Case Study 1: Evidence- based Practice Review

Theme: Interventions Delivered by Parents

How effective are low -intensity, guided, parent -delivered cognitive behaviour therapy interventions for children with anxiety?

Summary: In guided, parent-delivered cognitive behaviour therapy (GPD-CBT) parents are supported by a therapist to implement cognitive-behavioural techniques to

Low-intensity Interventions

One

Table 1

Terms used in database search

Parent-delivered	CBT	Children	Anxiety
parent-implemented OR parent-led OR parent-delivered OR implemented by parents OR led by parents OR delivered by parents OR parent-only OR for parents OR parent-based OR parent-focus?ed OR parenting	cognitive behavio?r* therap* OR cbt	child* OR adolescent* OR teen OR school-age* OR primary school OR elementary school OR secondary school OR high school OR youth* OR young adult*	anxi* OR panic OR phobia OR agoraphobia OR worry

Note.

Table 2

Inclusion and Exclusion Criteria

Criteria	Inclusion Criteria	Exclusion Criteria	Rationale
1. Population	(a) Children are aged 5-16	Children are older than 5 or younger than 16	The review focuses on school-aged children
	(b) Children's primary presenting difficulty is related to anxiety symptoms or diagnosis	Anxiety is not the main concern but it is secondary to another non-anxiety-related mental health condition (e.g. depression)	Such cases will likely require treatment of the primary disorder for anxiety symptoms to remit (e.g. Salloum et al., 2022)
	(c) The children included are generally physically healthy	Children have a 12 77.4 465* [(3.2aon(al)6 (l)-4 (y)14o (nx)14 (i)6 (et)2 (y)14	

	implement the intervention	parents and therapists	bibliotherapy or self-help approaches (e.g. Rapee et al., 2006), rather than therapist-guided parent-delivered CBT, as is the focus of this review
	(d) The intervention involves less than 6 hours of therapist contact	Therapist-parent contact is either not precisely reported, or more than six hours	Low intensity approaches, as per Shafran et al. (2022) typically involve less than 6 hours contact
	(e) The intervention involves some use of written self-help materials	No written or text-based materials are distributed to parents or children	Low intensity approaches, as per Shafran et al. (2022) make use of written self-help materials
	(f) This is the only anxiety-related intervention children are receiving	Children are receiving a different intervention concurrently	Concurrent intervention may confound results regarding the effects of the studied intervention
	(g) The intervention is designed to address anxiety as a primary difficulty	The intervention is for anxiety arising in the context of another need (e.g. 'interventions for autistic children, dyslexia', etc.)	Such interventions are often more specific (e.g. Rodgers et al., 2017) in their approach and may not generalise to anxious children more broadly
3. Comparison	There is a quantitative comparison between anxiety-related measures pre and post intervention	Study only reports qualitative data, data from one time-point; or, pre and post data are not in comparable metrics	

Figure 1

Flow diagram of screening process

Table 3

List of Included Studies

1. Breinholst, S., Walczak, M., Christiansen, B., & Esbjørn, B. (2021). A therapist-guided parent-delivered self-help group for anxiety disorders in children: An

Table 4

Mapping the Field: Summary of Study Characteristics

Author & Country	Design	Follow up	Sample (Referral)	Parent Demographics	Conditions (*N* post)	Therapist Contact (total)	Anxiety Outcome Measures
Breinholst et al. (2021) Denmark	NC	Yes	115 children aged 6-12 (65 female) whose parents reported anxiety problems; (community)	Over 50% of parents had a master's degree or higher; ~36% with income above 125,500 US Dollars			

