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Supporting parents of children and young people with anxiety and depressive disorders, an opportunity not to be missed: A scoping review

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Summary

There is limited guidance on whether and how to involve parents in treatment for anxiety and depressive disorders in children and young people (CYP). We conducted a scoping review of randomized controlled trials of psychological interventions for anxiety and depressive disorders in CYP, where parents were involved in treatment to identify how parents and carers have been involved in treatment of anxiety and depression in CYP, how this relates to both child and broader outcomes, and where research should focus.

We identified 73 trials: 62 focused on anxiety and 11 on depressive disorders. How parents were involved in treatments varied greatly, with at least 13 different combinations of ways of involving parents in 62 anxiety trials and 7 different combinations among 11 depression trials.

Including parents in treatment did not impair CYP outcomes, however wide variability in how parents were involved prevents clarity about why some trials favoured parent involvement and others did not. Furthermore, studies must consider long-term and wider benefits beyond CYP mental health such as enhanced engagement, family well-being and economic gains.

175 words

Introduction

Internalising disorders in children and young people (CYP) are common, with global prevalence rates of 6.5% for anxiety disorders and 2.6% for depressive disorders. In addition to their association with difficulties at home, with peers, and at school, 4-4 when left untreated, internalising disorders can put CYP at risk for longer term adverse outcomes, including substance abuse, unemployment and adult mental health difficulties. Frompt identification and effective treatment of internalising disorders in CYP are therefore of utmost importance. Parents and carers can facilitate this process, and provide a key route to accessing professional support for CYP (for brevity, henceforth we will use 'parents' to refer to 'parents and carers')(cross reference other review in the series). As such, appropriate engagement of parents in treatment for mental health problems in CYP is crucial. Despite this, there is no consistent guidance on how to achieve effective parental involvement in the treatment of CYP anxiety and depressive disorders, and consequently therapists see parent involvement in their child's treatment as optional.

To date, parental involvement in treatment for anxiety and depressive disorders in CYP has often been informed by a deficit or problem maintenance model, despite evidence that negative parenting factors account for a modest amount of variance in CYP internalising problems. 11,12 This focus on potential parental contributions to CYP problems has come at the cost of focusing on how to empower, engage, and support parents, which is particularly concerning given that parents of CYP with internalising disorders face a number of difficulties over and above those encountered by parents in general. Child internalising symptoms are a robust predictor of caregiver stress, low satisfaction and quality of life, 13 and it is well established that parents of CYP with internalising disorders are themselves more likely to experience their own mental health problems 14,15 (see also- cross reference other

review in the series). In qualitative research, parents of CYP with internalising disorders report significant emotional distress, a sense of helplessness and powerlessness and strong negative feelings of self-blame, guilt or shame, ^{16,17} which may be amplified by stigma associated with having a child with mental health difficulties. ^{17,18} Parents also describe subjugating their own needs ¹⁶ and significant unmet needs in terms of access to appropriate information and support (also see – cross reference other review in the series). ¹⁰ Given the important role that parents play in engaging CYP with mental health services, ⁹ (cross reference other review in the series -outline of model here) and the challenges inherent in supporting CYP with an internalising disorder, involving parents in interventions in a positive way could be beneficial both to parents and CYP.

Qualitative research highlights a strong desire among parents to be involved in their child's treatment for anxiety and depressive disorders and to manage the difficulties as a family. 17,19 Children and young people report that their families are the most important source of support when they are under stress. 20,21 Nonetheless, understanding of how to involve parents in treatment of their children's internalizing disorders is lagging behind interventions for other common CYP mental health problems - including attention deficit and hyperactivity disorder, conduct disorders, and eating disorders – where systematic evaluation of parent involvement has led to parents being embedded as an important resource at the centre of interventions. 22-24 In contrast, findings from meta-analyses of psychotherapeutic interventions have concluded that involving parents in treatment is associated with little, if any, enhancement in children's psychiatric outcomes for anxiety disorders, 25-27 and for depressive disorders findings have been mixed. However, there has been little consistency in the *nature* of parental involvement in treatment studies for anxiety disorders^{29,30} or depression²⁸ - with designs ranging from parental psychoeducation to parent-led intervention delivery.

