
Adi Y, Killoran A, Janmohamed K, Stewart-Brown S

CRD summary
This review of interventions to promote mental well-being in primary school children concluded that there is good evidence to support the implementation of programmes that include a significant component of teacher training and programmes that include a parenting support component. The authors’ conclusions are likely to be reliable.

Authors’ objectives
To assess the effectiveness of school-based interventions that aim to promote mental well-being amongst children in primary education, and that take a universal approach and are not primarily focused on the prevention of violence or bullying.

Searching
MEDLINE, EMBASE, ERIC, CINAHL, ASSIA, DARE, the Cochrane CENTRAL Register, SIGLE, Sociological Abstracts, PsycINFO and the Cochrane Database of Systematic Reviews were searched from 1990 to June 2007 for papers published in English. Five websites were also searched: CASEL, EPPI centre, Community Guide - Guide to community preventive services, Search Institute and the Joseph Rowntree Trust. The bibliographies of reviews and other studies were checked for additional studies.

Study selection
Controlled trials of interventions using universal approaches for mental well-being, which reported changes in aspects of mental well-being (emotional, psychological and social), were eligible for inclusion. Studies also had to be of children (aged 4 to 11 years) based in primary education settings (state sector or independent schools, or special education environments). Where studies spanned primary and secondary school age groups, they were included if the mean age was below 12 years. Studies of interventions with both universal and targeted components were also eligible for inclusion. Studies concerned with the prevention of violence and bullying were excluded.

Of the included studies, most were carried out in ordinary schools, with a few being set in schools serving disadvantaged communities or high crime areas. Four studies included some children over the age of 11. Most of the interventions included a classroom component (which was usually part of the taught curriculum), and many included a component for parents. Only 2 studies examined the same intervention (the PATHS curriculum). Many studies had no intervention as a control. The majority of outcomes used aimed to measure the children's behaviour, either antisocial or pro social; most of the measures used were validated, and the most commonly used was the Child Behaviour Checklist.

The authors did not state how the papers were selected for the review, or how many reviewers performed the selection.

Assessment of study quality
Study quality was assessed according to criteria from the NICE Centre for Public Health Excellence Methods Manual, which covers areas such as randomisation, allocation concealment, blinding, similarity at baseline and use of intention-to-treat analysis. A full list of criteria was provided.

One reviewer assessed the quality of the studies, which a second reviewer independently checked. Any disagreements were resolved by consensus, or by a third reviewer.

Data extraction
The studies were coded according to the content of the intervention; applicability to the UK setting was also considered and coded for. Every study was also coded for impact, ranging from A - positive impact (all or most measures proved
significantly in favour of intervention) to D - negative impact (intervention was harmful compared with control).

One reviewer extracted the data, which a second reviewer independently checked. Any disagreements were resolved by consensus, or by a third reviewer.

**Methods of synthesis**
The use of meta-analysis techniques was considered, but was precluded by clinical and methodological heterogeneity. A narrative synthesis was undertaken, with studies grouped by type of intervention. Comprehensive study details were tabulated.

**Results of the review**
Thirty-one studies were included in the review: 15 randomised controlled trials (RCTs; n=15,631) and 16 controlled clinical trials (CCTs; n>14,000). One of the studies classed as a CCT featured the combined results of 7 studies of RCTs, CCTs and before-and-after studies.

The quality of the trials was generally good; 4 RCTs and 2 non-RCTs were rated as high quality. However, for the majority of studies, randomisation was undertaken at the school or classroom level, but cluster design was only accounted for in the analyses in 2 studies, and most trials did not undertake an intention-to-treat analysis.

Of the 7 studies combining parenting and classroom components, five were positive and two were probably positive. Of the studies using just a classroom intervention, a more mixed result was seen: 6 studies showed a positive impact and 5 studies suggested that the interventions were unlikely to be effective. Of the 5 studies examining the impact of interventions which combined universal and targeted components, two showed a positive impact and three a probable positive impact. None of the studies reported a negative impact. Further results were reported.

**Authors' conclusions**
There is good evidence to support the implementation of programmes which include a significant component of teacher training and are offered to children over a prolonged period, and the inclusion of a parenting support component to school mental health promotion programmes.

**CRD commentary**
The review addressed a clear question and was supported by appropriate inclusion criteria. Attempts to identify relevant studies were undertaken by searching electronic databases and other means. Methods used to minimise the risk of reviewer error and bias in the validity assessment and data extraction processes were not reported at the study selection stage. Study quality was assessed and was used in interpreting the results of the review. Sufficient study details were provided and the narrative synthesis of the data was appropriate. The authors' conclusions reflect the evidence presented and are likely to be reliable.

**Implications of the review for practice and research**
Practice: The authors recommend that school health promotion programmes include a component that aims to support parenting.

Research: The authors made recommendations for further research; specifically in the areas of cross cultural applicability, school-based mental health promotion programmes, and programmes to develop coping skills and reduce anxiety and stress.

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**Record Status**
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.