Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Setting	Inclusion and exclusion criteria	Patient characteristics	Baseline depression score (IG/CG) Average duration of illness (months)	Intervention characteristics	Outcomes	Response (dichotomous measure)
Clarke, 1999[1] Good quality MDD or dysthymia	**Study design:** RCT (n = 123) **Location:** US, recruited at 2 sites, setting where intervention was delivered is not described **Selection method:** Recruited at 2 sites via announcements to health professionals and school counselors, television and newspaper stories, and advertisements	**Inclusion:** age 14 to 18 years, current DSM-III-R diagnosis of MDD or dysthymia **Exclusion:** 1) exhibited current mania/hypomania, panic disorder, generalized anxiety disorder, conduct disorder, psychoactive substance abuse/dependence, lifetime organic brain syndrome, mental retardation, or schizophrenia; 2) currently receiving other treatment for depression (and were unwilling to discontinue); 3) needed immediate, acute treatment	**Age:** 16.2 years (SD = 1.3) **Female:** 71% **Ethnicity:** NR **Psychiatric comorbidities:** 23.6% current anxiety disorder, 23.6% history of nonaffective disorder **Other:** 4.2% not in school, 43.8% lived in 2-parent families, 27.7% had 1 or 2 parents with graduate or postgraduate education	**Baseline:** BDI CBT: 26.5 (9.4) CBT + parent: 26.4 (8.7) Waitlist: 24.2 (10.8) HAM-D CBT: 13.0 (5.3) CBT + parent: 15.1 (6.0) Waitlist: 14.5 (5.9) **Duration of illness:** NR 87.5% had MDD, 46.9% recurrent affective disorder, n=73 had "pure" MDD, 12 had "pure" dysthymia, 11 had comorbid MDD/dysthymia	**IG1 (n=45)**: Group CBT (Adolescent Coping With Depression Course) for adolescents only; No family involvement; mixed-gender groups of 10 adolescents; 16, 2-hour sessions over 8 weeks; delivered by advanced graduate psychology or social work students or masters- or doctoral-level clinicians, plus 40 hrs of specialized training and weekly supervision meetings **IG2 (n=42)**: Group CBT same as IG1 plus 8 weekly 2-hour parent sessions (6 separate, 2 held jointly with adolescent group) over 8 weeks **CG (n=36)**: Waitlist	**Depression outcomes:** Longitudinal Interval Follow-up Evaluation (LIFE) - (requires symptom-free for 8 weeks for recovery criteria); HAM-D;GAF; BDI; CBCL **Measurement method:** Blinded interviewers **Definition of response or remission:** Recovery - no longer meeting DSM-III-R criteria for either major depression or dysthymia for 2 weeks preceding the post-treatment assessment	**Recovery rates:** IG1: 24/37 (64.9%) IG2: 22/32 (68.8%) CG: 13/27 (48.1%) (IG1 + IG2 vs CG: $p < 0.05$; Cohen's h = 0.38 (small to medium effect); OR 2.15 (95% CI 1.01, 4.59)) Trend for treated males to have better outcomes than treated females (81.0% vs 60.4%, $p = 0.096$)

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Response (continuous measure)	Other outcomes Adverse events	Funding source	Attrition	Other treatments (e.g. antidepressants; measured, not allowed, reported, etc.)	Comments	Other positive outcomes reported
Clarke, 1999[1] Good quality MDD or dysthymia	**HAM-D** pre post IG1: 13.0 (5.3) 4.6 (4.8) IG2: 15.1(6.0) 6.7 (7.1) CG: 14.5 (5.9) 7.7 (7.0) Group x time - IG1 & 2 combined vs. CG: p = ns **Self-reported measures:** BDI **Parent-reported measures:** CBCL Depression, CBCL internalizing, CBCL externalizing	**GAF** pre post IG1: 60.4 (6.8) 71.0 (11.7) IG2: 54.4 (8.2) 69.9 (14.9) CG: 58.3 (7.2) 64.5 (11.8) Group x time - IG1 & 2 combined vs. CG: p < 0.05	NIMH	**Attrition:** 22% overall 18% CBT 24% CBT + parent 25% WL	Excluded if receiving other treatment for depression and unwilling to discontinue	Participants in the two treatment groups who recovered were randomized to three different relapse prevention conditions	CBCL (parent)

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Setting	Inclusion and exclusion criteria	Patient characteristics	Baseline depression score (IG/CG) Average duration of illness (months)	Intervention characteristics	Outcomes	Response (dichotomous measure)
Kahn, 1990[2] Fair quality Depression	**Study design:** RCT (n=68) **Location:** US **Selection method:** 1 middle school	**Inclusion:** RADS ≥ 72, CDI ≥ 15 **Exclusion:** Receiving antidepressants or another treatment for depression	**Age:** 10-14 years **Female**: 51% **Ethnicity:** NR **Psychiatric comorbidities:** NR	**Baseline:** BID Group CBT: 44.65 (15.56) Relaxation: 38.06 (15.26) Self-modeling: 52.82 (18.45) Waitlist: 42.82 (13.60) **Duration of illness:** NR	**IG1 (n=17):** Group CBT; no family involvement; 12, 50-minute sessions over 6- to 8-week period **IG2 (n=17):** Group relaxation; no family involvement; 12, 50-minute sessions over 6- to 8-week period **IG3 (n=17):** Individual self-modeling; no family involvement; 12 sessions over 6-to 8-week period **CG (n=17):** Waitlist	**Depression outcomes:** RADS, CDI, BID (Bellevue Index of Depression, structured interview) **Measurement method:** Questionnaires and interview at screening, re-evaluation (not reported here), post-treatment, 1-month post-treatment **Definition of response or remission**: RADS and CDI scores for response, remission not assessed **Other outcomes**: In dysfunctional range based on RADS, CDI, BID, cutoff used NR	(none)