Creswell
et al.
(2010)

in their child (community)	60% of fathers > $114k USD

			impairment (clinic)			(120 minutes)	
Leong et al. (2009) Australia	RCT	Yes	27 children aged 7-14 (10 female) meeting diagnostic criteria for a primary anxiety disorder (community)	All participating families were Caucasian; 59% of parents had higher education	GPD-CBT (*N* = 13); Individual CBT (*N* = 14)	2-hour face-to-face training and 6 x up to 20-minute phone-calls with 'trained therapists' (no further details given) (240 minutes)	Anxiety Disorders Inventory for Children (ADIS-IV-C/P); Revised Children's Manifest Anxiety Scale (RCMAS); Strengths and Difficulties Questionnaire (SDQ) total score and emotional subscale
Thirlwall et al. (2013) UK	RCT	Yes	194 children aged 7-12 (94 female) with a primary diagnosis of an anxiety disorder; 85% Caucasian (clinic)	61% of parents were professionals; 44% had higher education	'Full' GPD-CBT (*N* = 50); 'Brief' GPD-CBT (*N* = 46); Wait-list (*N* = 63)	4x1-hour face-to-face and 4x 20-minute phone sessions (Full) (320 minutes) *or* 2x1-hour face-to-face sessions and 2x 20-minute phone sessions (Brief) (160 minutes);	Anxiety Disorders Inventory for Children (ADIS-IV-C/P); Clinical Global Impressions Scale (CGI-I); Spence Children's Anxiety Scale, parent/child (SCAS-c/p) Child Behaviour Checklist (CBCL), Child Impact of Anxiety Scale, child/parent (CAIS-c/p)

Table 5

Weight of Evidence Ratings for Included Studies

Study	A: Quality	B: Design	C: Topic	D	Rating
Breinholst et al. (2021)	2 (Med)	1 (Low)	1 (Low)	1.3	Low
Cobham (2012)	3 (High)	3 (High)	1 (Low)	2.3	Med
Creswell et al. (2010)	2 (Med)	0 (Very Low)	0 (Very low)	0.7	Very Low
Creswell et al. (2017)	2 (Med)	2 (Med)	1 (Low)	1.7	Low-Med
Esbjørn et al. (2016)	2 (Med)	0 (Very Low)	1 (Low)	1	Low
Esbjørn et al. (2019)	1 (Low)	0 (Very Low)	1 (Low)	0.7	Very Low
Green et al. (2022)	1 (Low)	0 (Very Low)	3 (High)	1.3	Low
Hill et al. (2022)	1 (Low)	0 (Very Low)	2 (Med)	1	Low
Leong et al. (2009)	2 (Med)	2 (Med)	1 (Low)	1.7	Low-Med
Thirlwall et al. (2013)	2 (Med)	2 (Med)	0 (Very low)	1.3	Low

Note. <1 = Very Low; 1 - 1.5 = Low; 1.5 - 2 = Low-Med; 2 - 2.5 = Med; 2.5 - 3 = High

Participants

sensitivity analysis for the large amounts of participants lost to follow-up, finding no evidence that this biased results. Nonetheless, their study still received a ‘some concerns’ judgement, as adherence to protocol for several therapist activities (e.g. homework setting) was low. Other studies (Breinholst et al., 2021; Esbjørn et al., 2016; Leong et al., 2009) received ‘some concerns’ in this domain, for not monitoring protocol therapists’ adherence to protocol at all.

Three studies received a ‘high’ risk of bias rating, meaning that they demonstrated high risk in at least one assessment domain. This is reflected in WoE A scores of 1/3. Two studies received this judgement because of parents’ poor adherence to intervention protocol. In Esbjørn et al. (2019), only 67% of parents completed 8/10 of the assigned CBT activities, whereas in Green et al. (2022), only 65% of parents completed all key modules. Interestingly, despite using the same manualised intervention as Green et al. (2022), parents in Hill et al.’s (2022) study demonstrated lower non-adherence, with 78% completing all of key modules. A possible explanation is that the parents in Hill et al. (2022) were offered the treatment following a referral to an anxiety clinic, rather than through school-wide anxiety screening. They may have perceived their child’s anxiety problem as more serious and been more motivated to fully engage in treatment. However, Hill et al. (2022) also received a ‘high’ risk of bias, as follow-up assessments for participants did not coincide, and no statistical adjustments were applied to correct for this. Only one study demonstrated ‘low’ risk of bias in every domain (Cobham, 2012).

Interventions

Treatment programs were between eight and twelve weeks in duration, with all requiring parents to cover one component (e.g. book chapter) per week.

Therapist-guidance was delivered in-person or via phone, with average total contact being 3.7 hours, counting the two interventions (brief and full GPD-CBT) in Thirlwall et al. (2013) as separate. Total contact ranged between 2 hours, and 5 hours 20 minutes, with six of eleven interventions involving 4 hours total contact.

In the three studies involving families from Denmark (Breinholst et al., 2021; Esbjørn et al., 2016; 2019), parents followed a treatment workbook across 10-12 weeks. Therapist guidance was provided through two 2-hour group workshops. This was delivered by clinical psychologists in Breinholst et al. (2021) and Esbjørn et al. (2019). In Esbjørn et al. (2016), facilitators' professional backgrounds were not specified. The two studies from Australia (Cobham, 2012; Leong et al., 2009) were similar, with one workbook session completed per week over 12 weeks. As in Brienholst et al. (2021) and Esbjørn et al. (2016; 2019), guidance was provided through an initial 2-hour group training; however, it was followed by six fortnightly telephone calls, delivered by psychologists. All five studies received lower WoE C scores; they less closely approximated 'low-intensity' approaches, as therapist guidance was not provided by 'paraprofessionals' (i.e. non-psychologists) and contacts were longer than 30 minutes each (Shafran et al., 2022).

In three of the UK-based studies (Creswell et al., 2010; 2017; Thirlwall et al., 2013), parents followed a self-help book (Creswell & Willetts, 2012), which instructed readers about CBT strategies they can use to help their child overcome anxiety. This was accompanied by eight weekly sessions of therapist guidance, including four (45 minutes to an hour each) face-to-face sessions, and four brief phone reviews (15-20 minutes each). In Thirlwall et al. (2013), an additional 'brief' condition was included where parents only received two hour-long face-to-face sessions and two 15-minute

phone-calls. Therapist guidance was provided by a range of professionals. This included clinical psychologists in Creswell et al. (2017) and Thirlwall et al. (2013), whereas in Creswell et al. (2010), their professional background was not specified. Considering that all three studies also involved therapist-guided sessions of over 30 minutes each, they received lower WoE C scores.

In the other two UK-based studies (Green et al., 2022; Hill et al., 2022), parents completed eight online modules, which included text, videos, and interactive elements covering CBT strategies derived from the self-help book (i.e. Creswell & Willetts, 2012) used in the aforementioned three studies. Modules were completed once per week, with the final one as a four-week follow-up. Each module was supported by a phone-call of around 20 minutes with a child wellbeing practitioner (CWP). These studies closely approximated low-intensity approaches, as they involved both paraprofessionals and short individual contact-times (Shafran et al., 2022). Given that Green et al. (2022) also recruited participants through a school-based anxiety screening (and not a mental health clinic), the referral context was similar to EP practice. Hence, this study met all WoE C criteria, receiving 3/3.

Outcome Measures

All included studies used anxiety screening questionnaires to assess outcomes. The majority used the Revised Children's Anxiety and Depression Scale (RCADS), which demonstrates reliability across different cultures and assessment contexts (Piqueras et al., 2017). It also demonstrates strong internal consistency and construct validity (Early Intervention Foundation, 2020). However, some authors recommend the use of subscales rather than the total score (e.g. Donnelly et al., 2019). Most included studies did this, with many using the overall anxiety subscale,

Table 6

Effect Sizes for Change in Anxiety Symptoms Across Time-Points

Study [WoE D]	Anxiety Symptom Measure (rated by)	Post-treatment		6-months	
		N	*d*	*N*	*d*
Breinholst et al. (2021) [1.3, Low]	RCADS Anxre W n BT -0.0 3.8 tBTBT/P27.6 <</4 >>BDC 1 12 70919377.044-0 0 12 433.68 649.92197.4 2 Tj ET EMC /P <</M				

