# PATHS to success: Evaluating the efficacy of the Promoting Alternative Thinking Strategies (PATHS) curriculum in promoting social and emotional wellbeing among children in primary school

| Submission date<br>12/03/2012 | Recruitment status  No longer recruiting                   | [X] Prospectively registered   |  |  |
|-------------------------------|--|--------------------------------|--|--|
|                               |  | ∐ Protocol                     |  |  |
| Registration date             | Overall study status                                       | Statistical analysis plan      |  |  |
| 30/05/2012                    | Completed  | [X] Results                    |  |  |
| <b>Last Edited</b> 30/07/2019 | <b>Condition category</b> Mental and Behavioural Disorders | [] Individual participant data |  |  |

#### Plain English summary of protocol

Background and study aims

This five-year project will evaluate the effectiveness of a primary school based intervention called Promoting Alternative Thinking Strategies (PATHS). PATHS helps children manage their behaviour, understand their emotions and work well with others. It is a 'universal' intervention in which all children in a given class take part. PATHS is supported by a very strong international evidence base. In the last 20 years a number of high quality studies have shown that is has a meaningful effect on children's social and emotional competence, health-related quality of life, and academic attainment. The intervention itself consists of 131 lessons across five volumes and one readiness unit that cover topics such as identifying and labelling feelings, controlling impulses, reducing stress, and understanding other people's perspectives. It is designed to be delivered by teachers for about one hour per week (usually 3 x 20 minute sessions). The project we are proposing is important because research tells us that there has been an increase in emotional and behavioural difficulties among children and young people in the last 30 years. Also, a recent international survey ranked the UK last among 21 developed countries in childhood wellbeing. It is therefore crucial that we examine the effects of interventions like PATHS - which aim to prevent such problems before they occur so that we can determine whether all schools and children in England would benefit from this kind of work. Our main aim is to examine the impact of the PATHS curriculum on the social and emotional wellbeing of children in primary schools in England.

#### Who can participate?

All children who are on a given participating schools full-time roll in each of the Year 3, 4 and 5 classes at the start of the trial will be considered as potential participants.

#### What does the study involve?

We will randomly allocate 50 schools to an intervention group or comparison group. The 25

intervention group schools will be trained to provide the PATHS intervention. Their teachers will then use the intervention materials to deliver lessons three times a week over a two year period to pupils in Years 3, 4 and 5 (the 25 comparison group schools will continue their usual practice during this period). Members of our team will work with and support these schools to ensure that PATHS is implemented properly, and we will record any changes they make to see if this affects later outcomes. We will work very closely with schools on this aspect, collecting data on things like dosage (e.g. do schools deliver the required number of lessons?) and fidelity (e.g. do schools deliver PATHS as it was intended in the intervention manual?) and also talking to teachers, pupils and their parents about their experiences of taking part. At the end of the two year period, schools will be free to continue (or, in the case of control schools, start) to implement PATHS.

The 1,250 children who were in Year 5 at the beginning of the project and transfer to secondary school at the end of the main trial will be followed-up for a further two years to see if the PATHS curriculum impacts upon their adjustment to their new school, and also to see if any intervention effects are sustained over time.

We will take a range of measures at regular intervals to help us find out if PATHS is effective, including social and emotional competence, health related quality of life, school attendance, and academic attainment. We will also perform analyses that will tell us if the intervention provides good value for money.

What are the possible benefits and risks of participating?

The project presents the opportunity to participate in a large and rigorous educational research study which will lead to significant advancements in theory, research and practice in promoting social and emotional wellbeing in education; furthermore, the procurement of aggregated survey data for each school is extremely useful for school planning and other (e.g. school inspections) requirements.

It is extremely unlikely that participation in the data generation activities noted above will yield any adverse effects. The child surveys are both positively worded/focused and neither cover what might be deemed to be distressing issues. Although the teacher and parent surveys cover some potentially sensitive issues (such as emotional symptoms), previous studies have found no reports of any adverse effects.

Where is the study run from?

The study will be conducted in primary schools in Greater Manchester.

When is study starting and how long is it expected to run for? The study itself runs from January 2012 until August 2017. The schools that implement PATHS will do so from September 2012 to July 2014.

Who is funding the study?
The study is funded by the National Institute for Health Research

Who is the main contact? neil.humprey@manchester.ac.uk

Study website

http://www.pathstosuccess.info

### Contact information

Type(s)

#### Scientific

#### Contact name

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#### Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers 10/3006/01

# Study information

#### Scientific Title

Evaluating the efficacy of the Promoting Alternative Thinking Strategies (PATHS) curriculum in promoting social and emotional wellbeing among children in primary school: a cluster randomised controlled trial

#### Study objectives

The primary aim of the proposed research is to examine the impact of the PATHS curriculum on the social and emotional wellbeing of children in primary schools in England through a cluster-randomised controlled trial. This aim will be achieved by addressing the following objectives:

- 1. To determine the impact of PATHS on a variety of outcomes for children Hypothesis 1: Children in primary schools implementing PATHS over a two-year period will demonstrate significant improvements in:
- 1. 1. Social and emotional competence
- 1.2. Health-related quality of life
- 1.3. Exclusions (reduction)
- 1.4. Attendance and
- 1.5. Academic attainment when compared to those children attending control schools.
- 2. To determine whether the impact of PATHS is sustainable

Hypothesis 2: The effects outlined in Hypothesis 1 will be sustained at two-year post-intervention follow-up

3. To determine the impact of PATHS on childrens psychosocial adjustment to secondary school

Hypothesis 3: Children in primary schools implementing PATHS over a two-year period will demonstrate significantly better psychosocial adjustment upon transfer to secondary school, when compared to those attending control schools.