Systematic reviews of randomized controlled trials that have considered the impact of parental involvement in treatments for child and adolescent internalising disorders have typically categorised the amount, rather than the nature, of parental involvement. ²⁵⁻²⁸

Furthermore, reviews to date have had a limited focus on the impact of parental involvement on (mostly short-term) child outcomes, ²⁵⁻²⁹ without considering the potential for broader benefits, above and beyond CYP symptom reduction. Engaging parents in delivering CYP treatments may potentially reduce the need for therapist contact time, enhance generalisation and sustained effects of treatment, while also addressing parental concerns relating to their child's and their own mental health. Given the exceptional current demands on CYP's mental health services in the UK³¹ and elsewhere ³² there is a pressing need to determine the extent to which parents can support intervention delivery for CYP anxiety and depressive disorders, which are among the most common problems presenting to clinical services.

In order to map in detail the different ways in which parents are involved in treatments, we conducted a scoping review of the existing literature on involvement of parents in the treatment of anxiety and depressive disorders in CYP with three research aims, to: a) provide a detailed synthesis of *how* parents have been involved in treatment across these disorders; b) determine the extent to which existing research is able to indicate *whether* parental involvement can improve CYP mental health outcomes, and/or provide an alternative and effective means of treatment delivery; and c) consider *what* broader benefits over and above CYP symptom reduction have been examined, including potential implications for the extent of engagement in treatment and cost-effectiveness of intervention.

Methods

We used scoping review guidelines³³ to develop an *a priori* protocol with predefined objectives based on our three research aims. We used the PICO framework³⁴ with the following inclusion criteria:

Participants and Problem

CYP (mean age under 18 years) diagnosed with anxiety disorder(s) or depressive disorder(s) and their parents. Studies were excluded where participants were identified in the context of an issue other than anxiety or depressive disorder(s) (e.g., physical health problems, neurodevelopmental disorders), where the focus was bipolar disorder, or where no diagnostic assessment was included.

Intervention

Randomized controlled trials, with parents included in at least one arm. Treatment comprised a psychological approach and targeted CYP anxiety disorder(s) or depressive disorder(s).

Comparator

Active or inactive control groups.

Outcome

Post-intervention CYP diagnostic or symptom status, health economics, participant experience.

We searched PubMed, PsycINFO (both via EBSCO) and EMBASE (via Ovid) in November, 2018, and August, 2019, for papers including the terms: (parent* OR mother* OR mum* OR father* OR dad* OR caregiver*), AND (child* OR adolescen* OR youth*) AND (anx* OR internali* OR depressi* OR dysthymia* OR mood disorder*) AND (treatment OR therapy OR trial). We limited our search to papers published since 1980, in English, reporting a clinical trial. Full details of the terms and limits are available in online supplement S1.

Study selection

PJL and MP independently screened the titles and abstracts of 810 papers; 267 papers were identified for potential inclusion and were reviewed in full. We also searched reference lists of included studies. CC and SH were consulted with any eligibility queries, prior to data extraction. PJL / MP each extracted an independent subset of the data, and discussed any uncertainties with each other and then CC and SH (see Figure 1 for PRISMA flow diagram). We categorized included studies according to their focus (anxiety or depressive disorder), whether the control groups were active (e.g., CYP only treatment), passive (e.g., wait list control) or also involved parents, and by the target of parental involvement (that is, psychoeducation, parental anxiety / depression, parental behaviours, strategies to address CYP difficulties, family relationships).

Results

We identified 75 studies, from 73 trials, that reported effects of interventions to treat anxiety or depressive disorders in CYP in which parents were involved in treatment (see Figure 1 for PRISMA flow diagram). Figures 2a and 2b depict the number of studies that addressed anxiety and depressive disorders, respectively, as well as the different combinations of targets of parental involvement. Table S1 provides a summary of key study characteristics (number and age of CYP, treatment delivery format, targets of parental involvement, study design, evidence of effectiveness, participant satisfaction and retention).

Sixty-four articles reported on treatment for anxiety disorders from 62 trials. Thirty-eight trials had only two arms, of which 11 compared treatment involving parents to a wait list control (WLC), nine compared treatment involving parents to treatment involving CYP-only, and 18 involved parents in treatment in both arms. Twenty-four trials used a multiple arm

design (including 19 further WLC arms and 10 further CYP-only arms). For 59 trials, the primary outcome was remission from anxiety disorders or reduction in severity/symptoms, whereas, for one trial it was percentage of school attendance and, for two it was clinician-rated global improvement. For the 51 anxiety disorder trials comparing active treatments, 18 reported power calculations to detect a clinically meaningful difference_(that is, an effect size of half a standard deviation) between active treatments. Two of these anxiety trials reported cost-effectiveness outcomes.

