Evaluation of Tips by Text (a text messaging programme to promote language development in early years)

| Submission date | Recruitment status No longer recruiting | Prospectively registered | | |
|-------------------|--|---|--|--|
| 16/08/2024 | | Protocol | | |
| Registration date | Overall study status | Statistical analysis plan | | |
| 19/09/2024 | Completed Condition category | ☐ Results | | |
| Last Edited | | Individual participant data | | |
| 12/09/2024 | Other | Record updated in last year | | |

Plain English summary of protocol

Background and study aims

There is ample evidence that early years education interventions produce long-term benefits on multiple cognitive and non-cognitive skills, particularly among disadvantaged groups. A large body of evidence shows that parents can support early literacy development through simple activities such as making conversation with children, reading books together, reciting songs or rhymes, and through conversations during everyday activities. In recent years, researchers and educators have explored technology-based interventions that are less expensive and have a greater reach than home visits and group training interventions. Tips by Text is a text messaging programme designed to improve the home learning environment. It is delivered by the Behavioural Insights Team's who adapted a similar programme developed and tested in California, USA, and called READY4K!. Tips by Text programme delivers a 9month text curriculum to the parents of Reception children, sending 3 texts per week with the goal of improving 4 – 5 year olds' literacy, language, numeracy and social and emotional skills. Our study will assess whether Tips by Text has an impact on language development and self-regulation of children.

Who can participate?

All children aged 4 - 5 years and attending Early Year Foundation Stage (Reception) in recruited schools, and their parents or guardian, are eligible to participate. Schools are recruited from the following regions: London, North West, South East, Yorkshire and the Humber.

What does the study involve?

Tips by Text is a 9month curriculum of text messages sent to parents of Reception children during the academic year (from November 2024 to June 2025). Parents receive 3 text messages per week. The first message of the week is designed to inform and motivate parents, the second offers a specific activity designed to fit into family routines, while the final message provides encouragement, reinforcement and a follow up tip. The programme aims at improving the home learning environment, thereby improving the development of children's language and numerical skills of children, as well as socio-emotional skills. The programme also aims at improving parents confidence and their interaction and participation with school activities. The intervention was originally designed by teams of educators and tested in a series of trials in the

USA. The programme was reviewed and adapted to the English school curriculum and tested in an efficacy trial in 2020/21. The present study will assess the impact of the intervention on language and socio-emotional skills of children aged 4-5. The evaluation also involves an implementation and process evaluation, to understand the extent to which the programme is implemented as intended, the impact of the intervention on parents confidence and engagement with school activities, and to add greater depth to the findings, including the extent to which there is support for the causal pathways set out in the underlying theory of change. Finally, the study will also estimate the cost of the programme.

What are the possible benefits and risks of participating?

The potential benefits include an improvement in language, numerical, and socio-emotional skills of children aged 4 - 5 years, and an improvement in parenting confidence of their carers and an increase in their engagement with school activities. No potential harm is envisaged for children or their parents, and no harm is envisaged for the schools attended by participating children, as school will only be indirectly affected by the intervention.

Where is the study run from?

The evaluation study is led by the National Institute of Economic Research (based in the UK), in partnership with Institute of Employment Studies (based in the UK). The intervention is delivered by the Behavioural Insights Team (based in the UK).

When is the study starting and how long is expected to run for? October 2023 to July 2025

Who is funding the study?

The study is funded by the Education Endowment Foundation (EEF) (based in the UK).

Who is the main contact?

