

PARENT-ONLY INTERVENTIONS FOR CHILD ANXIETY

**Feasibility of a Single-Session Primary Caregiver-/Parent-Only Psychoeducation**

**Intervention for Child Anxiety and the Impact of Primary Caregiver-/Parent-Only**

**Interventions for Child Anxiety on Parental Mental Health**

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### Abstract

**Background:** Anxiety disorder rates in young people are increasing to levels not seen before. Despite the effectiveness of intervention at preventing or treating anxiety disorders in children, few young people receive evidence-based intervention. Barriers to treatment reported by parents include inaccessibility of parental psychoeducation. Parent-only interventions for child anxiety are a valuable adjunct or alternative to child-focused treatments and may be more effective when parents are also anxious; it is not clear why.

**Methods:** Exploring a possible explanation, a systematic review and meta-analysis examined the impact of parent-only interventions for child anxiety on parental mental health. Additionally, an empirical study feasibility tested a novel, online-delivered, single-session parent-only psychoeducational intervention for child anxiety, which was developed to help address unmet care needs and treatment barriers.

**Results:** The review included fourteen studies. Data were limited in availability, and findings were mixed. Meta-analyses were non-significant but one showed evidence of a trend favouring parent-only intervention. However, important methodological issues may explain these findings. The feasibility study, with a sample of 55 primary caregivers, found the novel intervention to be acceptable and feasible. Participant retention was high relative to real-world usage data of online-delivered interventions.

**Conclusions:** The review highlighted the preliminary state of evidence on the topic. Important methodological and reporting issues in individual studies were highlighted and recommendations for future research were discussed. In addition, online-delivered single-session parent-only psychoeducational interventions for child anxiety appear to be acceptable and feasible, which may help address unmet care needs and treatment barriers. Limitations as well as clinical, theoretical, and research implications discussed.

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## **CHAPTER ONE**

Introduction to the Thesis Portfolio

### **Introduction to the Thesis Portfolio**

We are in a “global crisis of child and adolescent mental health” (Benton et al., 2021). In the UK, 18% of seven-to-sixteen-year-olds had a probable mental health problem in 2022 (Newlove-Delgado et al., 2022) which, in part, reflects the National Health Service’s (NHS’s) struggle to provide young people with adequate mental health care (Dubicka & Bullock, 2017; Gunnell et al., 2018; Limb, 2017; Reardon et al., 2020; Wolfe et al., 2011). As this trajectory continues, childhood mental health problems that would have been readily treatable will progress to become complex and enduring, persisting into adulthood (Compton et al., 2007; Copeland et al., 2014; Henriksen et al., 2015).

Suicide is currently the leading cause of death amongst 5-to-19, and 20- to 34-year-olds in England and Wales (Office for National Statistics, 2022), with mental health problems costing the UK economy at least £118 billion a year (McDaid et al., 2022). At a time where the socio-economic disruptions and health inequalities exacerbated by the COVID-19 pandemic show little evidence of dwindling (Cross et al., 2022; Suleman et al., 2021; Warner et al., 2022), there is urgent need to increase children’s access to psychological interventions.

The UK government has pledged to increase NHS mental health funding by at least £2.3 billion a year by 2023/24, as well as the number of young people accessing mental health services by at least 345,000 (NHS England, 2019). As part of this commitment, starting late 2019, a new profession, education mental health practitioner (EMHP) was introduced (Torjesen, 2018). EMHPs form part of the workforce structure of newly established school Mental Health Support Teams (MHSTs) and were designed to increase young people’s access to evidence-based intervention (Department of Health and Social Care & Department for Education, 2018).

One of the key interventions administered by EMPHs, as well as Child Wellbeing Practitioners and other NHS clinicians, is guided parent-delivered cognitive behavioural therapy for anxiety, as administered in Thirlwall et al. (2017). Parent-only interventions differ from child-focused treatments in that parents receive the intervention and implement what they learn with their child. Based on the *Transfer of Control Model* (Silverman & Kurtines, 1996), parent-only interventions have been described as teaching parents to be lay therapists (Salari et al., 2018). Parent-only interventions for child anxiety may have several advantages over child-focused treatments, such as improved child outcomes, being able to treat children who would struggle with conventional therapy (Simon et al., 2014), and requiring less therapist contact; as little as one contact per fortnight for 8 weeks has been shown to be effective (Thirlwall et al., 2017).

Another possible advantage is that parent-only interventions for child anxiety may be significantly more clinically- and cost-effective when parents are also anxious (Creswell & Cartwright-Hatton, 2007; Simon et al., 2012). It is not established why this is, but it is known that anxiety is transmissible from parents to offspring (Eley et al., 2015; Lawrence et al., 2019). Perhaps anxious parents indirectly benefit from receiving the intervention, resulting in reduced transmission of anxiety promoting behaviours and cognitions. Understanding the relationship between parent-only interventions for child anxiety and parental mental health may help to answer this question, which has significant clinical implications for the treatment and conceptualisation of child anxiety.

Parent-only interventions are a promising and exciting treatment approach for child anxiety. However, despite their wide and increasing implementation in the NHS, there are still unmet care needs and barriers to accessing treatment which have not been fully addressed (Reardon et al., 2018, 2020). Furthermore, due to the relative recency of parent-

only interventions, important questions continue unanswered; the answers to which are needed to optimise their effectiveness and inform future directions in the treatment and clinical study of child anxiety.

As such, this thesis had the aim of improving outcomes for anxious children by helping to address these points and contributing to the evidence-base on parent-only interventions for child anxiety. Specifically, presented in Chapter Two, is a systematic review and meta-analysis on the impact of parent-only interventions for child anxiety on parental mental health, the findings of which could help optimise the effectiveness of these interventions by targeting children who may benefit most from them. In Chapter Four, as another potential means of improving outcomes for anxious children, a feasibility study is reported examining an online-delivered single-session primary caregiver-/parent-only psychoeducation intervention for child anxiety, which was created by the author in collaboration with key expert stakeholders to help address treatment barriers. Chapter three provides the theoretical links that bridge these two chapters while Chapter Five presents additional methodology not found in Chapter Four. And, finally, an extended discussion and critical evaluation, which integrates findings from Chapter Two and Chapter Four in relation to the theoretical underpinnings and wider context of research and practice, is presented in Chapter Six.

## **CHAPTER TWO**

### Systematic Review and Meta-Analysis

Prepared for journal submission to *Child and Adolescent Mental Health*

(Author guidelines on manuscript preparation in Appendix A)

**The Impact of Primary Caregiver-/Parent-Only Interventions for Child Anxiety on Parental  
Mental Health: Systematic Review and Meta-Analysis**

Running Title:

Impact of Parent-Only Interventions for Child Anxiety on Parent Mental Health

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### Abstract

**Background:** Increasing evidence supports the effectiveness of parent-only interventions for child anxiety. In some cases, these interventions may be more effective than child-focused interventions, particularly when parents are also anxious. A possible explanation may be that parents indirectly benefit, reducing parental behaviours linked to the transmissibility of anxiety.

**Methods:** A comprehensive search of peer-reviewed, quantitative studies which included parental mental health outcomes, published between 2002 and 2022, was conducted. Studies were grouped by parental outcome and comparator for analysis by way of narrative synthesis and meta-analysis.

**Results:** Fourteen studies of mixed methodological quality, including 10 randomised controlled trials, were eligible for inclusion. Parental outcomes included depression and, most commonly, stress and anxiety. Findings from individual studies were mixed, with most reporting no significant impact or non-significant trends. The three meta-analyses were also not significant, although one showed a trend favouring parent-only intervention. However, there were important limitations of included studies which could explain these findings.

**Conclusions:** There are insufficient data, at present, to conclusively answer the question this review sought to. Based on currently available data, it is possible that parent-only interventions for child anxiety can positively impact parental mental health, particularly anxiety and stress, but no more than child-focused interventions. However, a major limitation is that study parent participants scored 'normal' to 'mild' on baseline measures and may not represent the target population due to recruitment sources. Suggestions for further research and clinical implications are presented.

**Key Practitioner Message:**

- No previous systematic review has evaluated the impact of parent-only interventions for child anxiety on parental mental health.
- The number of studies available was limited. Findings from individual studies were mixed. Meta-analyses were not significant.
- Methodological issues with individual studies may explain the mixed findings, particularly, parents scoring low on measures at baseline.
- There is evidence that parent-only interventions for child anxiety may positively impact parental mental health, with the strongest evidence for stress and anxiety.

However, there is currently no evidence this is greater than for child-focused interventions.

- Due to methodological limitations of included studies, mixed findings, and plausible theoretical underpinnings based on other established findings, further research is required comparing outcomes for parents with low and high baseline psychopathology, especially anxiety.

*Key Words:* Meta-Analysis, Systematic Review, Parent-Only Intervention, Child Anxiety,

Parent Mental Health

## Introduction

An estimated 5.9% of 5-to-16-year-olds in England had an anxiety disorder diagnosis in 2017 (Sadler et al., 2018), an increase from 3.3% in 2004 (Green et al., 2005). This figure has likely increased substantially given that 18% of children aged 7-to-16 in 2022 had a probable mental health disorder (Newlove-Delgado et al., 2022), with anxiety disorders being the most common (Bitsko et al., 2022; Polanczyk et al., 2015). This mirrors international trends and reflects a “global crisis of child and adolescent mental health” (Benton et al., 2021).

Anxiety disorders in children commonly persist into adulthood (Ginsburg et al., 2018). Without treatment, 40-50% of pre-adolescent children will not recover from an anxiety disorder and, of those that will, half will have a 50% increased risk of poor adult functioning (Copeland et al., 2014; Costello & Maughan, 2015; Ford et al., 2017; Reardon et al., 2020). Anxiety disorders have a significant impact on social and educational functioning in children, which has considerable economic costs (Fineberg et al., 2013). There is clearly an urgent need for children to have access to evidence-based (e.g. cognitive behavioural therapy; CBT) early and preventative interventions for anxiety, which research shows are effective (James et al., 2020; Merry et al., 2011; Sigurvinssdóttir et al., 2020).

On some metrics, child and adolescent mental health services (CAMHS) in England saw a 134% increase in referrals during 2021 compared with 2020 (Newlove-Delgado et al., 2022; Royal College of Psychiatrists, 2021). Despite this, estimates suggest that less than 3% of children with an anxiety disorder receive evidence-based treatment, such as CBT (Reardon et al., 2020), which is NICE (National Institute for Health and Care Excellence, 2013; Scott, 2009) recommended. Research has highlighted the barriers reported by parents to accessing child mental health support, including lack of knowledge, excessively long waiting times, and difficulties accessing referrals (Reardon et al., 2018).

In recent years, there has been increasing interest in parent-only<sup>1</sup> interventions, which may offer a valuable and similarly effective alternative to child-focused interventions (Jewell et al., 2022; Laakmann et al., 2017; Waite et al., 2014). Parent-only interventions can have the advantages of reducing the burden on children, requiring less therapist contact time, treating children for whom conventional therapy may not be appropriate, and allowing parents to intervene and encourage skills use ‘in the moment’ to promote their generalisation (Choudhury, 2005; Laakmann et al., 2017; Waite et al., 2014). Furthermore, increasing parental involvement in child-treatment may result in greater gains (Barrett, Dadds, et al., 1996; Bennett et al., 2019; Cobham et al., 1998), which is consistent with the important role parents often have in mediating and/or moderating the development and maintenance of anxiety disorders in their children (Bögels & Brechman-Toussaint, 2006; McLeod et al., 2007; Rapee, 1997; Wood, 2003).

Several parental variables are associated with anxiety disorder development in children, such as parental aversion and warmth (Yap, Pilkington, Ryan, & Jorm, 2014; Zhou et al., 2008). Similarly, a number of processes have been identified through which parents may unintentionally transmit anxious cognitions and behaviours, including parental modelling and conditioning (Angold et al., 1999; Schwartz et al., 2012; Yap, Pilkington, Ryan, & Jorm, 2014). Many of these factors are related to parental psychopathology, particularly parental anxiety (Murray et al., 2007), which is highly associated with offspring anxiety. Up to 83% of mothers to children with an anxiety disorder had a history of anxiety disorder themselves (Last et al., 1987; Telman et al., 2018). Additionally, parental psychopathology may limit child anxiety treatment effectiveness (Cobham et al., 1998; Compton et al., 2014;

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<sup>1</sup>While we generally used the term ‘parents’ to include primary caregivers in this review, it is worth noting that some research uses the term specifically to refer to parents.

Murray et al., 2007; Schleider et al., 2015; Southam-Gerow et al., 2010). Directly or indirectly addressing factors such as these in parent-focused interventions could enhance outcomes.

Indeed, Thienemann et al. (2006) found a CBT-based parent-only intervention for anxiety was more effective than a child-focused intervention for children whose parents were diagnosed with an anxiety disorder. Cobham et al. (1998) similarly found that adding a parent-focused element enhanced outcomes of a child-focused CBT intervention for anxiety only when one or more parents were anxious. As receivers of the intervention, it may be possible these improved child outcomes are due to anxious parents benefiting from indirect treatment gains. For instance, anxious parents who exhibit avoidant behaviours and unintentionally promote the same avoidance in their children may struggle to support their child with exposure (Ginsburg et al., 1995). Therefore, parent-focused treatments may enhance child outcomes by affording parents the opportunity to learn and implement many of the same skills and knowledge that they deliver to their child (Barrett, Rapee, et al., 1996; Ginsburg et al., 2004). This, in turn, may lead to reduced parental anxiety and associated parenting behaviours related to the development and/or maintenance of child anxiety. Additionally, this may enable parents to support their child in continuing to use skills learned during treatment, particularly following treatment cessation (Barmish & Kendall, 2005; Ginsburg et al., 1995).

Parent-only interventions for child anxiety may be a promising treatment approach, particularly when parents are also anxious, which may be more advantageous than child-focused interventions in such cases. Potential benefits include greater cost- and clinical-effectiveness, (Creswell & Cartwright-Hatton, 2007; Simon et al., 2012, 2014), the ability to treat both the parent(s) and child simultaneously (Everett et al., 2021), and increased

service reach by offering an alternative pathway for parents to access treatment, who may be more motivated to seek support for their child than for themselves (Yap, Pilkington, Ryan, Kelly, & Jorm, 2014). However, these possible benefits may depend on whether parent-only interventions for child anxiety benefit parental mental health.

### **The Present Review**

With the above in mind, the current review sought to synthesise and meta-analyse the evidence-base relating to whether parent-only interventions for child anxiety impact parental mental health (e.g. anxiety or stress), particularly when compared with child-focused interventions or waiting list control. Exploring this topic may inform clinical case-conceptualisation of child anxiety, help optimise intervention effectiveness, encourage further research, and promote the development of novel intervention targets.

### **Methods**

#### **Protocol and Registration**

The protocol for this systematic review was registered with PROSPERO international prospective register of systematic reviews (CRD42022371181), which can be accessed at [www.crd.york.ac.uk/PROSPERO/display\\_record.asp?ID=CRD42022371181](http://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42022371181). This review was reported in accordance with the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) 2020 statement (Page et al., 2021). The PRISMA 2020 checklist can be found in Appendix B.

#### **Search Strategy**

A search of five electronic databases (CINAHL Ultimate, PsycINFO, MEDLINE, EMBASE, and Web of Science) for peer-reviewed articles in English from 2002 to the present day was conducted on 28 November 2022. This date range was chosen to ensure relevance to current healthcare practice. Boolean operators were used in the search (see Table 2.1 for

search terms). The university medical school librarian was consulted during development of the search strategy. Upon their recommendation, search terms were limited to parent/primary caregiver participants and anxiety disorder concepts to ensure sensitivity of the search, electing to screen a greater number of titles and abstracts to reduce the likelihood of missing relevant articles. Supplementary to the main search, Google Scholar and the reference lists of relevant articles were hand searched (Gusenbauer & Haddaway, 2020; Haddaway et al., 2015).

### **Study Inclusion and Exclusion Criteria**

Included studies assessed interventions targeting child anxiety that were only

**Table 2.1**

*Search Terms*

Concept	Search Terms
Parent/Primary Caregiver Participants	( "parent only" OR "parent based" OR "parent focused" OR "parent cent*" OR "parent led" OR "parent guided" OR "parent training" OR "parent deliver*" OR "parent mediated" OR "parent manage*" OR "parent implement*" OR "parent engage*" OR "parent involve*" OR "parent inclu*" OR "parent targeted" OR "parent particip*" OR "parent administered" OR "parent coached" OR "parent direct*" OR "working with parents" OR "caregiver only" OR "caregiver based" OR "caregiver focused" OR "caregiver cent*" OR "caregiver led" OR "caregiver guided" OR "caregiver training" OR "caregiver deliver*" OR "caregiver mediated" OR "caregiver manage*" OR "caregiver implement*" OR "caregiver engage*" OR "caregiver involve*" OR "caregiver inclu*" OR "caregiver targeted" OR "caregiver particip*" OR "caregiver administered" OR "caregiver coached" OR "caregiver direct*" OR "working with caregivers" )
Anxiety Disorders	AND AB ( anx* OR anxiety disorder OR worry OR agoraphobia OR "panic disorder" OR phobia OR social anxiety OR "generalised anxiety disorder" OR GAD OR separation anxiety )

delivered to parents and which reported parental mental health outcomes (see Table 2.2 for full inclusion and exclusion criteria). Any intervention which was psychological, non-pharmacological, and based on psychological theory was included so long as it (a) was only parents receiving the intervention, (b) did not directly or significantly target the parents' mental health, and (c) primarily targeted child anxiety.

Child participants were defined as being 3-to-18 years old and either (a) diagnosed with, or meeting the diagnostic criteria for, at least one (any editions since 2002) International Classification of Diseases (ICD; World Health Organization, 1993, 2019) or Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association, 1994, 2022) recognised anxiety disorder or (b) presenting with elevated levels of, or clinically significant, anxiety, as assessed by clinical referral or a standardised measure of anxiety; either of which must have been the child's primary presenting problem. Due to historical classification of obsessive-compulsive disorder (OCD) as an anxiety disorder in the DSM-Fourth Edition (American Psychiatric Association, 1994), studies including child participants with a primary presenting problem of OCD were included so long as the sample included other anxiety disorders and the intervention did not specifically target OCD.

Studies were excluded if child participants had significant comorbid physical, neurodevelopmental, or intellectual conditions. This was because these cohorts often have additional needs which may impact the generalisability of findings (NHS England, 2015). Eligible studies were of any quantitative design, not limited to RCTs (e.g. case series, pilot trials), and used any comparator, including no comparison group. This was to ensure sufficient inclusion of data as to be meaningful, since initial scoping searches suggested available data were limited.

### **Screening and Study Selection**

Title and abstract records returned from database and Google Scholar searches were exported directly from the relevant search platform and imported into Mendeley Reference Manager software for collation. The collated records were then exported from Mendeley and imported into Rayyan (Ouzzani et al., 2016) web-based screening software for screening. Duplicate records were manually removed (by R3) before two blinded reviewers (R1 and R2) screened all titles and abstracts. Reviewers at this stage prioritised sensitivity over specificity. A third blinded reviewer (R3) screened at least 20% of titles and abstracts as an additional check. The third reviewer also settled any disagreement between the two reviewers. An initial pilot screening consisting of 36 titles and abstracts was conducted to ensure reviewers were clear on the eligibility criteria and familiar with the screening process.

Full-text papers were then retrieved for all eligible title and abstract records identified during screening. Full-text papers for records found through citation searching and from contacting authors were also retrieved. The same two blinded reviewers (R1 and R2) screened all identified full-text papers against the same inclusion and exclusion criteria as during title and abstract screening. The third reviewer (R3) screened at least 20% of full-text papers and all articles which the two reviewers disagreed on, settling any disagreements. Contact requesting data was made to the corresponding authors of all full-text articles that did not report on parental mental health outcomes but otherwise met the inclusion criteria.

