Table E.6. Characteristics of the included studies comparing CBT versus attention control or treatment as usual

| Author, Year  | Study Country, Study Design, Type of Study (Efficacy/ Effectiveness), Study Settings | Type of Anxiety/Severity (CGI) | Intervention and Comparisons (N of Patients)  | Characteristics of Interventions (Psychotherapy: Components, Delivery Model)/Pharm: Drug) Intensity, Duration (Weeks)) | Patient Characteristics Mean Age (Range) , Male (%), Race/Ethnicity, Comorbidity, Household Income, Parent Education, Family Dysfunction/Stressor, Treatment Sequence, Insurance, History of Maltreatment) | Length of Follow up (Weeks) |
| --- | --- | --- | --- | --- | --- | --- |
| Beidel, 2000 92 | United States RCTEficacyMental health clinic | GAD, PD (agoraphobia is not specified), SAD,  SP, SoP  | Child CBT, (N=36) | Social effectiveness yherapy for Children (SET-C)Individual and group basedExposureCognitive problem solving Two weekly sessions (one group session and one individual session) for 12 weeks. Group sessions could be 60 minutes (social skill training) or 90 minutes (peer generalization experiences). Individual sessions were 60 minutes | Mean age: 10.5Male:  38.8%Caucasian: 97.7%African American: 30.5%Hispanic: 5.5%GCI: 5.5 | 26 |
| Control, (N=31)  | Attention control or treatment as usualTestbusters program for study skills and test taking strategy | Mean age: 10.5Male: 19.3%Caucasian: 58%African American: 25%Hispanic: 9.6%Biracial: 5.5%CGI: 5.6 |
| Fujii, 201393 | United States RCT EfficacyMental health clinic | GAD, SAD, SoP  | Child and parent together CBT, (N=7) | Other: Coping skills exposureIndividual basedExposureCognitive problem solving32 90-minute weekly sessions, first 16 sessions, modular CBT, second 16 sessions social skillsDelivered by student/trainee | Mean age: 8.7 (range: 7-11)Males: 71%Caucasian: 86%Asian: 14%College graduate (parent): 71%Autism: 57%OCD: 14% | 0 |
| Control, (N=5) | Attention Control or Treatment as Usual | Mean age: 9 (range: 7-11)Males: 80%Caucasian: 60%African American: 20%Other: 20%College graduate (parent): 60%Autism: 100% |
| Ginsburg, 200294 | United States RCT EfficacySchool | GAD, SP, SoP, PD (agoraphobia) | Child CBT, (N=6) | Group-basedExposureRelaxationCognitive problem solving. 45 min session over 10 weeks delivered by psychiatrists. No parent involvement.  | Mean age: 15.6 (Range 14-17)Male: 16.6%African Americans: 100% | 10 |
| Control, (N=6) | Attention control or treatment as usualGroup based. 45-50 min session, one session a week, 10 sessions delivered by student trainee.  |
| Ginsburg, 201295  | United States RCTEffectivenessSchool-based Mental health clinics | GAD,SAD, SoP, SP | Child CBT, (N=17) | Modular CBTChild CBT- (parents included < 20%)Individual based Exposure RelaxationCognitive problem solving8 modules over 12 weeks (average 7.29); 20-45min sessions in school; efforts to involve parents in at least 3 sessionsDelivered by doctoral psychologist | Mean age: 11.12Male: 29.4%African American: 82%, other: 18%Low income: 23.5%Family stress: 100% | 4 |
| Control, (N=15) | Attention control or treatment as usual | Mean age: 9.33Male: 46.6%African American: 87%, other: 13%Low income: 40%Family stress: 100% |
| Halldorsdottir, 201696 | United States RCT EfficacyOutpatient  | GAD, SoP | Child CBT, (N=50) | OSTExposureRelaxation Cognitive problem solving Individual-based 180 minute one session only | Mean age: 9.24Male: 88%Mean income: 71.450 | 208 |
| Control, (N=33) | Attention control or treatment as usualIndividual-based | Mean age: 8.97Male: 90%Mean income: $73,232 |
