# Evidence-based intervention for preschool children with primary speech and language impairments: Child Talk – an exploratory mixed-methods study

Sue E Roulstone,<sup>1,2\*</sup> Julie E Marshall,<sup>3</sup> Gaye G Powell,<sup>4</sup> Juliet Goldbart,<sup>3</sup> Yvonne E Wren,<sup>1</sup> Jane Coad,<sup>5</sup> Norma Daykin,<sup>2</sup> Jane E Powell,<sup>2</sup> Linda Lascelles,<sup>6</sup> William Hollingworth,<sup>7</sup> Alan Emond,<sup>7</sup> Tim J Peters,<sup>8</sup> Jon I Pollock,<sup>2</sup> Cres Fernandes,<sup>9</sup> Jenny Moultrie,<sup>1</sup> Sam A Harding,<sup>1</sup> Lydia Morgan,<sup>1</sup> Helen F Hambly,<sup>1</sup> Naomi K Parker<sup>1</sup> and Rebecca A Coad<sup>1</sup>

**Declared competing interests of authors:** Dr Yvonne Wren is the director of an independent speech and language therapy provider called ChildSpeech.

Published August 2015 DOI: 10.3310/pgfar03050

# **Plain English summary**

Evidence-based intervention for preschool children with PSLI

Programme Grants for Applied Research 2015; Vol. 3: No. 5

DOI: 10.3310/pgfar03050

NIHR Journals Library www.journalslibrary.nihr.ac.uk

<sup>&</sup>lt;sup>1</sup>Bristol Speech & Language Therapy Research Unit, Frenchay Hospital, Bristol, UK <sup>2</sup>Faculty of Health and Applied Sciences, University of the West of England, Bristol, UK

<sup>&</sup>lt;sup>3</sup>Research Institute for Health and Social Change, Manchester Metropolitan University, Manchester, UK

<sup>&</sup>lt;sup>4</sup>Plymouth, UK

<sup>&</sup>lt;sup>5</sup>Centre for Technology Enabled Health Research, Coventry University, Coventry, UK <sup>6</sup>Afasic, London, UK

<sup>&</sup>lt;sup>7</sup>School of Social and Community Medicine, University of Bristol, Bristol, UK

<sup>&</sup>lt;sup>8</sup>School of Clinical Sciences, University of Bristol, Bristol, UK

<sup>&</sup>lt;sup>9</sup>GL Assessment Limited, London, UK

<sup>\*</sup>Corresponding author

# **Plain English summary**

Primary speech and language impairments affect 7.4% of primary school children. Early intervention by speech and language therapists (SLTs) is crucial to lessen their impact on these children's life chances; however, there is wide variation in how families are assessed and interventions implemented.

The aim of the research was to improve speech and language therapy services by developing a framework that speech and language therapists could use to inform the clinical decisions they make regarding which interventions to use with children. The framework was developed from published evidence, experiences of children and families and knowledge of the practitioners.

The research was carried out in six sites in England, representing a range of demographics. A variety of methods was used to collect data including online surveys, regional and national meetings and focus groups with SLTs, parents and workers in early years settings. In addition, a thorough search for published evidence was undertaken.

This research programme has identified nine themes that encompass the practice of speech and language therapy, such as 'comprehension' and 'speech'. For each theme we have mapped the activities that SLTs use, the views of families and children and research evidence to create the framework. To support the use of this, a toolkit has been developed that lists assessment tools, outcome measures and key data that should be routinely recorded by services to capture the resources that they use.

Further research is needed to assess the effectiveness of this framework in improving outcomes for children with primary speech and language impairment and its cost-effectiveness.

## **Programme Grants for Applied Research**

ISSN 2050-4322 (Print)

ISSN 2050-4330 (Online)

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) (www.publicationethics.org/).

