



# Adapting the Brief Coping Cat for Children with Anxiety to a Group Setting in the Spanish Public Mental Health System: a Hybrid Effectiveness-Implementation Pilot Study

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Published online: 19 June 2018  
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## Abstract

Group therapy may offer a promising solution to reducing patient waiting lists for publicly funded mental health services. In this study, an individual brief cognitive behavioral therapy (BCBT) intervention was adapted for implementation in a group setting in the Spanish public mental health care system. The study was designed to test initial clinical effectiveness, acceptability, and feasibility of the group adaptation of BCBT for child anxiety. The study utilized an uncontrolled multiple-group design for 8 weeks (1 h per week). Inclusion criteria were (i) children and young adolescents between 8 and 15 years old, and (ii) a clinical diagnosis of general anxiety disorder, social phobia, and/or separation anxiety disorder. Five groups were completed ( $n = 33$ ; mean age = 11 years; 42.4% females). A total of 31 (93.9%) participants completed at least 7 sessions, and follow-up data were collected for 84.9% ( $n = 28$ ) of participants. Overall, anxiety symptoms were reduced after intervention on the Spence Children Anxiety Scale, Generalized Anxiety Disorder Questionnaire-IV, Social Anxiety Scale for Children-Revised, and Separation Anxiety Symptom Inventory. Our findings suggest that group BCBT was associated with beneficial treatment outcomes, was acceptable and feasible for children with anxiety in the Spanish public mental health system. Both participants and their caregivers reported satisfaction and feelings of safety with the intervention. Results underscore the need for a larger-scale hybrid effectiveness-implementation trial of BCBT in a group setting throughout more community mental health centers in different Spanish states. Such work could improve patient access to and benefit from an evidence-based treatment that works in community settings.

**Keywords** Anxiety · Brief cognitive-behavioral therapy · Exposure · Coping cat · Generalized anxiety disorder · Separation anxiety disorder · Social phobia

## Introduction

Anxiety disorders are the most prevalent disorders among children and adolescents (Kessler et al. 2005; Merikangas et al. 2010). Anxiety disorders occur early in life, with the onset of 50% of cases established by age six (Merikangas et al. 2010). Within anxiety disorders, generalized anxiety disorder (GAD) is the most prevalent child disorder in clinical contexts, especially among older U.S. children and young adolescents, followed by separation anxiety disorder (SAD) among younger children (Kessler Petukhova et al. 2012). Although less prevalent among children, social phobia (SP) is more prominent during adolescence and is associated with more severe impairment (Burstein et al. 2011). Within community samples, the estimated prevalence rate for adolescent anxiety disorders is 32% and is

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usually higher among females (Merikangas et al. 2010). In Spain, anxiety prevalence rates are similar, ranging from 17 to 26% (Ezpeleta et al. 2007; Fernández Aláez et al. 2000).

Anxiety disorders are associated with significant suffering, affecting children's functioning across social (i.e., lower self-image, fewer friends, peer relation difficulties, increased loneliness; Muroff et al. 2011; Settapani and Kendall 2013), familial (i.e., more conflict and communication difficulties with siblings and parents; Drake and Ginsburg 2012; Rapee 2012), and school (i.e., less attendance, performance and classroom participation; Mychajlyszyn et al. 2010; Nail et al. 2015) domains. When starting in childhood, the presence of an anxiety disorder increases the odds of a subsequent psychiatric disorder as an adult, such as anxiety, depression, substance abuse disorders, and suicide attempts (Beesdo et al. 2007; Bittner et al. 2007; Boden et al. 2007; Gregory et al. 2007; Pine et al. 1998), especially if not treated (Weissman et al. 1999).

Meta-analyses and reviews on randomized controlled trials (RCTs) have established the efficacy of cognitive behavior therapy (CBT) among different therapeutic approaches for child anxiety disorders (Cartwright-Hatton et al. 2004; In-Albon and Schneider 2006). In particular, it has been suggested that among all the CBT components, participant modeling (i.e., learning vicariously through the observation and guidance of a model), exposure, and practice with reinforcement components (Barlow 2002; Feske and Chambless 1995) seem to be the most effective techniques to treat anxiety, including social phobia.

Other variables, such as parental factors, also have an important role in the development, maintenance, and reciprocal influence of child anxiety disorders (Rapee 2012). Thus, the majority of the recommended interventions to treat child anxiety problems include some parental sessions. Among those, the Coping Cat (full version; Kendall and Hedtke 2006) has been proven to reduce anxiety in RCTs of individual treatment (16 sessions; Kendall et al. 1997; Kendall et al. 2008; Walkup et al. 2008), and group treatment (18 sessions; Flannery-Schroeder and Kendall 2000; Flannery-Schroeder et al. 2005). Moreover, the manual of the individual version of the Coping Cat has been translated to Spanish, known as "*El Gato Valiente*" (Kendall and Kosovsky 2010a, 2010b). Nevertheless, despite the evidence supporting the use of the Coping Cat CBT intervention for child and adolescent anxiety, there is a disconnection between clinical practice possibilities and empirically validated interventions. For example, it seems that there have been difficulties in implementing and disseminating the original Coping Cat intervention in a community setting due to the length of the program (Beidas et al. 2012; Beidas and Kendall 2010). Therefore, a shorter version, the Brief Coping Cat CBT (eight individual sessions), was developed as a response to real-world

clinical practice needs (Beidas et al. 2013; Crawley et al. 2013).

Child CBT for anxiety usually comprises (i) a phase of psychoeducation; (ii) skill training in affect recognition, relaxation, cognitive restructuring, and problem solving; and (iii) exposure (Crawley et al. 2013; Damschroder et al. 2009). Within the Brief Coping Cat, the authors excluded those mechanisms considered less effective in creating therapeutic change (i.e., progressive muscle relaxation training) as preliminary results reported that a shorter intervention was effective in reducing anxiety without these components (Hudson 2005; Rapee 2000).

Despite the high prevalence rates, the early onset, high rate of comorbidities with other disorders, along with evidence-based programs showing effective at reducing anxiety, children and adolescents with anxiety are the least likely to receive treatment relative to other disorders (i.e., ADHD, oppositional defiant disorder, or conduct disorder), with only 41.4% of those with a need for care treated in the U.S. (Costello et al. 2014). Similarly, in Spain, there are challenges to accessing intensive treatment services within public mental health system, characterized by long waiting lists and scarce accessibility for children with more severe anxiety disorders (Tizón García 2002). For example, the mean ratio of child and adolescent psychologists within an outpatient facility in the Spanish public mental health system (5.3 per 100,000 inhabitants; median of 4.5) varies according to community, ranging from 2.2 in Extremadura to a 14.1 in Cataluña (Cátedra de Psiquiatría Infantil Fundación Alicia Koplowitz 2014). These figures are lower than both other comparable European countries, as well as the recommended ratio for providing adequate services (Remschmidt and Engeland 1999). Knowing that childhood and early adolescence are critical periods for early intervention, this situation underscores that current mental health resources for children and adolescents in Spain are insufficient.

Given resource constraints within the public system, group interventions could be a promising format to overcome setting difficulties. Moreover, group interventions offer unique advantages over individual therapy (i.e., peer modeling, peer reinforcement and group feedback to identify, challenge and offer alternatives to negative thoughts and defeatist beliefs; Flannery-Schroeder and Kendall 2000). Because participants from a group may share a similar age, experiences, and common symptoms, children place greater credibility on other participants' support and advice (Santesteban-Echarri et al. 2017). Interestingly, it seems from meta-analyses that there are no group differences of clinical results between those receiving group treatment versus individual treatment of childhood anxiety (Flannery-Schroeder and Kendall 2000; In-Albon and Schneider 2006; Liber et al. 2008; Manassis et al. 2002;

Muris et al. 2001). In particular, group therapy using the Coping Cat showed a moderate to large effect ( $d = 0.59$ – $2.09$ ) in reducing anxiety symptoms up to remission in a single-group study (de Souza et al. 2013). Group therapy using the Coping Cat has also been compared to individual therapy (Flannery-Schroeder and Kendall 2000) showing promising results. Both the individual and group conditions showed that >50% of the participants did not meet diagnostic criteria of a primary anxiety disorder after treatment, with no significant differences between conditions. Participants in the group condition performed better than the individual condition in reducing the severity of any anxiety disorder (GAD, SAD, or SP). These results were maintained without significant differences among groups at the 3-month follow-up. Given this, choice of therapy format may be based on considerations such as referral rates, clinical resources, and personal preferences. Implementation of group therapies within regular clinical practice may be a cost-effective alternative to reach and provide treatment from specialized child and adolescent services to a larger population (Flannery-Schroeder and Kendall 2000; Flannery-Schroeder et al. 2005). Moreover, the group format may improve long-term engagement with child and adolescent services and treatment generalization to other settings because group interventions provide a therapeutic context representative of daily situations in which generalization is desired (i.e., at school, with peers, in social situations; Kendall and Zupan 1981; Manassis et al. 2002).

To sum up, presenting with an anxiety disorder during childhood is a potential vulnerability indicator for an adult mental health disorder, especially if left untreated. Accordingly, the Spanish public mental health system needs to prioritize offering cost-effective therapies that are empirically validated to reduce child anxiety. We are not aware of any studies reporting implementation of the Brief Coping Cat, at the group level, in a public health setting.

