

As the UK government prepares to make personal, social, health and economic (PSHE) education compulsory, a recent trial shows how these subjects can be taught successfully. **Grace Lordan** and **Alistair McGuire** evaluate the effects of *Healthy Minds* – a new four-year curriculum for secondary schools – on physical health, emotional health and behaviour. Overall, the effects of this new PSHE curriculum are positive.

Healthy Minds: the positive impact of a new school curriculum

It is now well accepted that the physical health, emotional health and behaviour of children and teenagers have a big impact on their later lives. These characteristics of childhood have been shown to predict work and earnings outcomes in adulthood, as well as people's long-run psychological and health outcomes.

Health education for young people has become a focus of renewed interest for the UK government, which closed its consultation on statutory guidance in November 2018 and made this type of education compulsory from 2020. This implies that a compulsory curriculum in personal, social, health and economic (PSHE) education will replace the non-standardised PSHE teaching currently offered in UK schools.

Our study analyses the effects of a new standardised curriculum called *Healthy*

Minds on school students' physical health, emotional health and behaviour. A trial of the curriculum was initiated in 39 school cohorts, starting in 2013.

Students entering their first year of secondary education were enrolled either into 'treatment' groups, where they received the standardised curriculum delivered by fully trained teachers,



or 'control' groups, which received the usual PSHE teaching being delivered at their school. Drop-outs over the four-year period of the trial led to 35 school cohorts being evaluated in the final analysis.

Healthy Minds draws together 14 evidence-based modules into a cohesive programme to enhance specific aspects of a student's wellbeing and behaviour. The elements – which include building resilience, navigating social media, looking after mental health, developing healthy relationships and understanding the responsibilities of being a parent – were sourced through a project led by developmental psychologists John Coleman and Daniel Hale, and CEP's founder director Richard Layard in 2011.

The modules were selected if they had demonstrable evidence of impact and met latest best practice guidance for delivering PSHE topics. The individual elements were then designed applying a conceptual framework developed by Professor Coleman and Bounce Forward, an educational charity that specialises in practical resilience training for schools, to form the *Healthy Minds* standardised curriculum.

The curriculum consists of weekly one-hour lessons for students in school years 7 to 10 (ages 11 to 15) – with students advancing through the

programme over four years. Teachers leading the curriculum were trained by Bounce Forward for four days each year, costing just over £6,650 per teacher for the entirety of the course (for around 19 days of training and the cost of a substitute teacher for those days).

The rollout of *Healthy Minds* was randomised and 23 school cohorts followed the programme, while we also followed 16 school cohorts that did not receive the new curriculum – our control group. By comparing the impacts on students in the treatment and control cohorts, we could assess the overall effects of *Healthy Minds*.

So does the curriculum work? To answer this question, we draw on data collected from students through a questionnaire delivered during lessons prior to the initiation of *Healthy Minds*, as well as after the curriculum were finished. Specifically, data were collected in 2013 or 2014, and 2017 or 2018 depending on when the school cohort joined the trial.

The randomised design of the study allows us to quantify the direct impacts of *Healthy Minds*, under the assumption that students who received the curriculum would have continued on the same trajectory as the control group in the absence of the programme.

When assessing whether *Healthy Minds* works, we focus on five outcomes.

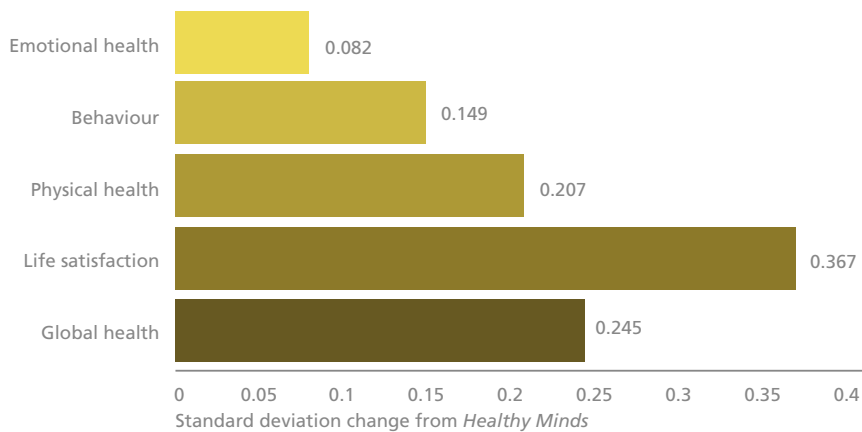
The *Healthy Minds* curriculum improves school students' health, wellbeing and behaviour

