# Changing mindsets to improve pupil attainment

Submission date	Recruitment status	Prospectively registered	
07/06/2016	No longer recruiting	☐ Protocol	
Registration date	Overall study status	Statistical analysis plan	
01/07/2016	Completed	[X] Results	
<b>Last Edited</b> 07/05/2021	Condition category	[] 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

## Study website

https://educationendowmentfoundation.org.uk/evaluation/projects/changing-mindset-2015/

## Contact information

### Type(s)

Scientific

#### Contact name

Dr Cinzia Rienzo

#### **ORCID ID**

http://orcid.org/0000-0002-5931-8270

### Contact details

2 Dean Trench Street Smith Square London United Kingdom Sw1P 3HE

## Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

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

### Secondary study design

Cluster randomised trial

### Study setting(s)

School

### Study type(s)

Quality of life

### Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

## 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 measure

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

### Secondary outcome measures

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

## Overall study start date

### 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 were 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

### Age group

Child

### Sex

Both

### Target number of participants

100 schools, with an estimated 40 students per school

### 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

England

**United Kingdom** 

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)

## Sponsor details

9th Floor Millbank Tower 21-24 Millbank London United Kingdom SW1P 4QP

## Sponsor type

Charity

### Website

https://educationendowmentfoundation.org.uk/about/contact/

### **ROR**

https://ror.org/03bhd6288

## Funder(s)

## Funder type

Charity

### **Funder Name**

Education Endowment Foundation (UK)

## **Results and Publications**

## Publication and dissemination plan

We will publish an Evaluation Report in Spring 2018 (by end of May 2018), which will include the impact estimates for the primary and secondary outcomes. This will be published on the study page of the Education Endowment Foundation website.

## Intention to publish date

31/05/2018

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