The present study was designed as an effectiveness-implementation hybrid type 1 study (Curran et al. 2012), which aimed to simultaneously test a clinical intervention and gather information on its delivery in a clinical context (as compared to a research context). Therefore, the objective of this study was to test effectiveness outcomes (i.e., clinical outcomes) and implementation outcomes (i.e., acceptability and feasibility) of a group adaptation of the individual Brief Coping Cat (Beidas et al. 2013; Crawley et al. 2013). The target population was children and young adolescents with an anxiety disorder in the Spanish public mental health system who received 8 weeks of intervention participation. Acceptability of the intervention, measured by the perceived usefulness of the group intervention and perceived helpfulness provided by therapists, peers, and parents, was also assessed. Potential clinical benefits were assessed according to changes in self-reported anxiety

symptoms. Feasibility was assessed by clinical service feedback of the intervention implementation in the clinical context (i.e., barriers, difficulties). In addition, attendance was evaluated by number of sessions attended by children and their parents (i.e., completing at least 6 out of 8 sessions: i.e., 75% of attendance for children, and at least one caregiver attending the two parent sessions). Finally, safety was indicated by (i) children reporting feeling supported by therapists, measured via a treatment satisfaction questionnaire; and (ii) all children perceiving the group to be safe.

## Method

### Participants

A total of 37 referrals were received from practising child psychologists or psychiatrists from the Villaverde and Carabanchel areas during 2015 and 2016 (Psychiatry and Mental Health Clinical Management Area from the Hospital Universitario 12 de Octubre, Madrid, Spain). All referrals were assessed on the basis of a principal anxiety disorder. Of these, three referrals were deemed as ineligible after reading the referral notes and medical histories due to comorbidity and erroneous diagnostic category. Moreover, one referral did not meet inclusion criteria after assessment (presenting separation anxiety symptoms were better explained by post-traumatic stress disorder). Thirty-three families consented to participate; therefore, 33 children completed the intervention induction and started a group (each group was designed for between five and six children). Two participants dropped out from the groups, leaving 31 children who completed all the sessions. The post-intervention assessment was completed by 28 participants.

Inclusion criteria were adapted to reflect the original Brief Coping Cat study criteria (Beidas et al. 2013; Crawley et al. 2013): (i) children and young adolescents between 8 and 15 years old inclusive; (ii) a clinical diagnosis based on referral notes of generalized anxiety disorder (GAD), social phobia (SP), and/or separation anxiety disorder (SAD) using the Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV; American Psychiatric Association 2000), or the Classification of Mental and Behavioral Disorders (ICD-10; World Health Organization 1992) as employed in the Spanish public mental health system; (iii) ability to give informed consent and comply with study procedures for parents and assent from children; and (iv) family commitment to attend two parent sessions. Exclusion criteria were (i) intellectual disability, (ii) inability to converse or understand Spanish, and (iii) comorbid diagnosis of conduct disorder as referred by treating clinician.

## Procedure

The study utilized an uncontrolled multiple-group design. Ethical approval for the project was received by the Hospital Universitario 12 de Octubre Research Ethics Committee. Participants were recruited over an eighteen-month period (April 2015–September 2016). Referrals from treating clinicians were received, upon which an independent clinician obtained consent to participate. The average wait time between when participants were contacted and the induction session was 2 weeks. In the induction session, information regarding the group was given to participating children and an initial baseline assessment was conducted. Moreover, parents were given a space to share their concerns and their child's difficulties. Questionnaires for the parents to complete at home were provided in this induction session. As soon as there was at least a group of five children assessed, they were offered an eight-session group and an extra assessment session post-group. When there were enough referrals to form a new group, a new eight-session intervention was offered. Therefore, a total of five groups were conducted over the study period. Children were grouped relating their age, trying to organize homogeneous groups in terms of developmental stage (for detailed information of the design, procedure and materials, see Santesteban-Echarri et al. 2015).

Throughout the intervention period, therapists invited parents to follow up as needed (waiting in the waiting room while the group took place). Moreover, therapists participated in clinical meetings with the clinical team and had the opportunity to discuss any issue pertaining to any of the children of the group with their treating clinician. The participants and their caregivers were assessed pre-intervention and post-intervention (within 2 weeks after completion the group) on the outcomes described below.

## Intervention

We adapted the individual Spanish version of a brief cognitive behavioral therapy (BCBT), the Brief Coping Cat (Beidas et al. 2013; Crawley et al. 2013) into a group setting in the context of the Spanish public mental health system. Each group lasted 2 months (eight sessions of 1 h, once a week). An experienced clinical psychologist and a co-therapist (trainee in 4th year of residency) conducted the groups. Therapists were clinical staff from the hospital, and groups were offered as part of the usual clinical care of the centre. Main components of the sessions were divided in two modules: (i) Module 1: comprising psychoeducation, functional analysis, cognitive restructuring and problem solving; and (ii) Module 2: comprising exposure tasks and positive reinforcement. Some exposure tasks had to be

completed at home (i.e., to sleep alone, to stay in the dark or to stay in a place without their parents). Two exposures were undertaken as a group (i.e., a surprise exam and a presentation of a story in front of an unfamiliar audience for them; for detailed description of the sessions, see Santesteban-Echarri et al. 2015).

As a note, it should be clarified that during the intervention phase, families did not have their regular appointments with their child and adolescent clinician unless strictly necessary (none was needed). In the Spanish public health care system, the frequency of this intervention is considered intensive compared to the usual frequency of appointment for anxiety disorders (range: one visit each 1–2 months).

## Measures

### Questionnaires Administered to the Children

All questionnaires were administered to children both at pre- and post-intervention with the exception of the children fears (pre-intervention only) and the satisfaction questionnaire (post-intervention only). Satisfactory internal consistency was met by all standardized scales.

### Child Anxiety

Child anxiety was measured with the Spanish version of the Spence Children Anxiety Scale, SCAS; (Godoy et al. 2011; Spence 1997), a 38-item scale with a 4-point Likert scale responses type (1 = “never,” 2 = “sometimes,” 3 = “often,” 4 = “always”). The measure comprises six subscales: separation anxiety (six items, i.e., “I worry when I am away from my parents”); social phobia (six items; i.e., “I am afraid to have to talk in front of my classmates”); obsessive-compulsive disorder (6 items, i.e., “I have to do some things in a certain way to prevent bad things from happening”); panic/agoraphobia (nine items, i.e., “Sometimes I feel as if I can not breathe”); physical injury fears (i.e., “I am afraid to go to the doctor or dentist”); and generalized anxiety (six items, i.e., “I worry that something bad can happen to me”). Scores range from 0 to 114 (reliability:  $\alpha = 0.92\text{--}0.94$ ; convergent validity:  $r = 0.70\text{--}0.80$ ).

### Generalized Anxiety

Generalized anxiety was measured with the Spanish version of the Generalized Anxiety Disorder Questionnaire-IV, GADQ-IV; (Newman et al. 2002; Sandín 1997), 12-item questionnaire with items assessing general worries (i.e., “Do you think your worries are excessive?”) and physical symptoms (i.e., “When you worry, do you have muscle tension?”), with scores ranging from 0 to 12 (reliability:  $\alpha$

= 0.85; convergent validity:  $r = 0.45\text{--}0.66$ ; Newman et al. 2002).

### Social Anxiety

Social anxiety was measured with the Spanish version of the Social Anxiety Scale for Children-Revised, SASC-R; (La Greca and Stone 1993; Sandín 1997) an 18-item scale with a 3-point Likert scale response type (1 = “never,” 2 = “sometimes,” 3 = “often”). The measure comprises three subscales: fear to negative evaluation (eight items, i.e., “I worry about what others think of me”); avoidance/social distress to new situations with equals (six items, i.e., “I get nervous when I talk to new people”); and avoidance/social distress-generalized (four items, i.e., “I feel shy even with people that I know very well”). Scores range from 18 to 54 (reliability:  $\alpha = 0.88\text{--}0.90$ ; convergent validity:  $r = 0.52\text{--}0.63$ ; Storch et al. 2003).

### Separation Anxiety

Separation anxiety was measured with the Spanish version of the Separation Anxiety Symptom Inventory, SASI; (Sandín 1997; Silove et al. 1993), a 15-item inventory (i.e., “I do not want to stay home alone”) with a 4-point Likert scale response type (0 = “never,” 1 = “almost never,” 2 = “almost every time,” 3 = “every time”) and scores ranging from 0 to 45 (reliability:  $\alpha = 0.88$ ; convergent validity:  $r = 0.72\text{--}0.79$ ; Silove et al. 1993).

### Children’s Satisfaction

Children’s satisfaction was measured with a questionnaire comprising 21 items with a 0–10 continuous scale response type (from 0 = “nothing” to 10 = “a lot”). This questionnaire was developed for this study, and asked about the amount of perceived help by (a) the therapeutic content (i.e., “How much did it help to expose and practice the feared situations, doing “the challenges?””; “How much did it help to talk about and understand the negative thoughts?”); (b) their parents (i.e., “During the group, how much help do you consider your parents gave you to overcome your difficulties with your fears, worries and anxiety?”); (c) their group peers (i.e., “How much did it help to realize that other boys and girls had similar difficulties as the ones you have?”); (d) therapists (i.e., “Was easy to understand the information the therapists were explaining?”; “If something bad had happened during a session, did you feel that the therapist would have helped you?”); (e) general satisfaction with the group (i.e., “If you knew another kid had difficulties similar to yours, how much would you recommend him/her to come to this group?”; “In general, how much did the group help you?”); and (f) three dichotomous questions

(1 = “yes”; 0 = “no”) regarding their satisfaction with the length of the group (i.e., “Do you think eight sessions were enough?”).

### Questionnaires Administered to the Parents

All questionnaires were administered to parents only at pre-intervention, with the exception of the parental anxiety scale (pre- and post-intervention), and the satisfaction questionnaire (post-intervention only).

### Socio-Demographics

We used a structured interview created for the study. Detailed information regarding demographics and family and mental health background was asked. Socioeconomic status (SES) was determined by the yearly median income in Spain reported by the National Institute of Statistics in 2014 (i.e., €19,230) (Insituto Nacional de Estadistica 2014). A categorical variable was created (0 = “below the median salary,” 1 = “above the median salary”). A categorical variable was also created for mother and father education (0 = “≤high school”, 1 = “>high school”).