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Response (continuous measure)	Other outcomes Adverse events	Funding source	Attrition	Other treatments (e.g. antidepressants; measured, not allowed, reported, etc.)	Comments	Other positive outcomes reported
Kahn, 1990[2] Fair quality Depression	**RADS** pre post 1-mo IG1: 87.0 (9.0) 53.4 (14.7) 54.2 (16.8) IG2: 83.4 (8.0) 61.8 (14.9) 61.6 (17.3) IG3: 81.7 (10.7) 62.1 (12.0) 64.2 (15.9) CG: 85.4 (11.0) 80.1 (13.4) 74.7 (16.6) F(3,64)=7.87, p<0.001 (pre-post tx*time effect) **CDI** pre post 1-mo IG1: 31.1 (9.6) 7.3 (typo) 9.1 (9.9) IG2: 26.9 (10.8) 12.9 (10.7) 13.9 (13.4) IG3: 27.2 (7.8) 13.6 (7.4) 14.6 (9.2) CG: 28.1 (9.8) 26.9 (15.4) 22.5 (15.5) F(3,64)=6.86, p<0.001 (pre-post tx*time effect) **BID** pre post IG1: 44.7 (15.6) 15.7 (10.0) IG2: 38.1 (15.3) 19.2 (20.4) IG3: 52.8 (18.5) 17.6 (14.7) CG: 42.8 (13.6) 29.7 (16.7) F(3,64)=6.51, p<0.001 (pre-post tx*time effect)	Change from dysfunctional to functional range **Pre-treatment to post-treatment** RADS IG1: 15/17 (88%) IG2: 11/17 (65%) IG3: 12/17 (70%) CG: 2/17 (12%) CDI IG1: 15/17 (88%) IG2: 13/17 (76%) IG3: 10/17 (59%) CG: 2/17 (12%) BID IG1: 13/17 (76%) IG2: 11/17 (65%) IG3: 10/17 (59%) CG: 3/17 (18%) **Pre-treatment to 1-mo followup** RADS IG1: 15/17 (88%) IG2: 11/17 (65%) IG3: 8/17 (50%) CG: 3/16 (19%) CDI IG1: 13/17 (76%) IG2: 11/17 (65%) IG3: 7/17 (44%) CG: 3/16 (19%)	NR	**Attrition:** 0%	Excluded if receiving outpatient psychological/ psychiatric services		Piers Harris Children's Self-Concept Scale

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Setting	Inclusion and exclusion criteria	Patient characteristics	Baseline depression score (IG/CG) Average duration of illness (months)	Intervention characteristics	Outcomes	Response (dichotomous measure)
Lewinsohn, 1990[3] Fair quality MDD, minor or intermittent depression	**Study design:** RCT (n=69) **Location:** US **Selection method:** Recruited via letters and announcements to health professionals, school counselors, and the media	**Inclusion:** DSM-III diagnosis of MDD or RDS diagnosis of current episode of minor or intermittent depressive disorder; age 14-18, grades 9-12 **Exclusion:** DSM-III or RDC diagnosis of current episode or bipolar disorder with mania, bipolar disorder with hypomania, panic disorder, generalized anxiety disorder, alcoholism, conduct disorder or drug use disorder, major depressive/psychotic subtype, organic brain syndrome or mental retardation, history of schizophrenia, need for immediate treatment and/or actively suicidal and/or need for hospitalization	**Age:** 14-18 years **Female:** 61% **Ethnicity:** NR **Psychiatric comorbidities:** NR, but excluded bipolar, panic disorder, GAD, CD, substance abuse 49% MDD; 7% RDC diagnosis of minor depression; 44% RDC diagnosis of intermittent depression 40% history of suicide attempt; 30% had previous psychological or psychiatric treatment	**Baseline:** BDI Group CBT: 21.67 (11.34) Group CBT + parent: 21.26 (11.35) Waitlist: 23.84 (11.43) CES-D Group CBT: 13.29 (5.21) Group CBT + parent: 12.84 (6.65) Waitlist: 14.89 (4.30) **Duration of illness:** NR	**IG1 (n=21):** Group CBT; no family involvement; 14, 2-hour sessions, twice a week for 7 weeks **IG2 (n=19):** Group CBT plus separate parent sessions; 14, 2-hour sessions, twice a week for 7 weeks for the child; the parent received 7, 2-hour sessions meeting once per week; parents seen separately **CG (n=19):** Waitlist	**Depression outcomes:** CES-D, BDI, CBCL-Depression **Measurement method:** Interview at intake, post-treatment, 1, 6, 12, and 24 months post-treatment **Definition of response or remission:** CES-D, BDI, and CBCL scores for response, remission per K-SADS interview for major, minor, or intermittent depression	**Post-treatment depressive diagnosis:** IG1: 57.1% IG2: 52.4% CG: 94.7% Chi-sq=9.41, p<0.01