Eleven articles reported on treatment for depressive disorders. Eight trials had only two arms, of which two compared treatment involving parents to WLC, two compared treatment involving parents to treatment involving CYP-only, and four involved parents in both arms. Three trials had multiple arms (including three further CYP-only arms and two further WLC arms). The primary outcome for all studies was remission from, or improvement in, depression. Of the nine depressive disorders trials comparing active treatments, one reported that it had adequate power to detect a clinically meaningful difference.⁵³

In light of the diversity of comparisons made in these trials, and the range of treatments and number of different combinations of targets, we elected not to risk obscuring genuine differences in effects by conducting meta-analyses.⁵⁴ Rather, we present the results of our narrative review according to our three research aims.

How Are Parents Involved in Treatments for CYP Internalising Disorders?

Involvement of parents in the treatment of CYP internalising disorders varied considerably, both when comparing anxiety and depressive disorder treatment studies and also within disorder specific approaches (see Table S1, and Figures 2a and 2b). First, the amount of time

that was allocated to parent sessions or parent involvement within CYP sessions varied from minimal (for example, parents had two group sessions of 45-minutes)⁵⁵ to substantial involvement (for example, one trial arm comprised 12 parent-only sessions of 90-minutes). 56 Second, the *method* of parent involvement varied considerably. The articles reporting information from the 73 trials showed that parent sessions focused on: parental behaviours implicated in the maintenance of CYP psychopathology (k=64/73), strategies targeting CYP difficulties (k=64/73), psychoeducation (k=63/73), parental psychopathology (k=18/73), and family relationships (k=17/73). The majority of trials included more than one (and up to five) of these focal areas. As depicted in Figure 2a, anxiety disorders studies most often focused on parent behaviours (57 of the 75 trial arms involving parents) and had parent sessions that taught specific (e.g., CBT) skills to parents to alleviate their child's difficulties in an adaptive way (k=56/62 trials). Parents received psychoeducation regarding the nature of anxiety in k=55/62 trials, while parental behaviours implicated in the maintenance of CYP anxiety, such as over-protection and provision of excessive reassurance, were the target in k=54/62 trials. Parental anxiety (k=16/62) and family relationships (k=7/62) were least frequently targeted in parent sessions in CYP anxiety disorder trials. By contrast, parent sessions in CYP depressive disorder trials most often targeted family relationships, for example, improving communication and adaptive conflict resolution skills⁵⁷ and parent behaviours implicated in the maintenance of CYP depression (k=10/11). Strategies to address CYP difficulties, for example, affect regulation, ⁵⁸ were the target in parent sessions in k=8/11 trials, and psychoeducation regarding depression in CYP in k=8/11 trials. Parental depression was the target in only k=2/11 trials.

What are the Outcomes when Parents are Involved in Treatment?

Despite the great variability in approaches and methods (see Table S1), there is evidence that treatments which involve parents, compared to waitlist controls, are able to improve CYP anxiety (k=28/30) and depressive disorders (k=3/4). For anxiety disorders, when treatments involving parents were compared to treatments for CYP-only (k=19), three trials found an advantage for involving parents when assessed at the end of treatment, ⁵⁹⁻⁶¹ with this maintained a year later in one trial, 60 and 16 found no difference. The three studies that found an advantage for involving parents did not differ in any particular single way from the 16 which did not. For example, Garcia-Lopez and colleagues⁶⁰ (who found an advantage for parent involvement) compared child CBT to family CBT, as did Reynolds and colleagues⁶² (who did not find an advantage for parent involvement), but the studies differed on a number of important study characteristics (including, sample characteristics: CYP Social Anxiety Disorder⁶⁰ vs CYP Obsessive-Compulsive Disorder⁶², setting: school⁶⁰ vs health clinic⁶² and delivery format: group⁶⁰ vs individual⁶²). Notably, a CYP anxiety disorders study with a similar design - parents involved in treatment versus CYP treatment with *minimal* parent involvement - found the latter condition had better outcomes immediately post-treatment (although this was not maintained three months later). 63 Three anxiety trials compared parentonly to parent-added treatments, with no significant differences between these approaches. 43,67,68

For depressive disorders studies (k=5), two trials favoured parent involvement over CYP-only treatment^{53,58} and the other three found no difference. ^{57,64,65} The two studies that favoured parent involvement over CYP-only did not differ in any single key way from those that showed no difference, although these studies did both involve parents as an integral part of the treatment and also provided ample opportunities for parent-adolescent interactions and skills practice in sessions. Importantly, for anxiety disorders, similar CYP outcomes were

found in treatments which *only* involved parents (that is, had no direct CYP involvement). 35,36,56,67-69 No depressive disorders studies reported a parent-only arm. No study showed that parent involvement, compared to their absence, led to poorer outcomes.

