Universal approaches to improving children and young people’s mental health and wellbeing

Lay summary report of the synthesis of systematic reviews and grey literature review
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Evidence of effectiveness of universal approaches in keeping children and young people mentally well and preventing mental health problems

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Lay summary

Background

Increasing recognition of the extent and impact of mental health problems in children and young people have led to calls to find the best ways to prevent mental ill health and promote mental good health and wellbeing as a public health priority (Department of Health and Social Care, 2017). The most recent prevalence survey in England found 1 in 8 children between the ages of 5–15 years old in England currently have identifiable mental health problems and there is evidence that these problems can have long term deleterious consequences (Kessler et al., 2005; NHS Digital, 2018).

In light of this there is increasing focus on seeking to find the best approaches to support the prevention of mental health problems and promotion of positive mental health at the earliest possible stage, with calls for a focus on prevention rather than intervention as the ideal way forward. But this of course relies on the availability of effective approaches to prevention and promotion.

There is an ever-growing body of research investigating the role of universal interventions in child mental health and wellbeing and seeking to evaluate the impact of different approaches. However the sheer number of studies which all too often use a wide variety of ill-defined and often overlapping terms, employ different measures of outcome and different approaches to evaluation, and report different findings can make it hard for time-pressured policy makers, commissioners and service providers to be able to identify clear conclusions that can guide their practice.

This review of the evidence was commissioned to help policy makers, commissioners and service providers navigate the literature and be sign posted to the most promising interventions. In turn it is hoped that this will help to inform evidence-based practice in relation to universal approaches to improving children and young people’s mental health and wellbeing.

Aims

To identify, synthesise and present key evidence of universal approaches to improving mental health and wellbeing of children and young people, with a view to informing policy and practice. Specifically, the review set out to consider evidence in relation to the following:

1. What is the effectiveness of universal approaches implemented to try to keep children and young people mentally well or prevent mental health problems?
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2. What approaches show most promise of being effective in promoting mental health and wellbeing of children and young people?
3. Which approaches are the most cost-effective and/or show positive return on investment?

While conducting the review, the questions were further specified to consider the following:

1. What approaches have shown evidence of preventing mental health problems in children and young people (considering behavioural and emotional difficulties)?
2. What approaches have shown evidence of being effective in promoting wellbeing of children and young people (considering resilience and subjective wellbeing)?
3. Which of these approaches show the most promise (defined as 2 or more individual studies reporting effectiveness on the same outcome domain)?
4. What categories of outcomes are the focus of these interventions (prevention of emotional or behavioural difficulties, and/or promotion of resilience and wellbeing) and what tools and approaches are used to consider impact?
5. What are the key gaps in the evidence?
6. What evidence is there for cost-effectiveness and/or positive return on investment?

Methods

A synthesis of systematic reviews was opted for given such a wide-ranging evidence-base. This involved searching a number of existing databases of published studies to identify systematic reviews that focused on universal interventions aimed at improving child mental health and/or wellbeing.

Literature returned after searches was filtered based on a range of criteria including the following requirements:

- a systematic review published since 2008
- available in the English language
- focussed on children and young people between the ages of 4 and 18
- focussed on universal interventions
- reporting outcomes that related to mental health and/or wellbeing

Information was extracted from each review about all relevant interventions reported. These were summarised in terms of 4 potential levels at which the intervention might operate to bring about change (each intervention might operate at more than one level):

i. individual;
ii. family;
iii. school;
iv. wider community.
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Interventions were also summarised in terms of 4 possible aims (each intervention could have more than one aim):

i. prevent behavioural problems;
ii. prevent emotional problems;
iii. promote resilience;
iv. promote subjective wellbeing.

Interventions identified from the synthesis were rated for level of promise, such that those that had at least 2 individual studies providing evidence of effectiveness (by whatever standard they had used) for a given outcome were included in a list of promising interventions and key characteristics highlighted.

Interventions identified from the review of systematic reviews were also considered for any evidence of evaluation of cost effectiveness or value for money.

A grey literature review was also carried out covering unpublished reports, expert submissions, databases and websites. As with the review of systematic reviews, interventions were recorded if they focused on improving mental health and/or wellbeing of children and young people between the ages of 4 and 18 but there was no requirement for an evaluation to have been undertaken. Interventions were again summarised in terms of the 4 levels of intervention (individual, family, school or wider community).

