

Vocabulary and Reading in Secondary School (VaRiSS)

E · S · R · C
ECONOMIC
& SOCIAL
RESEARCH
COUNCIL

Jessie Ricketts



ROYAL
HOLLOWAY
UNIVERSITY
OF LONDON



- Vocabulary contributes to reading development
- Reading provides opportunities for new word learning
- Fostering reading and vocabulary is essential for learning across the curriculum
- 'Reading to learn' a particular focus in secondary school
- Little data on vocabulary and reading in secondary school



- Study 1: Longitudinal



- Study 2: Learning new words with access to printed forms
- Study 3: Learning new words while reading – *watch this space!*

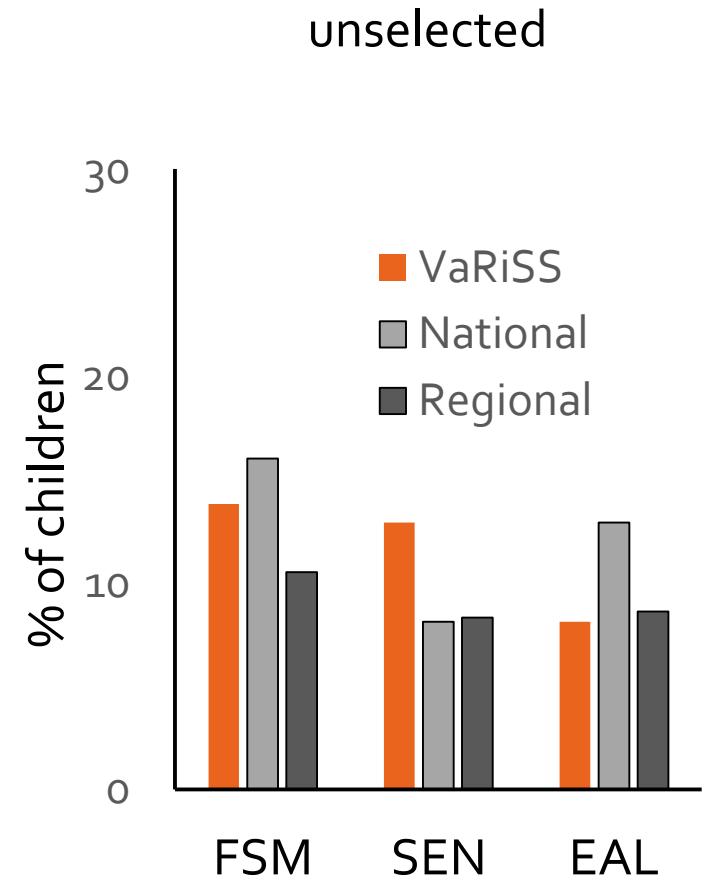
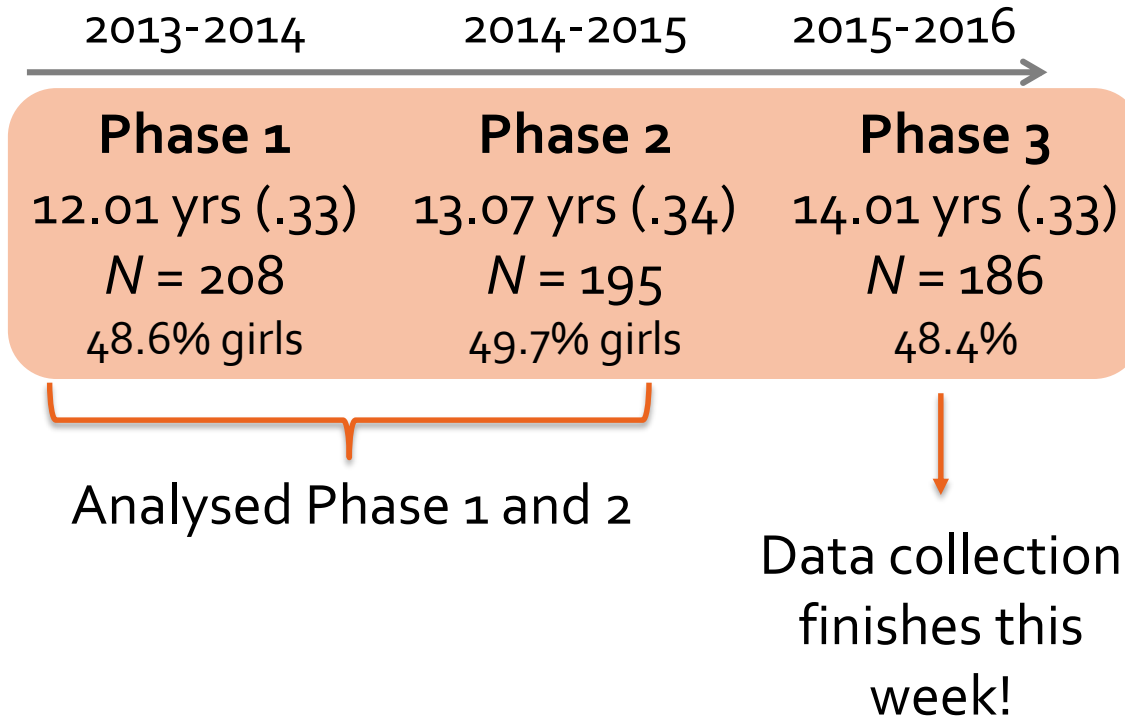