Twenty-three anxiety disorders trials (in twenty-five reports), ^{35, 45-51, 59,60,63,70-83} but no depressive disorder trials, included follow-up assessments beyond the immediate post-treatment assessment, and these ranged in duration from one to 36-months. No follow-up assessments found parent involvement to be inferior to its absence. One trial comparing parent involvement to a wait-list control reported a follow-up (12-months), and this favoured parent-CBT. ⁷⁰ Seven trials comparing parent involvement to CYP-only treatment had follow-ups, of which one reported a significant effect - favouring parent involvement at 12-month follow-up. ⁶⁰ Eight trials where parents were involved in both treatment arms reported follow-ups, three reported significant effects of one type of parent involvement over another; one at each timepoint of three-months (group family CBT was superior to group support and attention); ⁴⁶ six-months (child CBT + parent CBT was superior to a psychoeducation control), ⁷⁸ and 12-months (child CBT + parent CBT was superior to child attention control + parent CBT). ⁴⁷ Seven multi-arm trials reported follow-ups; two reported significant effects, one at three-months (family CBT was superior to bibliotherapy); ⁵⁰ one at five-months (school counsellor delivered child CBT + parent CBT was superior to an attention control). ⁸²

What are the Broader Benefits of Involving Parents in Treatment?

Few studies of CYP anxiety (k=16/62) and depressive disorders (k=3/11) reported child and/or parent perceptions of satisfaction with treatment, or information about their treatment engagement. Of those studies that did report satisfaction, there were no clear patterns related to whether or not parents were engaged in treatment.

A larger number of anxiety (k =62/62) and depressive disorders trials (k=10/11) reported frequency of drop-out, reporting frequency by treatment condition (k=53/62 for anxiety; k=7/11 for depressive disorders) with some reporting frequencies for the overall trial (k=9/62 for anxiety; k=3/11 for depressive disorders). Five anxiety disorders trials had no dropout during treatment, and the highest dropout for a treatment involving parents was 31%,³⁶ for CYP-only it was 38%,⁵² and 26% for a WLC group.³⁷ For depressive disorders treatments involving parents, the lowest dropout was 11%⁶⁴ and the highest was 63%,⁸⁴ for CYP-only dropout ranged from 14%⁶⁴ to 24%,⁵³ and for WLC the range was 10%⁸⁵ to 53%.⁶⁴

Only two studies reported economic analyses of parent involvement – both anxiety trials.^{35,48} Creswell and colleagues found that guided parent delivered cognitive behavioural therapy (CBT) was highly likely to be more cost-effective than brief solution focused therapy (where parents attended the first and last of six CYP-focussed sessions).³⁵ More recently, Creswell and colleagues found that, in the context of maternal anxiety disorders, intervention targeting the parent-child interaction was likely to be cost-effective as an adjunct to CYP CBT, but intervention focused on parental anxiety disorder was not.⁴⁸

Discussion

Our review of seventy-three randomized controlled trials that reported on the inclusion of parents in CYP interventions for internalising disorders found wide variability in the nature of parent involvement and other trial characteristics, preventing any clarity about why some trials have found benefits of parental involvement while others have not. Our results clearly indicate that treatments including parents can be effective and do not lead to poorer outcomes; however, there is only limited evidence that parental involvement increases

treatment efficacy over and above CYP-only treatments. Furthermore, individual studies have rarely been powered to detect clinically meaningful differences between two active treatment arms and there has been little long-term follow-up. Potential wider benefits of parental involvement in treatments, such as enhanced engagement, family well-being, and economic gains, have rarely been reported.

