at home and maternal mental health measured by the SF12 Health Survey







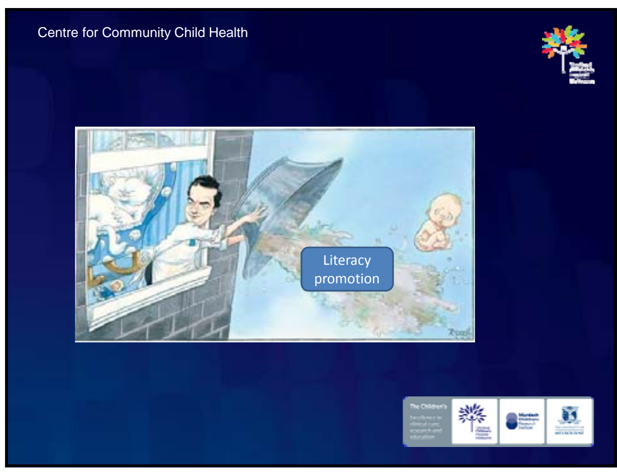




	Control (N* = 265)	Intervention (N* = 365)
Child's characteristics		
Child's age (weeks), mean (sd)	8.1 (3.9)	9.6 (4.5)
Male, %	47.4	55.8
Term gestation, %	94.9	93.2
Primary care giver		
Age in years, mean (sd)	32.1 (5.9)	31.6 (4.9)
Relationship status		
Married, %	74.2	77.2
De Facto, %	21.6	18.4
Divorce / Separated, %	1.1	1.4
Single, never married, %	3.0	3.0
Born in Australia, %	70.0	75.7
Aboriginal / TSI, %	0.4	0.8
Completed Year 12 education, %	79.6	76.5
Family health Care Card, %	19.8 %	20.1 %

* Sample size ranges from 217 to 265 in the control arm and 305 to 365 in the intervention arm

Outcome	Mean (SD)		Mean Difference (95% CI)		p-value
	Intervention	Control	Unadjusted	Adjusted	
SPAT – R					
Intra-syllabic	7.0 (2.4)	6.9 (2.4)	0.1 (-0.4 to 0.7)	0.1 (-0.3 to 0.6)	0.3
Phonemic	5.5 (2.6)	5.5 (2.7)	0.0 (-0.5 to 0.5)	0.1 (-0.4 to 0.5)	0.8
Letter Awareness	9.3 (8.9)	9.5 (9.0)	-0.2 (-1.8 to 1.3)	0.0 (-1.6 to 1.6)	0.96
CELF – P2					
Core	99.2 (16.0)	98.3 (16.4)	1.5 (-2.9 to 5.9)	1.3 (-1.4 to 4.0)	0.4
Receptive	95.4 (15.5)	95.1 (15.2)	0.9 (-3.0 to 4.9)	0.7 (-2.2 to 3.6)	0.6
Expressive	99.2 (16.0)	98.9 (17.6)	1.0 (-3.5 to 5.5)	0.9 (-1.8 to 3.6)	0.5
STIM-Q					
PIDA	10.5 (2.6)	10.8 (2.8)	-0.2 (-0.8 to 0.3)	-0.2 (-0.7 to 0.3)	0.4
PVR	5.9 (1.2)	5.9 (1.3)	0.0 (-0.3 to 0.3)	-0.1 (-0.3 to 0.2)	0.6
Reading	15.3 (2.2)	15.1 (2.4)	0.1 (-0.3 to 0.6)	0.2 (-0.2 to 0.6)	0.4
Total	31.8 (4.5)	31.9 (5.1)	-0.1 (-1.1 to 0.8)	-0.1 (-1.0 to 0.8)	0.8



Centre for Community Child Health
What are the next steps to translate this research into action?
Importance of a universal platform in order to target BUT consider whether free books are necessary for everyone (ie decrease costs against possible ineffectiveness)
How best to target disadvantaged families?
How to determine best dose?

Centre for Community Child Health
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Parents
Maternal and Child Health Nurses

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