

Mental health support and training to improve secondary school teachers' well-being: the WISE cluster RCT

Judi Kidger,^{1*} Rhiannon Evans,² Sarah Bell,¹
Harriet Fisher,¹ Nicholas Turner,^{1,3}
William Hollingworth,¹ Sarah Harding,⁴
Jillian Powell,⁴ Rowan Brockman,¹ Lauren Copeland,²
Ricardo Araya,⁵ Rona Campbell,¹ Tamsin Ford,⁶
David Gunnell,¹ Richard Morris¹ and Simon Murphy²

¹Population Health Sciences, University of Bristol, Bristol, UK

²Centre for Development, Evaluation, Complexity and Implementation in Public Health Improvement (DECIPHer), School of Social Sciences, Cardiff University, Cardiff, UK

³Bristol Randomised Trials Unit, University of Bristol, Bristol, UK

⁴School for Policy Studies, University of Bristol, Bristol, UK

⁵Centre for Population Neuroscience and Precision Medicine, King's College London, London, UK

⁶Department of Psychiatry, University of Cambridge, Cambridge, UK

*Corresponding author judi.kidger@bristol.ac.uk

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Disclaimer: This report contains transcripts of interviews conducted in the course of the research and contains language that may offend some readers.

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Scientific summary

The WISE cluster RCT

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Scientific summary

Background

Teachers are at heightened risk of mental health difficulties. Poor teacher mental health may have an impact on the quality of support provided to young people, who also report increased mental health difficulties themselves. Many studies have examined ways in which to improve student mental health in schools, and a few have concentrated on training teachers to be better equipped to provide support. However, none of them has sought to increase the support available to teachers alongside such training.

Aims

The primary aim of the study was to establish if the Wellbeing in Secondary Education intervention leads to improved teacher emotional well-being compared with usual practice.

The secondary aim was to address the following research questions:

- Does the Wellbeing in Secondary Education intervention lead to lower levels of teacher depression, absence and presenteeism, improved student well-being, attendance and attainment, and reduced student mental health difficulties, compared with usual practice?
- Do any effects of the intervention differ according to the proportion of children receiving free school meals (i.e. an indicator of the socioeconomic catchment area) and geographical area, or individual-level baseline mental health, sex, ethnicity and free school meals eligibility?
- What is the cost of the Wellbeing in Secondary Education intervention, and is it justified by improvements in staff and student well-being and reductions in staff depression and student difficulties?
- Does the Wellbeing in Secondary Education intervention work according to the mechanisms of change hypothesised in the logic model?
- Is the Wellbeing in Secondary Education intervention sustainable?

Methods

Inclusion criteria

- State mainstream secondary schools within a 30-mile radius of Bristol, and within the South East and South Central Wales educational consortia.

Exclusion criteria

- Fee-paying schools.
- Special schools (e.g. for those with learning disabilities).
- Pupil referral units.
- Schools that were pilot schools.
- Schools already participating in other, similarly intensive, research studies.
- Schools already delivering mental health first aid training or other similar interventions (e.g. mindfulness training).
- Schools without available free school meal data.
- Schools in the same academy chain and local authority as one that has already been selected for participation.

In Wales, all eligible schools were stratified into three levels according to free school meal eligibility of students (high, medium and low vs. the national average). Two schools were randomly selected from each stratum in each consortium and invited to participate. Schools that declined were replaced by a randomly selected school from the same stratum and region. In England, the study was advertised to head teachers at all eligible schools and invitations were followed up with relevant senior leaders. Those who expressed interest in participation were stratified into three levels according to free school meals (high, medium and low vs. the national average) and local authority (Bristol/non-Bristol). Where more than two schools fitted into one stratum, two were randomly selected.

Within each study area and stratum, selected schools were randomly allocated to a study arm (intervention or control) after baseline data collection.

We collected individual outcome data via self-report surveys, and collected school-level data via routinely reported data from all participating schools:

- baseline – teachers, year 8 students and school-level outcomes.
- 12-month follow-up (9–10 months after intervention began) – teachers at an individual level only.
- 24-month follow-up (21–22 months after intervention began) – teachers, year 10 students and school-level outcomes.

