

Changing mindsets to improve pupil attainment

Submission date 07/06/2016	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 01/07/2016	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 07/05/2021	Condition category Other	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

The Changing Pupils' Mindsets project is testing the theories that children hold about their intelligence, in particular whether it is a 'fixed entity' or a 'malleable' quality that can be developed. Research with 12-14 year olds in the US has found that those who agreed with the idea that "You can always change how intelligent you are" outperformed those who believed that "You have a certain amount of intelligence and you can't do much to change it". Other US research found that mentoring pupils with a Changing Mindsets approach led to improvements in standardised tests. This study is testing a model of changing the way pupils think about themselves and their intelligence. Specifically, the intervention aims to support schools in encouraging "growth mindsets" in their pupils (the belief that intelligence can be developed, rather than being a fixed trait).

Who can participate?

Teachers and Year 6 pupils at primary schools in the South East, South West, Midlands, North East and North West (UK)

What does the study involve?

Participating schools are randomly allocated to either receive the intervention straight away or to carry on with business as usual and receive the intervention two academic terms later. Teachers receive training that introduces them to mindset theory and evidence and provides them with tips for how to embed the approach in their classrooms/schools (e.g. how to communicate incremental beliefs to pupils through feedback/praise). To supplement these suggested changes to everyday practice, teachers are given the materials/training to run an 8-week programme (up 2.5 hours a week) of weekly lessons and activities.

What are the possible benefits and risks of participating?

The possible benefits of participation are an increase in growth mindset, increased pupil resilience to challenge and failure in learning, increased pupil attainment (literacy and numeracy), improved pupil self-regulation and self-efficacy. The risks of participating are loss of time spent on other curriculum areas having a negative impact on attainment in those areas. This risk is mitigated by teachers selecting the time of delivery that limits this risk, e.g. delivery coming outside of core curriculum delivery times.

Where is the study run from?

National Institute of Economic and Social Research and University of Portsmouth (UK)

When is the study starting and how long is it expected to run for?

February 2016 to January 2018

Who is funding the study?

Education Endowment Foundation (UK)

Who is the main contact?

Dr Cinzia Rienzo

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number

N/A

Study information

Scientific Title

Changing mindsets to improve pupil attainment: a randomised trial in schools

Study objectives

Testing whether teacher-led sessions can encourage pupils to adopt a “growth mindset”

Ethics approval required

Old ethics approval format

Ethics approval(s)

University of Portsmouth, Science Faculty Ethics Committee (SFEC), 04/02/2016, Ref: SFEC 2016-007

Study design

Interventional school-level cluster randomised controlled trial; the participants are not blinded, but the outcome measurement is

Primary study design

Interventional

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Academic performance end of Year 6

Interventions

Treatment: Teachers will receive training that introduces them to mindset theory and evidence and provides them with tips for how to embed the approach in their classrooms/schools. Schools will pay £500 to receive the intervention.

Control: Business as usual and payment of £500 to receive the intervention two academic terms later.

Intervention Type

Behavioural

Primary outcome(s)

Literacy and numeracy as measured by the national Key Stage 2 tests at the end of the first year

Key secondary outcome(s)

Non-cognitive skills, measured through the Motivated Strategies for Learning Questionnaire (MSLQ; Pintrich & Van De Groot, 1990), self-efficacy and self-regulation subscales

Completion date

31/01/2018

Eligibility

Key inclusion criteria

The study comprises primary schools in the South East, South West, Midlands, North East and North West. Within each school, the trial focuses on year 6 pupils.

Recruitment is on a school basis. Inclusion criteria is any school that is:

1. English state primary schools that are able to send their Year 5 and Year 6 teachers to one of up to 20 INSETs in 7 regions across the UK
2. Schools that have not carried out any formal Mindset intervention at the stage of recruitment
3. Schools that have not used a systematic mindsets programme with their Year 6 cohort
4. Schools should also be able to attend one of the training dates provided by Portsmouth

If there is a high degree of interest from schools then schools with a high number of FSM pupils, or schools where there was a significant gap between FSM and non-FSM pupils will be prioritized.

As a condition of being entered into the randomisation schools will need to provide the following:

1. Confirmation that parent opt-out consent forms have been sent out
2. Pupil data form including UPNs for all year 6s
3. Baseline teacher questionnaire

Participant type(s)

Other

Healthy volunteers allowed

No

Age group

Child

Sex

All

Key exclusion criteria

1. Independent schools
2. School that have used a systematic mindsets programme with their Year 6 cohort

Date of first enrolment

22/02/2016

Date of final enrolment

16/06/2016

Locations**Countries of recruitment**

United Kingdom

England

Study participating centre

National Institute of Economic and Social Research

United Kingdom

SW1P 3HE

Study participating centre

University of Portsmouth

United Kingdom

PO1 2DY

Sponsor information

Organisation

Education Endowment Foundation (UK)

ROR

<https://ror.org/03bhd6288>

Funder(s)

Funder type

Charity

Funder Name

Education Endowment Foundation (UK)

Results and Publications

Individual participant data (IPD) sharing plan**IPD sharing plan summary**

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Funder report results		11/07/2019	07/05/2021	No	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes