Wellcome Project Reading and Language Intervention Report - Summer 2012

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Background

Over the past 5 years, researchers at the Centre for Reading and Language have been conducting research to help understand the causes, development and overlap of two forms of learning difficulty: Specific Language Impairment and Dyslexia (specific reading impairment).

At the age of 3, many children were recruited to the project because they were at risk for developing reading problems: either because dyslexia ran in their family, or because they had a pre-school speech/language impairment.



One aim of this large project was to put in place a school-based reading and language intervention for some of these children with the weakest literacy skills. Along with the children that the research team identified, schools were asked to select additional children to take part in the intervention – those they thought would benefit from additional reading instruction.

Study Design

The intervention programme ran in schools between March 2011 and March 2012. Around 145 children in 45 schools in the North of England were involved in this project. The study was conducted as a Randomised Controlled Trial: Approximately half of the children received 18 weeks of intervention; the other half received 9 weeks of education as usual, followed by 9 weeks of intervention.

A new intervention programme was devised, based on previous research. It was delivered to children on a daily basis, and a typical week included 3 20-minute individual reading sessions, and 2 30-minute small-group language sessions. The intervention was delivered by Teaching Assistants (TAs) who were trained, supported and observed by the research team.

Reading Strand

- Practising reading books at easy (>94% accuracy) and instructional (90-94% accuracy) levels
- Learning high-frequency and tricky words by sight
- Training in letter-sound knowledge, phonological awareness, phonics and its application to reading and spelling

Language Strand

- Active listening to story book readings
- Multi-contextual vocabulary instruction of target words from the story books
- Re-telling stories and using this as a basis to practise writing







Participating Children

The children who received the intervention spanned a broad range of abilities and characteristics at the outset:

- On average, the children were 61/2 years old (ranging from 5 to 8 years)
- Children's reading skills tended to be in the low average range (ranging from below average to high average)
- Children's vocabulary skills tended to be average (ranging from below average to above average)
- 49 children were on the SEN register; and 90 children were already receiving some form of literacy support

Findings

So far, our analyses have concentrated on the first 9 weeks of the intervention programme. We have tested whether children who have received 9 weeks of intervention made more progress on language and literacy measures than the children who at that point had not received any intervention (education as usual). In our analyses, we have controlled for any impact that differences in age and school might have on the results.

We found that children who received the intervention made significantly more progress on: letter-sound knowledge, phoneme awareness, word reading accuracy and vocabulary (ability to define the words they were taught the meanings of). For some children, there was also an effect on spelling (how phonetically plausible spelling attempts were). We also found that these effects were larger for children who started the intervention with weaker performance on these skills.

After 9 weeks of intervention, there was no significant effect on nonword reading (phonic decoding), listening or reading comprehension, or on defining words that had not been taught.

School Feedback

We sent questionnaires to staff members to get their opinions on being part of the research. 22 Heads and 30 TAs responded. Heads agreed with the statement that the intervention had impacted the school's ability to improve reading and language skills. They judged that children's attainment skills showed good improvements (rated 5 on a scale of 1-7; 7 reflects major improvements), with reading improving more than expected. TAs overwhelmingly agreed with statements reflecting opinions that their expertise had improved as a consequence of the project, that the children had benefited, and that the TAs and children enjoyed the intervention (ratings of 6.5 out of 7).

Conclusions

After 9 weeks, the intervention significantly benefited letter-sound knowledge, phoneme awareness, word reading accuracy and taught expressive vocabulary. The intervention was more effective for children who started out with weaker literacy skills. After 9 weeks, there was no significant impact of the intervention on nonword reading, listening and reading comprehension, or untaught vocabulary. More data analysis is to be conducted; and children's performance is being assessed 6 months after the intervention finished.

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