After baseline, intervention schools received the following:

- Staff peer support service: 8% of staff trained in the 2-day standard mental health first aid training course set up a confidential peer support service for colleagues, following guidelines developed during the pilot study.
- In-service training for teachers using mental health first aid for schools and colleges: an additional 8% of teachers received a 1-day mental health first aid training course for schools and colleges, and applied the learning in day-to-day work.
- Mental health awareness-raising session for all teachers: a 1-hour session was delivered to all teachers to raise awareness of the importance of mental health in schools, first steps to provide support to others, self-help methods and availability of the peer support service.

In England, the mental health first aid training was delivered by independent, mental health first aid instructors. In Wales, healthy schools co-ordinators were trained as mental health first aid instructors and delivered the training to schools.

A mixed-methods process evaluation was conducted to answer the following questions:

- Are the intervention's mechanisms of change operationalised as hypothesised, how are they influenced by contextual factors, and does the interaction between intervention and context give rise to unintended effects?
- Is the intervention differentiable from 'usual practice' and is there contamination of usual practice in control schools by receipt of the intervention or similar approaches?
- What reach and dose were achieved for the different intervention components, were they delivered with fidelity and quality, were there any differences in delivery between England and Wales, and were there any contextual barriers to implementation?
- Is the Wellbeing in Secondary Education intervention acceptable to funding organisations, intervention trainers, head teachers, teachers and students?
- How likely is the Wellbeing in Secondary Education intervention to be sustainable and what factors might ensure sustainability?

Quantitative data were collected from participant surveys and evaluation forms, training observations and peer supporter logs. Qualitative data were collected via focus groups with teachers, peer supporters and students, and interviews with head teachers, trainers and funders. An audit of current practice relating to mental health was taken from each school at baseline and 24-month follow-up.

The main outcomes analyses were carried out under the intention-to-treat principle, analysing participants as randomised without the imputation of missing data. Repeated-measures (random-effects) models were used to examine pattern of change, adjusted for stratification variables, sex and years of experience (teachers only) and ethnicity (students only). All individuals with at least one observation of the outcome measure were included in the model for that outcome. Sensitivity analyses were conducted to examine the effect of missingness (using multiple imputation) and to examine effectiveness with outliers excluded. The effect of the intervention on well-being and mental health outcomes was tested for interaction with baseline well-being/mental health score, geographical area (Wales/England), school-level free school meals and sex. We examined whether or not baseline measures of these variables moderated the effect of the intervention by including the appropriate terms in the analysis model. We also used a complier-average causal effect approach to compare (1) well-being/mental health outcomes for teachers who completed the training with those in the control schools who would have completed the training, had they been offered it and (2) the impact of the intervention for schools that scored highly on various implementation measures compared with those that obtained a low score.

The economic evaluation took a public sector perspective, calculating the financial and opportunity costs to schools of participating in the Wellbeing in Secondary Education intervention. Data were collected on the resources used for the following four activities: (1) the healthy schools co-ordinator's mental health first aid instructor training (which was relevant for Welsh schools only); (2) the 2-day standard mental health first aid training; (3) the in-service day mental health first aid training for schools and colleges; and (4) the awareness raising session. In each case, the project team completed a pro forma after the training session, documenting the resources used and expenses claimed. The economic analysis provided evidence on whether or not the incremental costs of the intervention were justified because of improved teacher or student outcomes.

The process evaluation analysis of quantitative data involved a descriptive analysis of proportions and means, and logistic regression models to compare the before and after impact of the training. The qualitative data were analysed thematically, first as separate data sets (untrained teachers, peer supporters, students, etc.) and then themes were examined across all data.

Results

In total, 25 schools took part in the study (12 intervention and 13 control). Schools were well matched at baseline on all variables except that intervention schools had a considerably higher mean number of teachers leaving during the year leading up to baseline, and a higher percentage of schools in this group had equal to or above the national average in student attainment. A total of 1722 teachers were included in the analysis. Overall, the mean teacher Warwick-Edinburgh Mental Wellbeing Scale score was lower than the general working population mean (46.8 vs. 51.4, where a higher score indicates better well-being).