Longitudinal study

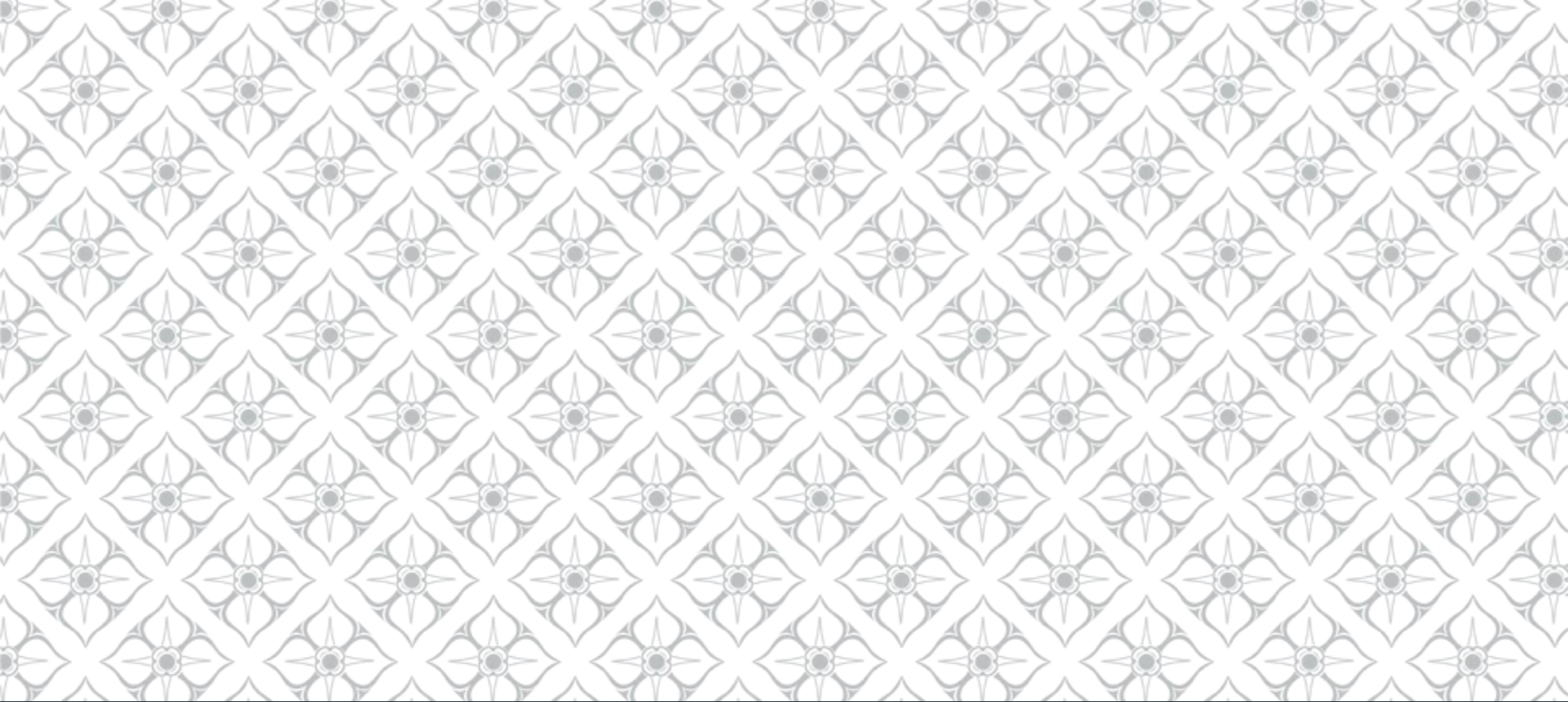


Design and participants



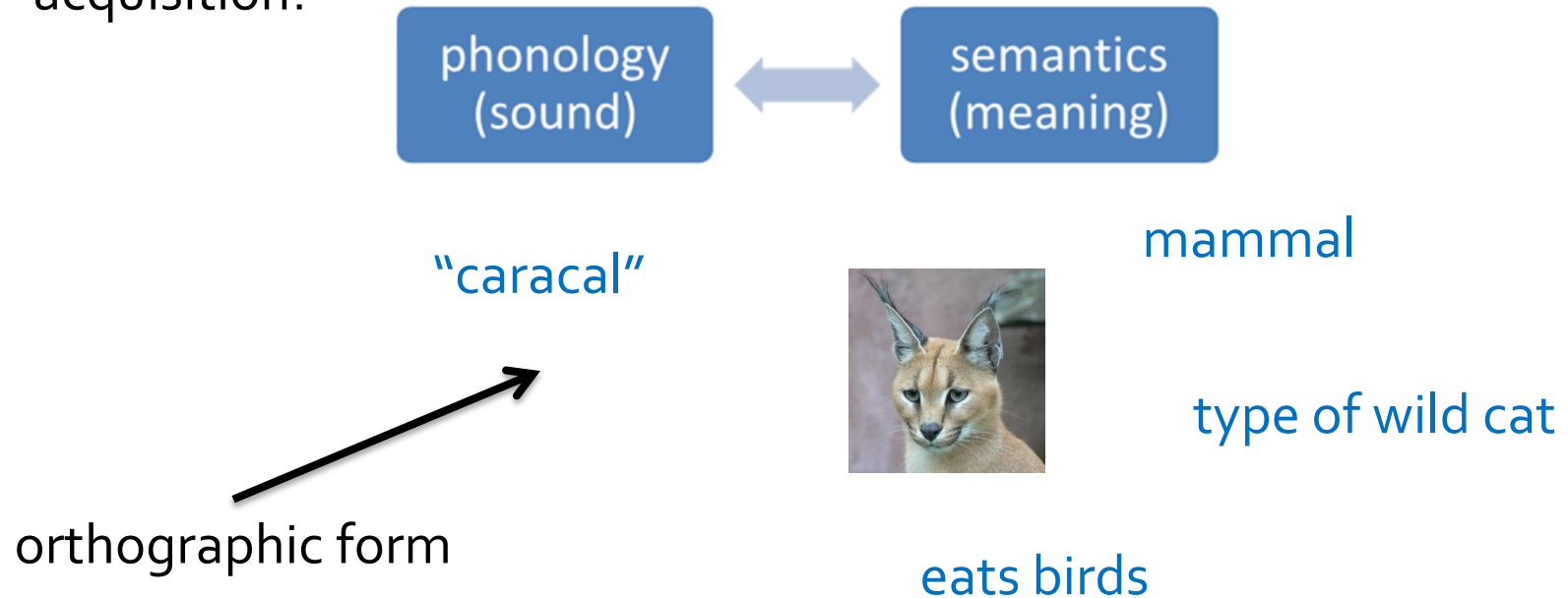
- 6 hours with each pupil (2 hours per year)
- Nonverbal reasoning
- Oral vocabulary (two measures)
 - Receptive, expressive, depth and breadth
 - Also, semantic relationships between words (where possible)
- Word-level reading (six measures)
 - Nonwords, regular words, irregular words, accuracy, efficiency
- Reading comprehension (one measure)
 - Minimum four passages (individual differences, reliability)

- Between 15% and 20% of pupils are experiencing reading difficulties at the beginning of secondary school. Can't assume that secondary pupils can read effectively.
- Limited development in this period
- Remarkably high longitudinal stability in oral vocabulary, reading comprehension and word reading in early adolescence, indicating:
 - Good measurement
 - Performance at 12 years explains almost all/all of the variance at 13 years
 - Rankings are fixed
- No evidence for the hypothesised vocabulary – reading relationships



Orthographic facilitation

- Does the presence of orthography facilitate oral vocabulary acquisition?



