Mental health promotion and problem prevention in schools across Europe: the evidence and messages for inclusive education

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Abstract

The school is a unique resource for mental health promotion in children and adolescents. Inclusion and belonging are particularly important as having a ‘sense of connectedness’ with school recognised as a protective factor for mental health (Catalano et al. 2002). The importance of school interventions for mental health has come to the fore in the last two decades when mental health research and programmes have expanded such that there are thousands of school mental health interventions in operation across the world. This paper reports on the findings of a study to identify positively evaluated interventions for promoting mental health in schools and the characteristics of those interventions. The study formed the schools element of a large EU-funded project (Dataprev) with other elements addressing interventions in parenting, the workplace and among older people. The work is a response to the World Health Organization Helsinki Action Plan for mental health (WHO, 2005) call for a coordinated set of databases to provide evidence to be integrated into mental health policy in relevant environments and sectors. The focus of our inquiry was the content, ethos, dimensions and outcomes of rigorously assessed school programmes in operation in Europe. While this is widely seen as health promotion work we argue that it is equally vital as inclusion and well-being work.

The methodology comprised a systematic search and analysis of programmes. This involved identifying any universal, and/or targeted, and/or indicated, school-based and/or classroom-based programme intended to improve mental health (very broadly defined), and/or prevent mental illness/problems, and/or tackle mental health problems, of children and young people in schools. The programmes needed to be included in a systematic review, review of reviews, data synthesis or meta-analysis and have measurable outcomes. Fifty-two systematic reviews and meta-analyses of mental health in schools were identified, from which 23 successful evidence-based interventions were identified. The interventions had a range of beneficial effects on individual children and young people, classrooms, families and communities, and many mental health, social, emotional and educational outcomes. The characteristics of more effective interventions included focusing on positive mental health, balancing universal and targeted approaches, starting early with the youngest children and continuing with older ones, operating for a lengthy duration, including explicit work on skills, and embedding work within a whole school approach combining social skills development, curriculum, teacher training, liaison with parents, parenting education, community involvement and coordinated work with outside agencies.
BACKGROUND

The importance of the school for mental health promotion and intervention is increasingly well understood as more and more school mental health interventions are implemented and evaluated. The USA and Australia are particular thriving centres of this work with diverse language surrounding these programmes including mental health, social and emotional learning, emotional literacy, and emotional intelligence. School-based interventions are also found across Europe, often under titles such as coping skills, stress reduction, violence prevention, and anti-bullying (WHO/HSBC Forum 2007 Task Force, 2007; Fundacion Marcelino Botin, 2008), but rarely closely associated with work on inclusive education. The research underpinning this paper was commissioned after Mental Health Europe (1999; 2000) concluded that much of the work to be found in Europe was not robustly designed or evaluated.

The European Union Dataprev project reviewed work on mental health in four areas, parenting, schools, the workplace and older people. For the schools ‘workpackage’ we carried out a systematic review of reviews of work on mental health in schools from which we identified evidence-based interventions and programmes and extracted the general principles from evidence based work. We then attempted to ascertain whether there were evidence-based interventions and programmes taking place in Europe. In this paper we reflect on current practice as well as the evidence base and draw out implications for the development inclusive education.

METHODOLOGY

With quality reviews of primary research already published, rather than work from individual studies, we sought to identify existing good quality systematic reviews, reviews of reviews, data synthesis, data extraction, meta-analyses and evidence-based databases. Included reviews were those published from 1990, addressing school-aged children and young people (4-19 years in mainstream, special, and independent institutions) and universal, targeted, indicated, school-based, and classroom-based interventions, including those in which schools worked with families and the community, to improve mental health, to prevent mental illness and problems and/or tackle mental health problems.

The following databases were systematically searched: MEDLINE, EMBASE, ERIC, CINALH, Sociological Abstracts, ASSIA, Psycinfo, the Cochrane Database of Systematic Reviews, DARE CENTRAL, SIGLE, and the Social Sciences Citation Index. This search was supplemented by personal contact with established reviewers, pursuing references from previous reviews and overviews, and hand-searching two journals: Advances in School Mental Health Promotion and International Journal of School Mental Health. Using a broad conceptualisation of mental health we used over 80 search terms to reflect the wide nature of the field including positive wellbeing and mental states such as happiness and self-esteem rather than just adopting a deficit approach. We included mental health skills and capacities, such as communication and resilience, and internalising and externalising mental health problems, such as depression and anger.