| Herbert, 200997 | United StatesRCT EfficacyMental health clinic | GAD , PD (agoraphobia is not specified), SAD, SP, SoP  | Child CBT, (N= 23) | Generic CBTGroup based Relaxation, exposure, Cognitive problem solving Delivered by Masters level clinicians. 120 min session per week for 12 weeks | Mean age: 14.6 (range 12 -17)Male : 56.5%Caucasian: 52%, African Americans: 39%, Asian: 8.6% | 52 |
| Child CBT, (N= 24) | Generic CBT Individual basedRelaxation, exposure, cognitive problem solving Delivered by Masters level clinicians. 60 min session per week for 12 weeks. | Mean age: 14.3 (range 12 -17)Male: 25%Caucasian:  54.2%, African Americans: 45.8% |
| Control, (N=26) | Attention control or treatment as usualPsychoeducational-supportive therapyGroup based Delivered by Masters level clinicians120 min session per week for 12 weeks | Mean age: 15.1 (range 12-17)Male: 53.8%Caucasian: 34.6%, African American: 50%, Hispanics: 7.69%Asians: 7.69% |
| Hudson, 200998 | Australia RCT EfficacyMental health clinic | GAD ,SAD, PD, SP, SoP  | Child and parent together CBT, (N= 60) | Cool kidsGroup basedExposureCognitive problem solving.120 min session per week for 10 weeks.  | Mean age; 10.2 (SD 2.4) (Range 7-16)Male: 53.3%Caucasian: 75%, Asian 6.6%, other:3.3%Low income: n= 8Medium income: n= 21High income: n= 22 | 13 |
| Control, (N=52) | Attention control or treatment as usualGroup support and attention, group based120 min session per week for 10 weeks | Mean age: 10.2 (SD 2.7) (Range 7-16)Male: 40.3%Caucasian: 65.3%%, Asian: 11.5%, others 5.7%Low income: n=16Medium income: n=11High income: n=17  |
| Ingul, 201499 | Norway RCT EfficacyMental health clinic | SoP | Child CBT, (N=36) | Other CBTExposure Cognitive problem solvingIndividual-basedDelivered by psychologist and Masters level clinician 12, 50 min weekly sessions | Age mean: 14.98 (SD:0.94)Males: 43%ADHD: 14.29%Depression: 9.52%PTSD: 4.76% | 52 |
| Child CBT, (N=58) | Cat ProjectExposureCognitive problem solving Group based10, 90 min sessions | Age mean: 14.30(SD:0.89)Males: 40%ADHD: 5%Depression: 10% |
| Control, (N=34) | Attention control or treatment as usual10, 90 min sessions | Age mean: 14.16 (SD:1.08)Males: 43%ADHD: 6.25%Depression: 6.25%OCD: 6.25%PTSD: 6.25% |
| Kendall, 2008 100, 101 | United StatesRCT EfficacyMental health clinic | GAD,SAD, SoP,SP | Child CBT, (N=55) | Coping Cat: xposure RelaxationCognitive problem solvingIndividual-basedWeekly for 16 weeks, 60 min each session, parents at two | Age mean (years): 10.37 range (7-14)Caucasian: 83%Other:16%Low income (<$40,000): 20%Medium income ($40,000-$90,000):34%High income (>$90,000):38% | 52 |
| Child and parent together CBT, (N=56) | CC derivativeExposureRelaxationCognitive problem solvingIndividual-based, family basedWeekly for 16 weeks, 60 min each session | Age mean (years): 10.41 range (7-14)Caucasian: 80%Other: 16%Low income (<$40,000): 14%Medium income ($40,000-$90,000):46%High income (>$90,000):32% |
| Control, (N=50) | Attention control or treatment as usualFamily education, support, and attentionWeekly for 16 weeks, 60 min each session | Age mean (years): 10.03 range (7-14)Caucasian: 88%Other:12%Low income (<$40,000): 10%Medium income ($40,000-$90,000):50%High income (>$90,000):30% |
| Khanna, 2010102 | United States RCTEfficacyMental health clinic | GAD, PD, SAD, SoP, SP  | Child CBT, (N=17) | Coping catExposureRelaxationCognitive problem solvingIndividual-basedDelivered by psychologist, student/ traineeWeekly for 12 weeks, 50 minute sessions | Age mean (years): 10.1 (range: 7-13)Males: 67%Caucasian: 83%African American: 14%Hispanic: 2%ADHD: 16%ODD:4%Tic disorder: 2% | 13 |