### **Quality Assessment**

The methodologies of included full-text papers were assessed for quality and risk of bias using the Effective Public Health Practice Project (EPHPP) Quality Assessment Tool

(Thomas et al., 2004). The EPHPP was used due to its favourable psychometric properties

(Jackson & Waters, 2005; Thomas et al., 2004), applicability to a range of quantitative

**Table 2.2**

*Inclusion and Exclusion Criteria*

PICOS	Inclusion Criteria	Exclusion Criteria
Population	<ul style="list-style-type: none"> <li>Parents or primary caregivers of children aged 3 to 18 years.</li> <li>Children with primary presenting problem of (a) elevated anxiety as assessed using a standardised measure of anxiety, or (b) one or more anxiety disorder diagnosis<sup>a</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>Non-primary caregivers.</li> <li>Children with significant comorbid physical, neurodevelopmental, or intellectual conditions.</li> <li>Children with primary presenting problem other than elevated anxiety or anxiety disorder diagnosis.</li> </ul>
Intervention	<ul style="list-style-type: none"> <li>Any intervention primarily targeting child anxiety</li> <li>Directly delivered only to parents</li> </ul>	<ul style="list-style-type: none"> <li>Interventions directly delivered to child (by anyone other than parent).</li> <li>Interventions directly targeting parental mental health.</li> <li>Interventions primarily targeting conditions other than anxiety.</li> <li>Preventative interventions where no diagnosable anxiety disorder or elevated anxiety, as assessed using a standardised measure of anxiety, is present.</li> </ul>
Comparator	<ul style="list-style-type: none"> <li>Any comparator, e.g. child-focused interventions, interventions with both child-and parent-focused</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>

	elements, wait list control, or no comparator group.	
Outcome	<ul style="list-style-type: none"> <li>• Parental mental health (e.g. mood, stress, any other variable related to parental mental health), as measured by validated self-report psychometric instruments.</li> </ul>	<ul style="list-style-type: none"> <li>• No validated self-report measure of parental mental health</li> </ul>
Study Design	<ul style="list-style-type: none"> <li>• Any quantitative study, e.g. RCT, feasibility, case-series.</li> </ul>	<ul style="list-style-type: none"> <li>• Qualitative designs.</li> <li>• Reviews.</li> </ul>

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Note. <sup>a</sup>Any DSM or ICD editions since 2002.

designs, and its use in systematic reviews being deemed suitable by the Health Technology Assessment report (Deeks et al., 2003). Six quality components were rated for each paper, including: (1) selection bias, (2) study design, (3) confounders, (4) blinding, (5) data collection methods, and (6) withdrawals and drop-outs. Each quality component was rated as either 'weak', 'moderate', or 'strong'. Derived from the individual component ratings, a global rating was assigned to each study. Studies with (a) no quality areas rated as 'weak' were assigned a global rating of 'strong', (b) one quality area rated as 'weak' were provided a global rating of 'moderate', and (c) two quality areas rated as 'weak' were assigned a global rating of 'weak' (Thomas et al., 2004). Two blinded reviewers (R1 and R3) quality assessed all included full-text papers. Disagreement was resolved by discussion.

### **Data Extraction**

The following data, if available, were extracted from each included study: background information (study location, year of publication, author), design information (research design, inclusion and exclusion criteria, sample sizes, drop outs, arms), sample

characteristics for both parent and child participants (e.g. diagnoses, family status, parent years of education, ethnicity, socioeconomic status), child and parent age (range, mean, standard deviation), child and parent sex, arm and intervention characteristics (description, type, format, duration), parental mental health measures (domain, scale, measurement time points) and outcome data (mean, standard deviation, number of observations), and relevant findings. Data extraction was conducted independently by two reviewers (R2 and R3). Discrepant extractions were checked and resolved. The corresponding authors of studies which did not include outcome data required to calculate effect sizes were contacted.

### **Data Analysis and Synthesis**

A narrative synthesis was first conducted following current published best practice guidance (Popay et al., 2006) to provide an overview of all included studies. The outcomes by which studies were reviewed were self-report changes to parent participants' mental health.

If the required data were available, standardised mean differences and confidence intervals were calculated for each study's parental mental health outcomes (e.g. depression or anxiety) measured using validated self-report psychometric instruments. Effect sizes were calculated using Hedges'  $g$  to account for small and/or significantly different sample sizes (Higgins et al., 2022). Effect sizes were interpreted as 0.2, 0.5, and 0.8 being small, medium, and large respectively (Cohen, 1992).

Meta-analyses were conducted using all randomised studies meeting the inclusion criteria where sufficient data were available. Similarly, analyses were performed on all parental mental health outcomes for which there were sufficient data. The Cochrane Handbook for Systematic Reviews of Interventions Version 6.3 (Higgins et al., 2022) was

referred to for guidance. Studies reporting the same parental mental health outcome (e.g. anxiety) were grouped according to the comparators (e.g. parent-only intervention versus wait list control, or parent-only intervention versus another intervention). Using a random effects model, each group of studies was then meta-analysed separately. The random effects model was applied to account for treatment variability across studies. Meta-analyses were only conducted if there was evidence that studies were sufficiently homogenous (Higgins et al., 2022). Forest plots were produced for each meta-analysis. Sensitivity analyses were conducted as appropriate to evaluate the robustness of synthesised findings.

Statistical heterogeneity was assessed for presence using Cochran's  $Q$  ( $\text{Chi}^2$ ; Cochran, 1954) and degree with the  $I^2$  statistics. An  $I^2$  statistic which is less than 30% may suggest mild heterogeneity, while more than 50% may indicate substantial heterogeneity, and more than 75% considerable heterogeneity (Higgins et al., 2022; Higgins et al., 2003). There were not enough studies to ensure sufficient power (Higgins et al., 2022) to determine whether there was evidence of publication bias using tests of funnel plot asymmetry (Egger's Test; Egger et al., 1997).

Uncontrolled studies are not recommended for meta-analysis due to lack of statistical independence between pre- and post-test scores, in addition to other statistical problems (Cuijpers et al., 2017; Lipsey & Wilson, 1993; Morris & DeShon, 2002). Instead, pre- and post-intervention effect sizes were calculated for these studies but not meta-analysed. Meta-analyses were conducted with R and the Metafor package (Viechtbauer, 2010) using Meta Analysis via Shiny (MAVIS) software (Aydin et al., 2015).

## Results

### Search Results

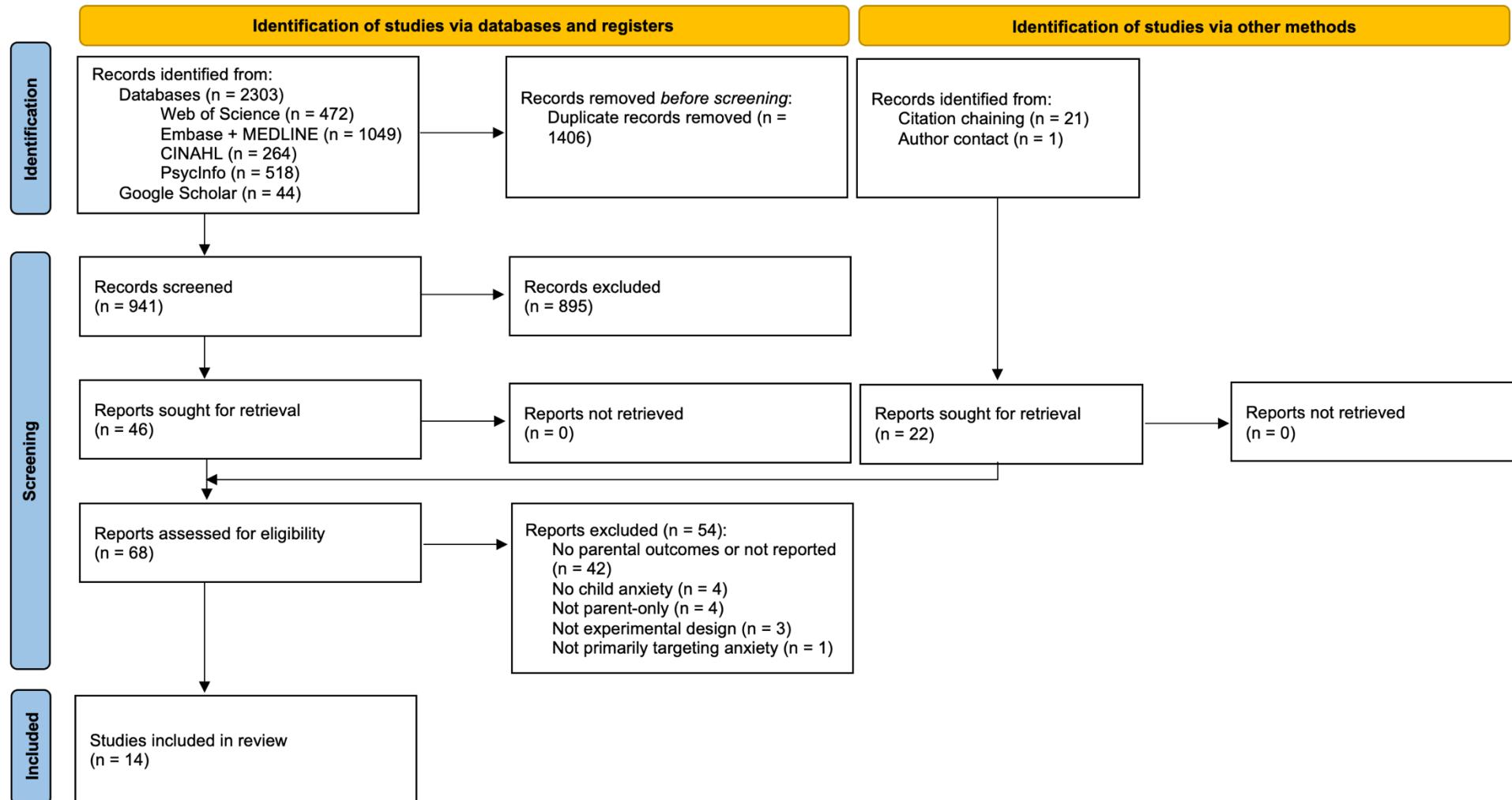
A combined total of 2347 articles was returned from database searches ( $n = 2303$ )

and Google Scholar ( $n = 44$ ), as illustrated in the PRISMA flow diagram (see Figure 2.1; Moher et al., 2009). After duplicate records ( $n = 1406$ ) were removed, a total of 941 title and abstract records were screened. Of these records, 46 were sought for full-text retrieval. Agreement between the two reviewers (R1 and R2) was moderate (93.2%; kappa = 0.56). One hundred percent of records blind screened by the third reviewer (R3) were consistent with at least one of the two reviewers' decisions.

Full-text papers were successfully obtained for all records identified during title and abstract screening ( $n = 46$ ). Additional full-text articles ( $n = 22$ ) identified through citation chaining ( $n = 21$ ) and contacting authors ( $n = 1$ ) were also obtained. This resulted in a total of 68 full-text articles being assessed for eligibility. The corresponding authors of five papers that appeared to otherwise meet the inclusion criteria were contacted requesting outcome data which were not reported. However, one author confirmed the data were no longer available (Creswell et al., 2010) and the remaining four did not respond to the request for data (Escovar et al., 2019; Lyneham & Rapee, 2006; Salari et al., 2018; Smith et al., 2014). As such, some of these studies could not be meta-analysed.

### **Study Characteristics**

A total of 14 papers published between 2002 and 2022 were found to meet the inclusion criteria (see Table 2.3). Studies consisted of RCTs ( $n = 10$ ), two case series, a feasibility study, and a pilot study. A combined sample size of 1204 was derived from individual samples ranging from 50 to 183 for RCTs, and 6 to 56 for non-RCTs. The participating parents' sex was not often reported in studies but all those that did reported more mothers than fathers. The mean age of parents in the six included studies which reported it, was 40.11 ( $SD = 2.58$ ). Most studies included child participants with elevated anxiety or a range of anxiety disorders, while two only included children with separation

**Figure 2.1***PRISMA Flow Diagram Describing Identification and Screening of Studies*

anxiety (Eisen et al., 2008; Mayer-Brien et al., 2017). Countries that studies were conducted in included the USA ( $n = 5$ ), Australia ( $n = 3$ ), Canada ( $n = 2$ ), Turkey ( $n = 2$ ), the UK ( $n = 1$ ), and Netherlands ( $n = 1$ ).

The majority of parent-only interventions were CBT or CBT-based ( $n = 10$ ), including *Cool Kids* ( $n = 2$ ; Scaini et al., 2022), *Take ACTION* ( $n = 1$ ; Waters et al., 2008), and *FRIENDS for Life* ( $n = 1$ ; Briesch et al., 2010). Two studies examined *Triple P* (Sanders et al., 2002), a behavioural family intervention, and another two studies investigated *SPACE* (Lebowitz & Majdick, 2020), a systemic intervention focusing on parental accommodation of the child's anxiety. Studies compared one ( $n = 13$ ) or more ( $n = 8$ ) parent-only interventions with a wait list and/or an active control. Five studies used an active control, which consisted of combined child- and parent-focused group CBT ( $n = 1$ ), individual ( $n = 2$ ) and group ( $n = 1$ ) child-focused CBT, and solution-focused brief therapy ( $n = 1$ ). Two studies included both a wait list and an active control while three included no control group.

The most common parent mental health outcome measures used by studies were the *Parenting Stress Index* (PSI;  $n = 5$ ; Abidin, 1983), *Depression, Anxiety, and Stress Scale* (DASS;  $n = 5$ ; Lovibond & Lovibond, 1995), and the *State-Trait Anxiety Inventory* (STAI;  $n = 2$ ; Spielberger, 1983). Two studies using the DASS only reported the anxiety scale or total score. Similarly, the most reported constructs measured as parental mental health outcomes were anxiety ( $n = 9$ ), stress ( $n = 8$ ), and depression ( $n = 3$ ). Most studies assessed outcomes pre- and post-intervention ( $n = 11$ ), while some included long-term follow ups ranging from 12 ( $n = 2$ ) to 24 months ( $n = 1$ ).

### **Quality Assessment**

Methodological quality and risk of bias ratings for studies ranged from weak to strong (see study characteristics in Table 2.3). Most were rated 'moderate' ( $n = 7$ ; 50%) with

**Table 2.3***Characteristics of All Included Studies*

#	Author (Year)	Country	Design	Sample Size (n)	Parent-Only Intervention, Format	Comparator(s), Format	Outcomes (Time Points)	Quality Rating
1	Kennedy et al. (2009)	Australia	RCT	142	Cool Kids Programme (CBT), <i>group</i>	Wait list	DASS-21 only anxiety scale ( <i>pre, 6-MFU</i> )	Strong
2	Waters et al. (2009)	Australia	RCT	150	Take ACTION (CBT), <i>group</i>	Take ACTION (CBT) parent- and child-focused, <i>group</i>	DASS-42, all scales ( <i>pre, post</i> )	Strong
3	Lyneham and Rapee (2006)	Australia	RCT	174	CBT: (i) Telephone only (ii) email only (iii) client-initiate, <i>individual</i>	Wait list	PSI, DASS-21 only total score ( <i>pre, post, 12-MFU</i> )	Moderate
4	Salari et al. (2018)	Canada	RCT	42	FRIENDS for Life (CBT), <i>individual</i>	Wait list	DASS-21 all scales and total ( <i>pre, post</i> )	Moderate
5	Simon et al. (2011)	Netherlands	RCT	183	CBT, <i>combined group and telephone sessions</i>	(i) Child-focused CBT, <i>individual</i> , and (ii) wait list	SCAARED ( <i>pre, 12-MFU, 24-MFU</i> )	Moderate
6	Özyurt et al. (2016)	Turkey	RCT	50	Triple P, <i>combined group and individual</i>	Wait list	STAI ( <i>pre, 4-MFU</i> )	Strong

#	Author (Year)	Country	Design	Sample Size (n)	Parent-Only Intervention, Format	Comparator(s), Format	Outcomes (Time Points)	Quality Rating
7	Özyurt et al. (2019)	Turkey	RCT	74	Triple P, <i>combined group and individual sessions</i>	Wait list	STAI ( <i>pre, post</i> )	Moderate
8	Creswell et al. (2017)	UK	RCT	136	Brief guided parent-delivered CBT, <i>individual face-to-face and telephone sessions</i>	Solution-focused brief therapy, <i>individual</i>	<sup>a</sup> DASS-21 all scales ( <i>pre, post, 6-MFU</i> )	Strong
9	Lebowitz et al. (2020)	USA	RCT	124	SPACE, <i>individual</i>	Child-focused CBT, <i>individual</i>	PSI, ( <i>pre, mid, post</i> )	Moderate
10	Escovar et al. (2019)	USA	RCT	48	Cool Kids outreach programme (parent-mediated bibliotherapy; CBT), <i>individual telephone sessions</i>	Cool Kids (child-focused CBT), <i>individual</i>	PSI, CALIS, BSI-18 ( <i>pre, mid, post, 3-MFU</i> )	Moderate
11	Smith et al. (2014)	USA	Pilot	56	CBT, <i>individual</i>	Wait list	AMAS ( <i>pre, post, 3-MFU</i> )	Moderate

#	Author (Year)	Country	Design	Sample Size ( <i>n</i> )	Parent-Only Intervention, Format	Comparator(s), Format	Outcomes (Time Points)	Quality Rating
12	Mayer-Brien et al. (2017)	Canada	Case series	6	Modified version of Parent Training Treatment Manual for Separation-Anxious Children (CBT; Raleigh et al., 2002), <i>individual</i>	None	PSI ( <i>pre, post, 3-MFU</i> )	Weak
13	Lebowitz et al. (2014)	USA	Feasibility	10	SPACE, <i>individual</i>	None	BAI ( <i>pre, mid, post, 3-MFU</i> )	Weak
14	Eisen et al. (2008)	USA	Case series	6	CBT parent training, <i>individual</i>	None	PSI ( <i>pre, post, 6-MFU</i> )	Weak

Note. SCAARED = Screen for Adult Anxiety Related Disorders (Angulo et al., 2017), CALIS = Child Anxiety Life Interference Scale (Lyneham et al., 2013), BSI-18 = Brief Symptom Inventory 18 (Derogatis, 2001), AMAS = Adult Anxiety Manifest Scale (Reynolds et al., 2003), BAI = Beck Anxiety Inventory (Beck et al., 1988). Pre = pre-intervention, mid = mid-treatment, post = post-intervention, MFU = months follow up.

<sup>a</sup> Outcome data not reported in paper but obtained through contact with author.

the remaining rated 'strong' ( $n = 4$ ) or 'weak' ( $n = 3$ ). To be assigned a global rating of 'strong' on the EPHPP, none of the six quality domains can be rated as weak (Thomas et al., 2004). Where studies were not assigned a global rating of 'strong', this was mostly due to achieving a rating of 'weak' on one or more of the following domains: *selection bias*, due to participants self-referring or not providing sufficient information about the recruitment process, *withdrawals and dropouts*, because of greater than 40% of participants dropping out, and *blinding*, due to outcome assessors knowing the treatment condition of participants or not specifying that they did not. However, most studies were rated 'strong' for the domains: *study design*, due to being RCTs, *data collection*, because reliable and validated measures and processes were used, and *confounders*, due to their handling of potential confounding variables.

## Main Analyses

### ***Parental Stress***

Of the included studies, seven evaluated the impact of intervention on parental stress; studies reported mixed findings. Of three papers comparing parent-only intervention with wait list, just one found a significant reduction in stress, and only for mothers in the telephone assisted CBT bibliotherapy condition, although trends were observed for mothers in the remaining email and client-initiate conditions (Lyneham & Rapee, 2006). Another paper similarly found a trend towards reduced stress in a parent-only CBT group relative to wait list but was not significant (Waters et al., 2009). In contrast, the remaining study found no significant difference in a parent-only group CBT intervention (Salari et al., 2018).

Three papers compared parent-only intervention with active controls. Of these, one found a non-significant reduction in stress for both the parent-only and combined parent and child group CBT conditions (Waters et al., 2009). Another paper did find significant

reductions in stress but there was no significant difference between the parent-only intervention (SPACE) and child-focused CBT arms (Lebowitz et al., 2020). A similar finding was reported by a study comparing parent-mediated bibliotherapy (CBT) with child-focused CBT (Escovar et al., 2019).

Of two case series evaluating parent-only CBT with no comparator, one concluded there were “few changes” to parental stress following intervention (Mayer-Brien et al., 2017). The other found only one participant out of six experienced a reduction of at least 1 SD on the PSI (Eisen et al., 2008). The pre- to post-intervention effect sizes for Eisen et al. (2008) and Mayer-Brien et al. (2017) were calculated and found to be  $d = -.4$ , 95% CI [-2.011, 1.221] and  $d = -.43$ , 95% CI [-2.045, 1.192] respectively. Both studies’ sample sizes were small (both  $n = 6$ ).

There were sufficient data to meta-analyse three studies (Creswell et al., 2017; Lebowitz et al., 2020; Waters et al., 2009) which compared parent-only intervention with an active control. A random effects meta-analysis was conducted which found no significant effect ( $g = .05$ , 95% CI [-.19, .3],  $z = .43$ ,  $p = .87$ ) and with low heterogeneity ( $Q = .7$ ,  $df = 2$ ,  $p = .71$ ;  $I^2 = 0\%$ ).

### ***Parental Anxiety***

Eight included studies evaluated parental anxiety. Of these eight, seven compared parent-only intervention with wait list (Kennedy et al., 2009; Özyurt et al., 2016, 2019; Salari et al., 2018; Simon et al., 2011; Smith et al., 2014; Waters et al., 2009). Only one study found significant reductions in parental anxiety following intervention (Özyurt et al., 2016). However, when Smith et al. (2014) analysed the combined data from both the treatment and waitlist conditions, including participants who completed the same intervention and measures following the waitlist period, a significant reduction in anxiety from pre- to post-

intervention was found as initial analyses were underpowered. In contrast, one study looking at whether parental anxiety predicted child anxiety improvements failed to find a significant relationship (Simon et al., 2011).

Two of these eight studies compared parent-only intervention with an active control (Simon et al., 2011; Waters et al., 2009). Neither found significant reductions in parental anxiety for either parent-only or active control conditions. However, a feasibility study with no control condition reported a non-significant reduction in anxiety post-treatment (Lebowitz et al., 2014). The calculated pre- to post-intervention effect size for Lebowitz et al. (2014) was found to be  $d = -0.73$ , 95% CI [-2.013, .59] (sample size of 10).