### Parental Anxiety

Parental anxiety was measured with the Spanish version of the State-Trait Anxiety Index, STAI; (Buena-Casal et al. 2011; Spielberg 1973), a 40-item index (20 for each subscale: state anxiety and trait anxiety) with a 4-point Likert scale response type (1 = “nothing,” 2 = “rarely,” 3 = “sometimes,” 4 = “a lot”) and scores ranging from 0 to 60 for each subscale (reliability:  $\alpha = 0.90$  trait anxiety;  $\alpha = 0.94$  state anxiety; convergent validity:  $r = 0.73\text{--}0.85$ ; Spielberger 1983).

### Parental Report on Child’s Behaviors

Parental report on child’s behaviors was measured with the Spanish version of the Child Behavior Checklist 4–16 for parents, CBCL; (Achenbach 1991; Albores-gallo et al. 2007). The CBCL comprises eight subscales (thought problems, attention problems, social problems, withdrawn and depression, somatic complaints, anxiety and depression, rule-breaking behavior and aggressive behavior; reliability:  $\alpha = 0.97$ ). See Ebesutani et al. (2010) for convergent validity of the CBCL subscales with the Diagnostic and Statistical Manual of Mental Disorders (DSM, American Psychiatric Association 2000) diagnosis. Moreover, a CBCL-Anxiety specific subscale was developed following recommendations by Kendall et al. (2007) to provide better concordance with other measures of anxiety than the CBCL internalizing and anxious/depressed subscales. Sixteen

items from the original scale (9, 11, 29, 30, 31, 32, 45, 46, 50, 56a, 56b, 56c, 56f, 71, 75, 112) were computed to create the new subscale.

### Parental Satisfaction

Overall parental satisfaction was measured with a questionnaire comprising 14 items with a 0–10 continuous scale response type (from 0 = “nothing” to 10 = “a lot”) was developed for this study asking about (a) their knowledge of the content of the sessions (i.e., “Have you felt involved and knew the “challenges” your child had to face?”); (b) satisfaction regarding the parent sessions (i.e., “Did it help hearing other parent’s commenting that their children had similar difficulties than your child?”); (c) satisfaction with the therapists (i.e., “Were the therapists available and approachable to ask questions and explanations?”; “Did you feel comfortable with the therapists?”); and (d) general satisfaction with the group and the perceived help for their children (i.e., “In general, how much do you think the group has helped your child?”; “If you knew that another child has difficulties similar to those of your child, how much would you recommend coming to this group?”). Moreover, three dichotomous questions (1 = “yes”; 0 = “no”) were asked regarding the number/length of the sessions (i.e., “Do you think eight sessions were enough for your child?”; “Do you think two parent sessions were enough?”).

### Data Analyses

Descriptive statistics and intervention acceptability and feasibility were established by means and frequency ratings. Clinical benefit of the intervention (i.e., measure of statistical significance of the change between pre- and post-intervention) were assessed through paired sample *t*-tests. Clinical significance of pre-post changes was assessed by effect sizes (Cohen’s *d*).

### Results

Out of the 33 children who started a group, two participants dropped out from the group, with 93.9% completing all the sessions. Post-intervention assessment was completed by 84.9% ( $n = 28$ ) of participants. The mean age at pre-intervention was 11 years ( $SD = 1.85$ ) ranging between 8 and 15 years old, and 42.4% ( $n = 14$ ) of the participants were girls. A total of 97% of participants were born in Spain (only one participant was born in a non-Spanish speaking country), and 100% of participants were native Spanish speakers. The mean number of people living in the household apart from the child was 2.9 ( $SD = 0.77$ ) ranging from 2 to 6 people. The majority of biological parents were

married and cohabiting (87.9%), 6.1% were cohabiting, and 6.1% were divorced and not cohabiting. Regarding parental education, 51.5% and 57.6% of mothers and fathers, respectively, finished high school. Among those with higher education, the majority undertook a vocational training program (36.4% and 24.2% of mothers and fathers, respectively) and a minority of the parents finished university (12.1% and 18.2% of mothers and fathers, respectively). A third of the families were living below the median income rate for Spain and only 21.3% made more than double income compared to the median for Spain.

Pre-intervention, 14 (42.4%) children were diagnosed with a primary diagnosis of social anxiety, 15 (45.5%) with GAD, and 4 (12.1%) with SAD. Relating clinical history, children were diagnosed with an anxiety disorder when they were an average of 9.2 years old (ranging from 3 to 14 years old). A third of the families had visited a mental health specialist before, and 9.4% of the children were currently attending another specialist center and were taking medication for anxiety problems. Finally, 65% of the parents reported previous family history of anxiety disorders: 21.9% of biological fathers (6.3% diagnosed); 40.7% of biological mothers (18.8% diagnosed); 12.5% of siblings (6.2% diagnosed); and 48.4% of other family members (16.1% diagnosed) had previous histories of anxiety disorders.

Table 1 shows baseline differences in demographics and clinical variables by baseline diagnosis (social anxiety, GAD and SAD). There were no significant differences between groups on demographic variables. However, there were some differences in clinical symptoms. The SAD group had significantly higher scores in separation anxiety symptoms (measured both by the SCAS and SASI) and panic/agoraphobia symptoms compared to the social anxiety group. Moreover, the GAD group had significantly higher scores in generalized anxiety symptoms than the social anxiety group. However, these results should be interpreted with caution due to the small sample size of each group.

### Effectiveness Outcomes

#### Clinical Variables—Children Report

Table 2 shows differences between pre- and post-intervention results on the self-reported measures ( $n = 28$ ). There was an overall significant decrease in anxiety symptoms ( $p < 0.05$ ) after 8 weeks of intervention for the total scales (i.e., general anxiety, generalized anxiety, social anxiety, and separation anxiety). However, when examining scores among subscales, there was no significant decrease on social phobia and fears from the SCAS scale, and the social anxiety distress and generalized distress subscales

**Table 1** Baseline differences in demographics and clinical variables by baseline diagnosis

	SP ( <i>n</i> = 14)	GAD ( <i>n</i> = 15)	SAD ( <i>n</i> = 4)	Test statistic	<i>p</i>	Effect size
Demographics	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	$\chi^2$	<i>p</i>	Cramer's <i>V</i>
Gender (male)	6 (42.9)	11 (73.3)	2 (50.0)	2.86	0.239	0.29
History of familial anxiety	3 (42.9)	4 (36.4)	1 (25.0)	0.35	0.839	0.13
Mother anxiety	3 (33.0)	3 (27.3)	0 (0.0)	1.70	0.428	0.27
Father anxiety	1 (11.1)	0 (0.0)	1 (25.0)	2.55	0.280	0.33
Previous contact with MH	5 (38.5)	4 (26.7)	1 (25.0)	0.53	0.766	0.13
SES (b.m.s.)	7 (53.9)	3 (20.0)	1 (33.3)	3.49	0.175	0.34
Mother education (<high school)	7 (50.0)	7 (46.7)	3 (75.0)	1.04	0.595	0.18
Father education (<high school)	9 (64.3)	8 (53.3)	2 (50.0)	0.46	0.794	0.12
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>F</i> <sup>a</sup>	<i>p</i>	$\eta^2$
Age	11.00 (2.2)	11.13 (1.6)	10.75 (1.7)	0.07	0.935	0.004
Clinical variables						
SCAS total	35.3 (14.5)	36.3 (14.0)	62.0 (22.9)	5.60	0.061	0.27
Separation anxiety	6.2 (3.2)*	6.7 (3.5)	11.5 (3.7)*	6.62	<b>0.037</b>	0.22
Social phobia	7.2 (3.2)	5.8 (3.1)	7.5 (1.3)	1.96	0.376	0.07
OCD	5.9 (3.3)	5.5 (3.4)	9.3 (3.4)	3.95	0.139	0.12
Panic/agoraphobia	4.5 (3.7)*	6.5 (3.4)	14.3 (8.3)*	8.09	<b>0.018</b>	0.36
Fear	4.4 (3.3)	3.0 (2.1)	7.5 (4.8)	3.83	0.147	0.21
Generalized anxiety	7.3 (2.8)	8.8 (2.7)	12.0 (4.3)	5.27	0.072	0.21
GADQ-IV	5.6 (2.3)*	9.1 (1.1)*	8.9 (2.8)	14.67	<b>0.001</b>	0.46
SASC-R total	34.6 (6.7)	32.1 (5.1)	32.8 (1.7)	1.29	0.524	0.04
SASC-R FNE	16.2 (3.0)	14.8 (3.0)	16.0 (2.5)	1.77	0.413	0.06
SASC-R SAD	12.1 (3.2)	12.0 (2.3)	10.5 (2.5)	1.69	0.430	0.04
SCAS-R SAD-G	6.3 (1.8)	5.3 (1.3)	6.3 (0.5)	3.20	0.202	0.10
SASI	14.8 (6.7)*	18.3 (7.0)	29.3 (6.7)*	9.72	<b>0.008</b>	0.32

*N* varies between variables due to missing data

*SP* social phobia, *GAD* generalized anxiety disorder, *SAD* separation anxiety disorder, *MH* mental health, *SES* socioeconomic status, *b.m.s.* below the median salary

\*Indicates which groups differ

<sup>a</sup>Independent-samples Kruskal–Wallis test; significance level is 0.05

Note: Bold values mean significance level  $p \leq 0.05$

from the SASC-R scale. Sensitivity analyses were performed to assess differences in the change between pre- and post-intervention between diagnoses. Models were run stratifying the sample by baseline diagnosis (social anxiety, GAD, and SAD). Table 3 shows that participants from the social anxiety group had a significant decrease in OCD symptoms ( $p = 0.048$ ) and fear of negative evaluation ( $p = 0.020$ ). Moreover, participants from the GAD group had a significant reduction in panic/agoraphobia symptoms ( $p = 0.036$ ), generalized anxiety symptoms (measured by the SCAS and GADQ-IV;  $p$ 's = 0.024, 0.025 respectively) and separation anxiety ( $p = 0.018$ ). There were no significant decreases in symptoms for the SAD group; however, these results should be interpreted with caution due to the small sample size of each group.