| Distance, (N=16) | Camp cope a lotExposureRelaxationCognitive problem solvingIndividual basedDelivered by psychologist, student/ traineeWeekly for 12 weeks  |
| Control, (N=16) | Attention control or treatment as usualIndividual-based, technology-basedDelivered by psychologist, student/ traineeWeekly for 12 weeks, 60 minute sessions. 30 minutes of support and 30 minutes of computer. |
| Last, 1998103 | United States RCT EfficacyMental health clinic | SoP | Child and Parent together CBT, (N=32) | Generic CBTExposureCognitive problem solvingDelivered by therapists and school contact person. 12, 60 min weekly sessions | Age mean (years): 11.67Male: 59.3%Caucasian: 65.6%Hispanic: 3.1%African American: 3.1% | 4 |
| Control, (N=24) | Attention control or treatment as usual12, 60 min weekly sessions  | Age mean (years): 12.4Male: 37.5%Caucasian: 87.5%African American: 4.1%Hispanic: 8.2% |
| Masia-Warner, 2007104 | United States RCT School | GAD, SAD, SoP  | Child CBT, (N=19) | SASS: skills for academic and social success, Individual-based, group-based,ExposureCognitive problem solving,12 group sessions (40 minutes) and 2 individuals delivered by 2 doctoral level psychologists | Age mean (years): 15 (Range 14 -16)Male: 15.7%Caucasian: 73.6%, African: 5.2%African:15.78%, other: 5.2% | 6 |
| Control, (N=17) | Attention control or treatment as usualEducational supportive group function (ESGF), Individual-based, group-based, RelaxationCognitive strategies12 group sessions and 2 individual delivered by 2 doctoral level psychologists.  | Age mean (years): 15.1 (Range 14-16)Male: 17.64Caucasian: 70.5%, African: 5.88%Hispanic: 17.6%, other: 5.88%  |
| Menzies, 199357 | Australia RCT EfficacyOutpatient | SP | Child CBT, (N=13) | In vivo exposure plus vicarious exposureChild CBT- (parents included < 20%)Individual based Delivered by student therapist3 15-minute weekly session  | Age mean (years): 5.5 (range:3-8)Male: 50.7%Caucasian: 96%, Hispanic:4%Depression: 10%Treatment non responder: 100% | 12 |
| Control, (N=13) | Attention control or treatment as usualOnly vicarious exposure3 30-minute weekly sessionDelivered by student therapist |
| Child CBT, (N=13) | In vivo exposureChild CBT- (parents included < 20%)Individual based Exposure 3 30-minute weekly sessionDelivered by student |
| Control, (N=12) | Waitlisting or no treatment  |  |
| Muris, 2002 105 | NetherlandsRCTEfficacySchool | GAD, SAD, SoP  | Child CBT, (N=10) | Coping KoalaGroup basedExposureRelaxationCognitive problem solving12 30-minute sessions. 2 sessions per week delivered by student/trainee | Age range (9-12) yearsCaucasian: 90%Other: 10%Low income: 13Medium income: 6High income: 1 Male int1 ; 30%Male Int2 : 40% | 13 |
| Control, (N=10)  | Attention control or treatment as usualEmotional disclosure treatment program. Group based. 12 30-minute sessions over 6 weeks  |
| O’Brien, 2007106 | Ireland RCT EfficacyMental health clinic | Anxiety disorder | Child CBT, (N=7) | Friends Child CBT- (parents included < 20%)Group basedExposureRelaxationCognitive problem solving10 90-minute weekly sessions, plus three parent sessionDelivered by 2 Masters level clinicians | Age mean (years): 13.8 (Range 7 – 15)Male: 28.57% | 4 |
| Control, (N=7) | Attention Control or Treatment as Usual | Age mean (years): 12.5 (Range 7 – 15)Male: 57.14% |