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Response (continuous measure)	Other outcomes Adverse events	Funding source	Attrition	Other treatments (e.g. antidepressants; measured, not allowed, reported, etc.)	Comments	Other positive outcomes reported
Lewinsohn, 1990[3] Fair quality MDD, minor or intermittent depression	**CES-D** Pre Post IG1: 13.3 (5.2) 7.2 (4.9) IG2: 12.8 (6.7) 5.7 (4.8) CG: 14.9 (4.3) 12.9 (4.7) F(1,38)=4.85, p<0.001 Followup (ns): IG1 IG2 1-mo 6.8 (5.3) 5.5 (4.0) 6-mo 6.3 (4.5) 5.4 (3.8) 12-mo 6.5 (5.7) 6.1 (3.7) 24-mo 7.1 (6.8) 5.6 (3.9) **BDI** Pre Post IG1: 21.7 (11.3) 10.0 (11.9) IG2: 21.3 (11.4) 6.5 (8.5) CG: 23.8 (11.4) 20.5 (10.3) F(1,38)=4.27, p<0.001 Followup (ns): IG1 IG2 1-mo 10.0 (11.2) 6.7 (7.9) 6-mo 8.2 (12.5) 6.5 (11.7) 12-mo 6.0 (7.1) 4.4 (4.5) 24-mo 8.4 (12.5) 5.5 (6.4) **CBCL-D** Pre Post IG1: 13.7 (4.0) 9.0 (5.4) IG2: 13.1 (4.9) 3.5 (2.7) CG: 12.8 (5.5) 8.3 (4.2) F(1,38)=4.08, p<0.001 Followup (p<0.01): IG1 IG2 1-mo 6.2 (6.0) 3.3 (2.7) 6-mo 7.5 (6.1) 6.5 (4.4) 12-mo 5.2 (3.7) 6.2 (4.3) 24-mo 6.3 (7.4) 5.9 (5.2)	(none)	NIMH	**Attrition:** 14% overall 13% Group CBT 10% Group CBT + Parent 21% Waitlist	All participants had to discontinue whatever treatment they might have been in	Higher attrition in waitlist group	Issues Checklist (child and parent), Child Behavior Checklist (parent)

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Setting	Inclusion and exclusion criteria	Patient characteristics	Baseline depression score (IG/CG) Average duration of illness (months)	Intervention characteristics	Outcomes	Response (dichotomous measure)
Stark, 1987[4] Fair quality Moderate to severe depression	**Study design:** RCT (n=29) **Location:** US **Selection method:** 1 elementary school	**Inclusion:** CDI > 16 at first assessment and CDI ≥ 13 at second assessment **Exclusion:** NR	**Age:** 9-12 years **Female:** 43% **Ethnicity:** NR **Psychiatric comorbidities:** NR	**Baseline:** CDRS-R Group S-C: 37.22 (8.36) Group BPS: 33.50 (10.27) Waitlist: 30.33 (6.28) CDI Group S-C: 21.60 (5.48) Group BPS: 22.40 (8.47) Waitlist: 20.11 (9.88) **Duration of illness**: NR	**IG1 (n=9):** Group Self-Control Therapy; no family involvement; 12, 45- to 50-minute sessions during a 5-week period **IG2 (n=10):** Group Behavioral Problem-Solving Therapy; no family involvement; 12, 45- to 50-minute sessions during a 5-week period **CG (n=9):** Waitlist	**Depression outcomes:** CDI, CDRS-R, CDS, CBCL-Depression **Measurement method:** Blind assessment by interview and self-report questionnaire packet at intake, pre-treatment, post-treatment, 8-week post-treatment **Definition of response or remission:** CDI, CDRS, CDS, and CBCL scores for response, CDI<13 for remission	**Recovery rates based on CDI post-treatment:** IG1: 7/9 (78%) IG2: 6/10 (60%) CG: 1/9 (11%) **8 weeks post-treatment:** IG1: 88% IG2: 67% CG: NR