There were sufficient data to conduct two separate meta-analyses. A random effects meta-analysis was completed using available data from four studies which compared parent-only intervention with wait list (see Figure 2.2). No significant effect was found ( $g = -.36$ , 95% CI [-.84, .12],  $z = -1.46$ ,  $p = .145$ ), although there was evidence of a possible trend favouring intervention. The analysis demonstrated high heterogeneity ( $Q = 11.61$ ,  $df = 3$ ,  $p = .009$ ;  $I^2 = 77.97\%$ ). Another random effects meta-analysis was conducted using available data from three studies (Creswell et al., 2017; Simon et al., 2011; Waters et al., 2009) comparing parent-only intervention with an active control. No significant effect was found ( $g = -.016$ , 95% CI [-.18, .21],  $z = .16$ ,  $p = .87$ ) but with low heterogeneity ( $Q = .41$ ,  $df = 3$ ,  $p = .81$ ;  $I^2 = 0\%$ ).

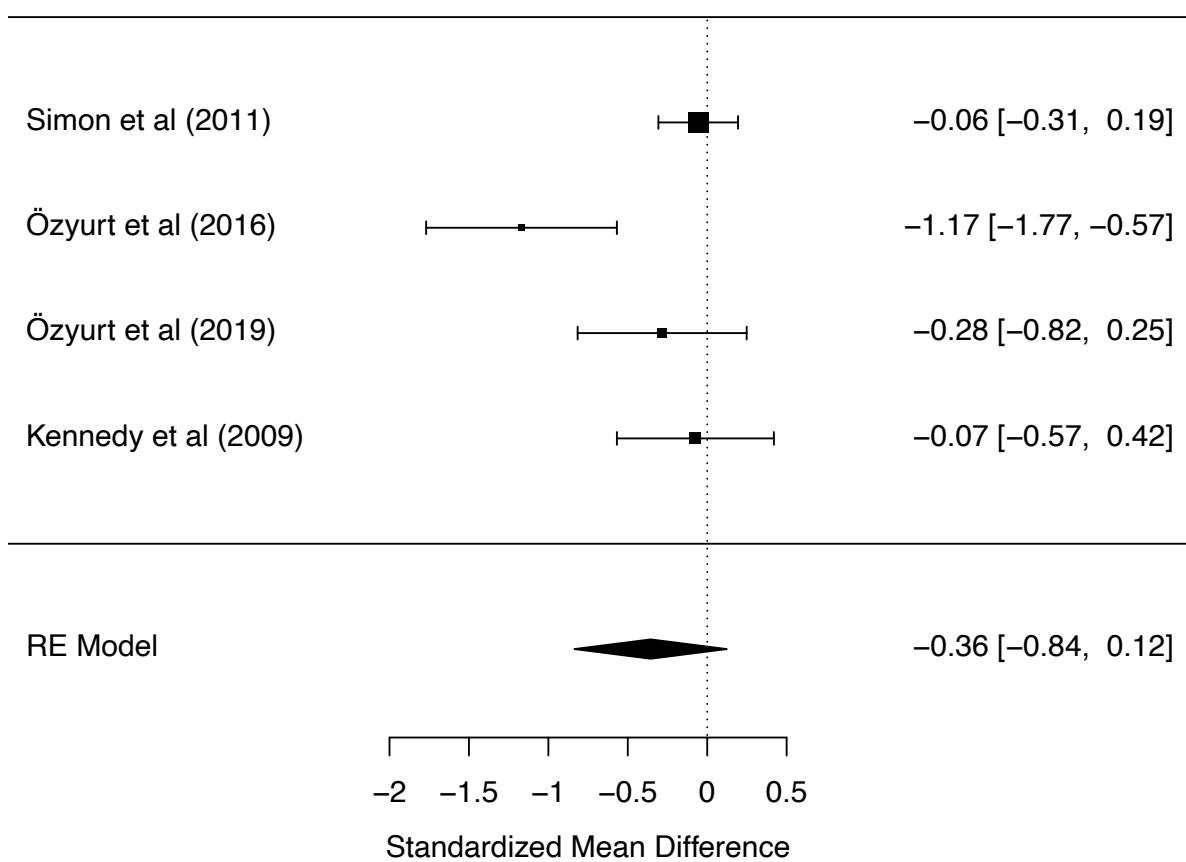
### ***Parental Depression***

Two studies analysed parental depression. Both these studies included a wait list condition, while one of them (Waters et al., 2009) also included an active control. A significant reduction in parental depression following treatment was reported only by Salari et al. (2018). Data not reported in the original paper (Creswell et al., 2017) were obtained

but despite this, there were insufficient data to conduct a meta-analysis. However, the calculated effect size for Creswell et al. (2017) comparing parent-only intervention with a child-focused intervention was  $d = -0.12$ , 95% CI [-.49, .25].

## Figure 2.2

*Forest Plot Showing Parental Anxiety Effect Sizes for Studies Comparing Parent-Only Intervention with Wait List*



*Note.* 95% CI in square brackets. Left favours treatment.

## Discussion

This systematic review and meta-analysis sought to evaluate peer-reviewed quantitative studies, published within the last 20 years, which investigated parent-only

interventions for child anxiety and included parental mental health outcomes. Specifically, to evaluate whether parent-only interventions for child anxiety affect parental mental health. Fourteen studies were identified and included. The majority of studies were RCTs and the most common parental mental health outcomes were anxiety and stress. A smaller number included parental depression outcomes. Most studies were assigned a methodological and bias risk rating of 'moderate', while an almost equal number were rated 'weak' and 'strong'. Findings from individual studies were mixed.

### **Parental Anxiety**

Eight studies assessed parental anxiety outcomes. Parental anxiety is perhaps the most significant outcome in the context of parent-only interventions for child anxiety, since it is consistently shown that children with an anxiety disorder are more likely to have a parent who also has an anxiety disorder (up to 83%; Last et al., 1987; Telman et al., 2018). It is similarly well established that anxiety difficulties are intergenerationally transmittable (Lawrence et al., 2019; Murray et al., 2009), which is more likely accounted for by environmental rather than genetic factors (Eley et al., 2015), with a number of processes and parenting factors shown to be associated with parental transmissibility of anxiety difficulties (Angold et al., 1999; Schwartz et al., 2012; Yap, Pilkington, Ryan, & Jorm, 2014).

As such, it would seem that parental anxiety is the parental mental health outcome most likely to be indirectly affected by parent-only intervention for child anxiety. However, of the eight studies, only one RCT with a wait list found a significant reduction in parental anxiety (Özyurt et al., 2016). Although another RCT found significant pre- to post-intervention anxiety reduction when data from the treatment condition were combined with wait list data, who completed the same intervention and measures after the wait list period (Smith et al., 2014), and a non-significant trend was reported by an uncontrolled

feasibility study (Lebowitz et al., 2014).

These non-significant effects may be the result of insufficient statistical power, since most samples sizes were small, although there were several studies with larger samples. Another explanation could be that the outcome measures used were not sufficiently sensitive to change (Blower et al., 2019; Ríos et al., 2022). However, the most likely explanation may be that most parent participants of included studies did not have anxiety disorders or elevated levels of anxiety at baseline. Reference to parent participants' mental health diagnoses in included studies was rare, but examination of meta-analysed studies' parent participant anxiety scores show they were all normal or low at baseline. As such, they would be less likely to indirectly benefit from receiving intervention. Our two meta-analyses of RCTs, one comparing treatment with wait list and the second with active control, neither of which were significant, reflect this, although there was evidence of a slight trend favouring parent-only intervention over wait list.

Interestingly, the only study which specifically recruited parent participants with an anxiety disorder also found no significant difference in anxiety (Kennedy et al., 2009). However, this finding becomes less unexpected when considering parental sample sizes were relatively small (32 in the intervention arm), parent participants self-referred through community sources (such as magazines), and parents were of middle to upper middle-class backgrounds, meaning they were not likely representative of the population. And, curiously, this sample also scored in the normal range for anxiety at baseline according to the outcome measure used (DASS; Lovibond & Lovibond, 1995). A possible explanation for this, which relates to how parent participant data were analysed, is discussed later in this discussion.

### **Parental Stress**

Seven studies included parental stress as an outcome. One out of three RCTs with a

wait list found a significant reduction in stress (Lyneham & Rapee, 2006), but only for mothers in a telephone assisted CBT condition, although non-significant trends were observed for mothers in the remaining treatment conditions. A second study also found a non-significant trend (Waters et al., 2009) but the third found no significant difference (Salari et al., 2018). It is possible that these non-significant results are also due to insufficient statistical power, since the largest sample size for the treatment condition at post intervention was 25 (Waters et al., 2009), or outcome measures used not being sufficiently sensitive to change (Blower et al., 2019; Ríos et al., 2022).

Of three RCTs which compared parent-only intervention with active control (child-focused CBT), one found a non-significant reduction (Waters et al., 2009), while two found significant reductions in stress (Escovar et al., 2019; Lebowitz et al., 2020). However, the difference between the parent-only and child-focused conditions was not significant. This was replicated in our meta-analysis which found no significant difference in parental stress between parent-only intervention and active control. Parenting a child with additional needs, such as anxiety disorder, is associated with elevated levels of parental stress (Feizi et al., 2014; Manti et al., 2019; Victor et al., 2007), which may reduce following child intervention, at least in part, as a function of reduced child symptom severity (Heath et al., 2015; Weiss et al., 2015). As such, these findings suggest that child anxiety treatment, regardless of who receives the intervention, may result in decreased parental stress if it is successful at reducing the child's anxiety severity.

### **Parental Depression**

There were comparatively fewer studies which reported on parental depression but of the two RCTs that did, both using a wait list comparator, one found a significant reduction (Salari et al., 2018). Analysis of unreported data from a third study (Creswell et al., 2017)

was inconclusive but could suggest that parent-only intervention reduced parental depression slightly more than a child-focused comparator, although the difference may be negligible or spurious.

### **Strengths and Limitations**

A rigorous search strategy was employed to ensure comprehensive identification of eligible, peer-reviewed studies. To the authors' knowledge, no systematic review has previously evaluated the impact of parent-only interventions for child anxiety on parental mental health, which is a key strength of this paper. This is an important topic as there is increasing evidence that parental psychopathology, in particular parental anxiety, plays a critical role in the development and maintenance of child anxiety difficulties (Cobham et al., 1998; Compton et al., 2014; Creswell & Cartwright-Hatton, 2007; Everett et al., 2021; Murray et al., 2007; Schleider et al., 2015; Southam-Gerow et al., 2010). For this reason, children with anxiety difficulties may benefit more from parent-only interventions when parents are also anxious (Creswell & Cartwright-Hatton, 2007). Understanding why, by examining the relationship between parental psychopathology, child psychopathology, and parent-only intervention, may therefore aid clinical case-conceptualisation and decision making, inform service-level treatment provision, optimise treatment effectiveness, and promote the development of novel targets of intervention.

However, there are several limitations to this systematic review. The number of eligible studies was limited, particularly when grouped by parental mental health outcome and comparator, and most included studies (71.43%) were assigned methodological quality ratings of 'weak' or 'moderate'. Several studies did not report on parental mental health outcomes that were described in the methodology, which meant they were not eligible for inclusion. Similarly, outcome data for individual studies were often not available, despite

contacting authors, so these studies could not be meta-analysed. Although excluding non-peer-reviewed studies helps safeguard against poor quality research, additional data would have been available if grey literature was included.

Additionally, studies did not often report on parent characteristics like age and sex, or how parent outcome data were handled for the purpose of analyses, which is an acknowledged problem in many parent intervention studies (Jukes et al., 2022; Panter-Brick et al., 2014; Tully et al., 2017). This is significant, as it was rarely clear how many parents were included in analysis, whether all parents included in analysis participated in the intervention, and if parent data were aggregated. Furthermore, based on studies reporting sex, there was an apparent underrepresentation of male participants, an issue previously noted in parent interventions studies (Panter-Brick et al., 2014), which raises questions surrounding validity and generalisability of findings, particularly to fathers.

Due to some of these limitations, the number of comparisons and meta-analyses were smaller than initially anticipated, as were the number of studies in each meta-analysis. This, combined with the observation that parent participants in all but one meta-analysed study scored in the low-mild or subclinical range on outcome measures at baseline, made it difficult to answer the question this review sought to. However, it is hoped this review and its recommendations may facilitate further study which addresses these limitations so that conclusions may be made in the future due to this topic's importance.

### **Implications for clinical practice**

The evidence reviewed suggests it is possible that parent-only interventions for child anxiety may reduce parental psychopathology, with the strongest evidence for reduced stress, followed by anxiety. Nonetheless, findings were mixed, with most studies reporting no significant results or non-significant trends, and there was little evidence to suggest

parent-only interventions reduce parental psychopathology to a greater degree than child-focused interventions. However, few studies were judged to have strong methodologies and many included small sample sizes which were derived from sources unlikely to be representative of the desired population. And, perhaps most importantly, as a group, parent samples in all but one meta-analysed study scored in the normal/mild range at baseline on parental mental health outcome measures. The only meta-analysed study with elevated baseline stress did find significant reductions (Lebowitz et al., 2020).

Based on included studies, it is not currently possible to conclude whether parent-only interventions for child anxiety improve parental mental health. However, there was little evidence, if any, that they are detrimental to the mental health of parents.

### **Implications for future research**

As discussed, more research is required to conclusively answer whether parent-only interventions for child anxiety impact parental mental health. In particular, high-quality RCTs are needed which compare parental mental health outcomes for parent-only and child-focused anxiety interventions using parent samples with high and low baseline psychopathology to assess between- and within-group differences. It is strongly recommended that parent intervention studies report characteristics of parent participants specifically receiving intervention, both at baseline and post-intervention (at a minimum, age and sex), and specify: (1) the number of parents who completed outcome measures at each time point, (2) whether both parents completed outcomes measures (and, if so, how both parents' data were handled for analyses, such as their aggregation), and (3) if all parents completing outcome measures received intervention (including the minimum amount of intervention sessions attended to be deemed completers). It is also suggested that studies investigating parent-only interventions include parental mental health outcome

measures to facilitate investigation into this important topic, as only a minority of such studies currently do so.

### **Conclusion**

Although individual studies reported mixed findings and none of the conducted meta-analyses were significant, the small number of studies, limited availability of data, and other limitations, such as parental samples scoring low on outcome measures at baseline, means it is not currently possible to conclusively answer the question posed in this review based on included studies. Findings are insufficient to refute or support the hypothesis that parent-only interventions for child anxiety impact parental mental health. However, it can probably be concluded that parent-only interventions for child anxiety are unlikely to significantly reduce parental stress, anxiety, or depression that are in the low-mild or subclinical range.

This review, although comprehensive in its identification of eligible studies, therefore, represents the preliminary state of evidence. At present, it is not possible to conclude that parent-only interventions for child anxiety reduce parental psychopathology; they are unlikely to be detrimental, however. Due to the significant implications answering this question may have for the treatment and conceptualisation of child anxiety, it is hoped this review and its recommendations encourage further research which overcomes these limitations so that an answer may soon be reached.

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## **CHAPTER THREE**

Bridging Chapter

### Bridging Chapter

As a possible means of improving outcomes for anxious children, Chapter Two presented a systematic review and meta-analysis investigating the impact of parent-only interventions for child anxiety on parental mental health, the findings of which were inconsistent. Understanding the impact these interventions have on parental mental health may be needed to optimise their effectiveness due to findings that suggest parent-only interventions for child anxiety are more effective when parents are also anxious (Creswell & Cartwright-Hatton, 2007). These findings may be due to anxious parents indirectly benefiting from being delivered the intervention, thereby reducing parental psychopathology and related parenting behaviours associated with the development and/or maintenance of child anxiety (Barmish & Kendall, 2005; Barrett, Rapee, et al., 1996; Ginsburg et al., 1995, 2004). Should it be shown that parent-only interventions for child anxiety do indeed reduce parental psychopathology, this would suggest improved parental mental health mediates the effectiveness of these interventions which could promote the development of novel treatments targets and optimise the effectiveness of these interventions by targeting children who may benefit most from them.

Although findings from the systematic review and meta-analysis did not support this hypothesis, the key reason for this may have been that, for most studies, parent participants scored in the normal-to-mild or subclinical range on outcome measures at baseline. There were also less data than anticipated resulting in fewer meta-analyses, and those which were conducted may have been underpowered. This was, in part, due to unclear reporting of outcome data in studies, particularly in relation to the number of parent participants included in analyses. It was often not clear if one parent's outcome data were used or if

both parents' data were aggregated, which is an acknowledged issue in parent intervention studies (Panter-Brick et al., 2014).

While no definite conclusions could be made based on the analyses presented in Chapter Two, they did make clear reporting issues and gaps in the evidence-base. It is hoped this will promote greater clarity in future studies and encourage further research into this area due to the clinical significance. Although considerably less, relative to child-focused interventions, there is much stronger and consistent evidence supporting the effectiveness of parent-only interventions for child anxiety (Bennett et al., 2019; Jewell et al., 2022; Sigurvinssdóttir et al., 2020).

In-line with UK Government and NHS policy to increase young people's access to early and preventative interventions (Department of Health and Social Care & Department for Education, 2018; NHS England, 2019), there is pressing need for child anxiety interventions that address barriers to treatment and unmet care needs (Reardon et al., 2018, 2020), which online-delivered parent-only interventions may prove useful for. In accordance, the next chapter presents an empirical study that feasibility tested an online-delivered primary caregiver-/parent-only psychoeducation intervention for child anxiety, which was developed by the Author (OS-Y) in collaboration with key stakeholders as another possible means of improving child anxiety outcomes.

## **CHAPTER FOUR**

### **Empirical Study**

Prepared for journal submission to *Child and Adolescent Mental Health*

(Author guidelines on manuscript preparation in Appendix A)

**Feasibility of an Online Single-Session Primary Caregiver-/Parent-Only Psychoeducation****Intervention for Child Anxiety**

Running Title:

Feasibility of an Online Single-Session Parent Intervention for Child Anxiety

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### Abstract

**Background:** Recent research suggests few children in England with anxiety disorder receive evidence-based interventions. Barriers identified by parents and professionals include lack of psychoeducation, excessive waiting times, and limited availability of interventions targeting milder presentations. To help address these barriers, the current study sought to assess the feasibility of an online-delivered single-session primary caregiver-/parent-only psychoeducation intervention for child anxiety, which was developed in collaboration with key expert stakeholders.

**Methods:** Parents/primary caregivers were administered the intervention in addition to quantitative and qualitative measures which explored perceived demand and acceptability. Other feasibility data were also collected.

**Results:** Findings from the 55-participants recruited suggested the intervention was acceptable, in need, and feasible, with 93% agreeing they benefited from it and 89% agreeing they were, overall, satisfied with the intervention.

**Conclusions:** The intervention and online-delivery may be acceptable and feasible; further research is appropriate. A key strength was the identification of limitations and required changes in advance of further study. With further research and possible refinement, an early and preventive primary caregiver-/parent-only intervention for child anxiety may be developed that helps address treatment barriers and unmet care needs, in-line with UK Government and NHS policy.

#### **Key Practitioner Message:**

- There is urgent need for evidence-based early and preventive intervention for child anxiety. In recognition, current UK Government and NHS policy places high on the agenda the need to increase access to these interventions.

- Despite this, parents face many barriers to accessing treatment for their child's anxiety, including difficulty accessing referral to mental health services, long waiting times, and unavailability of interventions targeting milder presentations.
- Parents also report not having access to psychoeducation which would help them support their child's anxiety and access early intervention when needed.
- Parent-only interventions are increasingly seen as a valuable alternative or adjunct to child-focused interventions which have comparable efficacy.
- We developed an online-delivered, single-session primary caregiver-/parent-only psychoeducational intervention for child anxiety to help address the barriers and need described above.
- Feasibility testing with parents found the intervention to be acceptable and suggests there is demand. Qualitative feedback suggested possible adaptations or changes.
- The intervention and online-delivery were found to be feasible, and further study is warranted. Findings, including limitations, may inform future research.

*Key Words:* Single-Session, Parent-Only Intervention, Psychoeducation, Internet-Delivered, Child Anxiety

## Introduction

An estimated 7.2% of young people in England aged five-to-sixteen had an anxiety disorder diagnosis in 2017 (Sadler et al., 2018), an increase from 3.9% in 2004 (Green et al., 2005).

However, the actual figure is likely higher due to under-reporting and under-diagnosing of mental health problems in children and young people (Barbour et al., 2013). It is known that anxiety disorders which develop during childhood frequently endure into adulthood (Ginsburg et al., 2018). Although 50-to-60% of pre-adolescent children recover from an anxiety disorder without treatment, this means 40-to-50% will not, and half of those children who recover will still have a 50% increased risk of poor functioning in adulthood (Copeland et al., 2014; Costello & Maughan, 2015; Ford et al., 2017; Reardon et al., 2020). Anxiety disorders in children impair social and educational functioning and are of significant economic cost (Fineberg et al., 2013).