Two standardised forms were used to extract data, one noting content (focus of review, aims of intervention, who delivered, frequency and duration, population,
setting and timing) and one noting results (number of included studies, relevant outcomes including effects sizes where given, findings and authors’ conclusions). We then analysed for recurrent themes and trends, particularly quantitative estimates of effectiveness. A third standardised form (informed by a seminal paper by Oxman, 1994) was used for critical appraisal of the reviews (relevance, question focus, elements of control (RCTs and CCTs), appraised of quality in the original studies, meta-analysis and/or data synthesis, quantitative presentation including effects sizes, and/or percentages and/or confidence intervals).

We placed most weight in drawing our findings on those reviewed judged to be of high quality for the purposes of this exercise. We then consulted reviews of medium quality to support or shed further light on the key results and rarely used reviews of low quality for support. Next we sought to clarify whether interventions indicated as having at least a small positive effect when originally implemented were being used in Europe. Finally we drew out the principles at work in effective programmes and issues for future development and pertinent to inclusive education.

FINDINGS

Over 500 studies were identified within 52 reviews which met the inclusion criteria. Most (46) of the reviews were universal in scope, that is, they targeted all children in their group and not just those with problems. Fourteen reviews also explored the impact of interventions and approaches on targeted or indicated populations within their larger sample and six focused entirely on targeted and/or indicated populations, that is, children with or showing signs of various mental health problems (2) violence and aggression (2) and emotional and behavioural problems (2).

Half (27) the reviews were judged as high quality (meeting 6 or 7 criteria), 18 were of medium quality (meeting 5 criteria) and 7 of low quality (4 or less criteria met). Quality was effected by lack of an element of control (often involving interrupted time line instead), failure to enumerate results, and lack of focus on schools by including work conducted in clinical contexts. All the reviews used a stated and appropriate and comprehensive search strategy; 51 provided a meta-analysis or narrative data synthesis; 47 assessed the quality of studies and used their assessment to guide results; and 46 asked a clearly focused question.

Half (27) the reviews were carried out by researchers based in the USA, the rest were from the UK (13), the Netherlands (3), Germany (2), Canada (2), Australia (2), New Zealand (1), Norway (1) and the Netherlands and Belgium combined (1). Of the interventions identified as effective about half (28) were being used somewhere in Europe, though only 15 originated here, 12 in the USA and 1 in Australia. Over half (9) the European interventions focused on bullying, conflict and violence (9), most (19) focused on skills and the curriculum, 6 took a whole school approach including work on school ethos, 2 were teacher education interventions and 1 was a peer support intervention. More (11) focused on the primary school years than middle (6) or secondary (6).

Fifty of the 52 reviews concluded that one or more of the interventions had at least small effects and/or were in some way ‘effective’, with the remaining 2 inconclusive rather than negative.
Only four minor examples of apparent adverse effects were reported across hundreds of interventions (these concerned apparent increases in bullying). Beneficial effects spanned those on children and young people, on classrooms, families and communities and on an array of mental health, social, emotional and educational outcomes. We summarise some of these here:

- ‘Internalising’ mental health problems, such as depression and anxiety, were improved (with small to modest effect in statistical terms). Consistently, the impact on higher risk children was higher.
- The impact on positive mental, emotional and social health and wellbeing in general showed positive and small to moderate effects of interventions.
- Impacts on self-esteem and self-confidence were consistently shown to be moderate across a range of high quality reviews.
- The impact on ‘externalising’ problems, such as violence and bullying, was positive and small for universal population, but markedly stronger for high risk children.
- Four studies assessed the impact of various interventions on aspects of children’s behaviour and attitudes towards school and reported small to moderate effect sizes on commitment to school.
- One study (Durlak et al. 2007) addressed the impact of various social and emotional literacy interventions on surrounding environments and found positive results (ES 0.34 for family environments, 0.78 for classroom environments).
- The apparent impact of most interventions was variable, indicating most interventions only worked sometimes. The more recent reviews, particularly, recognised this problem and addressed factors linked with effectiveness.
- The characteristics of more effective interventions included focusing on positive mental health, balancing universal and targeted approaches, starting early with the youngest children and continuing with older ones, operating for a lengthy duration, including explicit work on skills, and embedding work within a whole school approach combining social skills development, curriculum, teacher training, liaison with parents, parenting education, community involvement and coordinated work with outside agencies.