- Theoretical and practical motivation

- Children more likely to learn words that have been taught with support from orthography
 - Typically developing children (Ricketts et al., 2009; Rosenthal & Ehri, 2008), ASD (Lucas & Norbury, 2013, Ricketts et al., 2015), SLI (Ricketts et al., 2015) and Down syndrome (Mengoni et al., 2013)
- Implications
 - Emphasise orthography whilst teaching new vocabulary
 - Incorporate into intervention approaches
 - In the classroom, strategy is common but not universal (66% in observations of 147 classrooms including pupils with SLCN)

- Instructions: compare explicit and incidental conditions for first time
- Replicate orthographic facilitation effect in older children (12-13y)?

age group

9-10 year olds

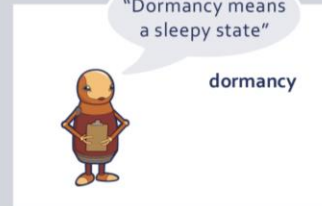


12-13 year olds



orthography

present



absent

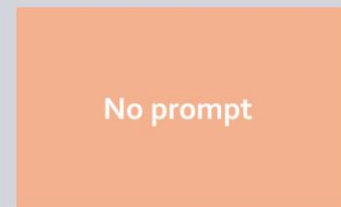


presentation

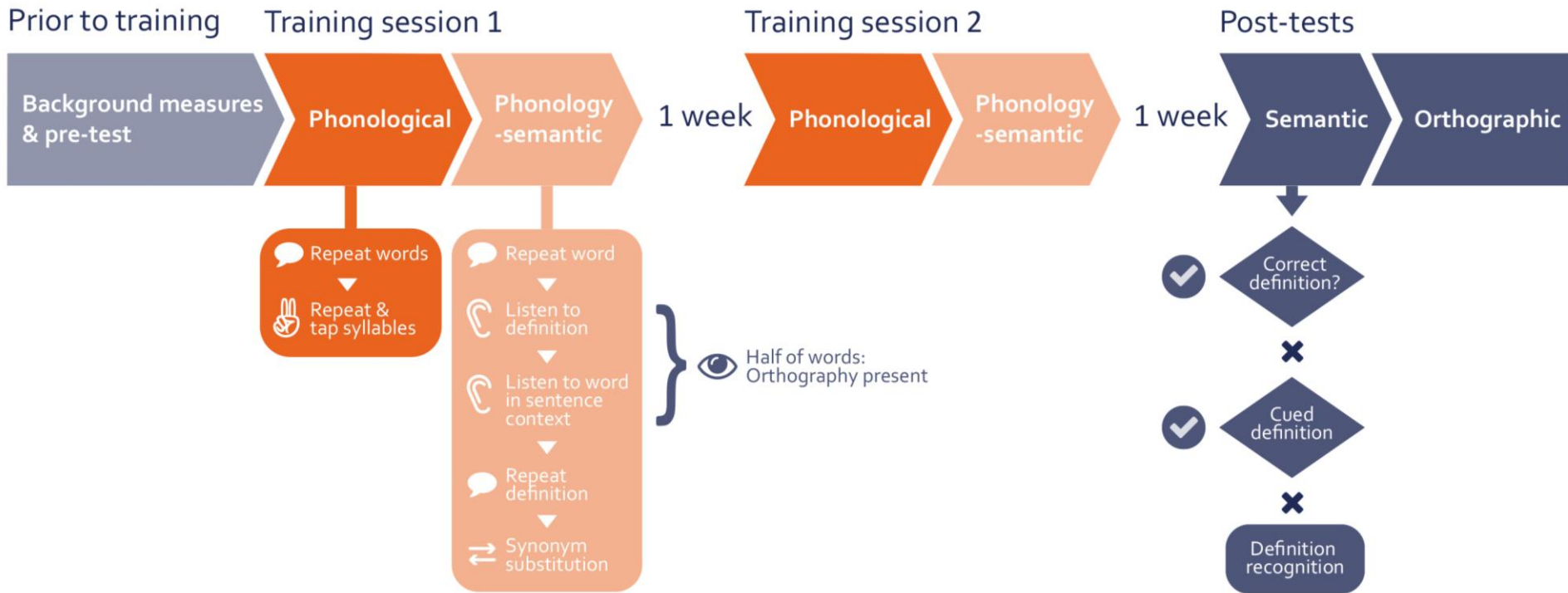
explicit



incidental



Words and procedure



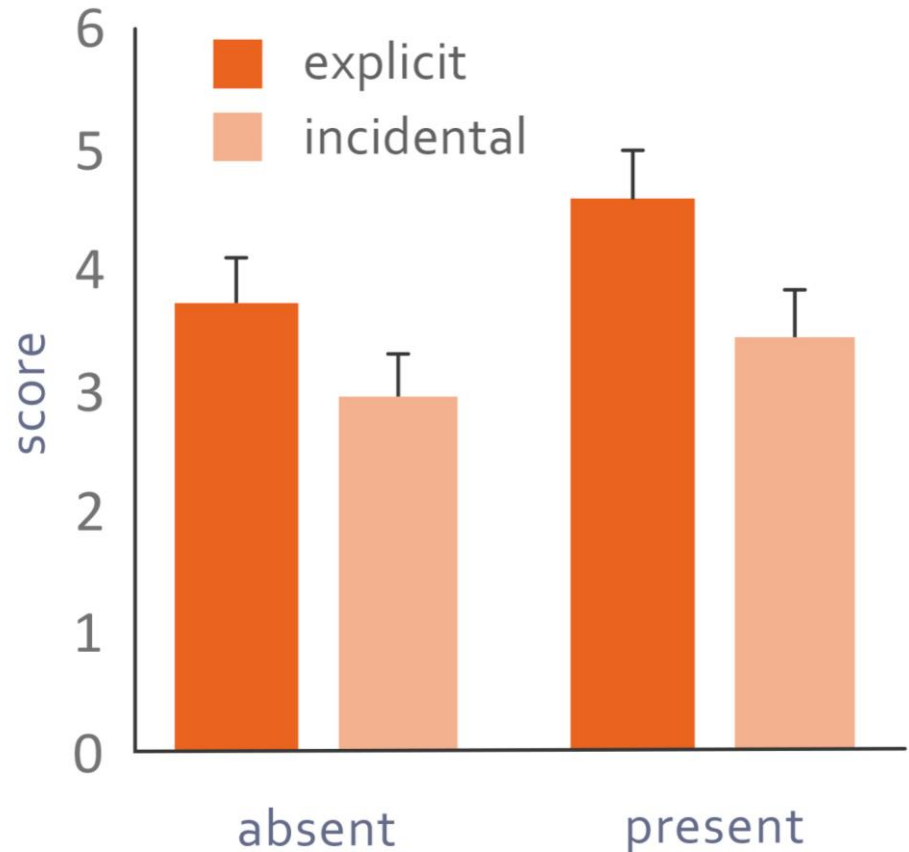
Semantic learning ($M \pm SE$)

Correct definition = 2, correct cued definition = 1, otherwise = 0

Thus max = 16 for each bar

Collapsed by age (ns)

- Orthography – $p = .01$
- Age - ns
- Presentation – $p = .03$



- Equivalent learning in 9 and 12 year olds
- Orthographic facilitation for oral vocabulary learning
 - Consistent with previous studies
 - Using paradigm that teaches real polysyllabic words and richer semantic representations
- Explicitly emphasising orthography leads to benefit (but general)
 - General increase in engagement with the task?
 - Instructions prime participants to generate their own orthography?

- Longitudinal study
 - Some pupils have poor vocabulary and reading in the early secondary years
 - Little growth during this period of development
 - Rankings seem to be fixed
- Orthographic facilitation
 - Children and adolescents are more likely to learn words that have been taught with support from orthography
 - Especially if attention is drawn to orthography and how it could be useful

Thanks and acknowledgements

- To you for listening!

- Funding



- Research Assistance:

- Nicky Dawson, Lucy Taylor, Rachael Sperring, Fay Bainbridge, Rachel Tomkinson, Natascha Ahmed, Keely Pridden, Rosie McGuire, Grace Pocock and Eva Dvorakova

- LARA lab: <http://pc.rhul.ac.uk/sites/lara/people/>; @ricketts_lara

- The VaRiSS project: www.variss.org; @varissproject;
www.facebook.co.uk/varissproject