Edoardo Masset is the principal investigator and the main contact for this study: e.masset@niesr. ac.uk

Contact information

Type(s)

Public, Scientific, Principal investigator

Contact name

Dr Edoardo Masset

ORCID ID

https://orcid.org/0000-0002-8826-0776

Contact details

2 Dean Trench Street London United Kingdom SW1P 3HE +44 7540201173 e.masset@niesr.ac.uk

Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

Nil known

Study information

Scientific Title

The effectiveness of a text messaging programme (Tips by Text) to promote language development in early years: randomised trial

Study objectives

Carefully designed text messages to parents of children age 4 - 5 years to improve the home learning environment have the potential to improve numerical skills, literacy, and socioemotional outcomes

Ethics approval required

Ethics approval required

Ethics approval(s)

approved 22/11/2023, NIESR Research Ethics Committee (2 Dean Trench Street, London, SW1P 3HE, United Kingdom; +44 20 7222 7665; k.stockland@niesr.ac.uk), ref: EP28

Study design

Individual level randomized controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Numerical skills, language skills, and socio-emotional status of children aged 4 - 5 years attending reception in disadvantaged communities in England.

Interventions

The study recruited 145 reception schools across England.

The researchers will use individual-level randomisation. Within each school, half the children in one class will be assigned to the intervention and the remaining half will be assigned to a control group not receiving the intervention. The intervention will consist of text messages delivered via SMS to the parent or carer of the selected children.

Randomisation will be conducted within a selected class within schools. It will performed in Stata 17 the following way:

- 1. One class in each school will be randomly selected for the study in multi-class schools (identified by the largest of a series of numbers between 0 and 1 randomly assigned to each class).
- 2. Children in each selected class are assigned a random number between 0 and 1
- 3. Children are sorted by the random number
- 4. In each class/school the first child is assigned to either the intervention or the control group on the basis of a randomly generated number
- 5. Each subsequent child is assigned to the opposite allocation of the previous child in the list

The duration of the intervention is 9 months. It will start in the first week of November of 2024 and it will end by the end of July of 2025. Children assessments will be conducted in the study and control arms before and after the intervention.

Intervention Type

Behavioural

Primary outcome(s)

Language Development as measured by the LanguageScreen assessment through four components: expressive vocabulary, listening comprehension, receptive vocabulary, and sentence repetition. Assessment will be taken before the intervention at the beginning of the academic year in September-October 2024 (baseline) and again after the intervention at the end of the academic year in June-July 2025 (endline).

Key secondary outcome(s))

Selff-regulation as measured by the Revised Heads-Toes-Knees-Shoulders assessment (HKTS-R). Assessment will be taken before the intervention at the beginning of the academic year in September-October 2024 (baseline) and again after the intervention at the end of the academic year in June-July 2025 (endline).

Completion date

31/07/2025

Eligibility

Key inclusion criteria

- 1. Children aged 4 5 years attending Early Year Foundation Stage (Reception) and their parents or guardians.
- 2. Children (and their parents) attending schools that are not already taking part in a research study funded by the Education Endowment Foundation.

Participant type(s)

Learner/student

Healthy volunteers allowed

No

Age group

Child

Lower age limit

4 years

Upper age limit

5 years

Sex

All

Key exclusion criteria

Does not meet inclusion criteria

Date of first enrolment

19/02/2024

Date of final enrolment

07/05/2024

Locations

Countries of recruitment

United Kingdom

England

Study participating centre Behavioural Insights Team

58 Victoria Embankment London United Kingdom EC4Y 0DS

Sponsor information

Organisation

Education Endowment Foundation

ROR

https://ror.org/03bhd6288

Funder(s)

Funder type

Funder Name

Education Endowment Foundation

Alternative Name(s)

EducEndowFoundn, Education Endowment Foundation | London, EEF

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during the trial and analysed by the current study are not expected to be made available to the public because they include information authorised by parents' for the exclusive purpose of the study. Anonymised data will be archived in the EEF data archive managed by FFT Education at the end of the study (August 2026), and will be available to researchers upon approval of request.

IPD sharing plan summary

Stored in non-publicly available repository, Available on request, Not expected to be made available

Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient- facing? |
|-------------------------------|---|-----------------|--------------------|-------------------|---------------------|
| Participant information sheet | Parent information sheet and privacy notice | | 12/09 /2024 | No | Yes |
| Participant information sheet | Schools information sheet | | 12/09 /2024 | No | Yes |
| Participant information sheet | Participant information sheet | 11/11/202 | 5 11/11 5 /2025 | No | Yes |