We now present some findings that we regard as important in terms of implications for inclusive education and that we will discuss later in the paper.

1. Audience matters: Reviews by Wells et al. (2003) Browne et al. (2007) and Diekstra (2008a) concluded that universal approaches provided a more effective context for working with students with problems than targeted or indicated alone. Adi et al (2007a) addressed this issue specifically and concluded that both universal and targeted approaches have their place, and appear to be stronger in combination, although they found insufficient evidence to make recommendations relating to the optimum balance between them. Synthesis of the evidence suggests that universal and targeted approaches need to be balanced and combined for maximum effectiveness.

2. Age matters: Synthesising the evidence it would appear that effectiveness is enhanced if interventions in school settings start early with the youngest children (Durlak and Wells 1997; Greenberg et al. 2001; Waddell et al. 2007; Browne et al. 2003; Browne et al. 2006).
al. 2007; Shucksmith et al. 2007) and continue with older ones, operating for a lengthy duration.

3. Methods matter: Merry et al. (2004) concluded that strategies of just giving information were ineffective and like Greenberg et al. (2001) and Wells et al. (2003) they concluded that interventions need also to “educate” the child through impacting on attitudes, values, feelings and behaviour. Five reviews also concluded that more effective interventions used active rather than didactic teaching methods, employing interactive methods such as games, simulations and small group work (Browne et al. 2004; Berkowitz 2007; Durlak and Weissberg 2007; Diekstra 2008a; Durlak et al. 2011).

4. Environment matters: Effective programmes are characterised by whole school, complex, multi-component approaches involving a wide range of people, agencies, methods, and levels of intervention, and mobilising the whole school as an organization (Catalano et al. 2002; Wells et al. 2003; Adi et al. 2007a, 2007b), and by an intensity and focus in their implementation (Wilson and Lipsey 2007; Durlak et al. 2011). Six reviews discussed the importance of school ‘environments’ and efforts to change them to promote mental health (Durlak and Wells 1997; Greenberg et al. 2001; Catalano et al. 2002; Wilson et al. 2003; Adi et al. 2007a, 2007b). Particularly important was the way staff and students treat one another, the development of bonds between youth and adults, and opportunities for young people to participate in positive social activities.

5. Teachers matter: The interventions analysed in the various reviews were transmitted by many different agents with variable effectiveness. Scheckner et al. (2002), looking at interventions that promote pro-social behaviour and skills, found that intervention impact was significantly affected by having a qualified intervention leader, while several reviews (e.g. Adi et al. 2007a, 2007b; Berkowitz 2007; Diekstra 2008a) commented on the need for extensive and intensive training for those involved in leadership. Expert interveners were found to be effective, for example when starting out with an approach, if not for routine embedding of it (see Wilson et al. 2003; Shucksmith et al. 2007).

6. Peers matter: Six of our reviews included interventions which involved peer work showing that peers can be an effective and significant part of some types of mental health interventions. Rones and Hoagwood (2002), Adi et al. (2007a) and Garrard and Lipsey (2007) all reported reasonable evidence that peer mediation in conflict resolution is effective in the short term, and Blank et al. (2009) found it to be effective in the longer term. Browne (2004) and Shucksmith et al. (2007) found some evidence that peer norming (putting children with problems with those without) has at least short-term modest impacts on the mental health of children with problems. However, the findings of Farrington and Ttofi (2009) and Shucksmith (2007) suggest caution is need in peer work with children who bully.