Additional alternative models were run excluding participants from the first group to take into account the protocol changes that were implemented for the remaining four groups. We found a very similar pattern of results, although the SCAS-Fear subscale ( $M_{pre} = 3.8$ ;  $SD_{pre} = 3.0$ ;  $M_{post} = 3.1$ ;  $SD_{post} = 3.3$ ;  $t = 2.08$ ;  $p = 0.050$ ;  $d = 0.44$ ) and the SAD-G subscale of the SASC-R ( $M_{pre} = 6.2$ ;  $SD_{pre} = 1.5$ ;  $M_{post} = 5.3$ ;  $SD_{post} = 1.9$ ;  $t = 2.46$ ;  $p = 0.022$ ;  $d = 0.50$ ) became significant (all results available upon request).

### Clinical Variables—Parent Report

Parents did agree in overall responses to the CBCL, giving higher scores to their children's internalizing symptoms. However, there was a discrepancy among informants for

**Table 2** Change between pre-intervention and post-intervention at 8th week for clinical outcome variables for participants completing post-intervention assessment ( $n = 28$ )<sup>a</sup>

Variable	Pre-intervention		Post-intervention		Range measure	<i>t</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
CASI	31.5	5.4	26.7	6.9	18–54	3.25	<b>0.003</b>	0.63
SCAS total	35.5	13.9	27.4	13.9	0–114	2.97	<b>0.007</b>	0.58
Separation anxiety	6.3	3.1	4.7	2.6	0–18	2.16	<b>0.040</b>	0.42
Social phobia	6.2	3.0	5.5	2.8	0–18	1.67	0.108	0.32
OCD	5.5	2.8	4.3	2.8	0–18	2.31	<b>0.029</b>	0.44
Panic/agoraphobia	5.9	4.0	3.8	3.8	0–27	3.25	<b>0.003</b>	0.64
Fear	3.8	3.0	3.1	3.1	0–15	1.93	0.064	0.37
Generalized anxiety	8.0	2.9	6.4	2.7	0–18	2.59	<b>0.015</b>	0.50
GADQ-IV	7.2	2.5	5.9	2.7	0–12	2.64	<b>0.014</b>	0.50
SASC-R total	32.8	5.8	29.7	8.4	0–54	2.18	<b>0.039</b>	0.42
SASC-R FNE	15.4	3.1	13.3	3.6	0–24	2.58	<b>0.016</b>	0.50
SASC-R SAD	11.6	2.7	11.0	3.7	0–18	1.27	0.216	0.24
SCAS-R SAD-G	5.9	1.5	5.4	1.8	0–12	1.60	0.122	0.30
SASI	16.6	7.1	11.6	5.9	0–45	3.47	<b>0.002</b>	0.67
FSSC-R	147.5	25.1	—	—	80–240	—	—	

*N* varies between variables due to missing data

CASI Childhood Anxiety Sensitivity Index for Children, SCAS Spence Children Anxiety Scale, OCD obsessive-compulsive disorder, GADQ-IV Generalized Anxiety Disorder Questionnaire-IV, SASC-R Social Anxiety Scale for Children-Revised, FNE fear to negative evaluation, SAD social anxiety distress, SAD-G social anxiety distress-generalized, SASI Separation Anxiety Symptom Inventory, FSSC-R Fear Survey Schedule for Children-Revised, *M* mean, *d* Cohen’s *d*, *t* *t*-test, *p* *p*-value

<sup>a</sup>Number of cases for each variable varies slightly due to missing data

Note: Bold values mean significance level  $p \leq 0.05$

**Table 3** Change between pre-intervention and post-intervention at 8th week for clinical outcome variables for participants completing post-intervention assessment by baseline diagnosis

Variable	Social phobia ( $n = 13$ )			Generalized anxiety ( $n = 13$ )			Separation anxiety ( $n = 3$ )		
	<i>M</i> pre (SD)	<i>M</i> post (SD)	<i>p</i> <sup>a</sup>	<i>M</i> pre (SD)	<i>M</i> post (SD)	<i>p</i> <sup>a</sup>	<i>M</i> pre (SD)	<i>M</i> post (SD)	<i>p</i> <sup>a</sup>
SCAS total	33.2 (14.8)	27.0 (17.7)	0.153	33.7 (12.3)	28.6 (10.3)	0.152	51.3 (10.0)	23.0 (18.2)	0.109
Separation anxiety	6.0 (3.4)	4.6 (2.7)	0.370	5.9 (2.7)	5.2 (2.6)	0.428	9.7 (0.6)	3.7 (3.1)	0.109
Social phobia	6.9 (3.3)	5.0 (4.0)	0.051	5.2 (2.9)	5.5 (2.5)	0.906	8.0 (1.0)	4.0 (4.6)	0.180
OCD	5.64 (3.3)	4.2 (3.1)	<b>0.048</b>	4.9 (2.4)	4.5 (2.5)	0.549	7.7 (1.5)	4.0 (3.6)	0.180
Panic/agoraphobia	4.0 (3.9)	3.3 (5.0)	0.474	6.3 (3.5)	4.2 (3.1)	<b>0.036</b>	10.3 (3.5)	3.7 (1.2)	0.109
Fear	4.4 (3.4)	4.1 (4.1)	0.959	2.9 (2.3)	2.2 (1.8)	0.075	5.7 (3.8)	3.0 (2.7)	0.109
Generalized anxiety	6.9 (2.8)	6.3 (3.1)	0.609	8.5 (2.9)	7.0 (2.2)	<b>0.024</b>	10.0 (2.0)	4.7 (3.8)	0.109
GADQ-IV	5.4 (2.2)	5.5 (2.8)	0.790	9.0 (1.2)	6.9 (2.2)	<b>0.025</b>	7.9 (2.3)	3.6 (3.3)	0.109
SASC-R total	34.2 (6.8)	30.0 (10.4)	0.093	31.3 (5.1)	31.4 (5.8)	0.759	32.7 (2.1)	22.7 (4.0)	0.102
SASC-R FNE	16.2 (3.1)	13.2 (4.6)	<b>0.020</b>	14.0 (3.1)	14.2 (2.4)	0.812	17.0 (1.7)	11.0 (2.0)	0.109
SASC-R SAD	11.9 (3.2)	11.1 (4.3)	0.421	12.0 (2.1)	11.9 (2.7)	0.964	9.3 (1.2)	7.0 (1.7)	0.109
SCAS-R SAD-G	6.2 (1.8)	5.8 (2.4)	0.438	5.6 (1.3)	5.2 (1.2)	0.471	6.3 (0.6)	4.7 (0.6)	0.102
SASI	13.8 (6.0)	10.8 (5.7)	0.181	17.0 (6.9)	11.8 (5.2)	<b>0.018</b>	26.0 (2.0)	14.0 (10.4)	0.285

*n* varies between variables due to missing data

CASI Childhood Anxiety Sensitivity Index for Children, SCAS Spence Children Anxiety Scale, OCD obsessive-compulsive disorder, GADQ-IV Generalized Anxiety Disorder Questionnaire-IV, SASC-R Social Anxiety Scale for Children-Revised, FNE fear to negative evaluation, SAD social anxiety distress, SAD-G social anxiety distress-generalized, SASI Separation Anxiety Symptom Inventory, FSSC-R Fear Survey Schedule for Children-Revised

<sup>a</sup>Related-samples Wilcoxon signed rank test; significance level is 0.05

Note: Bold values mean significance level  $p \leq 0.05$



somatic complaints, anxiety/depression, attention problems, and aggressive behavior subscales (Table 4). Of note, results show a pattern where mothers tended to rate child symptoms higher than fathers did. Moreover, parents did not differ in their own anxiety levels (as measured by the STAI) and overall levels did not change after intervention.

## Implementation Outcomes

### Acceptability

Acceptability assessed participants' feedback regarding the sessions. Regarding the frequency of the sessions, 76.7% of

the children agreed that once a week was enough compared with the 23.3% who thought it was not enough and would have preferred more sessions a week. Moreover, a great majority of the children (86.7%) thought that 1 h per session was sufficient, while 10% would have preferred longer sessions, and just one participant (3.3%) reported that the 1 h-session was too long. Finally, regarding the total number of sessions, 63.3% of the children reported that the eight-session intervention was sufficient, while 36.7% would have preferred more sessions. Moreover, children provided positive ratings of the content ( $M = 7.3$ ;  $SD = 1.8$ ) and their perceived usefulness of the group intervention ( $M = 8.3$ ;  $SD = 1.7$ ); and perceived help from therapists ( $M =$

