**Examining the effect of form-emphasising shared reading training on children’s language and phonological awareness.**

**Short title: Sharing Books with Children**

**Work Package 2, Study 3 of ESRC grant ref ES/M003752/1**

**CONTEXT**

‘Sharing Books with Children’ is part of a larger, ESRC-funded project, “How to promote children’s language development using family-based shared book reading”, led from the University of Liverpool in collaboration with the Universities of Manchester, Sheffield and Leeds. The aim of the project was to determine how shared reading promotes child language development, and to use this knowledge to make it an effective language-boosting tool for children from all social and economic backgrounds. The overall project included seven studies grouped into three work packages: two studies were run from Manchester.

**BACKGROUND**

Shared book reading has been demonstrated to be an effective way to promote children’s language including preparation for literacy: children who are read to regularly, on average, enter school with better language skills and become more successful readers. However, evidence suggests that shared reading interventions are less effective for children from lower socio-economic background. In addition, there has been no research specifically focused on ‘form-emphasising’ books (with lots of rhyme or alliteration) and their possible effect on phonological awareness (PA), an important skill in the early stages of phonics-based literacy development. The aim of this research was to investigate the effect of a shared reading intervention that emphasised the form of words (therefore targeting PA), and to explore its interaction with SES status.

The study recruited families across the range of socio-economic backgrounds. The children showed a range of language performance but none had been referred to speech and language therapy. We hypothesised that the intervention condition would improve children’s phonological awareness.

**GLOSSARY OF ABBREVIATIONS**

|  |  |
| --- | --- |
| PLS-5 | Preschool Language Scale: Fifth Edition UK |
| PIPA | Preschool and Primary Inventory of Phonological Awareness |
| IMD | Index of Multiple Deprivation |
| 2;6 | Age in years;months, i.e. two years six months |

**STUDY DESIGN**

A randomised blinded controlled trial, pre-registered at <https://clinicaltrials.gov>. Ethical approval was granted by the University of Manchester Research Ethics Committee. The study compared the effect of specific shared reading training on highlighting the sound properties of words, with more general advice on the importance of and good practice in reading with children.

**PARTICIPANTS**

We recruited families with children aged 3;6-4;6 with no known communication problem, neurological diagnosis or permanent impairment of vision or hearing; all were being raised as monolingual English speakers. Recruitment was via contact with schools, nurseries, community groups etc, by distribution of leaflets and social media. One hundred and twelve families from across the north west of England completed the study, with all deciles of the IMD represented. Families were loaned the books to complete the study and a digital voice recorder to record reading sessions. Families received a £10 gift voucher and children a small toy on completion.

**MATERIALS**

**Assessments and questionnaires** administered were:

*PLS-5***:** A standardized measure of language development. We reported the Total Language Score, which incorporates both the expressive communication and auditory comprehension scales.

*PIPA*: we administered the Rhyme Awareness, Alliteration Awareness and the Phoneme Isolation (identification of the first sound of a word spoken by the tester) subscales.

*The Family Questionnaire:* (see appendices) records relevant demographic information.

*The Home Life Questionnaire*: (see appendices) a parent report questionnaire including reading-related activities.

*Children’s Title and Author Checklists*: (see appendices) these checklists indirectly measure a child’s storybook exposure by assessing the carer’s knowledge of children’s book titles and authors.

**Training videos, scripts and parent advice sheets** were developed for both the intervention and control arms. In a 45-minute session, the trainer talked through the script, illustrating it with clips from the training video and left the advice sheet with the family. The PA (or form-emphasising) intervention training gave examples and demonstrations of how to incorporate awareness of syllables, rhymes and sounds in words into an enjoyable book sharing session. The Control intervention training explained the value of shared reading, gave examples and demonstrations of how to make book sharing an engaging experience for the child, and ideas of how to fit it into family routine. See appendices for scripts and advice sheets.

**Books**: Twenty children’s books (10 with lots of rhyme or alliteration, 10 with no emphasis on word form) were left with the families to read over a six week period. All books were described as suitable for children of three years and upwards and all families had the same books.

