

Supplementary Material

Article Title: Ineligibility and Refusal to Participate in Randomized Controlled Trials That Have

Studied Impact on Suicide-Related Outcomes in the United States: A Meta-Analysis

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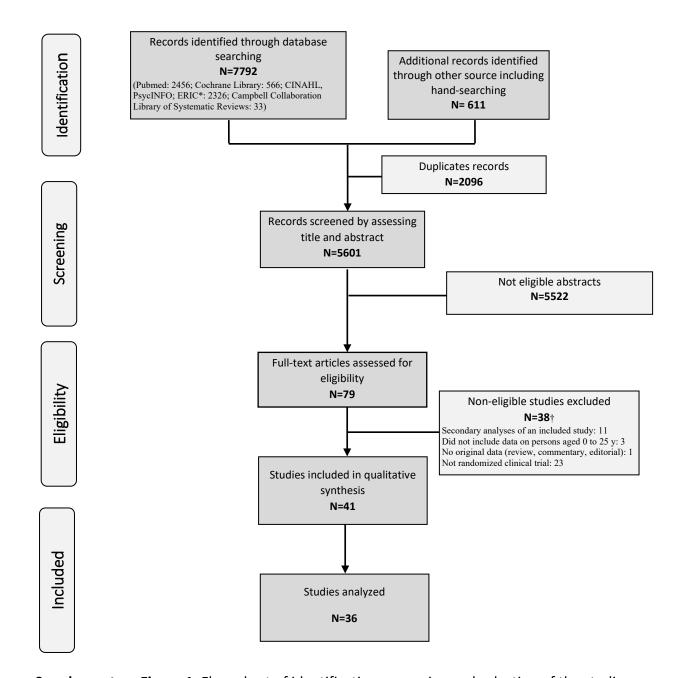
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Supplementary Figure 1. Flow-chart of identification, screening and selection of the studies

ERIC = Education Resources Information Center.

^{*} Searched simultaneously through the EBSCO database.

[†] Sum of individual reasons exceeds total number of exclusions because reviewers were not required to agree on reason for exclusion.

Supplementary Table 1. Rates of exclusion and refusal in included studies by the level of intervention