7. Communities matter: The four reviews looking at broad development and wellbeing (Greenberg et al. 2001; Catalano et al. 2002; Browne 2007; Diekstra, 2008a) concluded that engagement with and support from families and communities is helpful. Browne (2007) and Greenberg (2010) commented on the importance of embedding interventions within not just multi-disciplinary teams but communities to provide support. The involvement of parents was nominated by ten reviews as a key component of effective multi-component interventions.
DISCUSSION

There are a number of issues that arise from this research that have resonance or implications for issues in inclusive education more generally and we use this conference opportunity to air them. In this exercise we are thinking of promoting mental health as being about planned, purposeful work in schools towards the mental health and social and emotional well-being of all pupils including those with difficulties; we are thinking of promoting inclusion as being about planned, purposeful work in schools towards the social and academic inclusion and success of all pupils including those with difficulties. An obvious question pertains to what can be learned from the kind of rigorous study of programme effectiveness in mental health and whether one might draw from this a set of hypotheses such as:

- As the evidence indicates for mental health promotion, more effective interventions for promoting inclusion will include a focus on positive skills and abilities rather than just focusing on difficulties and deficits;
- As the evidence indicates for mental health promotion, effective work in promoting inclusion will address skills development within a whole school, multi-modal approach which typically includes changes to school ethos, teacher education, liaison with parents, parenting education, community involvement, and coordinated work with outside agencies.

These kinds of hypotheses are reasonable in that there is nothing here that goes against the body of knowledge on inclusive education. Playing around with these ideas, though, does highlight how little mental health is left to chance – the programmes are extensive, well-developed, strongly promoted and rigorously evaluated. In inclusive education, in contrast, there have not been programmes as much as movements, loose approaches, bottom-up grounded work in situ. They are encouraged by policy more than driven, and the research is quite different. In terms of intervention and research this is more the European approach to mental health in some respects, but influences from the USA and from the medics have changed the dynamic somewhat.

The volume of good quality studies and reviews regarding mental health work in schools is not matched in inclusive education work despite some EPPI-Centre reviews (e.g. Dyson et al. 2002; Evans et al. 2003; Nind et al. 2004). This partly reflects the medicalization of school-based work on emotional well-being and mental health and the vying for territorial control of this across medical/psychiatric, public health and education arenas (Nind & Weare 2009). Medical interest has stimulated the plethora of RCTs for example, which are in addition to case study type research with uncontrolled variables and naturalistic advantages. In inclusive education the vying for control has been more between policy makers and practitioners and between those asserting that evidence is needed and those asserting a more philosophical or political position (Nind 2011). This has not stimulated studies in the same way.

In mental health promotion the whole school approach, when well-implemented, has long been understood as more effective in terms of outcome than a skills focused, curriculum based, approach alone. Weare (2000, 2009) has long been championing the message that to support the emotional well-being of our school populations there is a need for consistent pedagogical principles relating the value of participative and experiential learning in which children and young people are actively involved in
learning a combination of skills and attitudes and gaining opportunities to use their social and emotional skills and for these to be positively reinforced. The current study has reinforced already established understandings (Nind & Weare 2009) that: affective learning needs to be integrated across the curriculum and not isolated in specific curriculum areas or lessons; school staff need to take responsibility for affective learning rather than leaving this to chance; staff need to address their own mental health needs and to feel trained and supported before addressing the needs of students; students benefit from warm relationships in which school staff demonstrate respectful and empathic compassionate concern; students need positive behaviour management; they can learn from peers including through mentoring, mediation, conflict resolution and buddyng; opportunities are needed for student voice with students and staff empowered to make real choices, and have appropriate levels of genuine decision-making and responsibility; and all this is helped by parental involvement and pedagogical connections with learning outside school and in the home. None of this contradicts messages from the inclusive education literature but it does enrich those messages.

The study reported and reflected on here adds some important new dimensions to this mix of evidence and ideas, including the following:

1. Synthesis of evidence in mental health promotion suggests that universal and targeted approaches need to be balanced and combined for maximum effectiveness yet in inclusive education we have tended not to use these concepts and this language at all. Implicitly, inclusive education is about the universal, it is about making schools fitting places for everyone (Barton 1995; Ainscow & Miles, 2008); targeted education is about labelling and special provision. It may be, though, that these concepts can be used more explicitly and helpfully in inclusive education to reduce this dichotomy and embed work that is targeted and indicated within the universal.