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Response (continuous measure)	Other outcomes Adverse events	Funding source	Attrition	Other treatments (e.g. antidepressants; measured, not allowed, reported, etc.)	Comments	Other positive outcomes reported
Stark, 1987[4] Fair quality Moderate to severe depression	**CDI** Screen Pre-tx Post-tx 8-week IG1: 22.4 (5.7) 21.6 (5.5) 8.0 (6.7) 5.4 (5.0) IG2: 25.0 (4.8) 22.4 (8.5) 9.0 (8.3) 7.3 (7.2) CG: 22.6 (6.0) 20.1 (9.9) 18.6 (9.9) (none) post-treatment ANCOVA F(2,27)=6.37, p=0.01 8-week ANCOVA F(1,18)=0.48, ns **CDS** Pre-tx Post-tx 8-week IG1: 72.4 (10.3) 50.1 (8.7) 46.5 (8.3) IG2: 71.1 (10.4) 55.1 (12.2) 50.0 (13.2) CG: 67.6 (17.8) 61.1 (16.7) (none) post-treatment ANCOVA F(2,27)=2.91, p=0.07 8-week ANCOVA F(1,18)=0.42, ns **CDRS-R** Pre-tx Post-tx 8-week IG1: 37.2 (8.4) 22.9 (4.4) 20.7 (3.5) IG2: 33.5 (10.3) 24.2 (6.0) 24.3 (4.7) CG: 30.3 (6.3) 28.2 (6.2) (none) post-treatment ANCOVA F(2,27)=2.41, p=.11 8-week ANCOVA F(1,18)=6.36, p=0.02 **CBCL-Dep** Pre-tx Post-tx 8-week IG1: 69.4 (6.8) 66.9 (9.7) 66.2 (4.3) IG2: 72.3 (10.0) 63.4 (10.0) 60.4 (9.3) CG: 64.0 (11.3) 67.6 (11.2) (none) post-treatment ANCOVA F(2,21)=0.50, ns 8-week ANCOVA F(1,12)=1.44, ns	(none)	NR	**Attrition:** 3% overall (The 1 subject who withdrew was in one of the two intervention groups)	NR, but 2 of the waitlist subjects referred to school psychologist by their teachers for behavior related to depression and met with him on a weekly basis		CSEI (self-esteem), RCMAS (anxiety), Treatment-generated expectancies and credibility, CBCL (parent)

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Setting	Inclusion and exclusion criteria	Patient characteristics	Baseline depression score (IG/CG) Average duration of illness (months)	Intervention characteristics	Outcomes	Response (dichotomous measure)
Rosello, 1999[5] - indiv. CBT Fair quality MDD or dysthymia	**Study design:** RCT (n=71) **Location:** Puerto Rico **Selection method:** Referred to clinic by local schools	**Exclusion:** Serious suicide risk, psychotic features, bipolar disorders, alcoholism, conduct disorder, drug use disorder, organic brain disease, hyperaggression, need for acute care, receiving other treatment for depression	**Age:** 13-17 years **Female:** 54% **Ethnicity:** 100% Latino **Psychiatric comorbidities:** NR, but excluded bipolar, CD, substance abuse	**Baseline:** CDI IPT: 21.21 (7.53) CBT: 20.12 (6.95) Waitlist: 20.13 (5.99) **Duration of illness:** NR	**IG1 (n=19):** Individual IPT; no family involvement; 12, 1-hour weekly sessions **IG2 (n=21):** Individual CBT; no family involvement; 12, 1-hour weekly sessions **CG (n=18):** Waitlist	**Depression outcomes:** CDI **Measurement method:** Assessment by interview at intake, post-treatment, 3-month followup **Definition of response or remission**: CDI score for response, none for remission **Other outcomes**: Effect size based on CDI, % severely depressed per CDI >=19	(none)
Mufson, 1999[6] Fair quality MDD	**Study design:** RCT (n = 48) **Location:** US **Selection method:** Recruited from two specialty mental health clinics; most patients were self-referred or referred by parents or mental health professionals in school-based mental health clinics	**Inclusion:** MDD by DSM-III-R and HRSD ≥ 15 **Exclusion:** HRSD <15, suicidal, were receiving other treatment for MDD, chronic medical illness, psychosis, bipolar I or II, conduct disorder, substance abuse disorder, current eating disorder, OCD	**Age:** 12-18 years **Female:** 73% **Ethnicity:** 71% Hispanic **Psychiatric comorbidities:** Dysthymic disorder: 29% IPT, 13% CG Any anxiety disorder: 88% IPT, 88% CG	**Baseline:** BDI IPT: 18.8 (8.5) Clinical monitoring: 22.8 (10.6) HRSD IPT: 19.2 (7.5) Clinical monitoring: 18.7 (8.6) **Duration of illness:** NR	**IG (n=24):** Individual IPT; no family involvement; weekly sessions for 12 weeks, with weekly additional telephone contact in first 4 weeks **CG (n=24):** Clinical monitoring; monthly, 30-minute sessions to discuss symptoms and functioning (no advice giving or skills training)	**Depression outcomes:** HRSD, BDI, CGI-S **Measurement method:** Assessed by blinded clinician at weeks 0, 2, 4, 6, 8, 10, and 12 **Definition of response or remission:** Recovery defined as HRSD < 6 or BDI ≤ 9; CGI-S if "very much, much, or minimally improved" **Other outcomes:** Suicidality assessed by K-SADS-E depression section and suicide section	**Recovery rate based on HRSD:** IG: 75% CG: 46% p = 0.04 **Recovery based on CGI-S:** Recovered: IG 20/21 (95.5%) CG: 7/11 (61.5%) p <0.001

