

SUMMARY

Background

Behaviour management is high on the education policy and practice agenda in England and the rest of the UK, as well as other areas of the world. Whole school policies are advocated for managing the behaviour of all pupils, with specialist approaches nested within these for children who might be deemed to have 'emotional and behavioural difficulties' (EBD) or 'social, emotional and behavioural difficulties' (SEBD). This group of children raises interesting issues for the intersection of behaviour management policies, inclusive schooling and the drive for raising academic standards. A combination of government policies in England has encouraged schools to include as many pupils as possible within mainstream schools and at the same time to reach ever-higher academic standards.

The term EBD is a broad label which has been used to group a range of more specific difficulties such as behaviour which interferes with a child's own learning or the learning of their peers; signs of emotional turbulence (e.g. unusual tearfulness, withdrawal from social situations); and difficulties in forming and maintaining relationships. Definitions of EBD are contested and there is a need to consider the role that societal, family and school environments play in creating and ameliorating children's social, emotional and behavioural problems.

Many different strategies for teachers to support children have been advocated. A variety of groups are likely to have an interest in which of these strategies are effective, for whom, and in which circumstances: school staff (e.g. teachers, special educational needs co-ordinators), parents, and children themselves. Like qualified teachers, trainee teachers and initial teacher education providers also need to know which strategies are effective, for whom, and in which circumstances. New standards for qualified teachers and requirements for initial teaching training also state that teachers should be able to learn from both research evidence and reflective practice. This review aims to help trainee primary school teachers (and their trainers) in their efforts to fulfil these standards. Access to good quality research findings about which strategies appear to be effective can augment teachers' 'craft knowledge' alongside reflection and theory.

Aims and review questions

This document reports on a piece of work which aimed to develop further an earlier systematic review on the effectiveness of strategies for supporting children with emotional and behavioural disorders in mainstream classrooms within primary schools (Evans *et al.*, 2003). The earlier review had been conducted with a range of users in mind (e.g. teachers, psychologists, special educational needs co-ordinators, students and parents). The piece of work reported in this document was conducted with an additional set of users in mind: those from within the initial teacher education community and trainee teachers. It is therefore complementary to our earlier systematic review. The current review is one of two reviews commissioned by the Teacher Training Agency (England) on behaviour

management. The other review focuses on theories and learning behaviour (Powell and Todd, 2003).

Our primary review question was 'What are effective strategies for supporting pupils with EBD in mainstream primary classrooms?'. We also wanted to address a secondary question related to teacher training, particularly in the context of initial teacher education: 'What are effective ways of supporting trainee primary school teachers to use the above strategies?'. However, we found few studies which could address this question, and so our review primarily addressed the first question. Our advisory group (which included providers of initial teacher education) considered that answering the first question would be a valuable way for them to provide support for primary school teacher trainees.

The intended population focus of our review was primary-aged children, their teachers or teacher trainers. The setting focus was classrooms within mainstream, rather than special, schools. However, our focus was not on special classrooms (e.g. resource rooms) within mainstream schools. The scope of our review covered children whose behaviours or emotional difficulties were not so extreme that they could not be taught in mainstream classrooms, but were sufficiently frequent to require specific interventions from teachers or other adults so that they could remain in the mainstream classroom.

We were interested in strategies, that could be implemented by primary school teachers either working on their own or in collaboration with other school staff. In terms of supporting children labelled as having EBD, to support children to remain in mainstream classrooms. Our review was not concerned with strategies using drug or psychiatric treatments, but with strategies which provide children with information, social support or skills training. Our intended intervention scope covered strategies which involved making changes at the whole class level (rather than individuals within classes) and to the physical or social organisation of the classroom. We were also concerned with programmes which attempted to support or train teachers in the use of these strategies. Our review was concerned with studies evaluating outcomes for children or teachers of the above types of strategies.

Methods

We sought reports of studies published between 1999 and 2002 which evaluated the effectiveness of strategies for supporting primary-aged children (usually aged between aged four and 11-years-old) with emotional and behavioural difficulties in mainstream primary schools or evaluated ways of supporting teachers to use these strategies. We excluded studies which: evaluated strategies for general discipline problems; involved children in mainstream schools who were taught entirely in special classes (e.g. resource rooms); or did not report the full results of an evaluation. We also excluded studies not published in the English language. We searched for studies on five electronic bibliographic databases using a wide range of terms for 'emotional and behavioural difficulties' combined with terms for the primary phase of education. These searches were supplemented by handsearches of 20 journals and by scanning the reference lists of already identified relevant studies.

The remainder of the review was carried out in two main stages: (i) a descriptive mapping of all studies identified (systematic map); and (ii) an in-depth review of a subset of these studies.

For the systematic map, the EPPI-Centre core keywording strategy (EPPI-Centre, 2002a) was used to code studies according to the country in which the study was carried out; the population studied; the age and sex of learners; and the evaluation design and methods. These codes were supplemented with review-specific codes covering the theoretical model underpinning the strategy under investigation; the type of behaviour/outcome the strategy is trying to change; the people involved in implementing the strategy; whether the study focused on teacher training; and the sample size. These were used to produce a descriptive map of all studies meeting our inclusion criteria.

We developed a narrower set of inclusion criteria for the in-depth review. The EPPI-Centre standardised set of data-extraction guidelines were applied to all studies meeting the criteria for the in-depth review (EPPI-Centre, 2002b). These guidelines enabled reviewers to extract data on the development and content of the strategies evaluated; the design and findings of the studies (including recruitment and characteristics of the sample); and details of any integral process evaluation (e.g. on factors influencing the implementation of the intervention, the acceptability of the intervention to teachers and pupils). The methodological quality of each study was assessed and reviewers made a judgement of the 'weight of evidence' the study could provide for answering the review question (high, medium, or low).

Findings of studies were synthesised according to the theoretical framework which underpinned the strategies evaluated and the methodological quality of the evaluation.

Findings

Our searches identified 1,312 citations from bibliographic databases and a further 74 papers or citations from handsearches or citation chasing. However, after screening, only 51 studies met our inclusion criteria. This represents four percent of all citations screened. Of the 51 studies, ten were described in unpublished reports.

Systematic map

The majority of studies (35/51) were conducted in the US although we identified nine from the UK. The strategies which have been most frequently evaluated by the studies we identified were those based on cognitive behavioural models and implemented by teachers and/or psychologists, social workers, parents, or children. Although overall, similar numbers of studies evaluated strategies targeting the four types of behaviours associated with EBD that we coded for (aggressive, disruptive, off-task and social difficulties), strategies evaluated outside the US tended to target social difficulties more often. This may be partly explained by the differences in the theoretical models which most frequently underpin the strategies evaluated in different countries. Outside the US, strategies based on behavioural models do not appear to be very popular; none of the studies in the UK evaluated these kinds of strategies compared to 13 of the 35 studies in the US. However, studies conducted in the UK were much more

likely to evaluate strategies based on a psychotherapeutic model (seven of the nine UK studies compared with only one of the 35 US studies).

It is encouraging to note that over a third of studies evaluated strategies by comparing groups receiving the particular strategy under test with groups which did not. This can help to rule out the possibility that any improvement in outcomes (e.g. aggressive behaviour) is simply due to the passage of time or other events. A quarter of studies used random methods to allocate children or teachers. This can help to rule out the possibility that any improvement in outcomes is simply due to known or unknown differences between the two groups of children or teachers being compared. Similar proportions of studies across countries involved the use of random allocation to assign groups of children or individuals. Only one-quarter of the studies combined the strengths of collecting both 'qualitative' and 'quantitative' data. All randomised controlled and other trials in the UK collected qualitative data to examine processes alongside quantitative estimates of impact compared with only two of the 12 randomised controlled and other trials in the US. Sample sizes were a cause of concern. Just under half of the studies employed sample sizes of fewer than 20 children or teachers.

Our map suggested a tiny potential evidence base for specifically informing ways of supporting trainee teachers who may encounter children with EBD in their primary school classrooms. Only four out of our 51 included studies were judged by reviewers to evaluate ways of supporting teachers to implement strategies. Only one of these studies was from the UK and none focused specifically on initial teacher education (ITE). This is clearly a gap for research commissioners in the ITE sector.

In-depth review

Owing to the time constraints we were restricted in the number of studies we could review in-depth. Following advice from our advisory group, we decided to focus our efforts on studies conducted in the UK, which were more likely to yield information that would be contextually relevant compared with studies conducted in the US. From our pool of UK studies we excluded those which did not employ adequate controls in their evaluation design (i.e. use of a control or a comparison group or a reversal design). Four of the nine studies fell out on this criterion and five studies went on to the in-depth review.

Our five studies consisted of one which evaluated the impact of 'nurture groups' to support positive emotional and social growth and cognitive development amongst children aged four- to 10-years-old with social, emotional and behavioural difficulties; an evaluation of the operation and impact of a parent and school behaviour action project (PASBAC) on children aged five- to 10-years-old with EBD; an evaluation of the 'communication opportunity group scheme' (COGS) to improve literacy and behaviour amongst seven- to 15-year-olds with EBD; an evaluation of the impact of establishing a therapeutic 'quiet place' within schools for four- to 11-year-olds with EBD; and an evaluation of Project CHANCE, a community-based mentoring scheme for children aged six- to 10-years old with EBD.

None of these studies were judged to have provided a high weight of evidence for answering the review question. Findings from the in-depth review highlight the fragmentary nature of the evidence base from the five UK studies conducted from 1999 to 2002. This finding is in line with our earlier review which found only four

studies conducted in the UK and published up to 1999 . The main implications from this part of the review therefore concern the future development of an evidence base and these are described in the next section. First we provide more detail on the five studies included in the in-depth review.

Three studies had the potential to provide evidence on the effectiveness of strategies based on a psychotherapeutic model. For two of these studies, authors concluded that there were positive effects for children. One study evaluated 'nurture groups' and the authors concluded that children attending 'nurture groups' showed improved levels of emotional and behavioural functioning. Another study evaluated the 'quiet place' (a room which provided a therapeutic environment) and the study author concluded that children who had attended showed improved levels of development. The authors of the third study evaluating mentors who aimed to develop a trusting and supportive relationship with children concluded that there were no differential effects on behaviour amongst children who received mentoring compared with those who did not. All three studies were judged by reviewers to have provided a medium weight of evidence for answering the question of this review. For each of these studies, reviewers judged results to be inconclusive due to small sample sizes for the 'quiet place' and the mentoring project, or to the interim nature of findings for the 'nurture groups'.

Three studies had the potential to provide evidence on the effectiveness of strategies based on a cognitive-behavioural model. For two of these studies, authors concluded that there were positive effects for children. One study evaluated a combined systemic strategy (parents, teachers and support staff working in collaboration) with cognitive behavioural elements whereby parents were trained to develop a range of skills, such as play, boundary setting, establishing rules and selective reinforcement, using naturally occurring situations within the home. These study authors concluded that the strategy was effective for improving the behaviour of children. Another study evaluated a strategy based on the premise that problem behaviour in school could be improved by improving children's communication skills using a specific programme developed by the author. This author concluded that there were positive effects on the behaviour of children receiving a communication skills intervention. As described above, the authors of the evaluation of the mentoring strategy (which also aimed to provide children with solution-focused cognitive-behavioural interventions as well as a secure and supportive relationship for children) concluded that there were no differential effects on behaviour amongst children who received mentoring compared with those who did not.

Again reviewers disagreed with author conclusions about the effects of cognitive-behavioural strategies. The study evaluating the strategy involving parental support workers was judged by reviewers to have provided a low weight of evidence and hence they judged the strategy to be unclear in its effects. Reviewers judged the study evaluating the communication skills strategy as providing a low weight of evidence. Despite this study using a strong design (a randomised controlled trial), the way the study judged the effectiveness of the strategy on children's behaviour was via anecdotal accounts of improvements by teachers and parents of children in the intervention group. Although the evaluation of the mentoring project was deemed by reviewers to provide a medium weight of evidence, reviewers judged the results of the study to be inconclusive due to a small sample size.