Despite these findings, it is estimated up to 60% of children with an anxiety disorder receive no professional help (Chavira et al., 2004) and just 3% are provided with an evidence-based treatment such as cognitive behavioural therapy (CBT; Reardon et al., 2020). Recent research conducted with parents<sup>1</sup> highlighted a number of barriers to accessing treatment, which included stigma and inaccessibility of psychoeducation about strategies to support their child and the importance as well as benefits of early intervention (Reardon et al., 2018). Additional barriers described by parents were the unavailability of interventions targeting milder anxiety problems, difficulties accessing referrals to mental health services, and excessively long waiting times for treatment (Reardon et al., 2018). Preventive intervention in children ‘at-risk’ for anxiety disorders has been shown to be

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<sup>1</sup>In this paper, our use of the term ‘parents’ includes primary caregivers. However, it is worth noting that some research uses the term specifically to refer to parents.

effective at prevention (e.g. Schwartz et al., 2019) and more cost-effective than not treating (Anna-Kaisa et al., 2022). Despite this, there is often a high severity threshold for accessing child mental health support (Crenna-Jennings & Hutchinson, 2020). These findings demonstrate the urgent need for parents to have access to child anxiety psychoeducation and self-help, and for children to have access to evidence-based early and preventative interventions targeting sub-clinical or prodromal anxiety presentations.

Fortunately, this unmet care need has been recently recognised in policy with the NHS's *Five Year Forward View for Mental Health, Long Term Plan*, and UK Government's Green Paper *Transforming Children and Young People's Mental Health Provision* putting high on the agenda the need for earlier intervention and prevention, particularly for mild-to-moderate mental health needs, and improving access to psychological therapies (Department of Health and Social Care & Department for Education, 2018; Independent Mental Health Taskforce, 2016; NHS England, 2019). Education Mental Health Practitioners (EMHPs) and Child Wellbeing Practitioners (CWPs) are examples of the workforce advanced by these policies. These professions are integrated into care and/or school systems and trained to deliver evidence-based low-intensity psychological interventions in schools (EMHPs) or the wider community (CWPs), of which guided parent-delivered CBT for child anxiety is a core intervention.

Interest in parent-only interventions for child anxiety is increasing and, although calls for more research have been recently made (Bennett et al., 2019), there is strong evidence of their effectiveness, which is comparable to, and in some cases may exceed, that of conventional child-focused treatments (Creswell & Cartwright-Hatton, 2007; Jewell et al., 2022). The unique mechanism of action that distinguishes parent-only interventions for anxiety from those that are child-focused may be related to the important role parents can

often have in mediating and/or moderating the development and maintenance of child anxiety (Bögels & Brechman-Toussaint, 2006; McLeod et al., 2007; Rapee, 1997; Wood, 2003). Parents have the potential to model adaptive or maladaptive behaviours which children socially reference, thereby learning how to respond to different emotional experiences, including anxiety (Angold et al., 1999; Schwartz et al., 2012; Yap et al., 2014). Similarly, parental behaviours, such as over-control and providing excessive reassurance, can reinforce anxious behaviours (Restifo & Bögels, 2009; Yap et al., 2014). With support, parents are able to change some of these factors and observe early warning signs in their children (e.g. behavioural inhibition) often much sooner than professionals due to their proximity. This enables them to intervene early and 'in the moment' which can enhance generalising of coping skills and support their continued use following treatment cessation, making them good targets for intervention (Sandler et al., 2011; Yap et al., 2014; Yap & Jorm, 2012).

Despite the strong evidence that child anxiety can be prevented (with prevention effects lasting up to 11 years), which parents play an important role in, there is a paucity of parent-only preventative interventions for child anxiety (Yap et al., 2016). Furthermore, practicalities such as childcare and timing availability are frequent barriers to conventional parent-delivered interventions (Axford et al., 2012), as are concerns around stigma, which can limit engagement, difficulties accessing referrals, and long waiting times for treatment (Reardon et al., 2018). Delivering interventions online may overcome these barriers as parents are not limited by therapist availability or geographical location, do not need to travel, and can access online interventions anonymously to preserve their privacy. In addition, online interventions can be vastly distributed with minimal cost and are instantly accessible, negating the need to obtain referral and wait for treatment. Parents rely heavily

on the internet to access child health information which suggests this mode of delivery would be acceptable to parents (Kubb & Foran, 2020).

## **Present Study**

### ***The Intervention***

Considering the above, we developed an online-delivered single session parent-only CBT psychoeducation intervention for child anxiety. Single session interventions have been found to be effective for anxiety disorders in youth (Schleider & Weisz, 2017), which by their nature have minimal time burden that may increase engagement. Combining single session, parent-only, and online-delivered intervention models may yield an intervention which helps address the gap in care need and some of the barriers discussed prior. To date, this approach has been little studied (for one of few examples, see Cardamone-Breen et al., 2018).

The current intervention targets milder anxiety presentations and was developed to provide parents with core psychoeducation on anxiety, including basic strategies to manage child anxiety as well as when and where to access further support. It was designed with the aim of being convenient, user-friendly, and free from excessive jargon which can be barriers to engagement (Garvey & Niall, 1992; Wiener & Kohler, 1986). The content of the intervention was modelled on the therapist-guided parent self-help for child anxiety that CWPAs and EMHPs are trained to deliver in the NHS (Creswell & Willetts, 2019; Halldorsson et al., 2017), as implemented and shown to be effective in Thirlwall et al. (2017). The intervention was developed in collaboration with patient and participant involvement (PPI) as well as key clinical and research stakeholders in the field of parent-delivered interventions. There are four modules to the intervention, as outlined in Table 4.1. It is CBT-oriented and adheres to the best currently available evidence on child anxiety and parent-

based interventions.

### ***Study Aims***

The present study sought to evaluate whether an internet-delivered single-session parent-only psychoeducational intervention for child anxiety is feasible and acceptable to parents of primary school-aged children.

**Table 4.1**

*Content of the Intervention by Section*

Module	Psychoeducation Content
<i>Part 1: Introduction</i>	<p>The nature of anxiety:</p> <ul style="list-style-type: none"> <li>• Cognitive, behavioural, and physiological components</li> <li>• Normalisation of anxiety with reference to evolutionary functions</li> <li>• Discriminating maladaptive and adaptive anxiety</li> <li>• The importance of early intervention</li> </ul>
<i>Part 2: How do fears and worries develop in children?</i>	<p>The aetiology of anxiety:</p> <ul style="list-style-type: none"> <li>• Genetic influences</li> <li>• Behavioural/learning <ul style="list-style-type: none"> <li>○ Modelling, reinforcement, conditioning, avoidance, reassurance, overprotection and other common anxiety promoting parenting behaviours</li> </ul> </li> </ul>
<i>Part 3: What keeps children's fears and worries going?</i>	<p>Perpetuating factors in anxiety:</p> <ul style="list-style-type: none"> <li>• Cognition <ul style="list-style-type: none"> <li>○ Biases (e.g. expectations), introduction to thought challenging and cognitive restructuring</li> </ul> </li> <li>• Physiology <ul style="list-style-type: none"> <li>○ E.g., hypervigilance to, and appraisals of, bodily sensations</li> </ul> </li> <li>• Behaviour</li> </ul>

- Avoidance, safety behaviours, modelling, conditioning, introduction to exposure, excessive reassurance, reinforcement/reward
- CBT five factor model-style maintenance cycles (Padesky & Mooney, 1990)
- Parental self-compassion

*Part 4: Strategies to break the cycles of fears and worries*

Strategies for reducing and/or coping with anxiety:

- Communication skills
    - E.g., showing empathy, normalising, active listening, curiosity
  - Cognitive
    - Thought challenging and cognitive restructuring (e.g. promoting confident thinking)
  - Behavioural
    - Reward/reinforcement, exposure (e.g. promoting brave behaviours)
  - Problem-solving
  - Signposting to further support
- 

## Methods

### Design

As the intervention is novel and untested, a feasibility study design was used. The key areas of feasibility examined were acceptability and demand (Bowen et al., 2009). UK Medical Research Council guidance on trial design and progression was used as a guide (Skivington et al., 2021).

### Participants

Participants were anyone in a primary caregiver role to 5-to-12-year-old children in the UK. The eligibility criteria were purposefully broad and the exclusion criteria minimal due to the intervention targeting milder presentations, the ubiquity of anxiety, and there being no planned efficacy testing, as recommended for feasibility studies, which are often

underpowered (Bowen et al., 2009; Eldridge et al., 2016).

At a minimum, we aimed to recruit between 40 and 50 participants, which are commonly recommended sample sizes for feasibility studies (Lancaster et al., 2004; Orsmond & Cohn, 2015). A key feasibility question was determining how many participants it is possible to recruit within the timescale to inform likely demand and future recruitment strategies.

### **Development of the Intervention**

The intervention (see Chapter Five for more information) was produced in collaboration with PPI and key expert stakeholders. The University of East Anglia's learning technology team was consulted before and during its production. The delivery and format of the intervention were designed to be easily understood, engaging, and concise. To this end, the intervention took the form of a pre-recorded 32-minute, narrated, animated video which was produced using VideoScribe animation software. The intervention duration was agreed with PPI and thought to be long enough for the intervention to provide sufficient depth and breadth of information as to be meaningful but without being too long that participants disengage. Care was taken to make the intervention as non-blaming and non-pathologizing as possible. The content was adapted from Creswell and Willetts' (2019) guided parent self-help book and therapist treatment manual (Halldorsson et al., 2017), which is considered the 'gold standard' of manualised parent self-help interventions for child anxiety and used by CWPs, EMHPs, and other mental health professionals in the NHS.

Content was considered for inclusion if it (1) could be deemed fundamental to parent-based interventions for child anxiety (Jewell et al., 2022); (2) had a strong evidence-base, and; (3) would be appropriate in a psychoeducational intervention of this format and nature. Content most closely matching these criteria were prioritised for inclusion. The

intervention was CBT oriented and drew upon core therapeutic skills (e.g. validating and showing empathy), cognitive theory (e.g. cognitive biases and thought challenging), behavioural theory (e.g. exposure and safety-behaviours) and their integration (e.g. CBT maintenance models); all of which are components of treatments that have been demonstrated to be effective in childhood anxiety and NICE recommended (Scott, 2009).

### **PPI and Key Expert Stakeholders**

PPI was an integral component of the present study to ensure the intervention was acceptable to the intended consumer. A panel of three caregivers of 5-to-12-year-old children had access to multiple iterations of the intervention and were consulted at various stages of development. An allocated member of the panel acted as an intermediary who collated the panel's feedback. Consultation occurred in person, by phone, and email. The panel, who approved the final product, were consulted on key elements such as the intervention's length, complexity, and format.

Additionally, a refinement team consisting of expert clinical and research stakeholders in the field of parent-only interventions and child anxiety also provided consultation and approval of the final product. A member of the refinement team also contributed feedback that was collected from parents who had received a similar intervention in a separate, clinical context. The refinement team similarly approved all measures used.

### **Measures**

#### ***Demographics Questionnaire***

Demographic data were collected from participants to understand the sample and generalisability of findings (see Appendix C). Collected data included age, gender, and ethnicity; minimal demographic information was collected to reduce participant burden. UK

government recommended ethnic categories were used ([www.ethnicity-facts-figures.service.gov.uk/style-guide/ethnic-groups](http://www.ethnicity-facts-figures.service.gov.uk/style-guide/ethnic-groups)).

### ***Adapted-Brief Parental Self Efficacy Scale (A-BPSES)***

The Brief Parental Self Efficacy Scale (BPSES; Woolgar et al., 2013) is a self-report, 5-item Likert-scale (strongly disagree = 1, strongly agree = 5) measure of parental self-efficacy. Its use evaluating parent interventions is recommended by the Child Outcomes Research Consortium ([www.corc.uk.net](http://www.corc.uk.net)). Summing the five items produces a total score ranging from 5 to 25. There are currently no established clinical cut-off ratings. Instead, higher scores suggest greater parental self-efficacy. Obtained baseline means in previous parent intervention research (Midgley et al., 2018; Selwyn et al., 2016) were 18.7 ( $SD = 3.85$ ) and 18.41 ( $SD = 2.9$ ). The scale has reportedly good internal consistency ( $\alpha = 0.817$ ; Wormald et al., 2022) and convergent validity (Midgley et al., 2018).

The BPSES was adapted for the current study following best practice guidance (Alrubai et al., 2022; Snyder et al., 2007) to measure parental self-efficacy specifically in relation to their child's anxiety (see Appendix D). For example, the question "I am able to do the things that will improve my child's *behaviour*" from the BPSES was modified to "I am able to do the things that will improve my child's *anxiety*" in the A-BPSES. The A-BPSES was used as a measure of need (demand) and to assess its acceptability as an outcome measure in future research.

### ***Participant Satisfaction Questionnaire***

A 9-item questionnaire (see Appendix E) developed for this study, measuring areas relating to acceptability and perceived demand (Bowen et al., 2009), was administered following the intervention. This included 8, 5-point Likert-scale questions (strongly disagree = 1, strongly agree = 5; e.g. "I would recommend the learning video to caregivers whose

child is struggling with anxiety") and one optional open-ended question ("Please provide any other feedback on the video") to gather qualitative data. Questions were developed based on those used in related feasibility studies (Creswell et al., 2010, 2021).

### ***Other Acceptability and Feasibility Measures***

Additional feasibility data were obtained, as summarised in Table 4.2

**Table 4.2**

### *Other Acceptability and Feasibility Measures*

Measure	<sup>a</sup> Area of Feasibility
The number of participants recruited within the recruitment time frame	Demand
The percentage of participants who provided consent and completed the study (defined as completing post-intervention measures)	Demand
The percentage of participants who began the intervention and completed the study (completed post-intervention measures)	Acceptability

*Note.* <sup>a</sup> As in Bowen et al.'s (2009) guidance.

### **Recruitment**

Participants were recruited via voluntary, convenience, and snowball sampling.

Parent- and child-related third sector organisation and schools in the UK were contacted using a standard email asking that details be disseminated to parents. This email contained a weblink that took potential participants to a Qualtrics survey containing the study information, intervention, and measures. Social media (e.g. Twitter) was also a means of

recruitment by sharing the weblink to the study.

In the online survey, participants were first presented with a participant information sheet followed by consent form (appendix F and G respectively). A debrief sheet was provided to participants (appendix H) signposting to further mental health resources and support.

### **Procedure**

The University of East Anglia's (UEA's) Faculty of Medicine and Health Sciences Research Ethics Subcommittee granted ethical approval for this study (ETH2122-0833; see Appendix I). Informed consent was obtained from all participants before any part of the study began.

The intervention and measures were contained within the same Qualtrics survey that consent was obtained. First, participants completed the demographic questionnaire and A-BPSES before receiving the intervention. Participants could pause and rewind the intervention in addition to leaving and returning to the Qualtrics survey within 30 days if using the same computer and browser. After receiving the intervention, participants completed the participant satisfaction questionnaire before receiving the debrief sheet. The estimated total time to complete the study was less than 50-minutes.

### **Statistical Analysis**

Due to the research design, descriptive statistics were calculated from quantitative data obtained from the A-BPSES and satisfaction questionnaire to assess acceptability and perceived demand for the intervention (demand was defined as the extent to which the intervention is likely to be used; Bowen et al., 2009). Similar descriptive statistics were produced from the demographic data to understand the sample and the generalisability of results. Other data, such as the number of participants that participated and the percentage

of participants who registered their interest and participated, were also analysed descriptively to assess demand and acceptability. Qualitative data from the open-ended question were analysed using inductive content analysis to describe and quantify the frequency of positive feedback, constructive feedback, and adaptation suggestions (Burnard, 1991; Dey, 2003; Elo & Kyngäs, 2008; McCain, 1988).

## Results

### Sample Characteristics

A total of 55 participants completed the study (see Table 4.3). Completers were defined as those who completed both the intervention and post-intervention outcome measures. Participants were mostly female and of white ethnicity, with a mean age of 37.45 ( $SD = 6.41$ , range = 23, 55). All analyses were conducted on the 55 completers unless otherwise stated.

### Feasibility Outcomes

#### *Demand*

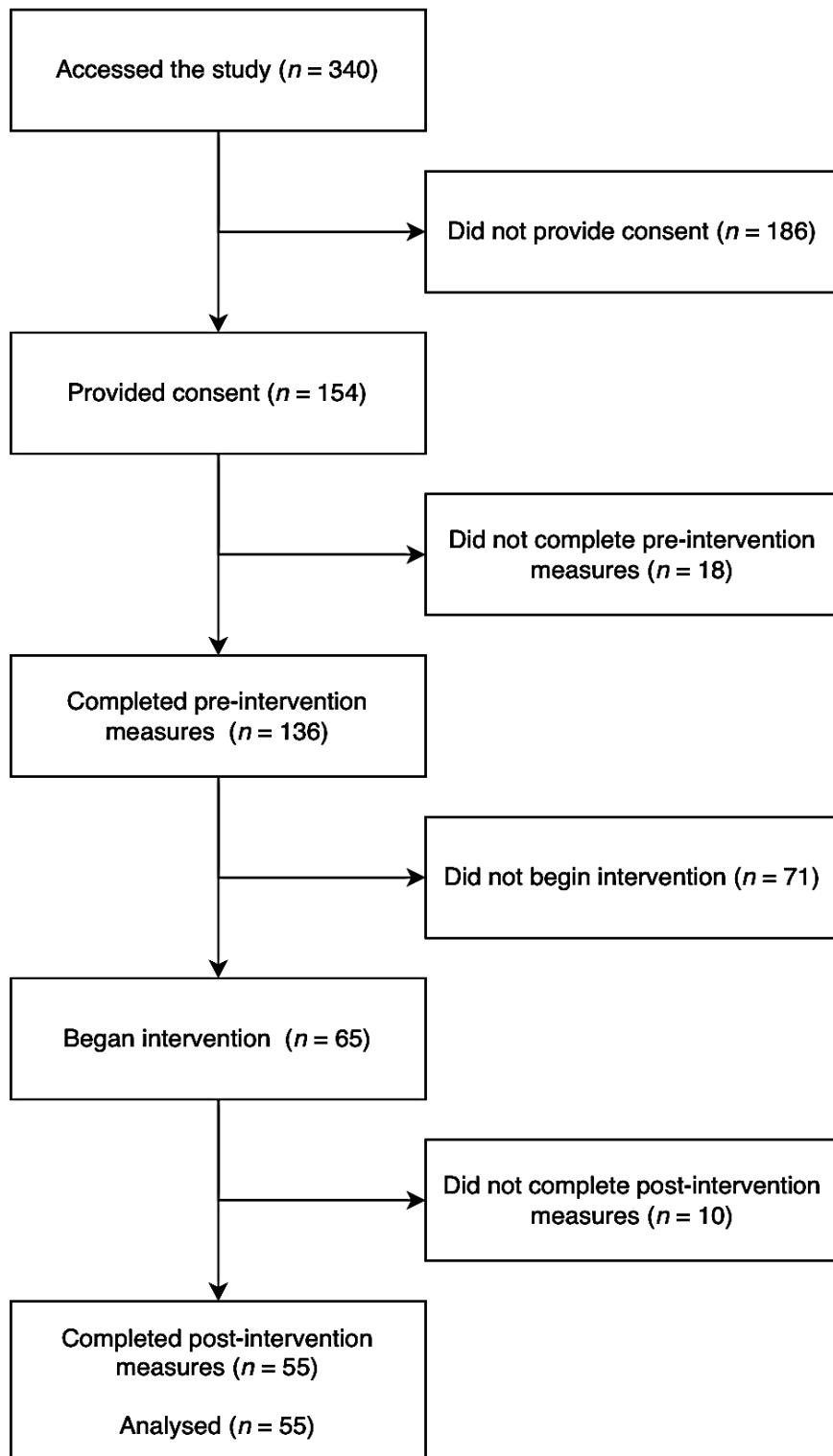
The recruitment window for this study was approximately 11 weeks (November to January 2023). During that time, the survey recorded 340 accessions, which is anyone who accessed the survey and moved to at least the second page. From these accessions, 154 participants provided their consent and, of these participants, 55 completed post-intervention measures, demonstrating a retention rate of 35.71%. Reasons for non-completion could not be obtained as contact information was not collected. Figure 4.1 shows flow of participants. Responding to the satisfaction questionnaire (see Table 4.6), 93% of participants agreed that they “believe there is demand for the knowledge contained within the learning video”. Similarly, 98% of participants agreed they “found the learning video useful”. From the 136 responses recorded on the A-BPSES, the mean score was 17.96

**Table 4.3***Participant Characteristics*

Characteristic	n	%
Gender		
Female	50	90.91
Male	5	9.09
Age		
20-29	4	7.27
30-39	30	54.55
40-49	19	34.55
50-59	2	3.64
Ethnicity		
White Total	50	90.91
White British	46	83.64
White Other	3	5.46
White Irish	1	1.82
Other Total	5	9.09
African	1	1.82
Indian	1	1.82
White & Asian	1	1.82
White & Black African	1	1.82
Asian Other	1	1.82

( $SD = 3.29$ ) out of a possible 25 (higher scores signify greater self-efficacy). Response

percentages and mean scores for each question on the A-BPSES are presented in Table 4.4 and 4.5 respectively.

**Figure 4.1***Flow of Participants*

*Note.* Pre-intervention measures = demographic questionnaire and A-BPSES. Post-intervention measures = participant satisfaction questionnaire.

### **Acceptability**

Of participants ( $n = 65$ ) who began the intervention, 84.62% completed post-intervention measures. The most dispersed responses on the satisfaction questionnaire (Table 4.6) were regarding the duration of the intervention, but most (54%) *disagreed* it was “too long”. Only 11% agreed the intervention was “too complicated” and participants largely found “the learning video engaging”. Overall satisfaction with the intervention was high, with 93% of participants agreeing they “benefited from the learning video” and 84% agreeing they would “recommend the learning video to caregivers whose child is struggling with anxiety”.