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Response (continuous measure)	Other outcomes Adverse events	Funding source	Attrition	Other treatments (e.g. antidepressants; measured, not allowed, reported, etc.)	Comments	Other positive outcomes reported
Rosello, 1999[5] - indiv. CBT Fair quality MDD or dysthymia	**CDI** pre post 3-month IG1: 21.2 (7.5) 10.8 (6.5) 13.8 (9.5) IG2: 20.1 (7.0) 13.3 (7.6) 8.9 (6.8) CG: 20.1 (6.0) 15.8 (6.8) (none) pre-post change differences, IG1 vs CG, F (1,33)=11.62, p<0.002 pre-post change differences, IG2 vs CG, F (1,37)=2.58, p<0.015	Effect size for IG1: 0.73 Effect size for IG2: 0.43 Severely depressed at post-tx: IG1: 11% IG2: 24% CG: 34%	NIMH and University of Puerto Rico	**Attrition:** 18% overall IPT 17% CBT 16% Waitlist 22%	Excluded if currently receiving psychotropic medication or psychotherapy		Piers-Harris Children's Self-Concept Scale, Social Adjustment Scale for Children and Adolescents, Family Emotional Involvement and Criticism Scale, CBCL
Mufson, 1999[6] Fair quality MDD	**HRSD** pre post IG: 19.2 (7.5) 6.3 (7.7) CG: 18.7 (8.6) 11.8 (8.9) p =0.02 **BDI** pre post IG: 18.8 (8.5) 5.9 (8.1) CG: 22.8 (10.6) 12.9 (12.6) p = 0.05 **CGI-S (week 12)** IG: 2.4 (1.6) CG: 4.2 (1.1) p < 0.001 (Note: there were no significant differences at baseline)	C-GAS: no differences between groups at week 12 **Adverse events (reasons for patient removal from study):** CG: 4 patients removed for suicidality, 4 for noncompliance, 1 for school refusal, 1 for psychotic features IG: 2 for suicidality No significant differences between groups on any measure of suicide plan or attempt at week 12 on the K-SADS	NIMH	**Attrition:** 33% overall 12% IG 54% CG	Excluded patients in another treatment for the same condition	Highly differential attrition	CGAS (global functioning), SAS-SR (social functioning), Social Problem-Solving Inventory

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Setting	Inclusion and exclusion criteria	Patient characteristics	Baseline depression score (IG/CG) Average duration of illness (months)	Intervention characteristics	Outcomes	Response (dichotomous measure)
Mufson, 2004[7] Good quality MDD, dysthymia, adjustment disorder with depressed mood, or depression NOS	**Study design:** RCT (n = 64); randomized at clinician and student levels **Location:** US; Urban impoverished areas of NYC **Selection method:** Five school-based health clinics (3 middle schools, 2 high schools) Patients who were referred to school mental health clinics were screened for eligibility	**Inclusion:** Referred to school health clinic for mental health intake; HAM-D ≥ 10 and C-GAS score ≤ 65 at intake and again at study baseline; DSM-IV diagnosis of MDD, dysthymia, adjustment disorder with depressed mood, or depressive disorder NOS **Exclusion:** Actively suicidal or mentally retarded; life-threatening medical illness; current diagnosis of substance abuse disorder, psychosis, or schizophrenia; currently in treatment for depression or currently taking antidepressant medication English-speaking patients accepted at all schools; monolingual Spanish-speaking patients accepted at 2 schools	**Age:** 12-18 years, mean 15.1 (1.9) **Female**: 84% **Ethnicity:** 71% Hispanic **Psychiatric comorbidities:** (possible/ probable per baseline clinical interview) Anxiety disorder: 20 (32%) ODD: 5 (8%) Substance use: 10 (16%) ADHD: 4 (6%) **Other:** % living in single parent home 79.3% IG, 75.0% CG; public assistance: 34.4% IG, 37.9% CG; years of parental education mother 10.54 (3.5) IG, 11.34(3.6) CG; father 11.22 (3.2) IG, 11.24 (3.7) CG	**Baseline:** BDI IG 20.8 (8.7) CG 21.8 (8.5) HAM-D IG 18.9 (5.9) CG 18.3 (5.0) **Duration of illness:** NR MDD 52.9% IG, 48.3% CG DD 14.7% IG, 20.7% CG Double depression 5.9% IG, 6.9% CG Depressive disorder NOS 11.8% IG, 10.3% CG Adjustment disorder 14.8% IG, 13.8% CG Previous mental health treatment: 26.5% IG, 31.0% CG Previous treatment for mood/anxiety/ depression 17.7% IG, 13.79% CG	**IG (n=34):** Individual Interpersonal Therapy for Adolescents (IPT-A); no family involvement; 8 consecutive, 35-minute weekly sessions followed by 4 sessions scheduled at any frequency during next 8 weeks (16 weeks in total); delivered by school clinicians (social workers and doctoral-level clinical psychologists) trained in IPT-A by manual, 2 half days didactic training, weekly supervision **CG (n=29):** Treatment as usual; whatever psychological treatment they would have received in the school-based clinic if the study has not been in place; most received individual psychotherapy, 8 received family therapy, and 5 participated in group therapy	**Depression outcomes:** Hamilton Depression Rating Scale, Beck Depression Inventory, Children's Global Assessment Scale, Clinical Global Impressions Scale **Measurement method:** Assessments performed by psychologist or social worker masked to treatment condition and not shared with treating clinicians; baseline, weeks 4,8,12, 16, or early termination from protocol **Definition of response or remission:** Recovery criteria HAMD ≤ 6 or BDI ≤ 9	**Recovery rates based on HAM-D:** IG: 17/34 (50%) CG: 10/29 (34%) **Recovery rate based on BDI:** IG: 25/34 (74%) CG: 15/29 (52%) p = 0.048