**Table 4** Differences between measures reported by parents ( $n = 26$ )<sup>b</sup>

	Mother		Father		Range	<i>t</i>	<i>p</i>	<i>d</i>																																																																			
	<i>M</i>	SD	<i>M</i>	SD																																																																							
Child measures																																																																											
CBCL total <sup>a</sup>	36.7	19.0	29.3	13.8	0–182	−2.06	0.056 <sup>d</sup>	0.50																																																																			
Thought problems <sup>a</sup>	1.5	1.2	1.3	1.2	0–14	−0.97	0.340	0.19																																																																			
Attention problems <sup>a</sup>	6.8	4.2	5.2	3.0	0–22	2.48	<b>0.020</b>	0.49																																																																			
Social problems <sup>a</sup>	3.9	3.4	3.7	3.0	0–16	−0.47	0.642	0.09																																																																			
Internalizing <sup>a</sup>	16.2	8.6	12.8	6.1	0–64	−2.4	0.058 <sup>d</sup>	0.48																																																																			
Withdrawn/depressed <sup>a</sup>	4.2	2.8	3.6	2.4	0–18	−1.29	0.213	0.28																																																																			
Somatic complaints <sup>a</sup>	2.8	2.8	1.9	2.0	0–18	−2.07	<b>0.050</b>	0.42																																																																			
Anxious/depressed <sup>a</sup>	10.5	6.1	8.1	5.1	0–28	−2.83	<b>0.010</b>	0.58																																																																			
Anxiety scale <sup>a,c</sup>	11.9	5.9	9.5	4.2	0–32	−1.64	0.119	0.39																																																																			
Externalizing <sup>a</sup>	11.1	7.8	8.0	6.5	0–66	−3.02	<b>0.006</b>	0.62																																																																			
Rule-breaking behavior <sup>a</sup>	1.7	1.8	1.8	2.0	0–26	0.14	0.892	0.03																																																																			
Aggressive behavior <sup>a</sup>	9.7	6.6	6.4	4.8	0–40	−4.08	<b>0.000</b>	0.82																																																																			
Parent measures																																																																											
STAI-state (pre-int)	20.1	10.8	18.3	9.1	0–20	−0.90	0.380	0.20																																																																			
STAI-trait (pre-int)	23.0	8.2	20.7	7.9	0–20	−1.09	0.289	0.23																																																																			
STAI-state (post-int)	20.0	6.0	16.8	8.0	0–20	−1.77	0.102	0.49																																																																			
STAI-trait (post-int)	23.0	7.6	20.9	7.8	0–20	−0.93	0.369	0.26																																																																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">Pre-intervention</th> <th colspan="2">Post-intervention</th> <th rowspan="2">Range</th> <th rowspan="2"><i>t</i></th> <th rowspan="2"><i>p</i></th> <th rowspan="2"><i>d</i></th> </tr> <tr> <th><i>M</i></th> <th>SD</th> <th><i>M</i></th> <th>SD</th> </tr> </thead> <tbody> <tr> <td colspan="9">Mother</td> </tr> <tr> <td>STAI-state</td> <td>20.5</td> <td>11.2</td> <td>20.2</td> <td>10.0</td> <td>0–20</td> <td>0.22</td> <td>0.826</td> <td>0.05</td> </tr> <tr> <td>STAI-trait</td> <td>20.8</td> <td>7.2</td> <td>22.3</td> <td>8.5</td> <td>0–20</td> <td>0.65</td> <td>0.527</td> <td>0.16</td> </tr> <tr> <td colspan="9">Father</td> </tr> <tr> <td>STAI-state</td> <td>18.4</td> <td>10.5</td> <td>17.5</td> <td>8.5</td> <td>0–20</td> <td>0.59</td> <td>0.566</td> <td>0.15</td> </tr> <tr> <td>STAI-trait</td> <td>21.3</td> <td>8.6</td> <td>20.7</td> <td>8.2</td> <td>0–20</td> <td>0.55</td> <td>0.594</td> <td>0.14</td> </tr> </tbody> </table>										Pre-intervention		Post-intervention		Range	<i>t</i>	<i>p</i>	<i>d</i>	<i>M</i>	SD	<i>M</i>	SD	Mother									STAI-state	20.5	11.2	20.2	10.0	0–20	0.22	0.826	0.05	STAI-trait	20.8	7.2	22.3	8.5	0–20	0.65	0.527	0.16	Father									STAI-state	18.4	10.5	17.5	8.5	0–20	0.59	0.566	0.15	STAI-trait	21.3	8.6	20.7	8.2	0–20	0.55	0.594	0.14
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*M* mean, *d* Cohen's *d*, *t* *t*-test, *p* *p*-value

<sup>a</sup>Question categories were as follows: 0–2 where 0 = “not true,” 1 = “somewhat true,” and 2 = “often true”

<sup>b</sup>Number of cases for each variable varies slightly due to missing data

<sup>c</sup>Anxiety scale proposed by Kendall et al. (2007) by using 16 items from the CBCL (9, 11, 29, 30, 31, 32, 45, 46, 50, 56a, 56b, 56c, 56f, 71, 75, 112)

<sup>d</sup>Trend observed for differences between maternal and paternal report

Note: Bold values mean significance level  $p \leq 0.05$

8.7;  $SD = 1.3$ ), peers ( $M = 7.2$ ;  $SD = 2.7$ ) and parents ( $M = 7.2$ ;  $SD = 2.6$ ). Regarding the therapy, children reported that the most useful component of the intervention was “the challenges” (exposure component) ( $M = 8.2$ ;  $SD = 2.3$ ). Therapists were rated as being close, available and able to explain concepts clearly. Importantly, nine of ten participating children would recommend the group to other child with similar difficulties, and 80% reported that the group was helpful, interesting, and enjoyable.

Parents also reported their levels of satisfaction with the therapy. Results were consistent and stable among dyads, without significant differences between mother and father report for any question. Overall satisfaction ( $M = 8.0$ ;  $SD = 1.3$ ) was high. Satisfaction with specific components such as the therapist availability and clarity ( $M = 7.9$ ;  $SD = 1.8$ ), interest in the content ( $M = 7.7$ ;  $SD = 1.6$ ), and helpfulness for their children ( $M = 6.8$ ;  $SD = 1.6$ ) was good and both mothers and fathers would recommend the group to other families. Finally, there was also an agreement between caregivers that other families’ advice was the least helpful component of parent sessions ( $M = 6.6$ ;  $SD = 1.4$ ).

### Feasibility

The intervention was considered feasible if most of the participants completed six out of eight sessions. On average, 7.1 ( $SD = 1.2$ ) sessions were completed, with 88.8% of attendance for children. Only two participants (6.1%) completely dropped out of the intervention. In general, at least one caregiver attended one of the parent sessions. Participants arrived on time to sessions, and if there was any competing activity (i.e., school trip, medical appointment), parents let therapists know in advance.

Moreover, the intervention was considered feasible after assessing clinical service feedback. All sessions were conducted as planned and covered the pre-established content. Nevertheless, important considerations need to be pointed out relating to barriers encountered in the implementation of the first group. After considering the clinical feedback for the first group, the following adaptations were made to the original program for the rest of the groups:

Choosing a fun activity for the end of the session, at the beginning of each session, was overly time-consuming and considered unfeasible. Instead we decided to create a list of eight fun activities (on the very first day), chosen by each member of the group. This served as a cohesive warm-up and gave structure for the rest of the sessions.

Using stickers as a reward was considered not useful with our population due to their older age, but also due to differences in the Spanish educational system compared to the American system, where stickers are frequently used. Stickers were not viewed as a salient reward, and we

decided to instead use social reward from parents and therapists (i.e., positive reinforcement through descriptive and specific praise techniques regarding intentions to make a change, effort, and achievements).

Only the full client workbook (16 sessions) is available in Spanish. Therefore, therapists had to choose only those activities related to the objectives proposed in the 8-session program. Therapists made a booklet with the selected sessions.

Participants of the first group were given the booklet in the first session. However, some of the participants forgot to bring the resource in following sessions. For the remaining groups, we decided to only provide single pages needed for each module in each session.

In the first group, some written activities were assigned on top of the exposure tasks (i.e., write a negative thought you had this week, how did you feel after it, and how did you behave after it). Participants from the first group reported feeling more anxious due to the responsibility of writing about the content, as it seemed “like homework.” Instead, for the remaining groups, therapists did not assign written activities at home and asked to be aware about the content, as they would be asked in the following session. Home tasks were always exposure tasks.

Certain terms such as “negative thoughts” were not well understood or did not engage participants as desired. We implemented the terminology that the children gave us, such as “bomb thoughts.” They wrote their “bomb thoughts” in a piece of paper on the floor and we represented the “bomb” with a game. We used a ball to represent the thoughts, and we imagined that the ball was a “bomb about to explode” to represent the negative thoughts. Therefore, the children threw the ball to the floor to make it “explode” when hitting the floor at the same time that they said the negative thoughts aloud.

Finally, all the activities were adapted to the group format in order to maximize participation. For instance, in order to talk about specific somatic reactions to anxiety (session 2), a human-size body shape was made of paper and hung onto the wall. Each participant had cards they could draw or write the body parts where they experienced somatic symptoms of anxiety (i.e., head, heart, sweaty hands, etc.). Then they were invited to stick the cards on the corresponding body part of the body shape on the wall. This activity showed different forms anxiety could be expressed, but also served to demonstrate commonalities with other group members.

Of note, one of the groups was undertaken in summer (school holidays). This was the only group with two participants dropping out, and had more inconsistent attendance compared to the rest of groups. This group participants’ characteristics differed from the other groups (i.e., lower SES cohort and less structure without school schedule).

Finally, all participants (100%) reported that they felt safe during the intervention (i.e., scores higher than 8 out of 10 for “Did you feel safe to share your difficulties in the group?” and “If something bad had happened during a session, did you feel that the therapist would have helped you?”). Despite the fact that the exposure sessions were difficult (i.e., share a story in front of an unfamiliar audience, surprise exam), participants reported trusting therapists and feeling safe.

## Discussion

This study was designed as an effectiveness-implementation hybrid study (Curran et al. 2012). The objective of this study was to test effectiveness and gather information on the delivery of a group adaptation of the individual Brief Coping Cat (Beidas et al. 2013; Crawley et al. 2013). The target population was children and young adolescents with anxiety disorders in the Spanish public mental health system after intervention participation. Our results showed both intervention effectiveness and implementation effectiveness (Proctor et al. 2011). Our findings indicated that the intervention was (i) potentially clinically beneficial as there was an overall decrease of anxiety levels in all the scales measured; (ii) acceptable, with a 89% attendance at sessions and positive ratings provided by both child participants and their families as to their perceived usefulness and helpfulness of the intervention; (iii) feasible, although some adaptations for the Spanish population and service constraints needed to be implemented; and (iv) safe, since all participants reported feeling safe and trusting therapists. The present findings provide support for group BCBT for anxiety reduction within clinical samples in a community setting in the Spanish public mental health system.