Limitations and future directions for research and practice

In terms of limitations of the broader literature, one of the most striking observations to emerge from the current review was the degree of heterogeneity in terms of both the focus and the extent of parental involvement in interventions, within and across the anxiety and depressive disorders fields. As such, although recent meta-analyses have concluded that including parents in interventions for CYP anxiety²⁵⁻²⁷ is not associated with better outcomes relative to CYP focused interventions, the current review highlights the risk of obscuring potentially important findings by pooling outcomes of parental interventions with extremely mixed approaches. While meta-analyses have typically taken account of the quantity of parental involvement in treatment,²⁷ examining how parents are involved in treatment for CYP anxiety and depressive disorders is also crucial.²⁹ In the depression field, it has been highlighted that involving parents in joint sessions and as an integral part of the intervention, rather than providing separate, parallel parent sessions, may lead to superior outcomes for CYP.²⁸ In the CYP anxiety field, it has been argued that parents have rarely been used to augment the key therapeutic targets, such as learning from exposure to feared stimuli, which is a key omission. 88,89 Indeed, where family involvement has been associated with poorer CYP outcomes, this might have been a result of including families, but losing focus on putative mediators of change, such as exposure to feared stimuli.

The need to take a more nuanced approach to evaluating the role of parent involvement is supported by the two meta-analyses that have made somewhat more fine-grained categorisations of parental involvement. These studies indicated that (i) at post-treatment, where parent involvement was active but did not emphasise key elements to promote exposure (contingency management [CM] and / or transfer of control [TC]) child outcomes were actually *poorer* than when parents were not actively involved in treatment at all; ii) over a one year follow-up period, greater improvements were evident only where parents were actively involved with emphasis on CM and / or TC, compared to when parents were not actively involved or where parent involvement did not emphasise CM/TC, ²⁹ and; (iii) high, active parent involvement was associated with greater reductions in broader symptoms (i.e., depression and externalising symptoms) at follow-up assessments than when parents were less involved alongside child focused CBT. 90 There remains a critical need for systematic investigation to elucidate which components of parental involvement in intervention are actively beneficial to CYP internalising and broader outcomes, both at the end of treatment and in the longer term. In doing so, it is essential that researchers provide clear and detailed information on how parents are involved in treatment using consistent terminology, so we encourage adherence to recently published guidance for consistent reporting on trial characteristics including parental involvement.⁹¹ Only through a focused and clearly described line of research will we avoid involving parents in ways that add no benefit (or have negative effects), and instead optimise the potential benefit and efficiency of their involvement.

Research into parent involvement is overall more developed in relation to CYP anxiety disorders, with five times as many studies examining treatment of anxiety, than depressive disorders. The nature of involvement also differs; while psychoeducation, parental

behaviours and strategies to target CYP difficulties were common targets in both fields, family relationships were a common target only for depressive disorders trials, and parent anxiety or depression were rarely targeted in either field. These different areas of focus likely emerge from the theoretical perspectives that underpin these two different fields.

Nonetheless, given promising findings from the treatment of CYP anxiety and other disorders, and the increasing use of behaviour-focused interventions for depression in CYP (such as behavioural activation), 92 there might be scope for introducing a more skills-building approach to involving parents in interventions for CYP depressive disorders. It is also important to note that, even in the child anxiety field which is more extensive, most evidence derives from high income country contexts and may not apply to lower resource international settings (cross reference other review in the series).

Another key observation to arise from the current review is the extent to which studies have focused on CYP outcomes, with limited consideration of the potential for parental involvement in treatment to bring wider benefit. CYP mental health problems are well-established to have a significant negative impact on parents, including causing distress, self-blame, helplessness, frustration and being overwhelmed. 16,17 Parental involvement that enables parents to support their child effectively might go a long way to restoring parents' sense of control and efficacy and to improving parental well-being and mental health. 53,93 However, this possibility has not been examined. There has also been little consideration of whether parental involvement could bring cost benefits. Of course, where parental sessions are in addition to usual treatment and do not enhance CYP outcomes, this is unlikely to be the case. However, some studies have included designs where parental sessions replace CYP sessions and parents are supported to apply key CBT principles in their child's day to day life. 50,67,68,69,86 Such parent-led approaches typically take a format that requires lower levels

of therapist support, such as guided self-help. Consequently, it has been argued that if they achieve outcomes similar to child- or family-focused treatments, parent-led interventions may be preferable based purely on cost considerations (both for families and services), a possibility that has received preliminary support.⁶⁸ This highlights the potential to reduce the burden on services and wider society through lower intensity interventions, and to widen access more generally, by providing alternative delivery formats for parents. Further investigation of these possibilities is essential.

This review was limited by our focus on trials where CYP were administered diagnostic assessments and where parent involvement was clearly stated. Further systematic investigation of studies that used self-report symptom measures and those where the nature of parent involvement in interventions was not highlighted in titles or abstracts, will no doubt provide additional valuable contributions to improving our understanding of how to involve parents in treatment.

Our review highlights that any conclusions about the advantages or disadvantages of parental involvement in treatment for CYP internalising disorders will currently be premature given the wide heterogeneity in parental involvement across studies. To move the field forward, it will be critical to conduct further, systematic investigation of *how* to involve parents and to consider potential broader benefits to families and wider society. Notably, changes to parental responses may not have immediate or short-term impacts⁹⁴ so studies also need to examine the longer-term benefits of particular forms of parent involvement. Future studies will also need to consider potential moderators of the effects of particular types of parental involvement. For example, despite all CYP meeting diagnostic criteria in the included trials, there is still wide variation in disorder severity and the impact of particular types of parent

involvement may vary with CYP internalising severity (notably no studies included CYP with the most severe anxiety and depressive disorders, i.e. those in in-patient settings). Critically future work on parental involvement in the treatment of CYP internalising disorders should be underpinned by empirical examination of how parental factors can reinforce the mechanisms of change in treatment, 30,88 taking into account how this may differ across CYP ages, in particular contexts (e.g., in the presence of school refusal), and cultures (cross reference other review in the series). As parents report distress, self-blame and stress when their child is referred to mental health services, 95 it will also be critical to establish how to enable and encourage parents to engage in treatment in ways that are empowering, nonblaming, and supportive. Parents need to receive a clear message that they can be an invaluable resource to support their child's recovery^{17,96,97} and mental health services need to see their role as including the empowerment and support of parents. Our experiences suggest that families will welcome this approach; as noted by Minnis in this journal, when describing work in the context of families who had abused or neglected their children, 'every family visited was pleased to see us - but simply... their lives were very stressful, [and] filled with unexpected events'.98 This view is reinforced by recent evidence from the behavioural parent training literature, that parenting groups can be effective across the social-economic spectrum. 99 Given the extensive evidence base and reach of parent training programmes for CYP conduct problems, there is clearly a great amount of knowledge that can be applied to ensure programmes to support parents of CYP with anxiety or depressive disorders are experienced positively by families. We will only be able to achieve this by working closely with parents to develop approaches that enable families to access and engage with support.

In conclusion, despite decades of study, we do not yet know the impact of parental involvement because of the extensive heterogeneity in how parents have been involved

treatment trials for CYP internalising disorders, in combination with a lack of consideration of broader and longer-term impacts on parents, families, and wider society. Given the established and wide ranging benefits of parental involvement in other common mental health conditions in children and young people, we urge researchers to take a systematic approach to examining how and in what conditions interventions could make the most of the resources parents bring to support children and young people with anxiety disorders and depression and their wider families. The lack of attention to supporting parents of children and young people with internalising problems in low and middle income countries was stark, in line with the conclusions drawn by XX that XX [highlight key point from parallel paper in series- to be added at later stage].

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Declaration of Interests

Dr Lawrence, Bec Jasper and Prof Halligan have nothing to disclose.

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Prof. Creswell reports grants from the NIHR during the conduct of the study; she receives other income from publishing, outside the submitted work. She is co-author of the following book, which has been evaluated in some of the included trials, and receives royalties from sales: Overcoming your child's fears and worries (Little Brown).

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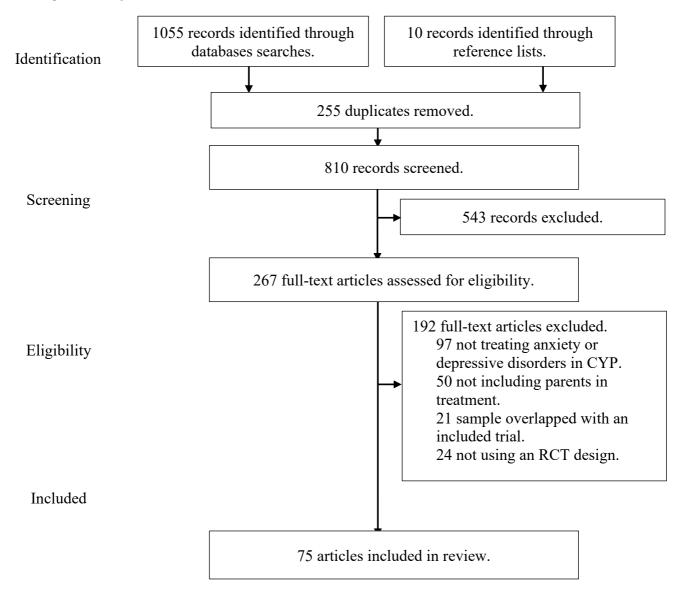
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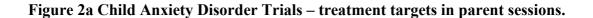
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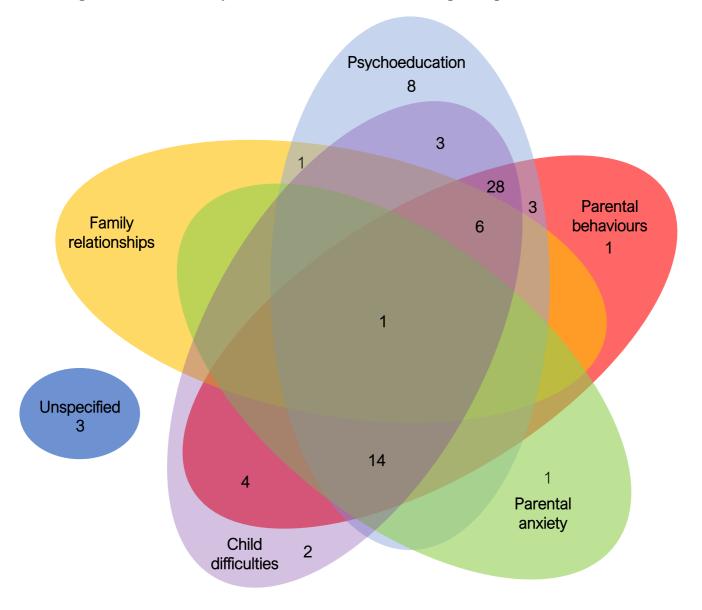
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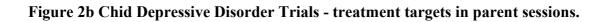
Figure 1 Study selection

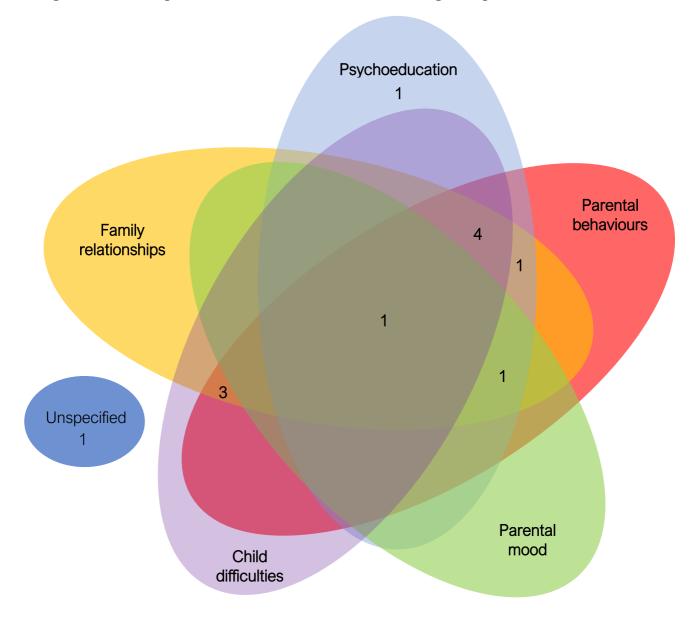






NB The number of target combinations is 75, not 62, because, in each of thirteen trials, ^{44, 48, 51, 61-63, 65, 69,92-96} two arms involving parents in treatment had different target combinations than each other.





'Green panel'

Search Strategy and selection criteria

We searched PubMed, PsycINFO (via EBSCO) and EMBASE (via Ovid) for studies whose title or abstract focused on all of i) parents; ii) children and adolescents; iii) anxiety and depression, and iv) clinical trials. Our search covered the period from 1980 to August, 2019, and articles published in peer reviewed journals in the English language. Studies had to use a randomized controlled design, with parents receiving psychological treatment for their children's or adolescents' anxiety or depressive disorder in at least one arm. We also searched reference lists of included studies. We excluded studies where children were identified in light of an issue other than anxiety or uni-polar depression (such as neurodevelopmental disorders). Full details of the terms and limits are available in online supplement \$1.'