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Improving speech, language and communication in pre-school children: implementation and effectiveness of the Sign 4 Programme, Luton, UK

Submission date
15/02/2018

Recruitment status
No longer recruiting

Registration date
21/02/2018

Overall study status
Completed

Last Edited
23/05/2022

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
The Sign 4 Programme uses sign language to support understanding and language development in hearing pre-school children. Nursery staff and parents read to children using Sign 4 story books and dolls to reinforce key words with sign language to facilitate story telling. Repeated use may help to improve children's comprehension, use of linking words, help with pronunciation and use of more complex words, as well as helping children to identify different emotions which allows them to 'name and tame' more challenging behaviours (such as 'frustrated' and 'angry'). The aim of this study is to find out whether the Sign 4 Programme improves language, speech and communication in pre-school children.

Who can participate?
Children aged under 5

What does the study involve?
Pre-school children take part in story time sessions in their nurseries as part of usual day-to-day activities. Children are assessed by nursery staff in four areas: listening and attention; understanding; speaking; and managing feelings and behaviour. These are part of standard assessments and are largely made through daily observation and activities. These assessments allow the tracking of progress over a period of months to assess the effectiveness of Sign 4 compared with a database of children who have not been part of the programme.

What are the possible benefits and risks of participating?
Early results suggest that children make better than expected progress in communication skills when attending Sign 4 story sessions. There are no anticipated risks.

Where is the study run from?
1. University of Bedfordshire (UK)
2. Flying Start Luton (UK)

When is the study starting and how long is it expected to run for?
February 2016 to November 2018

Who is funding the study?
1. University of Bedfordshire (UK)
2. Flying Start Luton (UK)

Who is the main contact?
Dr Rosemary Davidson
rosemary.davidson@beds.ac.uk

Contact information

Type(s)
Scientific

Contact name
Dr Rosemary Davidson

ORCID ID
https://orcid.org/0000-0002-0010-4809

Contact details
Institute for Health Research
University of Bedfordshire
University Square
Luton
United Kingdom
LU1 3JU
+44 (0)796 667 6974
rosemary.davidson@beds.ac.uk

Type(s)
Scientific

Contact name
Prof Gurch Randhawa

ORCID ID
https://orcid.org/0000-0002-2289-5859

Contact details
Institute for Health Research
University of Bedfordshire
Putteridge Bury Campus
Hitchin Road
Luton
United Kingdom

LU2 8LE
-
gurch.randhawa@beds.ac.uk

Additional identifiers

Protocol serial number
FS_Sign4_LT_BF

Study information

Scientific Title
Improving speech, language and communication in pre-school children: a process and outcome evaluation of the Sign 4 Programme, Luton, UK

Acronym
Sign 4 Little Talkers (S4LT) and Sign 4 Big Feelings (S4BF)

Study objectives
The Sign 4 Programme improves language, speech and communication in pre-school children when compared with a matched control group as measured by Early Years Outcomes (EYO).

Ethics approval required
Old ethics approval format

Ethics approval(s)
University Research Ethics Committee, University of Bedfordshire, 10/04/2017, ref: UREC104

Primary study design
Interventional

Study design
Single-centre non-randomised study

Study type(s)
Quality of life

Health condition(s) or problem(s) studied
Development of speech, language and communication in pre-school children, with particular focus on children who are not showing expected levels of development

Interventions
Targeted intervention in early years settings versus statutorily collected Early Years Outcome (EYO) control data

The Sign 4 Programme uses British Sign Language to support understanding and language development in hearing children.

Approach 1: Designated Safeguarding Officers led, Luton wide
Approach 1 aims to implement Sign 4 Big Feelings across Luton to children assessed as having

lower levels of expected development as efficiently as possible given limited resources. The intervention will be incorporated into existing safeguarding processes across the town in 50-60 schools, registered child minders, and private, voluntary or independent (PVI) nursery settings. Designated Safeguarding Officers (DSOs) will follow agreed protocols to identify and monitor a minimum of two children per setting who are below expected levels in communication and language development (and may show signs of emotional distress) as part of the evaluation, although many more children in each setting will use Sign 4. DSOs will attend a briefing session where they will learn about the intervention and receive the Sign 4 Big Feelings book and dolls. A 'light touch' ensures as great a reach as possible with early years professionals who already work with children judged to be at risk. Practitioners are asked to incorporate the story books and signing into daily routines with children, with data collected at baseline and follow-up at three months (one school term).

Approach 2: Targeted, 8 Early Years settings
Eight settings have been identified for a comprehensive roll out of the Sign 4 approach. These settings have reported lower than expected progress and attainment in communication and language as demonstrated by the Early Years Foundation Stage Outcomes data routinely collected and inputted into the Luton Borough Council Tracking System (LATS database). Children from these settings also do less well than Luton and National levels in Communication and Language and Managing Feelings and Behaviour when they are assessed using the EYFS Profile at aged 5. Head teachers and senior staff in each setting must be committed to implementing Sign 4 Little Talkers and be able to incorporate the intervention by embedding the approach into daily routines such as story time. All children in the specified age ranges appropriate for Sign 4 can access materials combining Little Talkers and Big Feelings materials, however, practitioners are led by stage of development of each child rather than chronological age. In addition, settings will identify approximately 10 children who need additional support and invite their families along for Sign 4 Little Talkers sessions so they can learn how to use the materials with their children. Practitioners are asked to incorporate the story books and signing into daily routines with children, with data collected at baseline and follow-up at six months (two school terms).

Intervention Type
Behavioural

Primary outcome(s)
Listening and attention, speaking, managing feelings and behaviour, and understanding are measured using Early Years Outcomes at baseline and 6 month follow-up

Key secondary outcome(s)
Children's well-being is measured using Leuven Well-being scales at baseline and 6 month follow-up

Completion date
01/11/2018

Eligibility

Key inclusion criteria
1. Children under 5 years
2. Early years practitioners
3. Head Teachers/Managers of pre-schools

4. Sign 4 Trainers
5. Sign 4 Managers
6. Local Authority commissioners

Participant type(s)
Mixed

Healthy volunteers allowed
No

Age group
Child

Upper age limit
5 Years

Sex
All

Total final enrolment
111

Key exclusion criteria
1. Persons with no experience of Sign 4
2. Persons with no experience of working in the early years sector

Date of first enrolment
01/05/2017

Date of final enrolment
01/12/2017

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
University of Bedfordshire
Institute for Health Research
University Square
Luton
United Kingdom
LU1 3JU

Study participating centre
Flying Start Luton
The TOKKO Building
7 Gordon Street
Luton
United Kingdom
LU1 2QP

Sponsor information

Organisation
University of Bedfordshire

ROR
https://ror.org/0400avk24

Organisation
Flying Start Luton

Funder(s)

Funder type
University/education

Funder Name
University of Bedfordshire

Alternative Name(s)

Funding Body Type
Private sector organisation

Funding Body Subtype
Universities (academic only)

Location
United Kingdom

Funder Name
Flying Start Luton

Results and Publications

Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date.

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		20/05/2022	23/05/2022	Yes	No