Note. 0.2 = Small Effect, 0.5 = Medium Effect, >0.8 = Large Effect (Cohen, 1992)

[a] *p* <.001, [b] *p* <.005, [c] *p* <.05, *insufficient information to obtain precise *p*-value

inconsistency across studies with respect to their use made it difficult to synthesise effects and future studies should endeavour to use clinician or other independently rated measures wherever possible. Finally, meta-analyses of pre-post effect sizes can be biased and subject to confounding (Cuijpers et al., 2017). This underscores the need for more RCTs to evaluate the effectiveness of these interventions.

Nonetheless, findings from two available RCTs suggested that low-intensity GPD-CBT was far superior to waitlist in achieving remission for all anxiety disorders, even with only 2.6 hours therapist-parent contact. Further, a meta-analysis of three RCTs found the intervention to be no less effective at post-treatment and six months follow-up relative to individual, evidence-based psychotherapies (either CBT or SFBT), which are gold-standard interventions for anxiety in children. This appeared to be the case at 2[f (-)Tj 0.0dirTd [(CB)5Tw 25.69 0 T (-)T1 0 Td (-)Tj.33 0 Td 2 (an)10 (d s)4 (i)6

suggests that the lower intensity the approach is, the more chance there is for parents to disengage from the intervention, so EPs should take steps to mitigate this. Second, children who present with severe levels of anxiety on referral, or who do not respond favourably, should be referred to more intensive treatment (e.g. CAMHS). Otherwise, preliminary evidence suggests that low-intensity GPD-CBT may be as effective as individual psychotherapy in many cases, and a valuable approach for treating anxiety in the context of EP practice.

Reference List

Becker, B. J. (1988). Synthesizing standardized mean-change measures. *British Journal of Mathematical and Statistical Psychology*, *41*(2), 257-278. https://doi.org/ 10.1111/j.2044-8317-1988.tb00901.x

Breinholst, S., Walczak, M., Christiansen, B., & Esbjørn, B. (2021). A therapist-guided parent-delivered self-help group for anxiety disorders in children: An effectiveness study. *Journal of Behavioral and Cognitive Therapy*, *31*(2), 105-113. https://doi.org/10.1016/j.jbct.2020.11.008

Brewin, C. R. (1996). Theoretical foundations of cognitive-behavior therapy for anxiety and depression. *Annual review of psychology*, *47*(1), 33-57. https://doi.org/10.1146/annurev.psych.47.1.33

Chorpita B.F., Moffitt C.E., Gray J. (2005) Psychometric properties of the Revised Child Anxiety and Depression Scale in a clinical sample. *Behaviour Research and Therapy, 43*(3), 309–322, DOI: 10.1016/j.brat.2004.02.004

Clark, D. M. (2018). Realizing the mass public benefit of evidence-based psychological therapies: the IAPT program. *Annual review of clinical psychology*, *14*, 159-183. https://doi.org/10.1146/annurev-clinpsy-050817-084833

Cobham, V. E. (2012). Do anxiety-disordered children need to come into the clinic for efficacious treatment?. *Journal of consulting and clinical psychology*, *80*(3), 465. https://doi.org/ 10.1037/a0028205

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155–159. https://doi.org/10.1037/0033-2909.112.1.155

Creswell, C., & Willetts, L. (2012). *Overcoming your child's fears and worries*. Hachette UK.

a guided self‐help program for Scandinavian parents. *Scandinavian journal of psychology*, *60*(4), 323-328. https://doi.org/ 10.1111/sjop.12544

anxiety in a sample of children and adolescents. Journal of Psychoeducational

review of qualitative and quantitative studies. *European child & adolescent psychiatry*, *26*, 623-647. https://doi.org/10.1007/s00787-016-0930-6