The first is general health, which is the primary outcome named in the official trial of *Healthy Minds*. General health is captured by asking students: 'In general, how would you say your health is?' We complement this outcome by analysing responses to 'How satisfied are you with your life nowadays?'

Three additional outcomes are created from 12 instruments on the questionnaire that capture various dimensions of physical health, emotional health and behaviour. To ease interpretation, for all outcomes higher numbers imply a more positive attainment (for example, better behaviour, better



Figure 1:
Effects of *Healthy Minds*



physical health and so on), and outcomes are standardised. Effects are expressed in terms of self-reported changes (whether improvements or deteriorations) from the average levels (expressed as changes in 'standard deviations') of the outcomes defined at the beginning of the trial.

Figure 1 shows the headline results from our analysis. Overall, the *Healthy Minds* curriculum is shown to improve general health, life satisfaction, physical health and behaviour significantly. Focusing on our primary outcome measure, teaching the *Healthy Minds* curriculum improves the general health score by an effect size of

0.245. The effects on emotional health are also positive, but not statistically significant

Expressing the result for the improved general health score differently, the average health after the teaching programme for a *Healthy Minds* student exceeds the general health level of 60% of those students not receiving the teaching. This is consistent with stating that if you taught the average student the *Healthy Minds* course, it would improve their general health score by 10.

One curious finding is that the impact of the teaching of the *Healthy Minds* curriculum shows that the reported anxiety measures are worsened. One possible explanation is that the teaching makes individuals more 'self-aware' but this would need further exploration. This is the only negative finding across our results.

So the *Healthy Minds* teaching does, in general, improve the health, wellbeing and behaviour of the students who received it. These effects relate to the taught curriculum as a whole, including the teacher training. We cannot disentangle the effects of specific elements of the curriculum, or the importance of teacher training over and above simply providing materials to teachers.

As noted above, the major costs related to the trial itself and the training undertaken by teachers to deliver the curriculum. The training costs total £6,650 over the four years of the trial or £1,662.50 per annum. Assuming one teacher can teach a curriculum of three classes and that this totals 90 students per school year, and that the printing of associated materials totals £5 per student per school year, the

total cost of the *Healthy Minds* curriculum is £23.50 per student per school year (or £94 per student for the entire programme).

We conclude that the evaluation of *Healthy Minds* provides evidence that, in general, the taught curriculum positively improves general health, life satisfaction, physical health and behaviour. In particular, *Healthy Minds* caused large changes in the physical and general health of its recipients, at a low cost.

Moreover, given that the teaching was not compulsory and not all schools taught all the curriculum throughout the four-year period, we believe that these are conservative findings. If *Healthy Minds* were made compulsory, the effects might be even larger.

Given the importance of health and behaviour in independently determining tertiary level educational attainment and labour market outcomes later in life, there are good reasons as to why time should be set aside in schools to enhance these important life domains.

Schools are a major opportunity for public health interventions, such as those associated with the *Healthy Minds* curriculum, which can help offset differences in the quality of parenting received in childhood. While dissenters may expect that such interventions will crowd out traditional academic achievement, we know of no study providing evidence that this is the case.

This article summarises the evaluation of *Healthy Minds* by Grace Lordan and Alistair McGuire (https://educationendowmentfoundation.org.uk/public/files/Projects/Evaluation_Reports/Healthy_Minds_interim_paper.pdf).

Grace Lordan of LSE's Department of Psychological and Behavioural Science and **Alistair McGuire** of LSE's Department of Health Policy are research associates in LSE's wellbeing programme. The *Healthy Minds* project is a collaboration between CEP, the Education Endowment Foundation and Bounce Forward.

The cost of the *Healthy Minds* curriculum is £94 per student for the entire programme