**Table 4.4**

*Participant Response Percentages for Each Question of the A-BPSES*

A-BPSES Question	Ratings				
	1	2	3	4	5
Even though I may not always manage it, I know what I need to do with my child’s anxiety	2	24	31	<b>40</b>	3
I am able to do the things that will improve my child’s anxiety	1	13	37	<b>46</b>	4
I can make an important difference to my child’s anxiety	1	2	28	<b>58</b>	11
In most situations I know what I should do to manage my child’s anxiety	2	13	<b>42</b>	38	4
The things I do make a difference to my child’s anxiety	1	4	32	<b>56</b>	8

*Note.* Table shows percentages. 1 = strongly disagree, 5 = strongly agree.  $n = 136$ . Bold = highest response percentage for corresponding question.

### ***Qualitative Feedback***

Eleven participants provided qualitative feedback (see Table 4.7), which was largely positive of the intervention (e.g. “this video [was] just brilliant”; “great video”). Ten participants described the intervention favourably or as being helpful (e.g. “it was really useful”). Participants described finding it helpful being able to rewatch the intervention, having “examples of which questions to ask”, and having the information in

**Table 4.5**

*Mean Scores for Each Question of the A-BPSES*

A-BPSES Question	M	SD
Even though I may not always manage it, I know what I need to do with my child’s anxiety	3.17	0.90
I am able to do the things that will improve my child’s anxiety	3.38	0.80
I can make an important difference to my child’s anxiety	3.76	0.70
In most situations I know what I should do to manage my child’s anxiety	3.29	0.83
The things I do make a difference to my child’s anxiety	3.67	0.71

*Note.* n = 136. Minimum score = 5, maximum score = 25. Higher scores suggest greater self-efficacy.

“understandable terms” and “bitesize chunks”. Participants also found the intervention useful for encouraging them to “stop, think and reflect”, highlighting that a “certain amount of anxiety [is] normal”, and providing “tips”.

Eight participants provided constructive feedback or adaptation suggestions. One participant felt “some of the language might be slightly complicated for everyone” but themselves found the intervention’s “simplicity... very useful”, whereas another described being “a little confused” when the intervention discussed providing children with choices.

**Table 4.6**

*Participant Response Percentages on the Satisfaction Questionnaire*

Feasibility Question	Ratings				
	1	2	3	4	5
I found the learning video useful	2	0	0	53	45
I feel that I benefited from the learning video	4	0	4	55	38
I found the learning video engaging	5	2	9	44	40
I would recommend the learning video to caregivers whose child is struggling with anxiety	4	0	13	40	44
I believe there is demand for the knowledge contained within the learning video	4	0	4	31	62
The learning video was too long <sup>a</sup>	15	36	27	18	4
The learning video was too complicated <sup>a</sup>	49	25	15	7	4
Overall, I was satisfied with the learning video	4	2	5	44	45

*Note.* Table shows percentages. 1 = strongly disagree, 5 = strongly agree. N = 55.

<sup>a</sup> Negatively worded question.

Adding “examples of how to apply strategies” in “a couple of scenarios” was suggested by a participant, and “highlighting key points to keep the viewer engaged” was suggested by another. Three participants felt the duration of the intervention was too long (e.g. “my attention span was about 20 minutes”) and two participants described wanting support for

a child with anxiety who has special educational needs and/or disabilities (e.g. “good video for the typical child but I need help around anxiety with an autistic child”). One participant wrote the narration felt “robotic and maybe lacked positivity in some spots” and another found the “doodling distracting” in reference to the animations used.

**Table 4.7**

*Frequency of Category and Codes from Qualitative Feedback*

Category	Code	Frequency ( <i>f</i> )
Positive Feedback	Useful	5
	Praise for intervention	4
	Understandable/explained well	2
	Ability to rewatch	1
	Wanting to share with other parents	1
	Simple	1
	<i>Total Positive</i>	<i>14</i>
Adaptation Suggestions	Highlight key points	1
	Add more examples	1
<i>Total Suggestions</i>		2
Constructive Feedback	Too long	3
	Lacking positivity	1
	Robot voice	1
	Doodling is distracting	1
	Confusing	1
	<i>Total Constructive</i>	<i>7</i>

*Note.* *n* = 11.

## Discussion

The present study sought to evaluate the feasibility and acceptability of an online-delivered single-session parent-only psychoeducation intervention for child anxiety based on Creswell and Willetts' (2019) model. Results suggest the intervention was acceptable to participants and there is demand for it, warranting further study. However, limitations, such as the somewhat low retention rate, will require consideration.

### Feasibility of the Intervention

#### *Demand for the Intervention*

Results provide evidence that there is demand for the knowledge contained within the intervention with 93% of participants agreeing with this statement. Furthermore, an average of two participants per day provided consent to take part (total 154), which is proportionally similar to comparative online-delivered single-session parent-only intervention studies (e.g. Cardamone-Breen et al., 2018; Sung et al., 2021). At baseline, participants had a mean score of 18 out of a possible 25 on the A-BPSES. While no established clinical cut-offs currently exist for the BPSES, higher scores indicate greater self-efficacy. Therefore, although participants did not score particularly low, there appears to be scope for parents to increase their self-efficacy in managing their child's anxiety. Correspondingly, 98% of participants agreed they found the intervention useful. Although adapted, the mean A-BPSES score and standard deviation was highly consistent with baseline findings from other parent-based intervention studies using the non-adapted BPSES (Midgley et al., 2018; Selwyn et al., 2016), suggesting the adapted version may have retained some of its psychometric properties. However, this is only indicative and further study is required to confirm.

In addition, our completion rates support the real-world utility of the intervention (Dobias et al., 2022). Randomised trials are known to overestimate engagement with unguided online interventions, often by four times that seen when implemented in real-world settings (Baumel et al., 2019). Low engagement with internet-delivered interventions is a widely acknowledged issue (Christensen et al., 2009; March et al., 2018; Melville et al., 2010; Nicholas et al., 2010), with only 0.5-to-28.6% of individuals completing them outside of clinical trials (Fleming et al., 2018; Torous et al., 2018). As such, our completion rates (36%) were high compared to real-world data and, when considering at least 85% of participants who started the intervention completed it, provides promising evidence of engagement with the intervention and likely demand.

### ***Acceptability of the Intervention***

Findings, including the above, support the intervention's acceptability to participants, as 93% agreed they benefited from the intervention, 84% would recommend it to caregivers struggling with their child's anxiety, and 89% were, overall, satisfied with the intervention. The delivery and format of the intervention were also rated positively, with the minority (11%) agreeing the intervention "was too complicated" and majority (84%) agreeing the intervention was engaging.

However, 24% agreed the intervention was too long and three participants provided qualitative data suggesting the same. Internet-delivered single-session interventions are commonly 30- to 60-minutes long (Crosby & Witte, 2021; Dobias et al., 2020; Schleider et al., 2020, 2021; Wasil et al., 2021; Zuromski et al., 2017). However, an analysis of 6.9 million viewing sessions of educational videos found that longer videos were less engaging, with engagement dropping substantially around nine-minutes into the video (Guo et al., 2014). To promote engagement and prevent fatigue, the current intervention was separated into

four modules and participants were encouraged to pause the intervention as needed. However, a more effective alternative may be to split the modules into four separate shorter interventions, which may seem less daunting to participants and encourage break taking while moving to the next intervention. Nonetheless, it is important to note that 76% of participants did not agree the intervention was too long and at least 85% of participants who started the intervention completed it.

### **Strengths and Limitations**

A key strength of this study was the naturalistic design, as the data collected are a more accurate estimate of real-world usage than would be obtained in a clinical trial (Dobias et al., 2022). We were also able to obtain high completion rates for a naturalistic online intervention study, which may reflect design choices intended to minimise participant burden. In addition, we collected several types of data, such as self-report qualitative and quantitative feedback and participation data, to provide a more confident estimation of feasibility and acceptability. These data will similarly inform possible refinements to the intervention and future evaluative research. Together, this study provides promising evidence that online-delivered single-session parent-only psychoeducational interventions for child anxiety are feasible and acceptable, warranting further exploration.

However, there were limitations. Firstly, the criteria for assessing feasibility were not defined a priori, which left this open to some degree of subjective interpretation. In addition, the sample consisted mostly of females (91%). It is acknowledged that males are generally more challenging to recruit (Patel et al., 2003). This is particularly the case for parent-only interventions, which typically include the mother as the participating parent (e.g. Escovar et al., 2019; Kennedy et al., 2009; Salari et al., 2018), resulting in fathers being underrepresented despite the importance their participation may have on treatment

effectiveness (Jukes et al., 2022; Panter-Brick et al., 2014; Tully et al., 2017). This, combined with the sample being mostly white ethnicity (91%), means it cannot be guaranteed that findings will generalise to other groups. Similarly, we did not specifically recruit parents whose child is experiencing problematic anxiety to facilitate data collection and because of the ubiquity of anxiety and the intervention targeting milder presentations. Although it may be assumed that such parents were more likely to participate, this, and therefore generalisability to these parents, cannot be guaranteed.

Furthermore, although participant drop out was lower than similar naturalistic intervention studies (referenced prior), much higher participant retention will be needed to ensure validity and generalisability in any future research evaluating efficacy (Sauers-Ford et al., 2017), since the possibility of bias is significant when drop-out exceeds 20% (Marcellus, 2004). It will therefore be important that future research evaluating effectiveness takes steps to improve retention rates, which may include alternative methods of recruitment. This could also address bias that may have been introduced due to self-refer sampling methods. Additionally, reasons for participant drop out could not be obtained as contact information was not collected to minimise participant burden. Insufficient time and technological problems are common reasons reported by parent participants in similar intervention studies (Morgan et al., 2017). However, collecting these data may have been valuable for increasing completion rates in future research and informing real-world application of such interventions to increase reach.

Another limitation is that a small number of participants provided qualitative feedback. As such, whether their views are representative of the full sample is not known. And, finally, effectiveness could not be demonstrated as efficacy testing was inappropriate (Skivington et al., 2021). However, the purpose of this study was to assess feasibility and

acceptability to inform future research where efficacy testing may be appropriate, resulting in a more robust research process (Lancaster, 2015), which is a strength of this study.

### Clinical Implications

Findings suggest online-delivered single-session parent-only psychoeducation for child anxiety can be an acceptable mode of delivery which is also feasible and in need. Little research to date has been conducted using this approach. Due to their potential to help address treatment barriers and unmet care needs, as discussed prior, it is hoped findings may encourage further study into online-delivered single-session parent-only psychoeducation for child anxiety, in particular, which evaluates their effectiveness at preventing anxiety disorder progression. However, a review of web-based psychological interventions suggested that satisfaction, engagement, and outcomes are enhanced when combined with in-person therapeutic guidance or support (Wozney et al., 2017). This may mean the current intervention would be most beneficial to parents in combination with in-person professional guidance. Additionally, although the intervention covered CBT skills, including exposure and thought challenging, this was brief and not the main focus since it was psychoeducational and online-delivery lacks the interactive and dynamic learning of in-person intervention, which may limit the extent to which new, especially complex, psychological tools can be learnt.

Because of this, although online-delivered single-session (e.g. Cardamone-Breen et al., 2018) and multi-session (e.g. Khanna et al., 2017) parent-only psychoeducational interventions for child anxiety have encouraging evidence of effectiveness, they are unlikely to replace the therapeutic value of human interaction with a trained professional. Therefore, the current intervention, particularly in isolation, may not be appropriate for all parents, such as those experiencing high distress or who have learning difficulties, and is not

a replacement for, although a possible addition to, conventional treatment in more severe or complex child anxiety presentations. However, it may be helpful in such cases for encouraging parents to access further support if they are not currently receiving any.

### **Conclusion**

Findings from this feasibility study suggest that an online-delivered, single-session parent-only psychoeducation intervention for child anxiety, based on Creswell and Willetts' (2019) model, is acceptable to parents and feasible for further study. The naturalistic design allowed for more accurate estimation of real-world engagement, which suggested there is demand for the intervention. Findings may support further refinement of the intervention and inform future research, which may eventually lead to an evidence-based early and preventative intervention that helps address treatment barriers and unmet care needs in-line with UK Government and NHS policy.

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## **CHAPTER FIVE**

### Additional Methodology

### **Empirical Study Additional Methods**

This chapter contains additional methodological information which could not be included in the empirical study (Chapter Four) for publication due to the chosen journal's word limit.

Research questions, development of the intervention, approach to content analysis, and ethical considerations are described in greater detail.

#### **Detailed Research Questions**

Table 5.1 shows how each measure answered each question.

1. Is there demand for the intervention?
  - 1a. How many participants can be recruited?
  - 1b. Is participant uptake and retention sufficient?
  - 1c. Do participants feel there is demand?
  - 1d. Do participants feel the intervention is useful?
  - 1e. Are participants, prior to intervention, confident at managing their child's anxiety?
2. Is the intervention acceptable?
  - 2a. Do participants feel they benefited from the intervention?
  - 2b. Is the intervention engaging?
  - 2c. Are participants overall satisfied with the intervention?
  - 2d. Would participants recommend the intervention to other caregivers whose child is struggling with anxiety?
  - 2e. Are participants satisfied with the complexity of the intervention content?
  - 2f. Do participants feel the intervention was an appropriate temporal duration (not too long)?

**Table 5.1***How each Measure Answered each Research Question*

Question	Measure
1. Is there demand for the intervention?	
(a) How many participants can be recruited?	<ul style="list-style-type: none"> <li>▪ The number of participants recruited within the finalised recruitment timeframe</li> </ul>
(b) Is participant uptake and retention sufficient?	<ul style="list-style-type: none"> <li>▪ The percentage of participants who provide consent and finish the study (defined as completing post-intervention measures)</li> </ul>
(c) Do participants feel there is demand?	<ul style="list-style-type: none"> <li>▪ Participant Satisfaction Questionnaire question: <i>"I believe there is demand for the knowledge contained within the learning video"</i></li> </ul>
(d) Do participants feel the intervention is useful?	<ul style="list-style-type: none"> <li>▪ Participant Satisfaction Questionnaire question: <i>"I found the learning video useful"</i></li> </ul>
(e) Are participants, prior to intervention, confident at managing their child's anxiety?	<ul style="list-style-type: none"> <li>▪ Adapted Brief Parental Self-efficacy Scale (A-BPSES)</li> </ul>
2. Is the intervention acceptable?	
(a) Do participants feel they benefited from the intervention?	<ul style="list-style-type: none"> <li>▪ Participant Satisfaction Questionnaire question: <i>"I feel that I benefited from the learning video"</i></li> </ul>
(b) Is the intervention engaging?	<ul style="list-style-type: none"> <li>▪ Participant Satisfaction Questionnaire question: <i>"I found the learning video engaging"</i></li> </ul>
(c) Are participants overall satisfied with the intervention?	<ul style="list-style-type: none"> <li>▪ The percentage of participants who begin the intervention and finish the study (complete post-intervention measures)</li> </ul>
(d) Would participants recommend the intervention to other	<ul style="list-style-type: none"> <li>▪ Participant Satisfaction Questionnaire question: <i>"Overall, I was satisfied with the learning video"</i></li> <li>▪ Participant Satisfaction Questionnaire question: <i>"I would recommend the</i></li> </ul>

primary caregivers whose child is struggling with anxiety?	<i>learning video to primary caregivers whose child is struggling with anxiety”</i>
(e) Are participants satisfied with the complexity of the intervention content?	Participant Satisfaction Questionnaire question: “ <i>The learning video was too complicated</i> ”
(f) Do participants feel the intervention was an appropriate temporal duration (not too long)?	Participant Satisfaction Questionnaire question: “ <i>The learning video was too long</i> ”

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*Note.* Participant Satisfaction Questionnaire administered post-intervention. A-BPSES administered pre-intervention.

### Detailed Development of the Intervention

Developing the intervention was a significant part of the empirical study. The first stage involved reviewing Creswell and Willetts' (2019) therapist-guided parent self-help for child anxiety and accompanying treatment manual (Halldorsson et al., 2017), since the intervention would draw on these. This guided parent-delivered self-help is a core intervention administered by Education Mental Health Practitioners and Child Wellbeing Practitioners but is also used by other clinicians in NHS child and adolescent mental health services. It is based on cognitive behavioural therapy (CBT) and has been shown to be effective (Thirlwall et al., 2017).

After reviewing these, the evidence-base on parent-only interventions for child anxiety and child anxiety generally was also reviewed. Preliminary discussions occurred between OS-Y and LP, KM (Clinical & Research Psychologists; Supervisors), LW (Senior Child Wellbeing Practitioner, Whittington Health NHS Trust) and CC (child anxiety and depression Researcher, University of Reading), to discuss initial ideas. LP, KM, and LW were key expert stakeholders who formed the core members of the expert refinement team. LW had used Creswell and Willetts' (2019) intervention clinically in addition to having experience of

developing and presenting workshops for parents based on the model. During this time, a panel of caregivers to primary school-aged children were consulted on aspects of the intervention such as its length and format.

**Figure 5.1**

*Visual Sample of the Intervention (1)*



# An Introduction to Child Anxiety (primary school age)

Based on the book:  
**Helping Your Child with Fears and Worries 2nd Edition: A self-help guide for parents**

*Note.* Visual sample shows start of the intervention.

It was determined, with consultation from the expert refinement team, that for content to be included, it had to meet three criteria: (1) be deemed key to parent-only interventions, (2) have a strong and established evidence-base, and (3) be appropriate for an online-delivered single-session parent-only psychoeducational intervention. Content which most closely met these criteria were prioritised for inclusion.

To determine what content could be deemed key to the intervention, parent-only intervention studies for child anxiety were reviewed for similarities by OS-Y. Content was then ranked by OS-Y based on the frequency that they were included in these interventions.

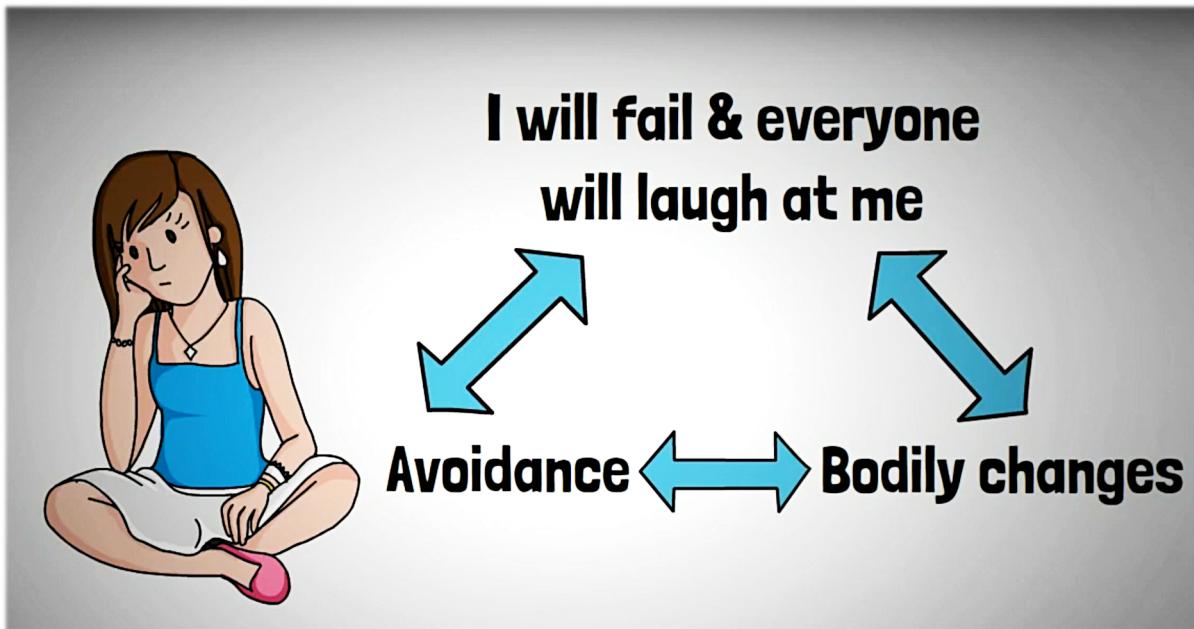
OS-Y then reviewed the literature on the highest ranked components to ensure stringent adherence with the best available evidence. For example, applied relaxation was commonly included in parent-only interventions for child anxiety, however, the evidence-base was much weaker relative to other frequently included content (Whiteside et al., 2020). Highest ranking content that had the strongest evidence-base was then reviewed for suitability in an online-delivered single-session parent-only psychoeducational intervention by OS-Y. For example, complex skills or psychoeducation that would require more than one session or input from a therapist to be meaningful was deemed inappropriate. From this process, it was determined that the following psychoeducational components were most frequently included in parent-only interventions for child anxiety, had the strongest evidence-base, and were appropriate:

- General psychoeducation on the presentation of anxiety, including cognitive, behavioural, and physiological components; evolutionary origins and function, discriminating adaptive and maladaptive anxiety; normalisation of anxiety (Barrett, 2010; Cartwright-Hatton et al., 2011; Ginsburg & Drake, 2002; Mendlowitz et al., 1999; Rapee et al., 2005; Shortt et al., 2010; Waters et al., 2008).
- Psychoeducation on the aetiology of anxiety, including genetic, environmental, and behavioural influences (modelling, conditioning, reinforcement, avoidance, excessive reassurance, overprotectiveness, and other anxiety promoting parenting behaviours) (Cartwright-Hatton et al., 2011, 2018; Shortt et al., 2010; Thienemann et al., 2006; Waters et al., 2008).
- Psychoeducation on perpetuating factors in anxiety, such as cognitive biases, physiology (hypervigilance and appraisals), and behaviour (avoidance, safety behaviours, modelling, conditioning, excessive reassurance, and reinforcement) in

addition to CBT maintenance models and promoting parental self-compassion (Barrett, 2010; Cartwright-Hatton et al., 2011, 2018; Ginsburg & Drake, 2002; Mendlowitz et al., 1999; Rapee et al., 2005; Shortt et al., 2010; Thienemann et al., 2006; Waters et al., 2008).