Reardon, T., Harvey, K., Young, B., O'Brien, D., & Creswell, C. (2018). Barriers and facilitators to parents seeking and accessing professional support for anxiety disorders in children: qualitative interview study. *European Child & Adolescent Psychiatry*, *27*, 1023-1031. https://doi.org/10.1007/s00787-018-1107-2

Salloum, A., Lu, Y., Chen, H., Quast, T., Cohen, J. A., Scheeringa, M. S., ... & Storch, E. A. (2022). Stepped care versus standard care for children after trauma: A randomized non-inferiority clinical trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, *61*(8), 1010-1022 (c)4 (ar)7 (e)10 (Ce2e0 Td (/)2 (dotdl)4 (o4 (s)4 lc -0.0(ooi)6 (/d)8)-

Sterne, J. A., Savović, J., Page, M. J., Elbers, R. G., Blencowe, N. S., Boutron, I., ... & Higgins, J. P. (2019). RoB 2: a revised tool for assessing risk of bias in randomised trials. *bmj*, *366*. https://doi.org/10.1136/bmj.l4898

Thirlwall, K., Cooper, P. J., Karalus, J., Voysey, M., Willetts, L., & Creswell, C. (2013). Treatment of child anxiety disorders via guided parent-delivered cognitive–behavioural therapy: Randomised controlled trial. *The British Journal of Psychiatry*, *203*(6), 436-444. https://doi.org/10.1192/bjp.bp.113.126698

Appendices

Appendix A: List of Excluded Studies with Reasons

Study	Reason
Brown et al. (2017)	5b – Not original data
Byrne et al. (2021)	2d – Therapist contact over 6 hours
Cartwright-Hatton et al. (2011)	2d – Therapist contact over 6 hours
Cartwright-Hatton et al. (2005)	2d – Therapist contact over 6 hours
Chatterton et al. (2019)	2b – Contact between child and therapist
Chavira et al. (2018)	2d – Therapist contact over 6 hours
Chavira et al. (2014)	2d – Therapist contact over 6 hours
Cobham et al. (2017)	2d – Therapist contact over 6 hours
Eisen et al. (2008)	2b – Contact between child and therapist
Evans et al. (2019)	2d – Therapist contact over 6 hours
Guzick et al. (2022)	2d – Therapist contact over 6 hours
Jewell et al. (2022)	1a – Included children under 5
Lebowitz et al., (2020)	2d – Therapist contact over 6 hours
Lebowitz et al. (2014)	2d – Therapist contact over 6 hours
Lebowitz et al. (2021)	2d – Therapist contact over 6 hours
Lyneham and Rapee (2006)	2b – Contact between child and therapist
Mendelowitz et al. (1999)	2d – Therapist contact over 6 hours
McKinnon et al. (2018)	2d – Format/duration not reported
Monga et al. (2015)	2d – Therapist contact over 6 hours
Ancestral: Morgan et al. (2017)	1a – Included children under 5
Morgan et al. (2018)	1a – Included children under 5
Radtke et al. (2022)	1a – Included children under 5
Ancestral: Rapee et al. (2006)	2c

Chavira, D. A., Drahota, A., Garland, A. F., Roesch, S., Garcia, M., & Stein, M. B. (2014). Feasibility of two modes of treatment delivery for child anxiety in primary care. *Behaviour Research and Therapy*, *60*, 60-66. https://doi.org/10.1016/j.brat.2014.06.010

Cobham, V. E., Filus, A., & Sanders, M. R. (2017). Working with parents to treat anxiety-disordered children: A proof of concept RCT evaluating Fear-less Triple P. *Behaviour research and therapy*, *95*, 128-138. https://doi.org/10.1016/j.brat.2017.06.004

Eisen, A. R., Raleigh, H., & Neuhoff, C. C. (2008). The unique impact of parent training for separation anxiety disorder in children. *Behavior therapy*, *39*(2), 195-206. https://doi.org/10.1016/j.beth.2007.07.004

Esbjørn, B. H., Breinholst, S., Christiansen, B. M., Bukh, L., & Walczak, M. (2019). Increasing access to low-intensity interventions for childhood anxiety: A pilot study of a guided self-help program for Scandinavian parents. *Scandinavian journal of psychology*, *60*(4), 323-328.