2. Approaches to mental health promotion in school settings need to start early with the youngest children and continue with older ones, operating for a lengthy duration. There are lessons here about the value of having a very clear approach and sticking with it. There are no simple ‘add-ons’ or ‘quick fixes’ for mental health and there is not likely to be for inclusive education either, but staff do benefit from adherence to a set of principles and processes. Working in this disciplined way for inclusive education might just boost the repeatedly reported poor confidence of teachers when faced with very diverse learners.

3. This study has shown that how one approaches the challenge of supporting good mental health makes a big difference, showing the importance of working on attitudes, values, feelings and behaviour. It may be productive for us in inclusive education more widely to make greater use these domains when thinking about how to intervene with children and teachers. There is clearly also far more work needed on inclusive pedagogies despite the important contributions by for example, Hart et al. (2004) and Florian and Black-Hawkins (2010).

4. The evidence on mental health work shows that in addition to what goes on at the level of the classroom, it is necessary for effectiveness to move beyond an individual, classroom and curriculum focus alone, and embed such work within a whole school, complex, multi-component approach involving a wide range of people, agencies, methods, and levels of intervention, and mobilising the whole
school as an organization. It may be that as yet in inclusive education we have under-estimated the extent of complex, multi-component work that is needed. The importance of school ethos and culture is already part of the body of knowledge on inclusive education and the body of knowledge on mental health indicates lends support to this emphasis.

5. Who should lead the intervention was shown through the reviews of mental health programmes to be important, and again this raises issues about this more generally – particularly regarding the level of expertise and the amount of contact with children and ideas. In inclusive education we know something about the importance of the commitment of school leaders and classroom teachers but little about the ways that expert interveners might be developed or used to support initiatives. The lessons from the mental health review are that it is when we want interventions to get to the heart of the school process that ordinary teachers may be more effective than specialists (Diekstra 2008a; Durlak et al. 2011).

6. Although not leading developments, peers have a recognised role in both mental health programmes and were often an effective and significant part of some successful interventions such as peer mediation in conflict resolution. Interestingly for inclusive education is evidence that putting children with problems together with those without was beneficial (Browne 2004; Shucksmith et al. 2007). Evidence on the role of peers in supporting inclusive education is less extensive but research in the field is clearly warranted.

7. Finally, the importance of going beyond the school when intervening is underpinned by evidence in mental health work and offers another reinforcing message to support early work in inclusive education. Unsurprisingly perhaps, the importance of engagement with and support from families and communities was supported by evidence, with effectiveness coming from embedding interventions within communities and engaging parents. The support and involvement of parents and communities in efforts towards inclusive education are not nearly so well understood.

CONCLUSION

A lot has been learned from this review of reviews regarding how to be effective when intervening in schools to support the mental health and emotional well-being of children and young people. We have argued here that this evidence is also helpful for prompting further thinking about inclusive education more widely, both in terms of how we work towards this and how we research it. It has been fascinating to compare the European and Australian style of whole school approaches promoting ‘bottom up’ principles such as empowerment, autonomy, democracy, and local adaptability and ownership (WHO, 1997) with the US style of more top-down, manualised approaches, with scripts, prescriptive training, and a strict requirement for programme fidelity. The flexible and non-prescriptive style is echoed in inclusive education where, similarly, supportive structures, positive climates, empowered communities and end-user involvement are highly valued. This, we have argued, leads to well-rooted and long-lasting changes of attitudes and policies that are necessary to support sustainable changes in mental health, and are equally applicable in inclusive education. However, there are clearly some challenges that
emerge from the US approach and which prompt us to think further about the value and need for a balance with work that is highly focused and that achieves demonstrable results as from this further confidence among teachers may grow. These approaches do not negate the value of reflexive teachers but they may help to equip them going forward.

REFERENCES


programmes Prevention Research Center for the Promotion of Human Development, College of Health and Human Development Pennsylvania State University.


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