- Psychoeducation on child anxiety management strategies, including communication skills (such as empathy, validation, being curious, normalising, and active listening), thought challenging and cognitive restructuring to promote confidence, exposure and reward to promote brave behaviour, and problem-solving (Barrett, 2010; Cartwright-Hatton et al., 2011, 2018; Ginsburg & Drake, 2002; Mendlowitz et al., 1999; Rapee et al., 2005; Shortt et al., 2010; Thienemann et al., 2006; Waters et al., 2008).

After confirming the suitability of the above content with the expert refinement team, content matching these components in Creswell and Willetts (2019) were adapted and rewritten by OS-Y into a coherent script, incorporating feedback from the panel of caregivers and expert refinement team. At various stages, LW, LP, and KM would review the script and suggest amendments. Intervention components were grouped into four distinct but connected modules (*Part One: What are Fears and Worries? Part Two: How do Fears and Worries Develop in Children? Part Three: What Keeps Children's Fears and Worries going? Part Four: Strategies to Break the Cycle of Fears and Worries*). The purpose of this was to increase engagement, reduce participant fatigue, and improve memory retention by chunking information and allowing for a simple summary ‘take-home message’ after each module (Albert et al., 2013; Gobet et al., 2001). Once the final script was read and approved by the expert refinement team, the narration was recorded by OS-Y using high-quality microphones and professional sound processing software (Logic Pro X with RX-9 plugins).

**Figure 5.2***Visual Sample of the Intervention (2)*

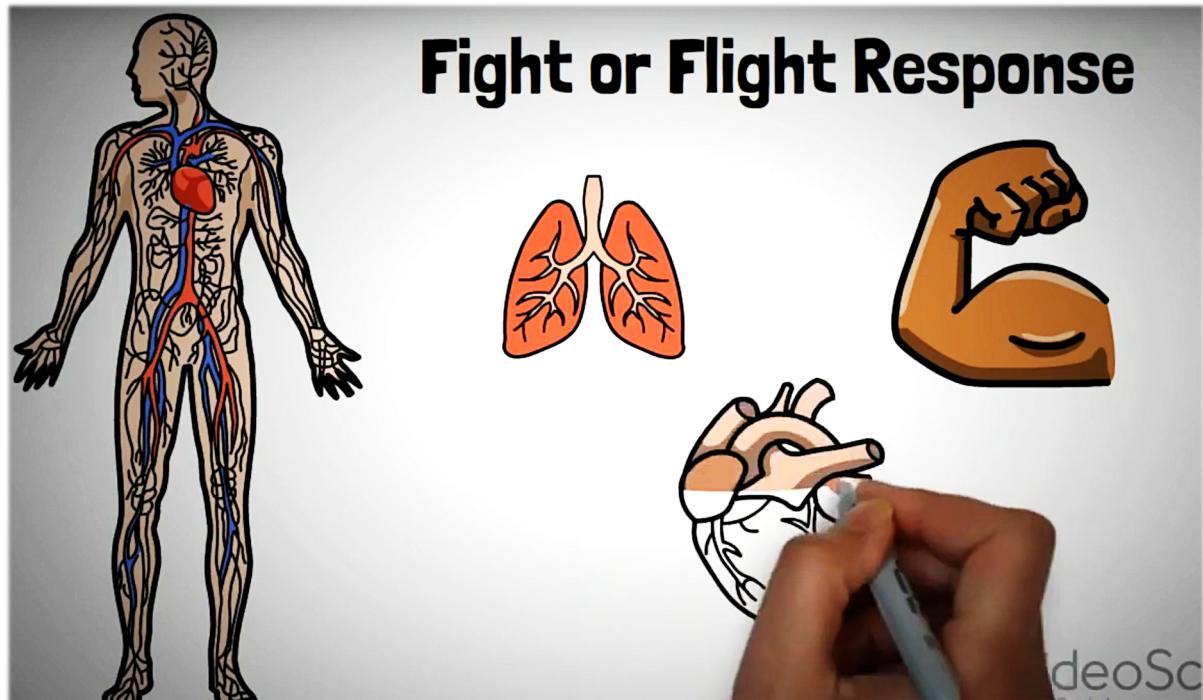
*Note.* Visual sample, taken from *Part Three: What Keeps Fears and Worries going?*, shows simple maintenance cycle and animated girl representing 'Faith', who was used as an example to illustrate perpetuating factors in anxiety.

Visual aspects of the intervention were then storyboarded and animated by OS-Y using VideoScribe software. The university's Learning Enhancement Team, who provided the licence for VideoScribe, were consulted on multiple occasions to review ideas and how to make best use of the software which helped ensure the intervention was as high quality as possible. The expert refinement team and panel of caregivers were provided with the intervention at multiple stages of development and consulted to incorporate their feedback. Once the final product was approved by the expert refinement team and panel of caregivers, the intervention video was uploaded privately to YouTube and embedded without advertisements into the Qualtrics survey for the study (viewable at <https://youtu.be/FWXdxr3ZHK8>). The process of creating the intervention took around one

year to complete and involved multiple iterations based on feedback. Transcript samples can be read below, and visual sample can be viewed in Figures 5.1, 5.2, 5.3, and 5.4.

**Figure 5.3**

*Visual Sample of the Intervention (3)*



*Note.* Visual sample, taken from *Part One: What are Fears and Worries?*, describes the physiological components of anxiety, such as heart rate increase and changes in breathing which increases blood oxygenation and supply to muscle tissue.

#### ***Transcript Samples***

***Sample One.*** Read by Narrator: “Although fears, worries, and anxiety are understood differently across cultures, they are usually seen as normal experiences which we will all have some of the time. We tend to feel anxious when we think something bad is going to happen. Our thoughts become focused on the possible threat and how to prevent it, which is very important when we’re in danger. Imagine your child is about to put their hand into a

*hot oven. That wouldn't be the best time to be distracted by thoughts like what you're going to eat for lunch! Instead, you'd need to be able to focus on getting them away from the hot oven without being distracted by other thoughts."*

**Figure 5.4**

*Visual Sample of the Intervention (4)*



*Note. Visual sample, taken from Part Four: Strategies to Break the Cycle of Fears and Worries, illustrates encouraging brave behaviour (exposure) and promoting confidence (thought challenging) while emphasising the importance of the child doing it themselves (parental overprotection) to promote learning (habituation/inhibitory learning/extinction/cognitive restructuring).*

**Sample Two.** Read by Narrator: "It can understandably be challenging for some children to talk about their fears and worries. Sometimes they don't even know themselves why they're afraid or worried. We first need to figure out what it is exactly that's making them anxious, and what they expect will happen. This might seem obvious or simple but it's

*one of the most important steps as knowing this will help you work out what they need to learn to overcome their fears and worries. You can start off by being curious and asking questions which help your child to tell you what they're afraid or worried about. To help you learn as much as possible try to avoid yes and no questions which limit their response. We need to know what they're anxious about and what they think will happen."*

### **Additional Content Analysis Information**

Additional detail regarding the approach to analysing qualitative data is described here. Using an inductive approach (Elo & Kyngäs, 2008), the aims were to describe and quantify the frequency of positive feedback, constructive feedback, and adaptation suggestions. Data were grouped by these categories, which were determined by the author a priori and confirmed to be appropriate once data were collected and analysed (Dey, 2003; Erlingsson & Brysiewicz, 2017), to provide clear and usable feedback that could guide future research and possible intervention refinement. Qualitative data were prepared by exporting it into Word and reading it to become familiarised with the data. Text which did not provide meaningful information (e.g. "thanks") was removed. Open coding was then performed. Condensed meaning units were first produced from text and then grouped by similarity, the label of these groups being codes (Burnard, 1991; McCain, 1988). These codes were then categorised as positive feedback, constructive feedback, or adaption suggestions. As the amount of qualitative data collected was expected to be small, this was deemed an appropriate method of analysis.

### **Additional Ethical Considerations**

#### ***Consent***

Health Research Authority (Health Research Authority, 2019) guidance and templates were followed to create the participant information sheet. The purpose and

nature of the study is explained along with ethical considerations. Adherence to General Data Protection Regulation (GDPR) was ensured by stating what data were to be collected and how it was to be used (The European Union, 2016). Consent was obtained using an electronic consent form which contained a number of statements next to a check box. All checkboxes needed to be checked in order to provide consent.

#### ***Coercion***

The possibility of participant coercion was reduced by clearly stating that participation is completely voluntary and there will be no consequences for their rights or child's education for choosing not to participate or withdraw (The British Psychological Society, 2021). Participants were able to withdraw from the study at any point by simply closing the webpage and were informed of this.

#### ***Confidentiality***

No personally identifiable data were collected and access to participant data was restricted to the research team (The European Union, 2016). No data were stored in paper format. All participant data from online forms were password protected on the University of East Anglia's servers for data analysis. Only software solutions approved by the University of East Anglia were used for data collection. No personally identifiable data were or will be published at any point. Following the university's Research Data Management Policy, data will be kept securely for at least 10 years after publication. All data are password protected.

#### ***Deception***

No deception occurred at any point.

#### ***Debriefing***

Following completion of the study, participants were provided with a debrief sheet, as per The British Psychological Society's (BPS; 2021) guidance. This is despite no deception

occurring at any point. Signposting to additional sources of support and further information about the study were included as well as offer of an additional opportunity to answer any questions participants may have had. Participants indicating that they wished to receive a copy of the study's findings were reminded that they will receive this once write up is completed. Participants were prompted in the debrief sheet that they could still contact us if they wanted to receive a summary but did not indicate so in their consent form.

### ***Distress***

Due to the nature of the intervention, it was possible that participants may have experienced distress, for example, due to activation of distressing memories cued by the content of the intervention. To address this, participants were reminded of their right to withdraw, and researcher contact information was present on study documents so that participants could seek support in the event of distress. Additionally, participants were informed of a 'sources of support' page, accessible at all points during the study, which signposted participants to various sources of support (such as 111, useful website etc.).

### ***Other***

It is possible that the content of the Intervention may have led parents to recognise or suspect an anxiety disorder or problem in their child. Participants were advised to speak to their GP should they have concerns.

### ***Possible Benefits***

All participants had access to evidence-based psychoeducation on childhood anxiety and may therefore have increased their knowledge and understanding of the topic. Participants may also find participation rewarding knowing that they are contributing to child mental health research. As the primary burden of the study is the time it took to complete the study, the research team predicted the benefits would outweigh the costs.

## **CHAPTER SIX**

### **Discussion and Critical Evaluation**

### **Discussion and Critical Evaluation**

This thesis sought to contribute to the evidence-base on parent-only interventions for child anxiety. First, a systematic review and meta-analysis was conducted to examine the impact of these interventions on parental mental health, and, second, a single-session psychoeducational intervention that addressed identified treatment barriers and unmet care needs was developed and feasibility tested in an empirical study. These are important areas of research due to the concerning state of child mental health globally (Benton et al., 2021; Gunnell et al., 2018). The prevalence of child mental health problems in England has increased over decades so that 18% and 22% of 7-to-16 and 17-to-24-year-olds respectively had a probable mental health problem in 2022 (Newlove-Delgado et al., 2022). The reasons for these increases are complex and beyond the scope of this thesis but are not fully accounted for by increased awareness and identification (Pitchforth et al., 2019). Despite these statistics, just 3% of young people in England are estimated to receive evidence-based treatment (Reardon et al., 2020).

There is an urgent need to increase access to child anxiety interventions. As described in previous chapters, parents frequently reported stigma, lack of knowledge, difficulties accessing referrals, excessive waiting times, and unavailability of early interventions as key barriers to accessing treatment (Reardon et al., 2018). Consistent with these reported barriers, recent UK Government and NHS policy is to increase access to evidence-based early and preventative interventions (Department of Health and Social Care & Department for Education, 2018; NHS England, 2019). The empirical study presented in this thesis, therefore, aimed to develop an intervention designed to help address these barriers in accordance with these recent policies. The online-delivered single session parent-only psychoeducation intervention, which targets milder anxiety presentations, was

developed based on the model used by an existing therapist guided parent self-help intervention (Creswell & Willetts, 2019; Halldorsson et al., 2017) and incorporated the best currently available evidence. Expert clinicians and researchers from various professional backgrounds involved in parent-only interventions and child anxiety formed the intervention refinement team which provided expert guidance. A panel of child caregivers also provided expertise by experience. Feasibility testing the intervention with 55 parent participants found it to be acceptable and in demand, warranting further study.

Parent-only interventions offer a valuable adjunct and alternative to child-focused interventions, such as when the latter would not be suitable (Jewell et al., 2022; Laakmann et al., 2017; Waite et al., 2014), which may increase treatment access. Moreover, research suggests that while parent-only interventions may be more clinically- (Simon et al., 2014) and cost-effective (Simon et al., 2012) than child-focused interventions, this advantage appears particularly pronounced when parents themselves are anxious (Creswell & Cartwright-Hatton, 2007). It is well established that anxiety is transmissible from parents to offspring (Eley et al., 2015; Lawrence et al., 2019; Murray et al., 2009). Several parenting factors are associated with transmissibility of anxiety (Angold et al., 1999; Schwartz et al., 2012; Yap et al., 2014) which, in addition to precipitating and perpetuating anxiety, can also undermine child-focused treatment effectiveness (Cobham et al., 1998; Compton et al., 2014; Murray et al., 2007; Schleider et al., 2015; Southam-Gerow et al., 2010).

The above underpins the theoretical understanding of why parent-only interventions for child anxiety may be more clinically- and cost-effective when parents are also anxious. By administering the intervention to anxious parents, they may become more aware of their anxiety and the impact their behaviour may have on their child's anxiety (Barmish & Kendall, 2005; Barrett et al., 1996; Ginsburg et al., 1995, 2004). Parents may also, in addition to

supporting their child with their continued use, be able to apply for themselves many of the strategies intended for their child, such as exposure or thought challenging, resulting in reduced parental anxiety promoting behaviours (Barmish & Kendall, 2005; Barrett, Rapee, et al., 1996; Ginsburg et al., 1995, 2004). However, this theory is preliminary, and more research is needed. If this theory is correct, it would seem reasonable to hypothesise that parent-only interventions for child anxiety would also impact parental mental health, particularly parental anxiety. Understanding this relationship, if present, could have significant clinical and research implications for the treatment of child anxiety, such as for case conceptualisation, the development of novel intervention targets, and treatment optimisation.

Consequently, the systematic review and meta-analysis sought to investigate whether this hypothesis can be falsified by conducting a comprehensive search of relevant literature using a rigorous methodology that followed best practice guidance (Page et al., 2021; Popay et al., 2006) to synthesise studies and meta-analyse outcome data. Although availability of literature was limited, there was enough for a preliminary evaluation of the impact of parent-only interventions for child anxiety on parental anxiety, depression, and stress. Findings from individual studies were mixed, with some reporting reduced psychopathology while others not; reduced parental stress, followed by anxiety, had the strongest evidence. There were less data to meta-analyse than initially anticipated due to some studies not including required outcome data or not reporting parent participant sample sizes. Attempts to obtain them by contacting authors was unsuccessful. None of the meta-analyses reached significance but there was a trend for reduced parental stress relative to wait list.

Findings from the systematic review and meta-analysis represent the preliminary

state of evidence in relation to the impact of parent-only interventions for child anxiety on parental mental health. Although findings from individual studies were mixed, and none of the meta-analyses were significant, the limited availability of literature and data combined with important limitations of individual studies warrants further research. One such limitation being, that a significant number of studies were not clear in their reporting of how parent participant outcome data were handled and analysed, such as not stating how many parents were included in analysis and whether they all received intervention, nor did they state whether parent outcome data were aggregated, a known issue in parent intervention studies (Jukes et al., 2022; Panter-Brick et al., 2014; Tully et al., 2017). This meant it was not possible to meta-analyse these studies' data. Perhaps most importantly though, parent participants scored in the normal-to-mild or subclinical range on parental mental health outcome measures at baseline in all but one meta-analysed studies, which may have also been true for individual studies that did not report these data. As such, they were unlikely to benefit significantly from receiving the intervention.

### **Strengths and Weaknesses**

A strength of the empirical paper was that the intervention was developed using a rigorous and comprehensive process which involved identifying and adapting the most evidence-based and appropriate content from Creswell and Willetts (2019) in collaboration with key expert stakeholders and comparison with the parent-only intervention literature. This interorganisational, interprofessional, and intersocial collaboration with key expert stakeholders, which included clinicians and researchers in the field of parent-only interventions, as well as a panel of caregivers, ensured the intervention incorporated various and diverse forms of expertise that helped enhance its quality and acceptability. The intervention was developed adhering to the best currently available evidence on the

treatment of child anxiety disorders and parent-only interventions, ensuring that every component of the intervention was strongly evidence-based. This stringent adherence to the best currently available evidence, considered by some to be an ethical imperative in healthcare (Coyle & Leslie, 2006; Sackett et al., 1996), was deemed essential and is a strength.

Similarly, ensuring the intervention was coproduced with patient and public involvement was also considered essential due to the benefits coproduction can have, which may include improved quality, effectiveness, and satisfaction with the intervention (Domecq et al., 2014; Vanleene et al., 2015). Equally important, is the role coproduction has in empowering consumers by ensuring their voice is heard, which can improve the trust and relationship between consumers and professional organisations (Domecq et al., 2014; Vanleene et al., 2015). This comprehensive and rigorous approach to developing the intervention, ensuring key stakeholder collaboration and stringent adherence to the evidence-base, was a strength of the empirical study.

As discussed previously, the intervention was developed with the aim of addressing identified barriers and unmet care needs in relation to the treatment of child anxiety, in line with UK Government and NHS policy to increase access to early intervention (Department of Health and Social Care & Department for Education, 2018; NHS England, 2019), which was another strength of the empirical study. The intervention being pre-recorded and accessible asynchronously via the internet addressed practical barriers, such as scheduling restrictions and childcare needs (Axford et al., 2012), as well as the barrier of stigma, since it is accessible anonymously (Reardon et al., 2018). Consistent with identified need and policy, the format and delivery of the intervention may also facilitate early intervention by removing the requirement for referral to markedly reduce waiting times. The content of the

intervention addressed the lack of knowledge parents often reported in relation to help-seeking and identification of problematic anxiety (Reardon et al., 2018). This was a crucial aspect of the intervention, as it was developed to address the unmet needs of children with milder or prodromal anxiety presentations (Reardon et al., 2018). Therefore, it was essential for the intervention to provide parents with knowledge on how and when to seek additional support.

Since the intervention was novel, it was appropriate that it was feasibility tested. However, although consistent with best practice guidance (Bowen et al., 2009; Lancaster, 2015), this meant no efficacy or significance testing was conducted, which is a limitation of the empirical study. Future research is needed to null hypothesis test the effectiveness of the intervention; it will be important to consider how best to achieve this. It is suggested that, in addition to the adapted brief parental self-efficacy scale (A-BPSES) used in the empirical study, a measure of child anxiety be used to compare pre- and post-intervention or between-group differences. However, attention should be paid to how child anxiety is measured, since parent-informant may be vulnerable to bias, particularly if participants are not blind (Enck & Zipfel, 2019). The use of a child-informant measure may be less prone to this bias, although research has found low agreement between child- and parent-informants (Meiser-Stedman et al., 2017).

It is also recommended that future research measuring child anxiety as an outcome include a six-month follow up, since previous research testing guided parent-delivered CBT for child anxiety found a significant improvement from post-intervention assessment to six-month follow up (Thirlwall et al., 2013). Dependent on factors such as sample size and length of follow up, this could also make it possible to use additional outcomes that may be more ecologically valid and less prone to bias. For example, the number of child participants

receiving an anxiety disorder diagnosis as an indirect measure of anxiety or the prophylactic potential of the intervention. Furthermore, it is recommended that an additional analysis based on intention-to-treat be conducted to reduce bias and improve generalisability (Fergusson et al., 2002; Gupta, 2011; McCoy, 2017). However, more research, including a pilot trial, will first be needed.

An additional limitation of the empirical study was that using the A-BPSES as a measure of need/demand relied on the assumption that parents' self-efficacy in managing their child's anxiety was indicative of their effectiveness at doing so. Because of this, future research may benefit from using alternative measures of need/demand which are less dependent on the accuracy of parental insight into their parenting abilities. For example, this could include conducting focus groups with parents or administering a bespoke questionnaire specifically designed to explore whether parents believe there is need for an intervention similar to the one that was feasibility tested. Nonetheless, self-report measures will always be prone to some level of bias.