Prevalence rates of our sample, mainly participants in their early adolescence, were comparable to those reported in literature, with GAD and SP being the most prevalent disorder among adolescents (Burstein et al. 2011) and SAD being the least prevalent, as it is usually more prevalent among younger children (Kessler et al. 2012). As expected, there were differences in symptoms by baseline diagnosis (SP, GAD and SAD), highlighting that the clinical diagnosis made by therapists adequately categorized each child under their most prevalent disorder. One of the criticisms that pure research studies receive from practicing clinicians is the need of “real clinical practice” diagnostic strategies (i.e., not using a structured interview to diagnose participants, as it is time- and resource-consuming). Our results provide an indicator that well-trained clinicians can successfully classify participants in a diagnostic category. However, as referred to in the literature, a high comorbidity between different anxiety disorders is expected (Merikangas

et al. 2010) and our results also highlight symptom comorbidity.

Regarding other implementation outcomes, self-report measures of the satisfaction with the group from both participants and their caregivers were comparable, and recruitment was better and the attrition was lower than the original 16-session CBT (Kendall and Sugarman 1997; Kendall et al. 1997). Therapists reported that the groups could be implemented, although some changes were needed to adapt to the Spanish public mental health system (i.e., adapting all the activities to a group format; less time in choosing a fun activity; not completely relying on the manual; changes in some terminology; and avoiding undertaking groups during school breaks).

Regarding effectiveness outcomes, there was a significant reduction in all anxiety scales with effect sizes ranging from  $d=0.42$  for social anxiety to  $d=0.67$  for separation anxiety. Consistent with preliminary results on individual therapy, our findings showed that group BCBT was effective to reduce anxiety without the progressive muscle relaxation component usually included in CBT for child and adolescent interventions for anxiety (Jennifer L. Hudson 2005; Rapee 2000). Providing condensed psychoeducation and focusing on exposure may be the most relevant mechanisms of change (Crawley et al. 2013). Furthermore, our results from the overall group are consistent with preliminary results from a single case study within our sample, which also reported positive results to decrease specific phobia (Santesteban-Echarri et al. 2016). It seems that BCBT may also reduce comorbid anxiety disorders (Ollendick et al. 2010) and phobias (Öst et al. 2001).

When effectiveness outcomes were stratified by diagnosis, those in the SP group seemed to have a reduction in OCD and fear to negative evaluation symptoms specifically, while those in the GAD group had a reduction in generalized anxiety, panic/agoraphobia, and separation anxiety symptoms in particular. Exposure, even without cognitive therapy seems to be effective to decrease SP symptoms (Feske and Chambless 1995). Group therapy is in itself an exposure to social situations, which can provide contradictory evidence to negative thoughts and distortions related to social expectations (Kaczurkin and Foa 2015). This is probably why those in the SP group benefited from the group, reducing their fear of negative evaluation. Moreover, seeing that there were more children with the same difficulties and the effort therapists made to normalize anxiety and “failure” may have contributed to the reduction of the perfectionism traits of participants in the SP group. Our results for the GAD group are promising. First, GAD is the most prevalent anxiety disorder during adolescence (Merikangas et al. 2010); second, due to its chronic course, GAD is one of the anxiety disorders causing greater suffering;

finally GAD is one of the most treatment-resistant disorders (Brown et al. 1994).

Sensitivity analyses excluding participants from the first group were performed to take into account the protocol changes after experiencing some implementation challenges. Although the pattern of results was very similar, the reduction of symptoms for the SCAS-Fear subscale and the SAD-G subscale of the SASC-R became significant. This finding could be spurious, or it may indicate that the protocol changes worked better for the Spanish population receiving help in the public mental health system than the original protocol (designed for the American context). One of the major changes implemented was to avoid written homework tasks. Although the Coping Cat uses the “Show That I Can” term to avoid the term “homework” when referring to take-home tasks, this approach may still elicit anxiety for children related to perfectionism, or negative evaluation concerns (Hudson and Kendall 2002). One of the most complicated aspects of therapy, especially with children, is compliance. The original therapy structure is clear about compliance. Therapists should review the quality of and whether written homework was done. When non-compliance occurs, rewards are not given. Because homework compliance may be an indicator of better outcome (Crawford et al. 2017), in the adaptation we made, we still covered the “Show That I Can” tasks, but we did not ask participants to write them down. Instead, we completed the task in the session aloud with each of the participants, serving as a model for the rest of the group. The rationale for this change was the reliance of the Spanish education system on substantial homework assignments from Grade 1 onwards compared with other countries (i.e., USA). Since formal education starts at three years of age, by the age of seven, homework assignments from each subject are given daily and may have a negative connotation among students. It could be the case that separating the “at-school tasks” from the “at-group tasks” was a good strategy to avoid an anxiety response, which usually leads to behaviors of avoidance, forgetting homework, or desire to please the therapist. Both fears and social anxiety-generalized symptoms were significantly reduced after the protocol changes. This finding may mean that children with anxiety perceived the group, contrary to the school setting, as a safe environment, which did not add extra pressure to perform (Mychailyszyn et al. 2010; Nail et al. 2015).

However, similar to results derived from the individual Brief Coping Cat (Crawley et al. 2013), there was not a significant improvement in SP within the group setting. This result is consistent with previous studies, and it suggests that CBT gains for children and adolescents with SP are not as pronounced as for other anxiety disorders (Crawley et al. 2008; Ginsburg et al. 2011). It may be the case that this cohort needs further training in other skills not included in

our program or more time to properly respond to treatment. For instance, Olivares et al. (2002) conducted an RCT consisting of a group therapy with the Social Effectiveness Therapy for Adolescents-Spanish version (Olivares and García-López 2001), and reported a significant reduction of SP compared with the control group. Although main components of the intervention were similar to the Brief Coping Cat (i.e., psychoeducation, exposure, and programmed practice), they included a social skills training module and the intervention was a high-intensity program (29 sessions over 17 weeks, twice a week).

In the present study, eight sessions were sufficient to promote changes and significantly reduce anxiety symptoms in children from a moderate to low SES, and the intervention appeared to provide useful tools for participants to use in stressful situations. Therefore, group BCBT for children and adolescents with anxiety could be an effective and cost-efficient intervention in day-to-day clinical care in the Spanish public mental health system. Although high rates of child and adolescent anxiety disorders are reported in Spain and CBT is the recommended treatment, most children and adolescents do not receive treatment due to the congested system (Cátedra de Psiquiatría Infantil Fundación Alicia Koplowitz 2014; Tizón García 2002). Therefore, changing the individual BCBT format to a group format may be a valuable resource for both usual clinical care and school settings to avoid the long wait-lists of the public mental health system (Mychailyszyn et al. 2012).

## Limitations

Reduction of anxiety symptoms in all the overall measures provides promising results for progression to a large-scale RCT testing implementation of a group BCBT for anxiety in the Spanish public mental health system. Nevertheless, some limitations apply to the present study. Some of the disadvantages of group settings are the need of a number of referrals before the group can start. Diagnoses of the participants were based on referral notes, and diagnoses were not confirmed through a structured diagnostic interview. The lack of confirmation of diagnoses could lead to variability of child characteristics due to referring providers. Moreover, due to the community mental health context of this study, all participants had previously seen an individual therapist at least once. We had no information of the duration of previous treatment and the progress in the reduction of symptoms. Future research should adjust for the length of treatment or the number of previous psychological sessions. Further, the sample size was small and we did not have a comparison control condition. Therefore, it is possible that changes evidenced could be associated with

repeated assessment or child maturation, and true clinical benefits remain unknown until an RCT can be undertaken. We could not ascertain maintenance of treatment effects over a period of time because we had no follow-up measure beside the post-treatment assessment. Future studies should undertake follow-up assessments at 3 and 6 months. Although we performed assessments by independent clinicians, due to the single-group assessment, blinding was not possible. Moreover, careful consideration should be given to generalizing these results because our sample is not necessarily representative of other child and adolescent outpatient units from Madrid (i.e., Villaverde and Carabanchel belong to a lower-income area of the state). Future groups should take place during school year, avoiding summer months in order to maximize engagement. Finally, more parent report questionnaires regarding children's symptoms should be assessed both at pre- and post-treatment as parent's and children's reports do not necessarily correlate. Specifically, mother report could be more accurate than the child report. Furthermore, parents may feel more integrated and supported by the addition of more parental sessions with a more structured framework within the intervention.

To sum up, the group CBCT pilot study using the Brief Coping Cat demonstrated the intervention to be engaging, feasible, and safe for children and young adolescents with anxiety disorders. Both parents and children reported positive feedback regarding the intervention and facilitating therapists. High retention rates suggest the overall acceptability of the intervention. The pre-post decrease of anxiety symptoms across all of the scales provides promising data for conducting a controlled trial and implementing group BCBT within standard clinical practice in Spain. Due to the high prevalence of anxiety disorders among child and adolescent populations and low clinical resources available in Spain, a group BCBT intervention could be a cost-effective means reaching more children with difficulties by reducing waiting lists and time lapsed between visits. Nevertheless, future research should focus on determining mechanisms of action for the reduction of SP symptoms and include therapeutic tools (i.e., social skills training) specific for social phobia as a component of the BCBT. Finally, our results underscore the need for a larger-scale hybrid effectiveness-implementation trial of the BCBT in a group setting throughout more community mental health centers in different Spanish states, so that patients can access and benefit from an evidence-based treatment in community settings. Such effort may translate into translational improvement in clinical treatment uptake, including strategies being implemented more effectively, and an important source of information for public mental health decision makers.

**Acknowledgements** The authors acknowledge all the clinicians involved in providing the intervention as co-therapists: David Rentero-Martin, Patricia Nava-García, Sergio Benavente-López, Esther Martín-Ávila, Odei Iriondo-Villaverde, Manuel Nieves-Carnicer, and the rest of child and adolescent clinicians from the Mental Health Centers Villaverde and Carabanchel for assisting with participant recruitment. Finally, the authors would like to thank all the participating children and their families for their involvement with the intervention.