Guzick, A. G., Leong, A. W., Dickinson, E. M., Schneider, S. C., Zopatti, K., Manis, J., ... & Storch, E. A. (2022). Brief, parent-led, transdiagnostic cognitive-behavioral teletherapy for youth with emotional problems related to the COVID-19 pandemic. *Journal of affective disorders*, *301*, 130-137. https://doi.org/10.1016/j.jad.2022.01.034

Jewell, C., Wittkowski, A., Collinge, S., & Pratt, D. (2022, August). A Brief Cognitive Behavioural Intervention for Parents of Anxious Children: Feasibility and Acceptability Study. In *Child & Youth Care Forum* (pp. 1-21). New York: Springer US. https://doi.org/ 10.1007/s10566-022-09704-x

McKinnon, A., Keers, R., Coleman, J. R., Lester, K. J., Roberts, S., Arendt, K., ... & Hudson, J. L. (2018). The impact of treatment delivery format on response to

cognitive behaviour therapy for preadolescent children with anxiety disorders. *Journal of Child Psychology and Psychiatry*, *59*(7), 763-772.

Lebowitz, E. R., Marin, C., Martino, A., Shimshoni, Y., & Silverman, W. K. (2020). Parent-based treatment as efficacious as cognitive-behavioral therapy for childhood anxiety: A randomized noninferiority study of supportive parenting for anxious childhood emotions. *Journal of the American Academy of Child & Adolescent Psychiatry*, *59*(3), 362-372. https://doi.org/10.1016/j.jaac.2019.02.014

Lebowitz, E. R., Omer, H., Hermes, H., & Scahill, L. (2014). Parent training for childhood anxiety disorders: the SPACE program. *Cognitiven4 (tJ0.004 T (.,2m)-3 5r.)2 i prr.ive372.*

L 72.

control group study. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, *27*(2), 130. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5896526/

Smith, A. M., Flannery-Schroeder, E. C., Gorman, K. S., & Cook, N. (2014). Parent cognitive-behavioral intervention fioral

tgnL10.004 456 (or)7 dFJourbe(,)2 (1.616 (or)7 B 0 Tcadi)6 nt

Appendix B : Coding Protocols for Weight of Evidence A

Randomised Controlled Trials

The protocol used to determine WoE A scores for included studies that were RCTs (*N* = 4) was adapted from version 2 of the Cochrane tool for assessing risk of bias (RoB) in randomised trials (Rob-

intervention, and did not account for data lost to subsequent follow-ups because presence and length of follow-ups varied across studies.

Non-controlled Trials

The protocol to determine WoE A for included studies that were non-controlled (*N* = 6) was adapted from the Cochrane collaboration's Risk of Bias in non-randomised studies of interventions (ROBINS-I). The tool assesses for bias potentially arising from different domains relating to non-controlled trials of an intervention, allowing an overall judgement about risk of bias to be reached. The following adjustments were made to the tool:

Domain 1 involves a qualitative description of various confounders of the treatment effect. This was omitted for the following reason: (i) confounders across the different studies would broadly be the same (i.e. therapeutic contact, additional attention from parents), and (ii) confounders of this nature will almost always be present in trials of psychological interventions, (iii) in the present review, reductions in the weight of evidence afforded to trials without a control group is accounted for in WoE B (design) Hence, Domain 1 wouldn't

2(as)4. ((i)o)]TJ T*2 ( )10 (T(1)10 (w)9.47oul)6 (dn')6 (a4 (hol)61 ( )()17 (on)10d)h) cn WE