| Ollendick, 200963 | United States and Sweden RCT EfficacyOutpatient Mental health clinic | SP, SoP, SAD, GAD | Child CBT, (N=85) | OSTChild CBT- (parents included < 20%)One session treatmentIndividual basedExposure 1 session of 3 hours Delivered by Masters level clinicians  | Caucasian: 90%,African American: 2.5%Hispanic:: 2%Other: 4.5%Age range 7 -16 yearsMale: 45.8% | 36 |
| Control, (N=70) | Attention control or treatment as usualEducation support treatment 1 session of 3 hours Delivered by Masters level clinicians | Caucasian: 90%,African American: 2.5%Hispanic:: 2%Other: 4.5%Range 7 – 16Male: 44.2% |
| Control, (N= 41) | Waitlisting or no treatment | Age range 7 -16 yearsMale: 46.3% |
| Pincus, 2010107 | United States RCT EfficacyMental health clinic | PD | Child CBT, (N=13) | Panic control treatmentExposureRelaxationCognitive problem solvingIndividual-basedDelivered by psychologist11 sessions over 12 weeks, 50 min | Age mean (years): 15.75 (range: 14-17)Males: 23%Caucasian: 100%Mean income: $97,500 (SD: $65,486) | 26 |
| Control, (N=13) | Attention control or treatment as usual |
| Reigada, 2015108 | United States RCT Efficacy Mental health clinic | GAD,PD with agoraphobia, PD without agoraphobia, SAD, SoP | Child CBT plus separate parent intervention, (N=11) | TAPSIndividual based ExposureRelaxationCognitive problem solving 15 sessions; 13 1-hour weekly sessions and 2 boosters; parents received three 1-hr sessions.Delivered by doctoral psychologist | Age mean (years): 13.65( range: 9-17)Caucasian: 82%, Other: 18%Low income (Less than $30,000 ): 10%Medium income ($30,000-$90,000) : 20%High income ( more than $90,000) : 70%Depression:18% | 13 |
| Control, (N=11) | Attention control or treatment as usualOffered social and emotional support | Age mean (years): 13.65( range: 9-17)Caucasian: 55%, African American: 9%, Hispanic: 18%, other : 18%Low income (Less than $30,000 ): 9%Medium income ($30,000-$90,000) : 36%High income ( more than $90,000) : 55%Depression: 27% |
| Ritter, 196871 | United StatesRCT Efficacy Outpatient  | SP | Child CBT, (N=7) | Other: Only contact desensitizationChild CBT- (parents included < 20%)Group based Exposure 2, 35-minute weekly sessionsDelivered by psychiatrist | Age range: 5-11 years | 0 |
| Control, (N=8) | Attention control or treatment as usualOnly vicarious desensitizationGroup based 2, 35-minute weekly sessionsDelivered by psychiatrist |
| Control, (N=7) | Waitlisting or no treatment |
| Rosa-Alcazar, 2007109 | Spain RCTEfficacySchools  | SoP | Child CBT, (N=12) | IAFS Group basedExposureCognitive problem solvingDelivered by practicing clinician, 12 weekly sessions for 90 minutes each | Age mean (years) 15 Male:29% | 26 |
| Control, (N=13) | Attention control or treatment as usualEducational treatment, individual treatment-based12 weekly sessions for 90 minutes each |
| Rosa-Alcazar, 200972 | Spain RCT Efficacy schools | GAD, PD without agoraphobia, PD (agoraphobia is not specified) SP  | Child CBT, (N=20)  | IAFSChild CBT- (parents included < 20%)Group based ExposureCognitive problem solving12 90-minute weekly sessions Delivered by practicing clinician | Age mean (years) 15 (Range 14 -17)Male:25% | 52 |
| Control, (N=19)  | Attention control or treatment as usualEducational treatment on anxiety and relaxation12 90-minute weekly sessions  | Age mean (years) 14.94 (14- 17)Male: 31.5% |
| Control, (N=18) | Attention control or treatment as usualEducation as placebo12 sessions of health education | Age mean (years) 14.75 (14-17)Male: 16.6% |
| Control, (N=20) | Waitlisting or no treatment | Age mean (years) 14.77 Male: 40% |