**Funding** O.S.-E., the first author, was supported by a Research Fellowship from the Alicia Koplowitz Foundation (Spain) and an Endeavour Research Fellowship (Australia). S.M.R. was supported via the Mary Elizabeth Watson Early Career Fellowship in Allied Health, provided by Melbourne Health.

**Author Contributions** O.S.-E.: designed and executed the study, analyzed the data, and wrote the paper. L.H.-A.: collaborated with the design and execution of the study as a co-therapist of the groups. S.M.R.: assisted with the analyses and editing of the study. M.J.G.-L., M. S.-V., and J.C.E.-J.: collaborated with the design and writing of the study. M.A.J.-A.: collaborated in the editing of the final manuscript.

## Compliance with Ethical Standards

**Conflict of Interest** The authors declare that they have no conflict of interest.

## References

- Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4-18 and 1991 profile*. Department of Psychiatry, University of Vermont, Burlington VT.
- Albores-gallo, L., Lara-Muñoz, C., Esperón-Vargas, C., Cárdenas, J. A., Pérez, A. M., & Villanueva, G. (2007). Validity and reability of the CBCL/6-18. Includes DSH scales. *Actas Españolas Délelött Psiquiatría*, 35, 393–399.
- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders (4th ed. - Text Revision) (DSM-IV-TR)*. American Psychiatric Association, Washington, DC.
- Barlow, D. H. (2002). *Anxiety and its disorders: the nature and treatment of anxiety and panic (2nd edition)*. New York: Guilford Press.
- Beesdo, K., Bittner, A., Pine, D. S., Stein, M. B., Höfler, M., Lieb, R., & Wittchen, H.-U. (2007). Incidence of social anxiety disorder and the consistent risk for secondary depression in the first three decades of life. *Archives of General Psychiatry*, 64(8), 903–912.
- Beidas, R. D. S., Mychailyszyn, M. P., Podell, J. L., & Kendall, P. C. (2013). Brief cognitive-behavioral therapy for anxious youth: the inner workings. *Cognitive and Behavioral Practice*, 20(2), 997–1003.
- Beidas, R. S., & Kendall, P. C. (2010). Training therapists in evidence-based practice: a critical review of studies from a systems-contextual perspective. *Clinical Psychology: Science and Practice*, 17(1), 1–30.
- Beidas, R. S., Mychailyszyn, M. P., Edmunds, J. M., Khanna, M., Downey, M. M., & Kendall, P. C. (2012). Training school mental health providers to deliver cognitive-behavioral therapy. *School Mental Health*, 4(4), 197–206.
- Bittner, A., Egger, H. L., Erkanli, A., Jane Costello, E., Foley, D. L., & Angold, A. (2007). What do childhood anxiety disorders predict?. *Journal of Child Psychology and Psychiatry*, 48(12), 1174–1183.
- Boden, J. M., Fergusson, D. M., & Horwood, L. J. (2007). Anxiety disorders and suicidal behaviours in adolescence and young

- adulthood: findings from a longitudinal study. *Psychological Medicine*, 37, 431–440.
- Brown, T. A., Barlow, D. H., & Liebowitz, M. R. (1994). The empirical basis of generalized anxiety disorder. *American Journal of Psychiatry*, 151, 1272–1280.
- Buela-Casal, G., Guillén-Riquelme, A., & Seisdedos-Cubero, N. (2011). *Cuestionario de Ansiedad Estado-Rasgo: Adaptación española*. 8a ed. Madrid: TEA.
- Burstein, M., Jian-Ping, H., Kattan, G., Albano, A. M., Avenevoli, S., & Merikangas, K. (2011). Social phobia and subtypes in the National Comorbidity Survey-adolescent supplement: prevalence, correlates, and comorbidity. *Journal of the American Academy Children Adolescent Psychiatry*, 50(9), 870–880.
- Cartwright-Hatton, S., Roberts, C., Chitsabesan, P., Fothergill, C., & Harrington, R. (2004). Systematic review of the efficacy of cognitive behaviour therapies for childhood and adolescent anxiety disorders. *The British Journal of Clinical Psychology*, 43, 421–436.
- Cátedra de Psiquiatría Infantil Fundación Alicia Koplowitz. (2014). Libro blanco de la psiquiatría del niño y el adolescente. In C. Arango (Ed.). Madrid: Fundación Alicia Koplowitz.
- Costello, E. J., He, J., Sampson, N. A., Kessler, R. C., & Merikangas, K. R. (2014). Services for adolescents with psychiatric disorders: 12-month data from the National Comorbidity Survey-Adolescent. *Psychiatric Services*, 65(3), 359–366.
- Crawford, E. A., Frank, H. E., Palitz, S. A., Davis, J. P., & Kendall, P. C. (2018). Process factors associated with improved outcomes in CBT for anxious youth: therapeutic content, alliance, and therapist actions. *Cognitive Therapy and Research*, 42(2), 172–183.
- Crawley, S. A., Beidas, R. S., Benjamin, C. L., Martin, E., & Kendall, P. C. (2008). Treating socially phobic youth with CBT: differential outcomes and treatment considerations. *Behavioural and Cognitive Psychotherapy*, 36(4), 379–389.
- Crawley, S. A., Kendall, P. C., Courtney, L. B., Chiaying, W., Beidas, R. S., Podell, J. L., & Mauro, C. (2013). Brief cognitive-behavioral therapy for anxious youth: feasibility and initial outcomes. *Cognitive and Behavioral Practice*, 20(2), 997–1003.
- Curran, G. M., Bauer, M., Mittman, B., Pyne, J. M., & Stetler, C. (2012). Effectiveness-implementation hybrid designs: combining elements of clinical effectiveness and implementation research to enhance public health impact. *Medical Care*. 10.1097/MLR.0b013e3182408812.
- Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Science*, 4(50), 40–55.
- de Souza, M. A. M., Salum, G. A., Jarros, R. B., Isolani, L., Davis, R., Knijnik, D., & Heldt, E. (2013). Cognitive-behavioral group therapy for youths with anxiety disorders in the community: effectiveness in low and middle income countries. *Behavioural and Cognitive Psychotherapy*, 41(3), 255–264.
- Drake, K. L., & Ginsburg, G. S. (2012). Family factors in the development, treatment, and prevention of childhood anxiety disorders. *Clinical Child and Family Psychology Review*, 15(2), 144–162.
- Ebesutani, C., Bernstein, A., Nakamura, B. J., Chorpita, B. F., Higa-Memillan, C. K., & Weisz, J. R. (2010). Concurrent validity of the child behavior checklist DSM-oriented scales: correspondence with DSM diagnoses and comparison to syndrome scales. *Journal of Psychopathology and Behavioral Assessment*, 10.1007/s10862-009-9174-9.
- Ezpeleta, L., Guillamon, N., Granero, R., de la Osa, N., Domenech, J. M., & Moya, I. (2007). Prevalence of mental disorders in children and adolescents from a Spanish slum. *Social Science and Medicine*, 64(4), 842–849.
- Fernández Aláez, M., Martínez-Arias, R., & Rodríguez-Sutil, C. (2000). Prevalencia de trastornos psicológicos en niños y adolescentes, su relación con la edad y el género. *Psicothema*, 12, 525–532.
- Feske, U., & Chambless, D. L. (1995). Cognitive behavioral versus exposure only treatment for social phobia: a meta-analysis. *Behavior Therapy*, 26, 695–720.
- Flannery-Schroeder, E. C., & Kendall, P. C. (2000). Group and individual cognitive-behavioral treatments for youth with anxiety disorders: A randomized clinical trial. *Cognitive Therapy and Research*, 24(3), 251–278.
- Flannery-Schroeder, E., Choudhury, M. S., & Kendall, P. C. (2005). Group and individual cognitive-behavioral treatments for youth with anxiety disorders: 1-year follow-up. *Cognitive Therapy and Research*, 29(2), 253–259.
- Ginsburg, G. S., Sakolsky, D., Piacentini, J., Walkup, J. T., Coffey, K. A., Keeton, C. P., & McCracken, J. T. (2011). Remission after acute treatment in children and adolescents with anxiety disorders: findings from the CAMS. *Journal of Consulting and Clinical Psychology*, 79(6), 806–813.
- Godoy, A., Gavino, A., Carrillo, F., Cobos, M. P., & Quintero, C. (2011). Composición factorial de la versión española de la Spence Children Anxiety Scale (SCAS). *Psicothema*, 23(2), 289–294.
- Gregory, A. M., Caspi, A., Moffitt, T. E., Koenen, K., Eley, T. C., & Poulton, R. (2007). Juvenile mental health histories of adults with anxiety disorders. *The American Journal of Psychiatry*, 164, 301–308.
- Hudson, J. L. (2005). Mechanisms of change in cognitive behavioral therapy for anxious youth. *Clinical Psychology: Science and Practice*, 12(2), 161–165.
- Hudson, J. L., & Kendall, P. C. (2002). Showing you can do it: homework in therapy for children and adolescents with anxiety disorders. *Psychotherapy in Practice*. 10.1002/jclp.10030.
- In-Albon, T., & Schneider, S. (2006). Psychotherapy of childhood anxiety disorders: a meta-analysis. *Psychotherapy and Psychosomatics*, 76(1), 15–24.
- Instituto Nacional de Estadística. (2014). Decil de salarios del empleo principal. Encuesta de Población activa (EPA). Año 2014., 1–22. <http://www.ine.es/prensa/np939.pdf>. Accessed on January 15, 2018.
- Kaczurkin, A. N., & Foa, E. B. (2015). Cognitive-behavioral therapy for anxiety disorders: an update on the empirical evidence. *Servier Research Group Dialogues Clinical Neuroscience*. 10.4088/JCP.12r07757.
- Kendall, P. C., Flannery-Schroeder, E., Panichelli-Mindel, S. M., Southam-Gerow, M., Henin, A., & Warman, M. (1997). Therapy for youths with anxiety disorders: a second randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 65(3), 366–380.
- Kendall, P. C., Hudson, J. L., Gosch, E., Flannery-schroeder, E., & Suveg, C. (2008). Cognitive-behavioral therapy for anxiety disordered youth: A randomized clinical trial evaluating child and family modalities. *Journal of Consulting and Clinical Psychology*, 76(2), 282–297.
- Kendall, P. C., & Kosovsky, R. P., (2010a). *El gato valiente*. Buenos Aires: Akadia.
- Kendall, P. C., & Kosovsky, R. P., (2010b). *Tratamiento cognitivo-conductual para trastornos de ansiedad en niños. Manual para el terapeuta*. Buenos Aires: Akadia.
- Kendall, P. C., Puliafico, A. C., Barmish, A. J., Choudhury, M. S., Henin, A., & Treadwell, K. S. (2007). Assessing anxiety with the Child Behavior Checklist and the Teacher Report Form. *Journal of Anxiety Disorders*. 10.1016/j.janxdis.2006.10.012.

