Effectiveness of a parent-engagement approach to supporting language development for children living in socially deprived areas

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Background

- Oral language skills provide the foundation for formal education and play a critical role in learning to read (Hulme et al., 2015; Duff et al., 2015)
- Children from low-income backgrounds are at risk of delayed language development and educational disadvantage (DfE, 2018)
- Positive relationship between parental involvement and academic achievement (e.g. Wilder, 2013)
- UK policy highlights the need for early intervention and call for increased efforts to engage parents in supporting early development (Ofsted, 2014; Field, 2010; Tickell, 2011; DfE, 2018)
Project Aims

• Evaluate the impact of a parent-delivered early language enrichment programme on pre-school children’s early language and emergent literacy skills
  – Robust evidence for a causal effect
• Equip parents with resources and strategies to help support early development and school readiness
Parents and Children Together (PACT)

- PACT is a parent-delivered early language enrichment programme designed to promote pre-school children’s oral language skills
- 30-week programme organised into 6 x 5-week blocks
- Delivered by parents in daily 20-minute sessions
  - Sessions are broken down into 5 components
  - Short varied activities
  - Consistent structure and routine
  - Based around storybook reading

The programme is manualised and all resources are provided
## Session overview

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
<th>Duration</th>
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</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>Settle your child</td>
<td>2 minutes</td>
</tr>
<tr>
<td><strong>Reading together</strong></td>
<td>Read the book together and talk about the story</td>
<td>5 minutes</td>
</tr>
<tr>
<td><strong>Vocabulary</strong></td>
<td>Talk about new words and what they mean</td>
<td>5 minutes</td>
</tr>
<tr>
<td><strong>Stories</strong></td>
<td>Talk about what happens in the story</td>
<td>5 minutes</td>
</tr>
<tr>
<td><strong>Reward</strong></td>
<td>Talk about what you did together and give your child a sticker</td>
<td>3 minutes</td>
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Evaluation of a parent-delivered early language enrichment programme: evidence from a randomised controlled trial

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Background: It is widely believed that increasing parental involvement can improve children’s educational outcomes although we lack good evidence for such claims. This study evaluated the effectiveness of a parent-delivered early language enrichment programme. Methods: We conducted a randomised controlled trial (RCT) with 208 preschool children and their parents living in socially diverse areas in the United Kingdom. Families were allocated to an oral language programme ($N = 103$) or an active control programme targeting motor skills ($N = 105$). Parents delivered the programmes to their child at home in daily 20-min sessions over 30 weeks of teaching. Results: Children receiving the language programme made significantly larger gains in language ($d = .21$) and narrative skills ($d = .36$) than children receiving the motor skills programme at immediate posttest. Effects on language were maintained 6 months later ($d = .34$), and at this point, the language group also scored higher on tests of early literacy ($d$ values $=.35$ and .42). There was no evidence that the movement programme improved motor skills. Conclusions: This study provides evidence for the effectiveness of a parent-delivered language enrichment programme. Further large-scale evaluations of the programme are needed to confirm and extend these findings. Keywords: Language; parents; motor skills; randomised controlled trial; education; early literacy.
Study Design

Recruitment

- 103 children – 30 weeks of Oral Language Programme
- 105 children – 30 weeks of Movement Skills & Independence Programme

Study Design:
- Pre-Test (t1) Oct14-Jan15 Feb-Mar15
- Post-Test (t2) May15-Mar16
- Maintenance-Test (t3) Mar-Apr16 Oct16
- 6 months maintenance period
## Participants: Pre-test data

<table>
<thead>
<tr>
<th></th>
<th>Pre-test Feb-March 15:</th>
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<tbody>
<tr>
<td></td>
<td>3,01 (2,07-3,06); 102:106 (M:F)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Average Raw Score</th>
<th>Range Raw Score</th>
<th>Percentage Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expressive vocabulary</td>
<td>8.53 (5.72)</td>
<td>0-22</td>
<td>36% -1SD</td>
</tr>
<tr>
<td>(max.40; N=190)</td>
<td></td>
<td></td>
<td>(16.5% -2SD)</td>
</tr>
<tr>
<td>Receptive vocabulary</td>
<td>31.45 (13.65)</td>
<td>1-66</td>
<td>53.7% -1SD</td>
</tr>
<tr>
<td>(max.96; N=170)</td>
<td></td>
<td></td>
<td>(20% -2SD)</td>
</tr>
<tr>
<td>Beanbag Throwing</td>
<td>1.35 (1.35)</td>
<td>0-6</td>
<td>N/A</td>
</tr>
<tr>
<td>(max.6; N=175)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing Trail Errors</td>
<td>14.57 (4.79)</td>
<td>1-19</td>
<td>79.8% -1SD</td>
</tr>
<tr>
<td>(max.19; N=171)</td>
<td></td>
<td></td>
<td>(42.7% -2SD)</td>
</tr>
</tbody>
</table>
Language Immediate Posttest – Programme is Effective ($d = .21$)

$X^2 (59, N=202) = 75.213; p=0.076$
RMSEA = 0.037 (90% CI 0.00 – 0.06)
CFI = 0.99
TLI = 0.98
Language Delayed Posttest – Programme is Effective ($d = .34$)

$X^2 (59, N=202) = 66.96; p=.22$

RMSEA = .026 (90% CI .00 – .052)

CFI = 0.99

TLI = 0.99
Summary

- The parent-delivered language teaching programme led to significant gains in children’s oral language and narrative skills
  - Small to medium effect sizes
  - Effects on language maintained 6 months after intervention
- Language group also scored better on measures of early literacy at delayed post-test
  - Letter sound knowledge ($d=.42$) and regular word reading ($d=.35$)
- Active control group – a conservative test of the language programme
- No effect of movement skills and self-care programme
Effectiveness of the programme: next steps

- EEF efficacy trial (2018-2021)
- Randomised Trial with large sample of children ($N=450$) in circa 47 nurseries.
- Revised and improved programme materials published by Book Trust
- Independent evaluation conducted by Durham University
Connecting to PACT online

PACT: Parents and Children Together (PACT)

Information for schools and participants

Project overview

Parents and Children Together (PACT) is an early language teaching programme that aims to provide parents with strategies, resources and activities to support their child’s early language development at home.

- Why is the project important?
- How is the project funded?

https://sites.manchester.ac.uk/pct/

@PACTLanguage