There was no evidence of a difference between arms in mean teacher mental well-being (i.e. Warwick-Edinburgh Mental Wellbeing Scale score) over the course of follow-up (adjusted mean difference -0.90, 95% confidence interval -2.07 to 0.27; *p*-value 0.130, direction in favour of control schools). There was also no evidence of a difference between arms in any of the secondary outcomes. The exception to this was teacher self-report absence, which, when measured as a continuous variable, showed higher absence in the intervention arm (adjusted mean difference 1.04, 95% confidence interval 1.00 to 1.09; *p*-value 0.042). The sensitivity and multiple imputation analyses showed the same null effect for all outcomes. There was no evidence of a treatment effect in those who attended the mental health first aid training or in schools that were classified as 'high' implementer schools. There was no evidence of modification of the effect of the intervention on well-being or mental health outcomes by baseline well-being/mental health, geographical area, school-level free school meals or sex. There was evidence of potential treatment effect heterogeneity on student Warwick-Edinburgh Mental Wellbeing

Scale score (but not on the Strengths and Difficulties Questionnaire) by ethnicity. There was no evidence of a difference between intervention and control groups with respect to stress and satisfaction with work, school's perceived attitude towards staff and student well-being, perceived quality of relationships between staff or between staff and students, or the amount of support given. There was evidence of potential effect modification by perceived school attitude to student well-being. In certain cases, these variables did cause a reduction in the estimate of the regression coefficient of the intervention.

The average cost of the intervention was £9103 per intervention school. The cost was slightly lower in English schools (£8263) than Welsh schools (£9943), primarily because of the upfront cost of training the healthy schools co-ordinator in Wales. Staff salaries and costs for supply teachers (£5566) accounted for the majority (61%) of the total cost of the intervention. There was no evidence that this additional cost was justified by improvement in teacher well-being, depressive symptom scores, presenteeism or absenteeism, or by any of the student outcomes.

The training components were delivered with high fidelity, although there were some challenges within the school context and the target dose was missed in some schools. Observers and participants rated the training as good quality. Participants reported increased knowledge and confidence to help, and gave examples of ways in which they had used the learning in practice. The peer support service was set up in every school, but fidelity to the guidelines was variable. In particular, confidentiality policies were not always established, the service was not well advertised in the second year and perceived senior leadership support dwindled. Low proportions of teachers reported using the service (5.9–6.1%), although peer supporter logs suggested higher service use. Barriers to use were not knowing about the service, preferring to go elsewhere for support, concerns about confidentiality and time constraints. There was no evidence of more support being provided overall between colleagues or from teacher to student in the intervention schools than in control schools. There was also no evidence of a change to quality of teacher–student relationships. Indeed, control school students rated certain aspects of their interactions with teachers more highly than control school students at follow-up. The intervention was sufficiently different from usual practice and there was no evidence of contamination. The intervention had high initial acceptability. However, some participants expressed disappointment that it did not become embedded into school life or address the difficult context in which teachers work, characterised by an overwhelming workload, a high level of accountability, large numbers of vulnerable students and stigma in asking for help.

Conclusions

The intervention did not appear to have an effect on the primary outcome (i.e. teacher emotional well-being) or on the secondary outcomes (i.e. teacher mental health and presenteeism, and student well-being, mental health, absence and attainment). There was an indication that intervention teachers were more likely to be absent at the second follow-up. This may indicate improved self-care because of raised awareness about mental health. Given the lack of clear effectiveness, the intervention cannot be considered cost-effective. According to the process evaluation, there may have been several reasons for the null finding:

- Although the training was delivered with high fidelity and was perceived to be useful, target dosage was not always reached, which may have diluted any effects.
- The peer support service was delivered with variable fidelity, which may have led to barriers to accessing it and resultant low usage. Specifically, confidentiality policies were not always in place, the services were not widely advertised as time went on and senior leaders were not always visibly promoting or supporting the service.
- Possibly as a result of these difficulties in implementation, the hypothesised mechanisms of change were not always activated. Specifically, there was no evidence that the quality of teacher–student relationships improved, and no evidence that the whole-school context had become more supportive of mental health.

Teacher and student mental health remains an important area for intervention. Teachers value training in this area and, therefore, opportunities to deliver mental health training as part of initial and in-service teacher training should be explored. However, future research seeking to improve both teacher and student mental health should focus on how to instigate sustainable change across the whole-school system and how to address the contextual drivers of poor mental health. Identifying ways to better engage senior leaders in any interventions is an important part of such work.

Trial registration

This trial is registered as ISRCTN95909211.

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