**PROCEDURE**

Families who consented to take part in the study and whose children met criteria were randomised to either the PA training or general reading training control condition according to the Consolidated Standards of Reporting Trials (CONSORT) 2010 guidelines (Schulz, Altman, & Moher, 2010). Randomisation was conducted by an independent colleague with no involvement in the project. For each participant number, condition allocations were placed in an opaque sealed envelope, identified only by participant number, by another independent research colleague. During the baseline visit, once the final measure had been collected, the research assistant opened the envelope with the appropriate participant number to find out which condition the participant had been randomised to and then administered the relevant intervention. Assessment and training took place in the family home. Pre-intervention assessment and training sometimes required two visits.

Families were requested to read two books a day to their children, at least five days a week; one form-emphasising and one in normal prose each day. A rota was provided so that each of the 20 books would be read twice in the first four weeks. In the last two weeks of the intervention families could choose which of the books to read, provided it still included one form-emphasising and one in normal prose each day. They were also requested to record their reading sessions on digital voice recorders.

At the end of the six-week period a second researcher, blind to group allocation, visited the families to administer post-intervention assessments and collect books and recorders. The two researchers on the study alternated the pre- and post-assessment role so that both were involved as trainers in both conditions.

**DOCUMENTATION**

Two main sections of information have been uploaded in addition to this user guide:

* a data file containing the measurement variables: WP1\_Study2\_reading\_and\_play.xlsx ;
* Supporting information (consent form, information sheet, blank questionnaires, training scripts, parent advice sheets);

**NOTES ON DATAFILE VARIABLES**

All variables are described in the data dictionary worksheet. The following adds more detail to variables not fully explained in the datafile.

***V3 IMDD:*** The English Indices of Multiple Deprivation (IMD 2015) ranks neighbourhood according to its level of deprivation relative to that of other areas in England. We used this tool

<http://imd-by-postcode.opendatacommunities.org/> to find the related IMD decile for our participants.

***V11 PLSTotLangScorePre, V12 PLSTotLangScorePost*:**  Scores achieved on the Preschool Language Scales UK, (5th Edition, Zimmerman et al, 2014). The Preschool Language Scales were originally developed in the US for use with children from birth to 7;11 years to identify children who have a language delay or disorder. The PLS-5UK has a UK standardisation sample. Results for the composite Total Language Score are reported as standard scores with a mean of 100.

***V13 PIPARhymePre, V14 PIPARhymePost, V15 PIPAAlliterationPre, V16 PIPAAlliterationPost*:** Scoresachieved on the Preschool and Primary Inventory of Phonological Awareness (Dodd et al., 2000). The PIPA was designed to measure children’s phonological awareness. It has an Australian and a UK standardisation sample for ages 3;0 – 6;11. The Rhyme Awareness and Alliteration Awareness subtests are odd one out tasks, comprising 12 items, each with four response choices. For Rhyme, children listen to an explanation and examples of words which ‘sound the same’ because they rhyme, then the tester says the names of the four pictures (three rhyming, one not). Children are asked to listen to the words and show the one that doesn’t belong. The Alliteration task has the same format but children are given an explanation and examples of sounds at the start of words. Three of the response choices start with the same sound, one does not..

***V17 PIPAPhonIsolationPre, V18 PIPAPhonIsolationPost***: Scoresachieved on the Preschool and Primary Inventory of Phonological Awareness (Dodd et al., 2000) described above. Children are given an explanation, demonstration and practice attempts at saying the first sound of a word. There are 12 items of pictured words; the tester says the word and children are asked to ‘tell me the first sound of xxx’.

**REFERENCES**

Dodd, B., Crosbie, S., McIntosh, B., Teitzel. & Ozanne, A. (2000). The Preschool and Primary Inventory of Phonological Awareness. London: The Psychological Corporation.

Zimmerman, I. L., Steiner, V. G., & Pond R. E. (2014) Preschool Language Scales-5UK. London: Pearson Assessment.