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Study reference USPSTF quality Target depressive disorder	Response (continuous measure)	Other outcomes Adverse events	Funding source	Attrition	Other treatments (e.g. antidepressants; measured, not allowed, reported, etc.)	Comments	Other positive outcomes reported
Mufson, 2004[7] Good quality MDD, dysthymia, adjustment disorder with depressed mood, or depression NOS	**HAM-D** pre post (week 12) IG 18.9 (5.9) 8.7 (8.0) CG: 18.3 (5.0) 12.8 (8.4) p = 0.04; ES 0.50 Differences between groups emerged at week 8 with 4.1 point difference (p=0.003); Random regression analysis to estimate slope indicated IG recovered at a significantly faster rate than the CG **BDI** pre post (wk 12) IG: 20.8 (8.7) 8.4 (11.0) CG: 21.8 (8.5) 12.3 (9.7) p = ns; ES = 0.37 Differences between groups emerged at week 8 with 5.42 point difference (p=0.001)	**General Functioning:** **CGAS** pre post (wk 12) IG: 52.6 (5.3) 66.7 (13.0) CG: 52.7 (6.3) 59.5 (13.5) p = 0.04; ES 0.54 **CGI-S** pre post (wk 12) IG: 3.9 (0.8) 2.4 (1.3) CG 3.8 (0.7) 3.0 (1.4) p=0.03; ES 0.48 **Adverse events:** 1 adolescent in IG referred to ED for suicidality and hospitalized one week; 1 adolescent in CG referred to ED, hospitalized overnight, and withdrawn from study	SAMHSA and NIMH	**Attrition:** 11% overall 13% IG 10% CG	Excluded if currently in treatment for depression, but remained in study if needed to receive antidepressants during study	IPT-A group had more females (91% vs 76%) and higher proportion with current SI or past suicide attempt, although differences are not statistically significant	SAS-SR (social functioning)

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Setting	Inclusion and exclusion criteria	Patient characteristics	Baseline depression score (IG/CG) Average duration of illness (months)	Intervention characteristics	Outcomes	Response (dichotomous measure)
Diamond, 2002[8] Good quality MDD	**Study design:** RCT (n = 32) **Location:** US **Selection method:** Referred by schools or parents	**Inclusion:** DSM-III-R primary diagnosis of MDD, age 13 - 17 years, primary caretaker willing to participate **Exclusion:** Initial BDI < 16, report other problems as primary, receiving antidepressant medication or psychotherapy, > 13 days of substance use in previous 90 days, needed higher level care, having psychotic features, plus other exclusion criteria not described	**Age:** 14.9 (SD = 1.5) **Female**: 78% female **Ethnicity:** 69% African American, 31% White **Psychiatric comorbidities:** NR, and only substance abuse excluded; parents report 47% above clinical cutoff for delinquency and 30% for aggressiveness, 42% parental depression, 47% parental anxiety, 37% parental hostility **Other:** 80% from single parent families; 69% < $30,000 annual income, 34% < 20,000 annual income; 47% heard random gunshots in 6 months prior; 31% had family members using drugs or alcohol, 19% had unwanted sexual experiences	**Baseline:** BDI IG: 23.8 (7.4) CG: 28.0 (7.1) HAM-D IG: 20.1 (5.6) CG: 17.1 (7.0) **Duration of illness:** NR	**IG (n=16):** Attachment-based Family Therapy; (treatment can include all family and extrafamilial members (e.g., teachers), but the therapist flexibly determines the composition of each session based on the evolving treatment plan; 12 weekly, 60- to 90-minute sessions, plus weekly calls as needed; delivered by doctoral- and masters-level therapists, most experienced in family therapy, received training (amount unspecified) and weekly supervision **CG (n=16):** 6-week waitlist; received weekly 15-minute calls restricted to monitoring for potential clinical deterioration with BDI	**Depression outcomes:** HAM-D, BDI **Measurement method:** Blinded interviewers; assessments by trained masters- or doctoral-level diagnosticians; diagnoses determined in weekly consensus meeting with senior diagnostician **Definition of response or remission:** Clinical significance determined by percentage of adolescents with BDI scores in a non-clinical range (≤ 9)	**No longer meet criteria for MDD at post-treatment/post waitlist:** IG: 13/16 (81%) CG: 7/15 (47%) p = 0.04 **Clinical significant reduction in symptoms post intervention/post-waitlist:** IG: 62% CG: 19% p = 0.01 **6-week outcomes: Clinically significant reduction in symptoms** IG: 56% CG: 19% p = 0.03

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Response (continuous measure)	Other outcomes Adverse events	Funding source	Attrition	Other treatments (e.g. antidepressants; measured, not allowed, reported, etc.)	Comments	Other positive outcomes reported
Diamond, 2002[8] Good quality MDD	**HAM-D** pre 6wk post-int IG: 20.1 (5.6) - 10.3 (8.7) CG: 17.1 (7.0) 15.3 (6.7) N/A condition-by-time comparison of IG at post-intervention vs. CG at 6 wks (post-wait list period): p = 0.005; effect size = 1.21 **BDI** pre 6wk post-int IG: 23.8 (7.4) 11.1 (8.8) 10.4 (9.8) CG: 28.0 (7.1) 18.5 (11.1) N/A condition-by-time comparison of IG at post-intervention vs. CG at 6 wks (post-wait list period): ns	**Additional condition-by-time comparisons of IG at post-intervention vs. CG at 6 wks/post waitlist:** Reduction in anxiety symptoms (STAIC) p=0.007; ES 1.24 **Child-reported level of family conflict (SRFF-Conflict subscale)** p=0.03; ES =1.21 **Suicidal ideation** p=0.09; ES = 0.52 **Reduction in hopelessness** p=0.08; ES 0.78	NARSD, American Suicide Foundation, NIMH	**Attrition:** 0%	Excluded if receiving antidepressants or psychotherapy	Low SES population, majority are African American; data on comorbid conditions not available because had to keep assessment short to engage population Screened patients with BDI twice, one week apart, before inviting for full evaluation, KSADS-P interview	Self-Report of Family Functioning, Inventory of Parent and Peer Attachment, Beck Hopelessness Scale, STAIC (anxiety), Suicidal Ideation Questionnaire, Youth Self-Report