| Southam-Gerow, 2010110  | United StatesRCT EffectivenessMental health clinic | GAD, PD without agoraphobia, SAD, SoP, SP  | Child CBT, (N=24) | Coping CatChild CBT- (parents included < 20%)Individual basedExposure RelaxationCognitive problem solving14 sessions, 1 hour sessions over 12 weeks Delivered by psychologist, Masters level clinicians, social workers | Total population N = 48Age mean (years): 10.9 (range: 8-15)Males: 44%Caucasian: 48%African American: 12.5%Hispanic: 27%Other: 10%Low income (<30,000): 73%Medium income (30,000-90,000): 16%High income (>90,000): 10%ADHD: 42%Depression: 8%OCD:4.2%ODD:37.5%PTSD:6.25%Dysthymic disorder: 2% | 0 |
| Control, (N=24) | Attention control or treatment as usual  |
| Silk, 2016 111 | United States RCT EfficacyOutpatient | GAD,SAD, SoP | Child CBT, (N=90) | Coping CatIndividual-based  ExposureRelaxationCognitive problem solving One session per week for 16 week | Age mean (years): 10.94Male: 45%Caucasian: 91%, African American :2% , Hispanic: 1%, Other: 6%Mean income: 94.155 | 52 |
| Control (N=43) | Attention control or treatment as Usual supportive child centered therapy (CCT) One session per week for 16 week | Age mean (years): 10.98Male: 41%Caucasian: 88%, African American :6% , Hispanic: 2%, Other:4% Mean income: 78.632 |
| Storch, 2015112 | United States RCTEfficacy Mental health clinic  | GAD, PD, PD with agoraphobia, PD without agoraphobia, SAD, SoP, SP Mean CGI=3.45 | Child CBT, (N=49) | Camp Cope a LotComputerized CBTChild CBT- (parents included < 20%)Individual basedExposure RelaxationCognitive problem solvingTechnology based12 60-minute weekly sessionsDelivered by Masters level clinicians | Age mean (years): 9.4 (range: 7-13)Male: 53.1%College graduate(parent): 51%Caucasian: 77.6%Hispanic: 10.2%African American: 8.2%Low income (<$40,000): 44.4%Medium income ($40,000-$90,000):33.3%High income: (>$90,000): 22.2%OCD: 4.1%PTSD: 4.1%Depression: 6.1%ADHD: 34.2%ODD: 6.1%Selective mutism: 4.1%Enuresis: 4.1% | 110 |
| Control, (N=51) | Attention control or treatment as usual  | Age mean (years): 10.2 (range: 7-13)Male: 58.8%College graduate(parent): 51%Caucasian: 66.7%Hispanic: 13.7%African American: 13.7%Low income (<$40,000): 62.2%Medium income ($40,000-$90,000):20%High income: (>$90,000): 18%OCD: 7.8%Dysthymia: 5.9%Depression: 5.9%ADHD: 31.4%Conduct disorder: 2%ODD: 7.8%Selective mutism: 5.9%Enuresis: 4.1% |
| Storch, 2013113 | United States RCT Efficacy Outpatient | GAD,SAD, SoP,SP | Child CBT plus separate parent intervention, (N=24) | Other: Behavioral interventions for anxiety in children with autism (BIACA) programIndividual basedExposure RelaxationCognitive problem solving16 60-90 minute weekly sessions over 12 weeksDelivered by psychologist, student/trainee | Age mean (years): 8.83 (range: 7-11)Male: 79%Caucasian: 92%Hispanic: 4%Asian: 4%Low income (<$40,000): 4%Medium income ($40,000-$90,000):25%High income: (>$90,000):71%ADHD: 71%Depression: 4%Autism: 100%OCD: 46%ODD: 37.5% | 13 |
| Control, (N=21) | Attention control or treatment as usual  | Age mean (years): 8.89 (range: 7-11)Males: 81%Caucasian: 76%Hispanic: 19%Asian: 5%ADHD: 76%Depression: 9%Autism: 100%OCD: 62%ODD: 52%Low income (<$40,000): 14%Medium income ($40,000-$90,000): 28%High income: (>$90,000): 52% |
| Suveg, 2009114 | United States RCT Outpatient | GAD, SAD, SoP, SP | Child CBT, (N=55) | Coping CatExposureRelaxationCognitive problem solving Individual basedDelivered by psychologist, Masters level clinician 16, 60 min weekly sessions | Age range: 7-14 yearsADHD: 32%Depression: 11%ODD: 14%Conduct disorder: 1% | 52 |