Another important limitation of the empirical study was that the sample consisted mostly of females (91%); males are known to be typically more difficult to recruit (Patel et al., 2003). As such, it is less confident that acceptability findings will generalise to men, which may have implications for single fathers and male couple parents. This limitation also applies to the patient and public involvement group, since it consisted of only mothers. The representativeness of the group could have been improved by ensuring fathers were included and that all parents had a child experiencing anxiety difficulties. Additionally, it would have been beneficial to ensure parents from ethnic minority backgrounds and those with lower socioeconomic status were included. One way in which recruiting these groups

could be facilitated in future research is by building connections with community organisations that work with these groups (Dawson et al., 2022).

Men are notably underrepresented in parent intervention studies (Panter-Brick et al., 2014), which is problematic since the inclusion of fathers in interventions can improve child outcomes (Lundahl et al., 2007). To optimise effectiveness of child interventions, father involvement is needed to address father-specific parenting factors, increase parental consistency in the implementation of intervention skills, and minimise parental conflict (Rhoades, 2008; Tully et al., 2017). Effect sizes for father outcomes have been observed to be lower than that of mothers, which may be the result of interventions being developed and tested mostly with the mother in mind (Tully et al., 2017). It is therefore recommended that future research consider strategies to increase father participation and, more generally, attempts are made to better understand the needs of fathers in parenting interventions to enhance father acceptability and outcomes.

This underrepresentation of fathers in parenting interventions was apparent in the systematic review conducted as part of this thesis. Although a limitation for the purpose of the analyses conducted, a key strength of the systematic review, in addition to being the first review on the topic, was the illumination of widespread reporting issues regarding parent participants. It was surprising how frequent intervention studies did not state basic parent participant characteristics like age and sex. Moreover, when they were stated, it was not clear if this just represented parents who received the intervention or all parents of the child participants, including non-participating parents. Similarly, few studies clearly specified the parent participant sample sizes and, crucially, how their outcome data were handled for the purpose of analysis. Specifically, whether just one parent completed outcome measures or both parents did and their data were aggregated. It is tempting to assume the former,

since the latter would appear to violate a key assumption of all inferential tests that observations are independent of one and other (Nimon, 2012). Yet, the use of just one parent's data could also be problematic, as one could question how and why one parent was decided over the other, and whether the data actually represented the parent's report without influence from the other parent. Unless methodological choices such as these and their implications are clearly considered and justified, it is difficult not to question the validity and generalisability of findings.

Another limitation of the systematic review was the limited availability of data and, to a lesser extent, individual studies. Many studies did not contain the required outcome data, which remained unattainable despite contacting authors. This was related to the previous limitation, since studies for which parent sample sizes were not attainable could not be meta-analysed, resulting in fewer meta-analyses being conducted than initially planned. Due to the limited availability of data, the systematic review could not conclusively answer the question it sought to. However, it is hoped the systematic review will encourage further research into this important topic and bring to attention the reporting issues described prior. This is a strength of the systematic review, as addressing these issues in future research could improve reporting quality that helps answer the question of whether parent-only interventions for child anxiety impact parental health.

### **Clinical and Theoretical Implications**

The key contribution of the empirical study to the clinical evidence-base is the intervention which, consistent with both Government and NHS policy (Department of Health and Social Care & Department for Education, 2018; NHS England, 2019) to increase access to evidence-based low-intensity early and preventative interventions, was developed

to address key barriers reported by parents to accessing child anxiety treatment. The intervention was found to be feasible, supporting that the knowledge contained within it is in demand and that the online-delivered single-session format is acceptable to parents. It is hoped this will encourage further research due to the advantages this format can have.

However, as discussed, the intervention will still require efficacy testing and possibly further refinement based on acceptability data before it can be administered to consumers, which the recommendations produced from feasibility testing could support. Should efficacy testing support the intervention's effectiveness, it could be implemented widely, unrestricted by cost and time, making it an excellent initial early or preventative intervention option for children with milder anxiety presentations that complements interventions already available and delivered by clinicians in the NHS. This could also lead to and promote the development of similar online-delivered single-session parent interventions for other child mental health and related presentations, such as low mood, autism spectrum, and attention deficit hyperactivity.

Furthermore, a novel measure of parental self-efficacy in relation to the management of their child's anxiety was produced for the empirical study by adapting the Brief Parental Self-Efficacy Scale (Woolgar et al., 2013). The obtained mean and standard deviation at baseline for the adapted measure were highly consistent with those obtained in other parent-based interventions using the non-adapted version (Midgley et al., 2018; Selwyn et al., 2016), suggesting it may have retained some of its psychometric properties. Nonetheless, further investigation is needed to confirm this, particularly its sensitivity to change. If confirmed, the adapted measure could be used in future research and further adaptations could be made to measure parental self-efficacy in relation to other constructs, such as low mood.

However, as previously highlighted, there are still unanswered questions regarding parent-only interventions for child anxiety. Perhaps most importantly, it is not clear for who they are most effective and why. Their effectiveness has been demonstrated and shown to be comparable to child-focused interventions for child anxiety (Jewell et al., 2022). Yet, some research has found parent-only interventions are more effective than child-focused interventions when one or both parents are also anxious, but others have not observed this (Cobham et al., 1998; Creswell & Cartwright-Hatton, 2007; Maliken & Katz, 2013; Simon et al., 2011; Thienemann et al., 2006). However, a review by Creswell & Cartwright-Hatton (2007) conclude that parent-only CBT in isolation or combined with child-focused CBT is “probably more effective than [child-focused] CBT” for child anxiety when parents are also anxious. Parent-only intervention was similarly found to be more cost-effective than child-focused intervention only when a parent was anxious in one study (Simon et al., 2012).

There is a reasonable theory to support and explain this as discussed earlier. In brief, parental anxiety is both highly associated with offspring anxiety and non-genetically intergenerationally transmissible (Eley et al., 2015; Lawrence et al., 2019; Murray et al., 2009). As such, administering intervention to parents may confer indirect treatment gains which reduces parental behaviours associated with transmissibility of anxiety (Angold et al., 1999; Schwartz et al., 2012; Yap et al., 2014). If true, it would be expected that parent-only intervention for child anxiety would reduce parental anxiety. The systematic review therefore sought to help address this gap in the evidence-base by exploring whether parent-only interventions for child anxiety do indeed impact parental mental health, including parental anxiety.

Due to the large association between parental anxiety and offspring anxiety, this topic has significant implications for the treatment of child anxiety since parental anxiety

limits the effectiveness and predicts poorer outcomes of child anxiety treatment (Cobham et al., 1998; Compton et al., 2014; Creswell & Cartwright-Hatton, 2007; Everett et al., 2021; Murray et al., 2007; Schleider et al., 2015; Southam-Gerow et al., 2010). If parent-only interventions are more effective than child-focused interventions when parents are also anxious, understanding why could optimise their clinical- and cost-effectiveness by better targeting children who will benefit most. Similarly, understanding the mechanism of action, and how this differs from child-focused interventions, could lead to the development of novel interventions and treatment targets, which could involve simultaneous treatment of both parent and child (Everett et al., 2021). The answers to these questions could inform case conceptualisation of child anxiety and better guide clinicians in treatment.

### **Conclusion**

Rates of child and adolescent mental ill health are increasing to levels not seen before, both in England and globally (Benton et al., 2021; Newlove-Delgado et al., 2022). We have reached a crisis point (Benton et al., 2021). Treating and improving the mental health of future generations is not just a priority but a necessary imperative. Left untreated, once readily treatable child and adolescent mental health problems will become complex, severe, and enduring (Compton et al., 2007; Copeland et al., 2014; Henriksen et al., 2015). The implications of this for the economy, society, and individual are significant (McDaid et al., 2022; Office for National Statistics, 2022). As such, there is urgent need to increase availability, accessibility, and effectiveness of child and adolescent mental health interventions.

This thesis, therefore, sought to help address this need by contributing to the relevant evidence-base. First, by developing and feasibility testing an online-delivered single-session early and preventative parent-only psychoeducation intervention for child

anxiety in collaboration with key expert stakeholders that addressed identified treatment barriers and unmet care needs. And secondly, by conducting a systematic review and meta-analysis regarding the impact of parent-only interventions for child anxiety on parental mental health, contributing to efforts to understand the mechanism of action and optimise their effectiveness.

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**APPENDICES**

## Appendix A

### Author Guidelines for Chosen Journal: Child and Adolescent Mental Health

#### *Author Guidelines*

1. Contributions from any discipline that further clinical knowledge of the mental life and behaviour of children are welcomed. Papers need to clearly draw out the clinical implications for mental health practitioners. Papers are published in English. As an international journal, submissions are welcomed from any country. Contributions should be of a standard that merits presentation before an international readership. Papers may assume any of the following forms: Original Articles; Review Articles; Innovations in Practice; Narrative Matters; Debate Articles.

CAMH considers the fact that services are looking at treating young adults up until the age of 25, with the evidence that brains continue to develop until the age of 25, as well as the fact that a lot of issues that affect young adults and students are also relevant and topical to older adolescents. CAMH offers a discretionary approach and will take into consideration papers that extend into young adulthood, if they are pertinent developmentally to the younger population and contribute further to a developmental perspective across adolescence and early adult years.

Authors are asked to remember that CAMH is an international journal and therefore clarification should be provided for any references that are made in submitted papers to the practice within the authors' own country. This is to ensure that the meaning is clearly understandable for our diverse readership. Authors should make their papers as broadly applicable as possible for a global audience.

**Original Articles:** Original Articles make an original contribution to empirical knowledge, to the theoretical understanding of the subject, or to the development of clinical research and practice.

**Review Articles:** These papers offer a critical perspective on a key body of current research relevant to child and adolescent mental health. The journal requires the pre-registration of review protocols on any publicly accessible platform (e.g. The International Prospective Register of Systematic Reviews, or PROSPERO).

**Short Research Articles:** Short Research Articles should consist of original research of any design that presents succinct findings with topical, clinical or policy relevance. For example, preliminary novel findings from pilot studies, important extensions of a previous study, and topical surveys.

**Letters to the Editor:** These are short articles that offer readers the opportunity to respond to articles published in CAMH. Letters must only discuss issues directly relevant to the content of the original article such as to add context, correction, offer a different interpretation, or extend the findings.

**Innovations in Practice:** These papers report on any new and innovative development that could have a major impact on evidence-based practice, intervention and service models.

**Narrative Matters:** These papers describe important topics and issues relevant to those working in child and adolescent mental health but considered from within the context and framework of the Humanities and Social Sciences.

**Debate Articles:** These papers express opposing points of view or opinions, highlighting current evidence-based issues, or discuss differences in clinical practice.

**Technology Matters:** These papers provide updates on emerging mental health technologies and how they are being used with and by children and young people.

2. Submission of a paper to *Child and Adolescent Mental Health* will be held to imply that it represents an original submission, not previously published; that it is not being considered for publication elsewhere; and that if accepted for publication it will not be published elsewhere without the consent of the Editors.

3. Manuscripts should be submitted online. For detailed instructions please go to: [http://mc.manuscriptcentral.com/camh\\_journal](http://mc.manuscriptcentral.com/camh_journal) and check for existing account if you have submitted to or reviewed for the journal before, or have forgotten your details. If you are new to the journal create a new account. Help with submitting online can be obtained from the Editorial Office at ACAMH (email: [publications@acamh.org](mailto:publications@acamh.org))

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#### *Disclosure of interest form*

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Authors are reminded that the *Journal* adheres to the ethics of scientific publication as detailed in the [\*\*Ethical principles of psychologists and code of conduct\*\*](#) (American Psychological Association, 2010). These principles also imply that the piecemeal, or fragmented publication of small amounts of data from the same study is not acceptable. The Journal also generally conforms to the Uniform Requirements for Manuscripts of the International Committee of Medical Journal Editors ([\*\*ICJME\*\*](#)) and is also a member and subscribes to the principles of the Committee on Publication Ethics ([\*\*COPE\*\*](#)).

#### *Informed consent and ethics approval*

Authors must ensure that all research meets these ethical guidelines and affirm that the research has received permission from a stated Research Ethics Committee (REC) or Institutional Review Board (IRB), including adherence to the legal requirements of the study country. Within the Methods section, authors should indicate that 'informed consent' has been appropriately obtained and state the name of the REC, IRB or other body that provided ethical approval. When submitting a manuscript, the manuscript page number where these statements appear should be given.

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The Journal requires authors to conform to CONSORT 2010 (see [CONSORT Statement](#)) in relation to the reporting of randomised controlled clinical trials; also recommended is the [Extensions of the CONSORT Statement](#) with regard to cluster randomised controlled trials). In particular, authors must include in their paper a flow chart illustrating the progress of subjects through the trial (CONSORT diagram) and the CONSORT checklist. The flow diagram should appear in the main paper, the checklist in the online Appendix. Trial registry name, registration identification number, and the URL for the registry should also be included at the end of the methods section of the Abstract and again in the Methods section of the main text, and in the online manuscript submission. Trials must be registered in one of the IJME-recognised trial registries:

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The [Equator Network](#) is recommended as a resource on the above and other reporting guidelines for which the editors will expect studies of all methodologies to follow. Of particular note are the guidelines on qualitative work <http://www.equator-network.org/reporting-guidelines/evolving-guidelines-for-publication-of-qualitative-research-studies-in-psychology-and-related-fields> and on quasi-experimental <http://www.equator-network.org/reporting-guidelines/the-quality-of-mixed-methods-studies-in-health-services-research> and mixed method designs <http://www.equator-network.org/reporting-guidelines/guidelines-for-conducting-and-reporting-mixed-research-in-the-field-of-counseling-and-beyond>

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abbreviated title (running head) of up to 80 characters, a correspondence address for the paper, and any ethical information relevant to the study (name of the authority, date and reference number for approval) or a statement explaining why their study did not require ethical approval.

*Summary:* Authors should include a structured Abstract not exceeding 250 words under the sub-headings: Background; Method; Results; Conclusions.

*Key Practitioner Message:* Below the Abstract, please provide 1-2 bullet points answering each of the following questions:

- **What is known?** - What is the relevant background knowledge base to your study? This may also include areas of uncertainty or ignorance.
- **What is new?** - What does your study tell us that we didn't already know or is novel regarding its design?
- **What is significant for clinical practice?** - Based on your findings, what should practitioners do differently or, if your study is of a preliminary nature, why should more research be devoted to this particular study?

*Keywords:* Please provide 4-6 keywords use [MeSH Browser](#) for suggestions

6. Papers submitted should be concise and written in English in a readily understandable style, avoiding sexist and racist language. Articles should adhere to journal guidelines and include a word count of their paper; occasionally, longer article may be accepted after negotiation with the Editors.

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study and take responsibility for the integrity of the data in the study and the accuracy of the data analysis). Contributions from others outside the author group should also be acknowledged (e.g. study assistance or statistical advice) and collaborators and study participants may also be thanked).

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12. Figures: Any figures, charts or diagrams should be originated in a drawing package and saved within the Word file or as an EPS or TIFF file.

See <http://authorservices.wiley.com.uea.idm.oclc.org/bauthor/illustration.asp> for further guidelines on preparing and submitting artwork. Titles or captions should be clear and easy to read. These should appear at the end of the main text.

13. Footnotes should be avoided, but end notes may be used on a limited basis.

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CAMH encourages authors to share the data and other artefacts supporting the results in the paper by archiving them by uploading it upon submission or in an appropriate public

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Original Articles make an original contribution to empirical knowledge, to the theoretical understanding of the subject, or to the development of clinical research and practice. Adult data is not usually accepted for publication unless it bears directly on developmental issues in childhood and adolescence.

Your Original Article should be no more than 5,500 words including tables, figures and references.

## Review Articles

Research Articles offer our readers a critical perspective on a key body of current research relevant to child and adolescent mental health and maintain high standards of scientific practice by conforming to systematic guidelines as set out in the [PRISMA statement](#). These articles should aim to inform readers of any important or controversial issues/findings, as well as the relevant conceptual and theoretical models, and provide them with sufficient information to evaluate the principal arguments involved. All review articles should also make clear the relevancy of the research covered, and any findings, for clinical practice.

Your Review Article should be no more than 8,000 words excluding tables, figures and references and no more than 10,000 including tables, figures and references.

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Short Research Articles should consist of original research of any design that presents succinct findings with topical, clinical or policy relevance. For example, preliminary novel findings from pilot studies, important extensions of a previous study, and topical surveys. Short Research Articles will be peer reviewed and authors might be asked to revise and edit

their article to acceptable standards for publication. Short Research Articles should follow standard guidelines, such as STROBE for observational studies, CONSORT extension for pilot trials etc.

Your Short Research Article should be 1500 words, excluding references, tables and graphs/figures. Your article should be structured, including the subheadings Introduction/Methods/Results/Discussion. There is a maximum of 1 table and 1 graph/figure. Please do not include more than 12 references.

### **Narrative Matters: The Medical Humanities in CAMH**

These articles are both submissions and directly commissioned papers. They will be peer-reviewed. The articles should be on a humanities topic relevant to those working in child and adolescent mental health. The topics can include but are not restricted to: aspects of child mental health service history; representations of abnormal mental states or mental illness in children and teenagers in film, literature or drama; depictions of child mental health clinicians within popular culture; ethical dilemmas in the speciality. Interest and originality are valued. If in doubt, please contact the section editor:

**[Gordonbates@virginmedia.com](mailto:Gordonbates@virginmedia.com)**

The essays should be between 1500 and 2000 words and written for an audience of child mental health professionals. For publishing reasons, there is an upper limit of 8 references for the article. Additional references may be given in the text if necessary.

### **Letters to the Editor**

Letters to the Editor are short articles that offer readers the opportunity to respond to articles published in CAMH. Letters must only discuss issues directly relevant to the content of the original article such as to add context, correction, offer a different interpretation, or extend the findings. Letters will be evaluated for relevance to the index paper, scientific merit, and importance.

Letters should be submitted not later than 2 weeks after publication of the print issue of the Journal containing the paper of interest. Please note - all papers are published on Early View as soon as they are accepted. The letters should avoid personal attacks and unscholarly communication.

Letters will not be peer reviewed. However, the section Editor will review the letters and might consult another Editor before acceptance or rejection.

Due to the short length of this article type, your Letter should be between 500 and 700 words with a maximum of one figure or table. If in doubt, please contact the section editor **[c.anj@imperial.ac.uk](mailto:c.anj@imperial.ac.uk)**

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Innovations in Practice promote knowledge of new and interesting developments that have an impact on evidence-based practice, intervention and service models. These might have arisen through the application of careful, systematic planning, a response to a particular need, through the continuing evolution of an existing practice or service, or because of changes in circumstances and/or technologies. Submissions should set out the aims and details of the innovation including any relevant mental health, service, social and cultural contextual factors, and give a close, critical analysis of the innovation and its potential significance for the practice of child and adolescent mental health.

Due to the short length of this article type, your Innovations in Practice article should be no more than 2,200 words including tables, figures and references and contain no more than 8 references.

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Our debate articles express opposing points of view or opinions, highlighting current evidence-based issues, or discuss differences in clinical practice. Although discussion of evidence is welcome, these articles generally do not include primary data. The evidence on which your arguments are based and how that was sourced should be explicit and referenced, and the quality of your evidence made clear.

Due to the short length of this article type, your Debate article should be no more than 1,000 words and contain no more than 8 references. If in doubt, please contact the section editor [Rachel.Elvins@mft.nhs.uk](mailto:Rachel.Elvins@mft.nhs.uk)

### **Technology Matters**

Technology Matters provides updates on emerging mental health technologies and how they are being used with and by children and young people. We aim to cover established technologies such as computer-assisted psychological interventions as well as more novel technologies (e.g. mobile apps, therapeutic games, virtual reality). We will present the evidence base for their use, showcase how they can complement other interventions and are being used in practice and address wider cross-cutting issues (such as technology accreditation, regulation, cost etc.) relevant to practitioners and service funders.

Your paper should be between 1000 and 1500 words. Please do not include more than 7 references. If in doubt, please contact the section

editors [Kapil.Sayal@nottingham.ac.uk](mailto:Kapil.Sayal@nottingham.ac.uk) or [Jennifer.Martin@nottingham.ac.uk](mailto:Jennifer.Martin@nottingham.ac.uk).