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Setting	Inclusion and exclusion criteria	Patient characteristics	Baseline depression score (IG/CG) Average duration of illness (months)	Intervention characteristics	Outcomes	Response (dichotomous measure)
Ackerson, 1998[9] Fair quality Mild and moderate depressive symptomatology	**Study design:** RCT (n=30) **Location:** US **Selection method:** Recruited through mental health and social services agencies, schools, hospitals, and media announcements	**Exclusions:** CDI score <10, HDRS score <10, not living at home with a parent willing to participate in the assessment phases of the study, reading level <6th grade equivalence, psychotic or suicide symptoms, participation in psychotherapy	**Age**: 14-18 years **Female:** 64% **Ethnicity:** 36% Nonwhite **Psychiatric comorbidities**: NR, and none excluded	**Baseline:** CDI Bibliotherapy: 19.2 (7.1) Waitlist: 16.8 (4.5) HRSD Bibliotherapy: 19.9 (5.5) Waitlist: 21.0 (5.0)	**Cognitive bibliotherapy (n=12):** No family involvement; 4 weeks to read Feeling Good book and complete exercises in workbook; weekly telephone calls to collect number of pages read and number of exercises completed in workbook (no counseling provided during calls) **CG (n=10):** Waitlist; telephoned weekly during waiting period, but content of calls NR	**Depression outcomes:** HRSD, CDI, CBCL-depression scale **Measurement method:** Interview, blinding of interviewers NR; assessments for treatment group: baseline, post-treatment, 1-month post-tx.; assessments for waitlist group: baseline, 1 mo later (before tx initiation), post-treatment **Definition of response or remission:** None **Other outcomes:** Clinical significance of change, per HRSD <10, CDI <10, CBCL-D T-score <60 + change on standardized version of each measure of 1.96 or more	(none)

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Setting	Inclusion and exclusion criteria	Patient characteristics	Baseline depression score (IG/CG) Average duration of illness (months)	Intervention characteristics	Outcomes	Response (dichotomous measure)
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Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Response (continuous measure)	Other outcomes Adverse events	Funding source	Attrition	Other treatments (e.g. antidepressants; measured, not allowed, reported, etc.)	Comments	Other positive outcomes reported
Ackerson, 1998[9] Fair quality Mild and moderate depressive symptomatology	**HRSD** Time 1 Time 2 Time 3 IG: 19.9 (5.5) 8.8 (5.3) 6.8 (4.9) CG: 21.0 (5.0) 20.5 (3.4) 9.2 (2.4) F (1,20)=37.78, p<0.05 **CDI** Time 1 Time 2 Time 3 IG: 19.2 (7.1) 9.4 (6.7) 6.8 (5.0) CG: 16.8 (4.5) 15.8 (5.2) 7.7 (3.5) F(1,20)=24.40, p<0.05 **CBCL-D** Time 1 Time 2 Time 3 IG: 71.9 (9.5) 64.8 (10.1) 60.8 (6.7) CG: 70.9 (9.1) 69.5 (11.1) 61.7 (7.5) F(1,20)=4.98, p<0.05	**Clinically significant change (among completers):** 59% per HDRS 64% per CDI 14% per CBCL-D **Adverse Events:** NR	NR	**Attrition:** 27% overall 20% IG 33% CG	Excluded if participating in psychotherapy, and no participants were receiving antidepressants, although 1 received methylphenidate for ADD		CBCL (parent), Automatic Thoughts Questionnaire, Dysfunctional Attitudes Questionnaire

Appendix C Table C5. Evidence Table of Randomized Controlled Trials for Efficacy and Adverse Effects of Psychotherapy in Treating Depression in Children and Adolescents