- Kendall, P. C., & Sugarman, A. (1997). Attrition in the treatment of childhood anxiety disorders. *Journal of Consulting and Clinical Psychology, 65*(5), 883–888.
- Kendall, P. C., & Zupan, B. A. (1981). Individual versus group application of cognitive-behavioral self-control procedures with children. *Behavior Therapy, 12*(3), 344–359.
- Kendall, P., & Hedtke, K. (2006). *Cognitive-behavioral therapy for anxious youth: therapist manual*. Ardmore: Workbook Publishing 3.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*, 593–602.
- Kessler, R. C., Petukhova, M., Sampson, N. A., Zaslavsky, A. M., & Wittchen, H. U. (2012). Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. *International Journal of Methods in Psychiatric Research, 21*(3), 169–184.
- La Greca, A. M., & Stone, W. L. (1993). Social Anxiety Scale for Children-Revised: factor structure and concurrent validity. *Journal of Clinical Child Psychology, 22*, 17–27.
- Liber, J. M., Van Widenfelt, B. M., Utens, E. M. W. J., Ferdinand, R. F., Van Der Leeden, A. J. M., Gastel, W., Van, & Treffers, P. D. A. (2008). No differences between group versus individual treatment of childhood anxiety disorders in a randomised clinical trial. *Journal of Child Psychology and Psychiatry, 49*(8), 886–893.
- Manassis, K., Mendlowitz, S. L., Scapillato, D., Avery, D., Fiksenbaum, L., Freire, M., & Owens, M. (2002). Group and individual cognitive-behavioral therapy for childhood anxiety disorders: a randomized trial. *Journal of the American Academy of Child and Adolescent Psychiatry, 41*, 1423–1430.
- Merikangas, K., Jian-ping, H., Burstein, M., Swanson, S., Avenevoli, S., Lihong, C., & Swendsen, J. (2010). Lifetime prevalence of mental disorders in US adolescents: results from the National Comorbidity Study-Adolescent supplement. *Journal of the American Academy Children Adolescent Psychiatry, 49*(10), 980–989.
- Muris, P., Schmidt, H., Lambrichts, R., & Meesters, C. (2001). Protective and vulnerability factors of depression in normal adolescents. *Behaviour Research and Therapy, 39*(5), 555–565.
- Muroff, J., Ross, A., (2011). Social disability and impairment in childhood anxiety. In D. M. Storch, & E. A. Storch (Eds.), *Handbook of child and adolescent anxiety disorders* (pp. 457–478). New York: Springer Science Business Media.
- Mychailyszyn, M. P., Brodman, D. M., Read, K. L., & Kendall, P. C. (2012). Cognitive-behavioral school-based interventions for anxious and depressed youth: a meta-analysis of outcomes. *Clinical Psychology: Science and Practice, 19*(2), 129–153.
- Mychailyszyn, M. P., Mendez, J. L., & Kendall, P. C. (2010). School functioning in youth with and without anxiety disorders: comparisons by diagnosis and comorbidity. *School Psychology Review, 39*(1), 106–121.
- Nail, J. E., Christofferson, J., Ginsburg, G. S., Drake, K., Kendall, P. C., McCracken, J. T., & Sakolsky, D. (2015). Academic impairment and impact of treatments among youth with anxiety disorders. *Child and Youth Care Forum, 44*(3), 327–342.
- Newman, M. G., Zuelling, A. R., Kachin, K. E., Constantino, M. J., Przeworski, A., Erickson, T., & Cashman-McGrath, L. (2002). Preliminary reliability and validity of the Generalized Anxiety Disorder Questionnaire-IV: a revised self-report diagnostic measure of generalized anxiety disorder. *Behavior Therapy, 33*, 215–233.
- Olivares, J., García-López, L.-J., Beidel, D. C., Turner, S. M., Albano, A. M., & Hidalgo, M.-D. (2002). Results at long-term among three psychological treatments for adolescents with generalized social phobia (I): Statistical significance. *Psicología Conductual, 10*(1), 147–164.
- Olivares, J., & García-López, L. J. (2001). Un nuevo tratamiento multicomponente para adolescentes con fobia social generalizada: resultados de un estudio piloto. *Psicología Conductual, 9*, 247–254.
- Ollendick, T. H., Öst, L. G., Reuterskiöld, L., & Costa, N. (2010). Comorbidity in youth with specific phobias: impact of comorbidity on treatment outcome and the impact of treatment on comorbid disorders. *Behaviour Research and Therapy, 48*(9), 827–831.
- Öst, L. G., Svensson, L., Hellström, K., & Lindwall, R. (2001). One-session treatment of specific phobias in youths: a randomized clinical trial. *Journal of Consulting and Clinical Psychology, 69*(5), 814–824.
- Pine, D. S., Cohen, P., Gurley, D., Brook, J., & Ma, Y. (1998). The risk for early-adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. *Archives of General Psychiatry, 55*(1), 56–64.
- Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunker, A., & Hensley, M. (2011). Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Administrative Policy in Mental Health, 38*, 65–76.
- Rapee, R. M. (2000). Group treatment of children with anxiety disorders: outcome and predictors of treatment response. *Australian Journal of Psychology, 52*(3), 125–130.
- Rapee, R. M. (2012). Family factors in the development and management of anxiety disorders. *Clinical Child and Family Psychology Review, 15*(1), 69–80.
- Pedreira-Massa, J. L., Alcázar, J. L., & Vilaltella, J. T. (1999). Child and adolescent psychiatry in Spain. In H. Remschmidt, & H. Engeland (Eds.), *Child and adolescent psychiatry in Europe. Historical development, current situation, future perspectives*. (pp. 329–350). New York: Springer.
- Sandín, B. (1997). *Ansiedad, miedos y fobias en niños y adolescentes*. Madrid: Dykinson-Psicología.
- Santesteban-Echarri, O., Hernández-Arroyo, L., Rentero-Martín, D., & Güerre-Lobera, M. J. (2015). Programa de terapia grupal para niños con ansiedad. *Cuadernos Délelött Salud Mental Del, 12* (11), 134.
- Santesteban-Echarri, O., Martín, D. R., Güerre Lobera, M. J., Espín Jaime, J. C., & Jiménez-Arriero, M. Á. (2016). Cognitive-behavioral treatment of specific phobia in childhood: a case study. *Ansiedad Y Estres, 22*(2–3), 80–90.
- Santesteban-Echarri, O., Rice, S., Wadley, G., Lederman, R., D'Alfonso, S., Russon, P., & Álvarez-Jiménez, M. (2017). A next-generation social media-based relapse prevention intervention for youth depression: qualitative data on user experience outcomes for social networking, safety, and clinical benefit. *Internet Interventions, 9*(1), 65–73.
- Settipani, C. A., & Kendall, P. C. (2013). Social functioning in youth with anxiety disorders: association with anxiety severity and outcomes from cognitive-behavioral therapy. *Child Psychiatry and Human Development, 44*(1), 1–18.
- Silove, D., Manicavasagar, V., O'Connell, D., Blaszczynski, A., Wagner, R., & Henry, J. (1993). The development of the Separation Anxiety Symptom Inventory (SASI). *The Australian and New Zealand Journal of Psychiatry, 27*(3), 477–488.
- Spence, S. H. (1997). Structure of anxiety symptoms among children: a confirmatory factor-analytic study. *Journal of Abnormal Psychology, 106*, 280–297.
- Spielberg, C. (1973). *Manual for the state-trait anxiety inventory for children*. Palo Alto: Consulting Psychology Press.

- Spielberger, C. D. (1983). *Manual for the State-Trait Anxiety Inventory STAI*. Palo Alto: Mind Garden.
- Storch, E. A., Eisenberg, P. S., Roberti, J. W., & Barlas, M. E. (2003). Reliability and validity of the Social Anxiety Scale for Children — revised for Hispanic children. *Hispanic Journal of Behavioral Sciences*, 25(3), 410–422.
- Tizón García, J. (2002). Prevención e intervención en la salud mental de la primera infancia desde los dispositivos de Atención Primaria. *Revista Pedriatria Dèlèlòtt Atención Primaria*, 4(13), 81–106.
- Walkup, J. T., Albano, A. M., Piacentini, J., Birmaher, B., Compton, S. N., Sherrill, J. T., & Kendall, P. C. (2008). Cognitive behavioral therapy, sertraline, or a combination in childhood anxiety. *The New England Journal of Medicine*, 359(26), 2753–2766.
- Weissman, M. M., Wolk, S., Wickramaratne, P., Goldstein, R. B., Adams, P., Greenwald, S., & Steinberg, D. (1999). Children with prepubertal-onset major depressive disorder and anxiety grown up. *Archives of General Psychiatry*, 56(9), 794–801.
- World Health Organization. (1992). *The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines*. Geneva: World Health Organization.