Editorial contact: nihredit@southampton.ac.uk

The full PGfAR archive is freely available to view online at www.journalslibrary.nihr.ac.uk/pgfar. Print-on-demand copies can be purchased from the report pages of the NIHR Journals Library website: www.journalslibrary.nihr.ac.uk

### Criteria for inclusion in the Programme Grants for Applied Research journal

Reports are published in *Programme Grants for Applied Research* (PGfAR) if (1) they have resulted from work for the PGfAR programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

### **Programme Grants for Applied Research programme**

The Programme Grants for Applied Research (PGfAR) programme, part of the National Institute for Health Research (NIHR), was set up in 2006 to produce independent research findings that will have practical application for the benefit of patients and the NHS in the relatively near future. The Programme is managed by the NIHR Central Commissioning Facility (CCF) with strategic input from the Programme Director.

The programme is a national response mode funding scheme that aims to provide evidence to improve health outcomes in England through promotion of health, prevention of ill health, and optimal disease management (including safety and quality), with particular emphasis on conditions causing significant disease burden.

For more information about the PGfAR programme please visit the website: http://www.nihr.ac.uk/funding/programme-grants-for-applied-research.htm

### This report

The research reported in this issue of the journal was funded by PGfAR as project number RP-PG-0109-10073. The contractual start date was in January 2011. The final report began editorial review in April 2014 and was accepted for publication in October 2014. As the funder, the PGfAR programme agreed the research questions and study designs in advance with the investigators. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The PGfAR editors and production house have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, CCF, NETSCC, PGfAR or the Department of Health. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the PGfAR programme or the Department of Health.

© Queen's Printer and Controller of HMSO 2015. This work was produced by Roulstone et al. under the terms of a commissioning contract issued by the Secretary of State for Health. This issue may be freely reproduced for the purposes of private research and study and extracts (or indeed, the full report) may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.

Published by the NIHR Journals Library (www.journalslibrary.nihr.ac.uk), produced by Prepress Projects Ltd, Perth, Scotland (www.prepress-projects.co.uk).

### **Programme Grants for Applied Research Editor-in-Chief**

Professor Paul Little Professor of Primary Care Research, University of Southampton, UK

### **NIHR Journals Library Editor-in-Chief**

Professor Tom Walley Director, NIHR Evaluation, Trials and Studies and Director of the HTA Programme, UK

### **NIHR Journals Library Editors**

**Professor Ken Stein** Chair of HTA Editorial Board and Professor of Public Health, University of Exeter Medical School, UK

Professor Andree Le May Chair of NIHR Journals Library Editorial Group (EME, HS&DR, PGfAR, PHR journals)

Dr Martin Ashton-Key Consultant in Public Health Medicine/Consultant Advisor, NETSCC, UK

**Professor Matthias Beck** Chair in Public Sector Management and Subject Leader (Management Group), Queen's University Management School, Queen's University Belfast, UK

**Professor Aileen Clarke** Professor of Public Health and Health Services Research, Warwick Medical School, University of Warwick, UK

Dr Tessa Crilly Director, Crystal Blue Consulting Ltd, UK

Dr Peter Davidson Director of NETSCC, HTA, UK

Ms Tara Lamont Scientific Advisor, NETSCC, UK

**Professor Elaine McColl** Director, Newcastle Clinical Trials Unit, Institute of Health and Society, Newcastle University, UK

Professor William McGuire Professor of Child Health, Hull York Medical School, University of York, UK

Professor Geoffrey Meads Professor of Health Sciences Research, Faculty of Education, University of Winchester, UK

Professor John Norrie Health Services Research Unit, University of Aberdeen, UK

Professor John Powell Consultant Clinical Adviser, National Institute for Health and Care Excellence (NICE), UK

**Professor James Raftery** Professor of Health Technology Assessment, Wessex Institute, Faculty of Medicine, University of Southampton, UK

Dr Rob Riemsma Reviews Manager, Kleijnen Systematic Reviews Ltd, UK

Professor Helen Roberts Professor of Child Health Research, UCL Institute of Child Health, UK

**Professor Helen Snooks** Professor of Health Services Research, Institute of Life Science, College of Medicine, Swansea University, UK

**Professor Jim Thornton** Professor of Obstetrics and Gynaecology, Faculty of Medicine and Health Sciences, University of Nottingham, UK

Please visit the website for a list of members of the NIHR Journals Library Board: www.journalslibrary.nihr.ac.uk/about/editors

**Editorial contact:** nihredit@southampton.ac.uk