Study reference USPSTF quality Target depressive disorder	Setting	Inclusion and exclusion criteria	Patient characteristics	Baseline depression score (IG/CG) Average duration of illness (months)	Intervention characteristics	Outcomes	Response (dichotomous measure)
TADS, 2004[10-15] - CBT only Good quality MDD	**Study design:** RCT (n = 223 in CBT and placebo control groups) **Location:** US; 13 academic and community clinics **Selection method:** Recruited from clinics, advertise-ments, primary care and mental health clinicians; schools and juvenile justice facilities	**Exclusion:** Aged <12 or >17 years, unable to receive care as outpatient, didn't meet DSM-IV criteria for MDD at consent/baseline, CDRS-R <45 at baseline, IQ <80, prior treatment with AD, depressive mood had to have been present in at least 2 of 3 contexts (home, school, among peers), current or past diagnosis of bipolar disorder, severe conduct disorder, current substance abuse or dependence, pervasive developmental disorder(s), thought disorder, concurrent treatment with psychotropic medication or psychotherapy outside the study, 2 failed SSRI trials, a poor response to clinical treatment containing CBT for depression, intolerance to fluoxetine, confounding medical condition, non-English speaking patient or parent, and/or pregnancy or refusal to use birth control No patients were asked or required to discontinue other forms of psychiatric treatment to enter the study; excluded for dangerousness to self or others if they had been hospitalized for dangerousness within 3 months of consent or were deemed by a cross-site panel to be high risk because of a suicide attempt requiring medical attention within 6 months, clear intent or an active plan to commit suicide, or suicidal ideation with a disorganized family unable to guarantee safety monitoring	**Age:** 12-17 years **Female:** 54% **Ethnicity**: 26% Nonwhite **Psychiatric comorbidities:** Any psychiatric comorbidity: 58% CBT, 51% Placebo Anxiety: 32% CBT, 25% Placebo Disruptive behavior: 24% CBT, 25% Placebo OCD: 2% CBT, 4% Placebo ADHD: 13% CBT, 17% Placebo	**Baseline:** CDRS-R CBT 59.6 (9.2) Placebo 61.1 (10.5) **Average duration of illness (median, weeks):** CBT: 52.0 Placebo: 35.5	**IG (n=111):** Individual CBT; 15, 50- to 60-minute sessions over 12 weeks; includes 2 parent-only sessions and 1-3 combined parent-adolescent sessions depending on need **CG (n=112):** Placebo pill; adjusted starting dose 10 mg/d to 40 mg/d, with clinical management (6 physician visits lasting 20-30 minutes to monitor clinical status and medication effects and offer general encouragement about the effectiveness of pharmacotherapy	**Depression outcomes:** CDRS-R score, dichotomized CGI-I score; RADS: Suicidal Ideation Questionnaire-Junior High School Version **Measurement method:** Clinician-rated measures were assessed by a blinded assessor at baseline, week 6, week 12 **Definition of response or remission:** Response defined as CGI-I score 1 or 2 **Other outcomes:** Integrated procedures for adverse event monitoring	**Response rate:** IG: 43.2% (95% CI 34, 52) CG: 34.8% (95% CI 26, 44) p = 0.20

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Study reference USPSTF quality Target depressive disorder	Response (continuous measure)	Other outcomes Adverse events	Attrition	Funding source	Other treatments (e.g. antidepressants; measured, not allowed, reported, etc.)	Comments	Other positive outcomes reported
TADS, 2004[10] - CBT only Good quality MDD	**CDRS** pre wk 6 wk12 IG: 59.6 (4.5) 44.6 (8.3) 42.1 (9.2) CG: 61.2 (4.3) 44.9 (7.3) 41.8 (8.0) p=0.40 **RADS** pre wk 6 wk12 IG: 78.7 (10.6) 69.1 (13.6) 68.0 (14.2) CG: 81.3 (9.2) 69.4 (10.9) 66.7 (11.4) p=0.21	**Suicidal Ideation Questionnaire** pre wk 6 wk12 IG: 21.9 (16.3) 13.2 (11.3) 11.4 (10.4) CG: 24.2 (16.5) 16.9 (11.7) 15.0 (11.1) p=0.76 **Harm- and suicide-related adverse events:** CBT vs. Placebo Harm-related: OR 0.83 (95% CI 0.25, 2.81) Suicide-related: OR 1.27 (0.33, 4.87) **Psychiatric adverse events:** (Table 4) 1 panic attack occurred in the CBT group compared to 11 events in the placebo group	**Attrition:** 18% overall 14% Flu+ CBT 17% Flu 22% CBT 21% CG	NIMH	Excluded concurrent treatment with psychotropic medication or psychotherapy outside study		CGI

USPSTF-United States Preventive Services Task Force; IG-intervention group; CG-control group; MDD-major depressive disorder; RCT-randomized controlled trial; US-United States; DSM-III-R-Diagnostic and Statistical Manual of Mental Disorders, 3rd edition, revised; NR-not reported, BDI-Beck Depression Inventory; HAM-D-Hamilton Rating Scale for Depression; CBT-cognitive-behavioral therapy; GAF-Global Assessment of Function; OR-odds ratio; CI-confidence interval; vs-versus; CBCL-Child Behavior Checklist; RADS-Reynolds Adolescent Depression Scale; BID-Bellevue Index of Depression; tx-treatment; HRSD-Hamilton Rating Scale for Depression; OCD-obsessive-compulsive disorder; IPT-interpersonal therapy; CGI-S-Clinical Global Assessment-Severity of Illness scale; K-SADS- Kiddie-Schedule for Affective Disorders and Schizophrenia; SAS-SR-Social Adjustment Scale-Self-Report; NIMH-National Institute of Mental Health; IPT-A-interpersonal therapy for adolescents; ES-effect size; SAMHSA-Substance Abuse and Mental Health Services Administration; K-SADS-P- Kiddie-Schedule for Affective Disorders and Schizophrenia-Present Version; NARSD- National Alliance for Research on Schizophrenia and Depression; SES-socioeconomic status

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