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**Appendix B****PRISMA Checklist**

<b>Section and Topic</b>	<b>Item #</b>	<b>Checklist item</b>	<b>Page(s) where item is reported</b>
<b>TITLE</b>			
Title	1	Identify the report as a systematic review.	14
<b>ABSTRACT</b>			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	15
<b>INTRODUCTION</b>			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	17-20
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	20
<b>METHODS</b>			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	21-24, 26-27
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	20-21
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	20-22
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	24-25
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	25-26
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	21-24
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	21-24
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	25
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	26-27
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	27

Section and Topic	Item #	Checklist item	Page(s) where item is reported
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	26-27
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	27
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	26-27
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	N/A
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	27
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	27
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	27
<b>RESULTS</b>			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	28, 29
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	28
Study characteristics	17	Cite each included study and present its characteristics.	31-33
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	31-33
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	35-38
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	31-33
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	35-38
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	N/A
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	N/A
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	N/A
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	35-38
<b>DISCUSSION</b>			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	39-45

Section and Topic	Item #	Checklist item	Page(s) where item is reported
	23b	Discuss any limitations of the evidence included in the review.	39-45
	23c	Discuss any limitations of the review processes used.	42-43
	23d	Discuss implications of the results for practice, policy, and future research.	43-45
<b>OTHER INFORMATION</b>			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	20
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	20
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	N/A
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	45
Competing interests	26	Declare any competing interests of review authors.	45
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	20-27

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

For more information, visit: <http://www.prisma-statement.org/>

## Appendix C

### Demographic Questionnaire

**Note, measures were computerised  
and therefore looked visually different.**



### Demographic Questionnaire (less than 2 minutes)

Age: \_\_\_\_\_

Gender: \_\_\_\_\_

Ethnicity (please select):

White	Mixed or Multiple ethnic groups	Asian or Asian British	Black, African, Caribbean or Black British	Other ethnic group
English, Welsh, Scottish, Northern Irish or British	White and Black Caribbean	Indian	African	Arab
Irish	White and Black African	Pakistani	Caribbean	Any other ethnic group
Gypsy or Irish Traveller	White and Asian	Bangladeshi	Any other Black, African or Caribbean background	
Any other White background	Any other Mixed or Multiple ethnic background	Chinese		
		Any other Asian background		

## Appendix D

### Adapted Brief Parental Self-Efficacy Scale

*Adapted  
Brief Parental Self Efficacy Scale*

**Note, measures were computerised  
and therefore looked visually different.**

*The following are a number of statements about you and your child.  
Please say **how much you agree or disagree** with each one.*

	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
1 Even though I may not always manage it, I know what I need to do with my child's anxiety	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
2 I am able to do the things that will improve my child's anxiety	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3 I can make an important difference to my child's anxiety	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
4 In most situations I know what I should do to manage my child's anxiety	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
5 The things I do make a difference to my child's anxiety	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Measure obtained from:

<https://www.corc.uk.net/media/2607/brief-parental-self-efficacy-scale-interactive-pdf.pdf>

## Appendix E

### Participant Satisfaction Questionnaire

**Note, measures were computerised  
and therefore looked visually different.**



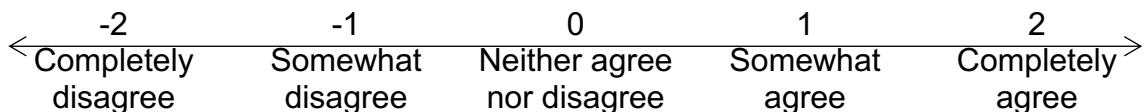
### Participant Satisfaction Questionnaire

Less than 10 minutes

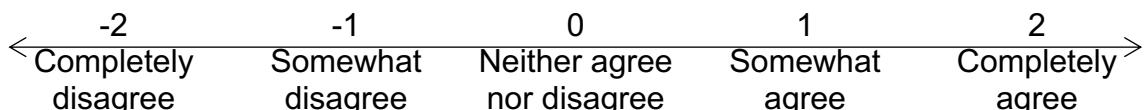
The following questions will ask you about your experience of the video you watched

**Please answer all the following questions as honestly and accurately as possible**

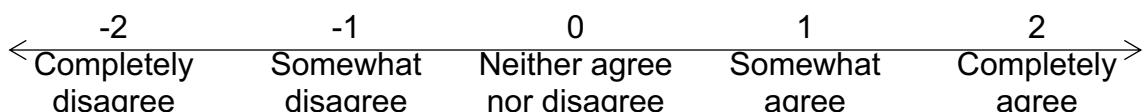
1. I found the learning video useful:



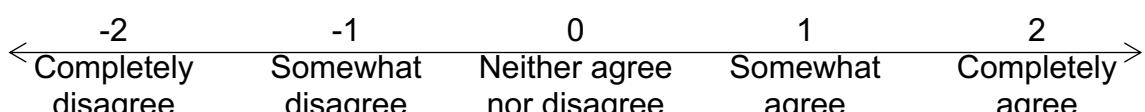
2. I feel that I benefited from the learning video:



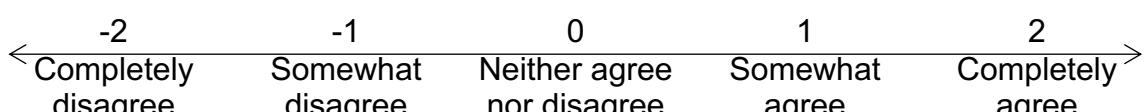
3. I found the learning video engaging:



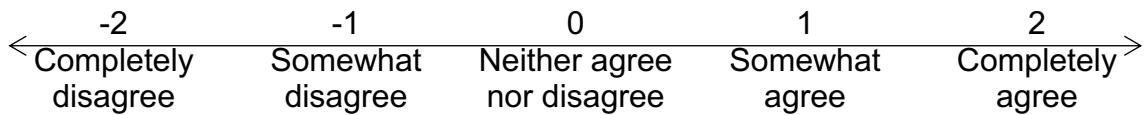
4. I would recommend the learning video to caregivers whose child is struggling with anxiety:



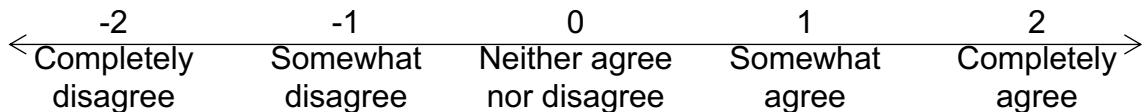
5. I believe there is demand for the knowledge contained within the learning video:



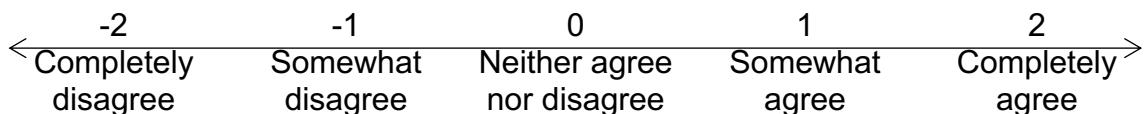
6. The learning video was too long:



7. The learning video was too complicated:



8. Overall, I was satisfied with the learning video



9. Please provide any other feedback on the video (optional):

[Type here]

## Appendix F

### Participant Information Sheet

Mr Oliver Sharples-Yusta  
Trainee Clinical Psychologist, Doctoral Student

02 January 2022

Faculty of Medicine & Health Sciences  
Norwich Medical School

University of East Anglia  
Norwich Research Park  
Norwich NR4 7TJ  
United Kingdom

Email: O.Sharples-Yusta@uea.ac.uk  
Web: www.uea.ac.uk

### The feasibility of a single session psychoeducational intervention on anxiety in childhood for primary caregivers of primary school aged children

#### PARTICIPANT INFORMATION SHEET

Version 3

##### (1) What is this study about?

You are invited to take part in a research study about evaluating an on demand, online learning video about childhood anxiety for parents and primary caregivers of a 5-12 year old child. This Participant Information Sheet tells you about the research study. Knowing what is involved will help you decide if you want to take part in the study. Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

You have been invited to participate in this study because we need caregivers of primary school age children to help us develop and evaluate a cost-effective, on-demand online learning video for parents and caregivers on the topic of anxiety in childhood. **Any primary caregiver of a primary school age child may participate; we are not looking specifically for caregivers of anxious children.**

Anxiety disorders and difficulties with anxiety are common in all age groups. Although it is normal for children to experience some anxiety growing up (such as fears and worries), anxiety disorders or problems with anxiety which develop during childhood often persist into adulthood. Most children and their parents who need support will receive no professional help. We hope this study will help to address this by creating accessible information about anxiety in childhood, and ways parents and primary caregivers can help. Participation in this research study is voluntary. By giving consent to take part in this study you are telling us that you:

- ✓ Understand what you have read.
- ✓ Agree to take part in the research study as outlined below.
- ✓ Agree to the use of your personal information as described.
- ✓ You have received a copy of this Participant Information Sheet to keep.

##### (2) Who is running the study?

The study is being carried out by the following researcher(s): Mr Oliver Sharples-Yusta, Dr Laura Pass, UEA. And is part of doctoral research for Clinical Psychology training.

This will take place under the supervision of Ms Kiki Mastroyannopoulou ([INSERT PRIMARY SUPERVISOR'S EMAIL ADDRESS], [INSERT PRIMARY SUPERVISOR'S TELEPHONE NUMBER]). (L.Pass@uea.ac.uk), Clinical Psychologists and Clinical Associate Professors at UEA.

**(3) What will the study involve for me?**

Participating in the study involves watching an online learning video on childhood anxiety and answering some short questions. This will all be online and on demand giving you the flexibility to watch the video and answer the questions at a time and location convenient to you.

First, we will ask you a few questions about yourself, including your age and ethnicity. This is to help us understand the characteristics of our participants. You will also be asked to answer a brief questionnaire about your confidence as a parent managing your child's anxiety. We estimate this will take less than 5 minutes to complete.

Next, you will be able to watch the online learning video, which is approximately 32 minutes in duration.

Finally, once you have watched the video, you will be asked some brief questions about your experience of the video which we estimate will take less than 10 minutes to complete.

You will not have the opportunity to review information generated about you prior to publication.

**(4) How much of my time will the study take?**

We estimate the total time to participate in this study (including watching the learning video and answering all the questions) should take less than 50 minutes, but may take longer if you pause and rewind the video.

**(5) Do I have to be in the study? Can I withdraw from the study once I have started?**

Taking part in this study is completely voluntary and you do not have to take part.

Your decision whether to participate will not affect your current or future relationship with the researchers or anyone else at the University of East Anglia, now or in the future.

If you decide to take part in the study, you can withdraw your consent at any point. You can do this by closing the webpage or by contacting us to let us know. You will not be contacted to provide any more information. But please be aware, you will not be able to withdraw data you have already provided up to the point that you choose to withdraw. This is because it will not be possible to identify and remove your data once it has been anonymously added to the research dataset and analysed.

**(6) What are the consequences if I withdraw from the study?**

There will be no consequences for you if you decide to take part in the study and then change your mind; you are free to withdraw at any time. But please note, you will not be able to withdraw data you have already provided up to the point that you choose to withdraw. This is because it will not be possible to identify and remove your data once it has been anonymously added to the research dataset and analysed.

**(7) Are there any risks or costs associated with being in the study?**

Aside from giving up your time, we do not expect that there will be any risks or costs associated with taking part in this study. However, if at any time you experience any distress, concern, or discomfort you can always contact the research team (contact details below).

**(8) Are there any benefits associated with being in the study?**

Taking part will mean you are offered free evidence-based information on childhood anxiety. You will learn what anxiety is, what keeps it going, how to support your child with anxiety, and more. Research suggests parents often do not have this knowledge so this could be an excellent opportunity.

Your participation will help us to develop cost-effective interventions for anxiety in children and may inform further research into similar interventions for other areas such as childhood depression; both are areas in need of research.

**(9) What will happen to information provided by me and data collected during the study?**

Your email address will be collected if you choose to receive a copy of the study's results once they are ready. It will be stored on a password encrypted database on UEA Microsoft OneDrive servers.

Other information which will be collected, such as your age, ethnicity, gender, answers to the questionnaires, and time taken to complete, will be stored on UEA Microsoft OneDrive servers separately to your email (if you choose to provide it) on a different password encrypted database in a different location. Your email will not be directly linked to any of the research data you provide us. We will only use this research data for the purpose of scientific analysis and will only be accessible by members of the research team.

Your research data and consent will be collected using Qualtrics survey software. This platform is GDPR compliant and use encryption technologies to keep your data safe. However, no website is immune to data breaches. Your email (if you choose to provide it) will never be directly linked to your research data which ensures your data is kept anonymous. These websites may, as do most, use cookies which you will be informed of when you visit a website for the first time along with an explanation of what the cookies do. This is separate to, and not a part of the study. The research team does not have access to these websites' cookies.

Your privacy is extremely important to us and measures are in place to safeguard your data; personal information will be kept strictly confidential other than when required by law. You may access your personal information from the study by contacting the research team.

Study results (no personal information) will be published as part of a doctoral thesis and may also be published in academic journals.

Research data will be stored for a minimum of 10 years. At the end of the storage period, data will be rewritten over and deleted.

Your personal data and information will only be used as outlined in this Participant Information Sheet, unless you consent otherwise. Data management will follow the Data Protection Act 2018 (DPA 2018) and UK General Data Protection Regulation (UK GDPR), and the University of East Anglia's [Research Data Management Policy](#).

The information you provide will be stored securely and your identity will be kept strictly confidential, except as required by law. Study findings may be published, but you will not be identified in these publications if you decide to participate in this study.

Study data may also be deposited with a repository to allow it to be made available for scholarly and educational purposes. The data will be kept for at least 10 years beyond the last date the data were accessed. The deposited data will not include your name or any identifiable information about you.

**(10) What if I would like further information about the study?**

When you have read this information, Mr Oliver Sharples-Yusta (O.Sharples-Yusta@uea.ac.uk, 07385395811) will be available to discuss it with you further and answer any questions you may have.

**(11) Will I be told the results of the study?**

You have a right to receive feedback about the overall results of this study.

You can receive feedback from ticking the relevant box on the consent form.

This feedback will be in the form of a one page lay summary.

This feedback will be ready in about 1 to 2 years to allow for data collection, analysis, and write up.

**(12) What if I have a complaint or any concerns about the study?**

If there is a problem please let me know. You can contact me via the University of East Anglia at the following address:

Mr Oliver Sharples-Yusta  
Norwich Medical School  
University of East Anglia  
NORWICH NR4 7TJ  
O.Sharples-Yusta@uea.ac.uk

If you are concerned about the way this study is being conducted or you wish to make a complaint to someone independent from the study, please contact the Head of Norwich Medical School [INSERT NAME OF HEAD OF SCHOOL/DEPARTMENT AND EMAIL AND TELEPHONE NUMBER].

**(13) How do I know that this study has been approved to take place?**

To protect your safety, rights, wellbeing and dignity, all research in the University of East Anglia is reviewed by a Research Ethics Body. This research was approved by the FMH S-REC (Faculty of Medicine and Health Sciences Research Ethics Subcommittee).

**(14) What is the general data protection information I need to be informed about?**

According to data protection legislation, we are required to inform you that the legal basis for processing your data as listed in Article 6(1) of the UK GDPR is because this allows us to process personal data when it is necessary to perform our public tasks as a University.

Our processing of your personal data will be based on Article 9(2)(j), which relates to archiving, research and statistics purposes, and Schedule 1, Part 1(4) of the DPA 2018, which relates to research.

In addition to the specific information provided above about why your personal data is required and how it will be used, there is also some general information which needs to be provided for you:

- The data controller is the University of East Anglia.
- For further information, you can contact the University's Data Protection Officer at [dataprotection@uea.ac.uk](mailto:dataprotection@uea.ac.uk)
- You can also find out more about your data protection rights at the [Information Commissioner's Office \(ICO\)](#).
- If you are unhappy with how your personal data has been used, please contact the University's Data Protection Officer at [dataprotection@uea.ac.uk](mailto:dataprotection@uea.ac.uk) in the first instance.

**(15) OK, I want to take part – what do I do next?**

If you are happy and consent to take part in the study simply access the questionnaire at this website [TO BE CONFIRMED] and answer the questions. By submitting your responses you are agreeing to the

researcher using the data collected for the purposes described above. Please keep the information sheet for your information.

**(16) Further information**

This information was last updated on 19 October 2022.

**END**

**This information sheet is for you to keep**

## Appendix G

### Participant Consent Form

### Consent Form

This consent form is a requirement of all research. Please carefully read the statements below. If you are unsure or have any questions, please contact us using the contact information in the **Participant Information Sheet**.

Check the box next to each statement to say you have read, understood, and agreed to it. All the boxes must be agreed to in order to participate.

By ticking the boxes below and clicking **Submit**, you confirm that you agree to the statements and provide your consent to take part in this study.

- I confirm that I have read and understood the participant information sheet for this study. I have had the opportunity to consider the information and ask questions which were answered to my satisfaction
- I understand that my participation is voluntary and I am free to withdraw at any time, without giving any reason, and without my rights or freedoms being affected
- I understand that if I withdraw from the study after completing and submitting the questionnaires, I will not be able to withdraw the data I have provided up to that point. But I will not be contacted to provide any more information
- I understand that the data collected from me may be used to support other research in the future and may be shared anonymously with other researchers
- I consent to the storage and processing of personal data and information for the purpose of completing this study
- I understand that the information collected during this study will be treated in the strictest confidence and handled in accordance with the EU General Data Protection Regulation (GDPR)
- I agree voluntarily of my own free will to take part in the above study
- I confirm I am 18 years of age or older

Note, consent form looked visually different when presented in Qualtrics survey

**Appendix H****Participant Debrief Sheet****Participant Debrief Sheet****Complete – Thank You****1. Your role in the study is now complete.**

You will no longer receive any communication from us in relation to this study unless you indicated that you wish to receive a summary of the study findings. If this is the case, a summary of the study findings will be the final communication you receive from us.

**2. We would like to thank you very much for participating in the study and contributing towards mental health research. We really are so grateful.**

Your participation has helped us to investigate an online intervention for parents and caregivers on childhood anxiety. Your responses will help us understand whether the online learning video is acceptable to caregivers and deserving of further study. Your feedback may help us to refine and develop the intervention for future participants.

**3. If anything about participating in this research has been distressing for you, we would recommend that you seek social support from trusted friends and family. If you require mental health support and/or advice, we recommend using the links and phone numbers below ('4a') or contacting your GP or calling 111 who will be able to discuss further support with you.**

We also have included some links and a phone number below ('4b') where you can access further support and information about young people's mental health for parents.

**4. a. Support and advice:**

- <https://www.mind.org.uk>
  - Infoline: 0300 123 3393
- <https://www.samaritans.org/>
  - 24h support line: 116 123
- <https://www.papyrus-uk.org> (under 35 years of age)
  - HopelineUK (9am to midnight): 0800 068 41 41

- <http://www.sane.org.uk>
- b. Child mental health support and advice for caregivers:
- <https://youngminds.org.uk/find-help/for-parents/>  
Parents helpline (9:30am to 4pm Mon to Fri): 0808 802 5544
  - <https://www.annafreud.org/parents-and-carers/>
  - <https://www.samaritans.org/scotland/how-we-can-help/schools/parents-and-carers/>
5. This learning video was developed based on material from the book '*Helping Your Child with Fears and Worries 2nd Edition: A Self-help Guide for Parents*' by C. Creswell and L. Willetts (ISBN-10: 1472138619), which you may find useful for further information.
6. Should you have any questions, either now or in the future, then please feel free to contact the research team. And again, a massive thank you for your participation.

Yours sincerely,

Oliver Sharples-Yusta  
Trainee Clinical Psychologist  
Lead Researcher  
University of East Anglia  
o.sharples-yusta@uea.ac.uk

## Appendix I

### Ethical Approval Letter



University of East Anglia  
Norwich Research Park  
Norwich. NR4 7TJ

Email: [ethicsapproval@uea.ac.uk](mailto:ethicsapproval@uea.ac.uk)  
Web: [www.uea.ac.uk](http://www.uea.ac.uk)

**Study title:** The feasibility of a single session psychoeducational intervention on anxiety in childhood for caregivers of primary school aged children

**Application ID:** ETH2122-0833

Dear Oliver,

Your application was considered on 10th March 2022 by the FMH S-REC (Faculty of Medicine and Health Sciences Research Ethics Subcommittee).

The decision is: **approved**.

You are therefore able to start your project subject to any other necessary approvals being given.

If your study involves NHS staff and facilities, you will require Health Research Authority (HRA) governance approval before you can start this project (even though you did not require NHS-REC ethics approval). Please consult the HRA webpage about the application required, which is submitted through the [IRAS](#) system.

This approval will expire on **31st December 2022**.

Please note that your project is granted ethics approval only for the length of time identified above. Any extension to a project must obtain ethics approval by the FMH S-REC (Faculty of Medicine and Health Sciences Research Ethics Subcommittee) before continuing.

It is a requirement of this ethics approval that you should report any adverse events which occur during your project to the FMH S-REC (Faculty of Medicine and Health Sciences Research Ethics Subcommittee) as soon as possible. An adverse event is one which was not anticipated in the research design, and which could potentially cause risk or harm to the participants or the researcher, or which reveals potential risks in the treatment under evaluation. For research involving animals, it may be the unintended death of an animal after trapping or carrying out a procedure.

Any amendments to your submitted project in terms of design, sample, data collection, focus etc. should be notified to the FMH S-REC (Faculty of Medicine and Health Sciences Research Ethics Subcommittee) in advance to ensure ethical compliance. If the amendments are substantial a new application may be required.

Approval by the FMH S-REC (Faculty of Medicine and Health Sciences Research Ethics Subcommittee) should not be taken as evidence that your study is compliant with the UK General Data Protection Regulation (UK GDPR) and the Data Protection Act 2018. If you need guidance on how to make your study UK GDPR compliant, please contact the UEA Data Protection Officer ([dataprotection@uea.ac.uk](mailto:dataprotection@uea.ac.uk)).

Please can you send your report once your project is completed to the FMH S-REC ([fmh.ethics@uea.ac.uk](mailto:fmh.ethics@uea.ac.uk)).

I would like to wish you every success with your project.

On behalf of the FMH S-REC (Faculty of Medicine and Health Sciences Research Ethics Subcommittee)

Yours sincerely,

Paul Linsley