Only one study had the potential to provide evidence on the effectiveness of strategies based on a systemic model – the strategy involving parent support workers as described above. This study was judged to have provided a low weight of evidence for answering the review question.

None of the five studies evaluated strategies based on a behavioural model.

Implications

Based on the studies included in this review, the evidence base for recommending effective strategies that teachers could draw on to support pupils with emotional and behavioural difficulties in mainstream classrooms is limited. It is even smaller for informing ITE in this area. However, because of the definitional problems associated with EBD, it is likely that our search strategies missed studies which would have met the inclusion criteria for this review. Our searches were designed to identify literature described as being focused on EBD rather than the overlapping literatures on aggression, conduct disorder or violence prevention; see, for example, a recent systematic review on violence prevention by Mytton *et al.* (2002). The studies in this review therefore represent a particular slice of all potentially relevant literature and our conclusions must be interpreted within this context. In addition, there was a bias towards finding studies in educational and psychological journals in our search strategy, and this may have limited the range of theoretical models underpinning the strategies evaluated by the included studies.

For policy and practice

There are currently many new initiatives relevant to supporting pupils with EBD in mainstream primary classrooms. For example, 'Behaviour Improvement Programmes' (BIPs) have been implemented in 61 LEAs across England (34 in phase 1 and 27 in phase 2). A number of different strategies are suggested as part of this programme: for example, multi-agency support for pupils at risk of EBD, Learning Mentors and 'extended schools' with activities such as Breakfast Clubs. It is clear from our review that many of these strategies have not yet been evaluated by rigorous research, but are experimental and will need to be evaluated if they are to be used as a basis for policy development in this area.

Nevertheless, the strategies and the theoretical models underpinning them, add to a broader understanding of emotional and behavioural difficulties and the types of approaches that are currently being implemented in UK schools. The UK studies published between 1999 and 2002 suggest a move in the UK towards strategies using a 'whole school' approach for their successful implementation. These studies have also shown a trend towards involving parents in the interventions and also towards working actively with parents to improve their relationship with their children. Thus, primary school trainee teachers should expect to work in a multi-disciplinary way with colleagues in school and from other services to provide support for the pupils with EBD in their classrooms.

For research

Given the lack of clarity about the effectiveness of a number of widely-used strategies, we recommend that practitioners and researchers work in partnership

to carry out rigorous studies of the strategies currently used. Such partnerships need actively to include children and parents and take account of their views on the appropriateness of strategies. There is a clear need for research evaluating the effectiveness of different ways of supporting or preparing primary school teachers (trainee or otherwise) to include children with emotional and behavioural difficulties in their classrooms. Again researchers need to work in collaboration with ITE providers as well as trainee teachers.

From the strengths and weaknesses identified in the methods of the studies included in the in-depth review, a number of recommendations can be made about how research which evaluates the effectiveness of strategies should be carried out. We recommend the following:

- the use of more than one group so that one group receiving the strategy under evaluation can be compared with a group not receiving the intervention;
- the use of random allocation (where possible) of children or classes or schools to groups;
- that careful attention is paid when random allocation is not possible, to obtaining groups that are matched on socio-demographic characteristics and levels of emotional and behavioural problems;
- that more effort is invested to obtain measures of outcome over the long term, potentially into adulthood, when appropriate;
- the use of larger sample sizes to ensure that studies are adequately powered to detect the effects of strategies;
- the collection and appropriate use of 'qualitative' process data alongside 'quantitative' data estimating the effects of strategies.

As it is impossible to assess the reliability of the results of evaluation studies unless there is a clear description of the methods used for the evaluation, we also recommend that more careful attention needs to be paid to providing full details of research methods in research reports (e.g. data-collection tools, data analysis methods and sample characteristics). Publications should also make this information available, either in the published paper, or as a technical appendix available from the authors. Journal editors need to play a role in ensuring this.