Overview of findings

Findings from the synthesis of systematic reviews

Nineteen systematic reviews met the criteria which between them considered 113 interventions (see Figure 1 for PRISMA diagram). Of these interventions, 8 had shown some evidence of promise based on having at least 2 studies reporting positive outcomes (see Findings from the synthesis of systematic reviews and Table 1 and Appendices 5 and 6 in Report of the findings of a Special Interest Group). The extent of information available about the studies included in the systematic reviews, and their quality, varied substantially. Some studies only looked at pre-post intervention data with no control group, some drew on matched comparisons and others were randomised controlled trials. No studies reported on cost effectiveness or value for money.

On the whole there were many more interventions that operated at the individual level than at the school or family level and no interventions were identified that operated at the community level.
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The most commonly reported outcome was preventing emotional difficulties, followed by improving resilience and then preventing behavioural difficulties. Far fewer studies focused on improving subjective wellbeing.

Overall there was no clear evidence of an evaluated universal intervention that consistently shows a sustained, meaningful effect to improve mental health and wellbeing. Even those with the most extensive research evidence yielded some mixed findings.

**Figure 1. PRISMA Flowchart**

Records identified through literature database searching (Web of Science and PsycInfo) n=3957 → Records screened out n=3810

Online website searches (NHS Evidence, TRIP Database and Mental Elf) n=19 → Duplicates removed n=16

Full text articles assessed for eligibility n=147+3 =150 → Records excluded n=82

Full text articles assessed as having at least some studies meeting inclusion criteria n=68 → Full text articles excluded “partial matches” n=49

Included studies n=19 (n=14 full match SRs + 5 partial match SRs)
Eight interventions met the criteria for being categorised as promising: 6 of these interventions were focussed on the individual (child) level (Zippy’s friends, FRIENDS, Resourceful Adolescents, Penn Resilience, LARS and PATHS) whilst 2 were aimed at the family level (parents) (Triple P and the Substance Abuse Risk Reduction Programme). Seven aimed at preventing mental health problems and 4 at promoting resilience (with 3 aiming to do both). None aimed at promoting subjective wellbeing.

Of the 8 promising interventions, only 4 (FRIENDS, PATHS, Penn Resilience (but only for Latino children), Substance Abuse Risk Reduction Programme) had evidence of long term effect. By long term we mean interventions showing a positive impact at 12 months follow up. These promising interventions are summarised in the Findings from the synthesis of systematic reviews and Table 1 and Appendices 5 and 6 in Report of the findings of a Special Interest Group. It should be noted that pragmatic challenges may exist when translating interventions deemed to be ‘promising’ into practice, for example the extent to which the approach involves following a manualised procedure. Of those 6 promising individual interventions aimed at children and young people, typical characteristics include:

1. provided in schools;
2. offered in group setting (often a class);
3. offered over a series of weeks from 10–24 often in 30 minutes to 1 hour;
4. led by professionals (teachers or psychologists);
5. skills-based with strong emphasis on experiential practice in situ;
6. often draw on CBT principles;
7. often include element of fun and enjoyable practice experiences.

Multi-component or whole school approaches were not common in this group of promising interventions. However, this may be partly be due to classroom-based, individual-level interventions being easier to implement and research rather than because they are inherently more effective.

Of the 2 promising interventions aimed at parents, common characteristics include:

1. provided online;
2. supported by professional input;
3. involve skills-based practice.

Findings from the ‘grey’ literature

The review of the grey literature found 82 interventions. While some of these were interventions already identified in the review of systematic reviews \(n = 17\), many were additional \(n = 65\).
As with the synthesis of systematic reviews, on the whole there were more interventions operating at the individual level ($n = 50$) than at the school ($n = 11$) or family level ($n = 11$), but there were also some interventions identified that operated at the community level ($n = 4$). There were also interventions that operated on more than one level ($n = 5$).

Due to the heterogeneous sources for these interventions, information varied hugely about the intervention itself and about any evidence for associations with relevant outcomes. An overview of the interventions identified is provided in Fig 2 Report of the findings of a Special Interest Group and a full list is provided in the Summary of interventions identified in the grey literature review.

These documents are provided as a resource for information about existing interventions that may potentially show promise as further outcome evidence becomes available. However, based on the current information, no judgements can be made about their potential to improve mental health and wellbeing in children and young people.

**Gaps in the evidence**

The synthesis of systematic reviews identified 113 interventions. Based on mapping of these interventions and the associated research evidence, the following gaps are noted:

**Focus of intervention**

The vast majority of individual studies identified related to interventions operating at the individual level with far fewer interventions found at the family level and school level, and none identified which focused at the community level (except in the grey literature).

**Aim of intervention**

The majority of individual studies focussed on considering impact in terms of prevention of mental health problems and promotion of resilience as opposed to promotion of wellbeing.