4. To assess the role of implementation variability in mediating the impact of PATHS on outcomes for children

Hypothesis 4: Quality of implementation will be associated with improved outcomes in schools implementing PATHS

- 5. To assess the validity of the logic model for social and emotional learning (SEL) programmes Hypothesis 5: Proximal changes in social and emotional competence and the learning environment will be associated with distal improvements in motivation to learn, psychological wellbeing and (reduced) internalising and externalising difficulties, which in turn will impact upon attendance, academic attainment and exclusions
- 6. To examine the cost-effectiveness of PATHS

Hypothesis 6: The PATHS curriculum will demonstrate cost-effectiveness.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Not provided at time of registration

#### Study design

Single-centre cluster-randomised controlled trial

#### Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

#### Study setting(s)

Other

#### Study type(s)

Quality of life

#### Participant information sheet

Patient information sheet can be found at http://www.pathstosuccess.info/documents/parent info and consent sheet opt out.pdf

#### Health condition(s) or problem(s) studied

Social and emotional wellbeing

#### Interventions

PATHS is a universal, curriculum-based SEL intervention for primary school children. It comprises of 131 lessons across five volumes and one readiness unit that focus upon developing childrens self-control, emotional awareness and interpersonal problem-solving. It is designed to be delivered by class teachers for approximately one hour per week throughout the school year. The developmental sequencing of the lessons means that it can be introduced at any age from 4-11. The lessons cover topics including identifying and labeling feelings, expressing feelings, assessing the intensity of feelings, managing feelings, understanding the difference between

feelings and behaviours, delaying gratification, controlling impulses, reducing stress, self-talk, reading and interpreting social cues, understanding others' perspectives, using steps for problem-solving and decision-making, self-awareness, nonverbal communication skills, and verbal communication skills. Although PATHS primarily focuses on the school/classroom setting, information and activities for use with parents are also included in the curriculum package, as are 'extension' activities and tasks to encourage skill generalisation. The total duration of the intervention will be 2 years. The total duration of follow-up will also be 2 years.

The comparator in the trial is schools usual practice.

#### Intervention Type

Other

#### Phase

Not Applicable

#### Primary outcome measure

- 1. Social Skills Improvement System (SSIS) rating scale: The SSIS provides measurement of social skills (including communication, empathy, and self-control), problem behaviours (including internalising and externalising difficulties) and academic competence (including reading and maths achievement, and motivation to learn).
- 2. Strengths and Difficulties Questionnaire (SDQ): The SDQ provides measurement of childrens emotional symptoms, conduct problems, hyperactivity/inattention, peer problems and pro-social behaviour. It is the most widely used outcome measure of its type in the UK.

#### Secondary outcome measures

- 1. Health-related quality of life
- 2. Kidscreen-27 (KS27): The KS27 provides measurement of health-related quality of life (including physical wellbeing, psychological wellbeing, parent relations and autonomy, social support and peers, and school environment).
- 3. CHUD-9. This will allow intervention benefits to be accurately mapped onto increases in quality-adjusted-life-years (QALYs)
- 3. Attendance, attainment and exclusions

All schools in England record data on attendance, attainment and exclusions for each of their pupils and it is held at both local (e.g. LA) and national (e.g. Department for Education National Pupil Database (NPD)) levels.

#### Overall study start date

01/01/2012

#### Completion date

31/03/2017

# **Eligibility**

#### Key inclusion criteria

- 1. Children aged 7-11 attending said primary schools
- 2. All children who are on a given schools full-time roll in each of the Year 3, 4 and 5 classes at the start of the main trial will be considered as potential participants
- 3. Parental consent will need to be provided for each potential pupil to participate

#### Participant type(s)

**Patient** 

#### Age group

Child

#### Lower age limit

7 Years

#### Upper age limit

11 Years

#### Sex

Both

#### Target number of participants

We will initially recruit 70 schools, with 3 classes from each school (of approx. 25 pupils), yielding an initial sample of 5,250.

#### Total final enrolment

2542

#### Key exclusion criteria

Does not meet inclusion criteria

#### Date of first enrolment

01/06/2012

#### Date of final enrolment

20/07/2012

## Locations

#### Countries of recruitment

England

**United Kingdom** 

# Study participating centre School of Education

Manchester United Kingdom M13 9PL

# Sponsor information

#### Organisation

University of Manchester (UK)

#### Sponsor details

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#### Sponsor type

University/education

#### **ROR**

https://ror.org/027m9bs27

# Funder(s)

#### Funder type

Government

#### **Funder Name**

National Institute for Health Research (NIHR) (UK) ref: project 10/3006/01

#### Alternative Name(s)

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

#### **Funding Body Type**

Government organisation

#### **Funding Body Subtype**

National government

#### Location

**United Kingdom** 

# **Results and Publications**

Publication and dissemination plan

Intention is to publish at least one output for each of the study hypotheses noted in the trial protocol, primarily in peer reviewed journals (but also potentially book chapters and other types of output). These will be published from 2015 onwards.

Intention to publish date 31/12/2015

Individual participant data (IPD) sharing plan

# IPD sharing plan summary

Other

#### **Study outputs**

| Output type     | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|-----------------|---------|--------------|------------|----------------|-----------------|
| Results article | results | 01/04/2020   | 30/07/2019 | Yes            | No              |