| Child and parent together CBT, (N=56) | Coping CatExposureRelaxationCognitive problem solvingIndividual basedDelivered by psychologist, Masters level clinician 16, 60 min weekly |
| Control, (N=50) | Attention control or treatment as usual Weekly for 16 weeks |
| Valles-Arandiga, 2014 84 | Spain RCTEfficacy Schools | SoP | Child CBT, (N=17) | IAFSChild CBT- (parents included < 20%)Group based12 90-minute weekly sessionsDelivered by therapist | Age mean (years): 14.9 (range: 14-16)Males:25% | 26 |
| Control, (N=17) | Attention control or treatment as usualEducation SupportIndividual based12 90-minute weekly sessions |
| Control, (N=17) | Waitlisting or no treatment |
| Van Steensel, 2014115 | Netherlands RCT EffectivenessOutpatient | GAD, SAD, SoP, SP  | Child and parent together CBT, (N=24) | Discussing plus doingIndividual based15 sessions over 3 months | Age mean (years): 11 (range:8-18)Males: 83.3%Autism: 100% | 26 |
| Control, (N=25) | Attention control or treatment as usual | Age mean (years): 10.72 (range:8-18)Males: 80%Autism: 100% |
| Pill Placebo, (N=76) | Pill placebo | Age mean (years): 10.6Male : 51.3%Caucasian: 79%, African American: 9%, Hispanic: 9%, other: 3%Low income: 27.6%ADHD: 118%, ODD:9.2%, Tic disorder and other internalizing disorders: 44.7% |
| Warner, 2016116 | United States RCT EfficacyOutpatient | GAD, PD, SAD, SP, SoP | Child CBT, (N=46) | SASS: Group-based,  exposure, cognitive problem solving (Skills for academic and social success provided by psychologists)Delivered by doctoral level psychologist12 in school group sessions ( ranged from 50- 90 mints)  | Age mean (years): 15.5Male: 30.4%Caucasian: 74%, African American :4% , Hispanic: 4%, Asian: 12%, Other: 4%Mean income: 94.155 | 20 |
| Child CBT, (N=47) | SASS: Group-based, exposure, cognitive problem solving Delivered by doctoral level psychologist12 in school group sessions ( ranged from 50- 90 mints) | Age mean (years): 15.34Male: 29.7%Caucasian: 75%, African American :8% , Hispanic: 5%, Asian: 6%, Other: 6% |
| Control, (N=43) | Attention control or treatment as usualRelaxation Cognitive problem solving. A nonspecific counseling program, SFL, controlled for the attention and group involvement. | Age mean (years): 15.37Male: 37%Caucasian: 67%, African American :2% , Hispanic: 14%, Asian: 7%, Other: 9% |
| Yen, 2014117 | Taiwan Non-Randomized comparative studies Efficacy Outpatient | GAD, SAD, SoP | Child CBT, (N=30) | Coping catChild CBT- (parents included < 20%)Individual basedExposure RelaxationCognitive problem solving17 weekly sessionsDelivered by Psychologist | Age mean (years): 9.1 (range: 7-12)\Males:40% | 0 |
| Control, (N=32) | Attention control or treatment as usual | Age mean (years): 9.5 (range: 7-12)Males: 38% |

ADHD: attention deficit hyperactivity disorder, CC: coping cat, CCC: child centered therapy, IAFS: intervencion en adolescents con fobia social (treatment for adolescents with social phobia), CBT: cognitive behavioral therapy, CGI: clinical global impression scale, GAD: generalized anxiety disorder, NR: not reported, OCD: obsessive compulsive disorder, ODD: oppositional defiant disorder, PD: panic disorder, PTSD: post-traumatic stress disorder, RCT: randomized controlled trial, SAD: separation anxiety disorder, SASS: skills for academic social success, SET-C: social effectiveness therapy, SFL: skills for life, SoP: social anxiety, SP: specific phobia, SSRI: selective serotonin reuptake inhibitor. TAPS: treatment of anxiety and physical symptoms.