**Cost effectiveness**

No systematic reviews were identified that addressed cost effectiveness or value for money of universal interventions to promote resilience or wellbeing or prevent mental ill health.
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Limitations

A number of limitations to the current review should be acknowledged. Because the primary focus of this rapid review was to identify the widest range of relevant interventions, the emphasis was very much placed on breadth so all systematic reviews above the threshold for relevant content were included with no quality assessment of these reviews incorporated. Furthermore, the quality assessments reported for individual studies were based on assessments made in the original systemic reviews rather than applying our own quality criteria. It is possible that bias may have been introduced through including poor quality reviews or through poor quality assessment within those reviews and this should be borne in mind when interpreting results. A second related limitation is that the criteria used for identifying promising interventions was the existence of 2 or more studies providing some evidence for effectiveness. Judgements were not made based on the quality of the effectiveness data provided and interventions for which studies were also identified that found no evidence of effectiveness were not excluded; however the existence of these studies was reported. However, it should be noted that even with this very broad criterion only a very small number of promising interventions were identified. Finally, in a small number of cases, the reviews did not provide sufficient information for us to identify the specific intervention incorporated, which resulted in a very small number of interventions being excluded from the analysis.

Implications and recommendations

Addressing confusion and heterogeneity in the literature

The variation in purpose/focus of the interventions make it difficult to make generalisable statements of impact. It would be very helpful for the field if a core set of common measures were used. Attempts have been made to collate and clarify relevant measures of mental health, wellbeing and resilience, such as PHE’s Measuring and monitoring children and young people’s mental wellbeing: A toolkit for schools and colleges and the EEF’s SPECTRUM database. However, the sheer number of mental health problem measures in particular makes a unified approach to a consistent evidence-base challenging, as does the variety of terms used to describe the same, similar or overlapping outcomes.

Addressing gaps in the evidence

While the review identified a wide range of interventions, there were a limited number which can be described as ‘promising’. Those that were promising were supported by mixed evidence of effectiveness. This mixed evidence may be due to a range of reasons which might include: an absence of replication in the literature (ie multiple studies testing the same intervention); research design which does not allow for
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assessment of outcomes within the timeframe, or in ways that are sufficiently attuned to the nature of the intervention. Furthermore, recent research has highlighted that approaches to capturing the magnitude of effects in universal interventions traditionally used in the research literature may need to be reviewed and refined (Tanner-Smith, Durlak, and Marx, 2018). Such adjustment may alter the conclusions drawn about the effectiveness of some of these interventions. Furthermore, current approaches may fail to capture the potential population-level benefits of universal interventions, where even very small effect sizes once applied at a population level represent important mental health gains and associated economic benefits (Arango et al., 2018).

However, it is also possible that there is limited effectiveness of universal interventions, and this should be explored further. In the absence of a clear evidence-base pointing to effective practice, it is important that those implementing interventions carry out their own evaluation and monitoring in situ to establish whether the support put in place is achieving the desired outcome. Clear guidance on well validated but feasible measurement tools for the relevant outcomes is an important part of this. The Child Outcomes Research Consortium (CORC) brings together a range of outcome and experience measures on its website (CORC, 2019) and using these along with logic models such as the EBPU Logic Model (Wolpert et al., 2016) to develop evaluation plans provides a good starting point. The PHE Mental Health and Wellbeing Toolkit for schools (Deighton et al., 2016) also provides guidance around evaluation and outcomes measurement.

The poor representation of interventions aiming at levels other than the individual level suggests a pressing need to consider outcomes in terms of family level, such as improving the quality of parent–child relationships; school level, such as a focus on the context of the learning environment; and community level, such as a focus on wider determinants (for example housing, poverty) and/or those engendering a sense of social connectedness, belonging, control and/or voice. It is also possible that the challenges of evaluating complex interventions aimed at tackling mental health and wellbeing at these levels account for their rarity in the research literature. Therefore, consideration of methods and approaches that account for systemic change and aim to investigate complex interventions are recommended (Rutter et al., 2017).

The lack of evidence around the cost effectiveness of interventions meeting our criteria was disappointing. This absence may be partially due to the inclusion of systematic reviews rather than individual studies and the challenges of quantifying the economic benefits of universal wellbeing-focused interventions when applied to the whole population as described above (Arango et al., 2018). An All Party Parliamentary Group on Wellbeing Economics are exploring promising approaches to address this issue.

On the whole, further consideration of appropriate outcome measures for universal prevention and promotion, and better approaches for quantifying the potential benefits, is needed. Resources like the PHE toolkit, the SPECTRUM database and the
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Wellbeing Measurement Framework provide a useful starting point. However, wider consideration needs to be given to suitable population level indicators as well as ensuring focus on promotion of wellbeing and not just a focus on prevention of mental health problems. Considering asset-based measures may be an important agenda going forward.
References


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