First suther (Vasu)	# A nave a sheet	# Dandamirad		Excluded		Refused
First author (Year)	# Approached	# Randomized	N	% (95% CI)	n%	(95% CI)
Universal	<u>"</u>	<u>,, </u>	<u>"</u>	<u>" </u>	<u></u>	
Aseltine, 2007 ²⁸	4491	4133	0	0	358	8.0 (7.2-8.8)
Schilling, 2014 ²⁹	NA	386	NA	NA	NA	
Schilling, 2016 ³⁰	3120	1284	0	0	1836	58.8 (57.1-60.6)
Wilcox, 2008 ³¹	NA	1196	0	NA	NA	_
Connell, 2016 ³²	1110	998	0	0	112	10.1 (8.5-12.0)
Selective		-	-		-	
Brent 2008 ³³	3258	334	2810	86.2 (85.0-87.4)	114	3.5 (2.9-4.2)
Brown, 2001 ³⁴	NA	1108	NA	_	NA	
Brown, 2019 ³⁵	115	61	36	31.3 (23.5-40.3)	18	15.7 (10.1-23.4)
Eggert, 2002 ³⁶	1068	341	556	52.1 (49.1-55.0)	171	16.0 (13.9-18.3)
Esposito-Smythers, 2017 ³⁷	285	81	91	31.9 (26.8-37.6)	113	39.6 (34.1-45.4)
Hill, 2019 ³⁸	708	80	611	86.3 (83.6-89.6)	17	2.4 (1.5-3.8)
Kaminer, 2006 ³⁹	294	177	59	20.1 (15.9-25.0)	58	19.7 (15.6-24.7)
Keeton, 2019 ⁴⁰	3066	488	1226	40.0 (38.3-41.7)	1352	44.1 (42.3-45.9)
Kerr, 2014 ⁴¹	251	166	60	23.9 (19.0-29.5)	25	10.0 (6.8-14.3)
King, 2012 ⁴²	NA	245	NA	-	105	-
King, 2015 ⁴³	828	49	478	57.7 (54.3-61.1)	301	36.4 (33.1-39.7)
March, 2004 ⁴⁴	2804	439	1315	46.9 (45.1-48.7)	1050	37.4 (35.7-39.3)
Vidot, 2016 ⁴⁵	989	746	65	6.6 (5.2-8.3)	178	18.0 (15.7-20.5)
Weinstein, 2018 ⁴⁶	170	71	21	12.4 (8.1-18.1)	80	47.1 (39.7-54.5)
Sandler, 2016 ⁴⁷	432	156	35	8.1 (5.9-11.1)	241	55.8 (51.1-60.4)
Spirito, 2015 ⁴⁸	NA	24	NA	-	NA	-
Slesnick,2019 ⁴⁹	639	150	440	68.9 (65.2-72.3)	49	7.7 (5.8-10.0)
Grupp-Phelan, 2019 ⁵⁰	5195	168	4823	92.8 (92.1-93.5)	204	3.9 (3.4-4.5)
Indicated	<u> </u>	1	ir .	1	1	1
Asarnow, 2011 ⁵¹	340	181	88	25.9 (21.5-30.8)	71	20.9 (16.9-25.5)
Asarnow, 2017 ⁵²	140	42	75	53.6 (45.3-61.6)	23	16.4 (11.2-23.4)
Bernal, 2019 ⁵³	529	121	264	49.9 (45.7-54.2)	144	27.2 (23.6-31.2)
Diamond, 2010 ⁵⁴	341	66	208	61.0 (55.7-66.0)	67	19.6 (15.8-24.2)
Diamond, 2019 ⁵⁵	366	129	106	29.0 (24.6-33.8)	131	35.8 (31.1-40.8)
Hooven, 2012 ⁵⁶	4231	615	1545	36.5 (35.1-38.0)	2071	48.9 (47.4-50.5)
Huey, 2004 ⁵⁷	156	116	22	14.1 (9.5-20.4)	18	11.5 (7.4-17.5)
Kennard, 2018 ⁵⁸	104	66	11	10.6 (6.0-18.0)	27	26.0 (18.5-35.1)
King, 2006 ⁵⁹	1316	289	330	25.1 (22.8-27.5)	697	53.0 (50.3-55.6)
King, 2009 ⁶⁰	2493	448	1443	57.9 (55.9-59.8)	602	24.1 (22.5-25.9)
Rudd, 1996 ⁶¹	328	264	26	7.9 (5.5-11.4)	38	11.6 (8.6-15.5)
Thompson, 2001 ⁶²	1546	460	757	49.0 (46.5-51.5)	329	21.3 (19.3-23.4)
Yen, 2020 ⁶³	347	52	275	79.3 (74.7-83.2)	20	5.8 (3.8-8.7)
Thompson, 2000 ⁶⁴	166	106	38	22.9 (17.2-29.9)	22	13.3 (8.9-19.3)
Wharff, 2019 ⁶⁵	330	139	102	30.9 (26.2-36.1)	89	27.0 (22.5-32.0)
Yen, 2019 ⁶⁶	123	50	46	4.9 (1.9-12.0)	27	33.3 (24.0-44.1)
Esposito-Smythers, 2019 ⁶⁷	334	147	56	16.8 (13.1-21.1)	131	39.2 (34.1-44.6)
McCauley, 2018 ⁶⁸	576	173	194	33.7 (29.9-37.6)	209	36.3 (32.5-40.3)
NA: Not available	57.0	1,3	237	33.7 (23.3 37.0)	_00	30.3 (32.3 40.3)

NA: Not available

Supplementary Table 2. Extracted data in 36 studies included in the meta-analysis

Author, Year	Setting	Name of intervention	Age group	Year of study	Inclusion criteria	Exclusion criteria
Universal	•					
Aseltine, 2007 ²⁸	School	Signs of Suicide (SOS)	14 to 18	2001-2003	1-Ninth-grade classes	None
Schilling, 2014 ²⁹	School	Signs of Suicide (SOS)	10 to 13	2009-2010	1-Middle schools identified by the Department of Defense as high-impact	None
Schilling, 2016 ³⁰	School	Signs of Suicide (SOS)	14 to 18	2007-2009	1-Ninth grade students in 16 technical high schools in the state of Connecticut	None
Wilcox, 2008 ³¹	School	Good Behavior Game (GBG)	6 to 8	1985-1987	1- All first grade in 41 classrooms in 19 elementary schools of the Baltimore City Public School System during two successive academic years: 1985–1986 for Cohort 1 first graders and 1986–1987 for Cohort 2 first graders.	None
Connell, 2016 ³²	School	Family Check Up (FCU)	13 to 18	1996-1998	1- Sixth grade from three middle schools within a metropolitan community in the northwestern US	None
Selective		I				
Brent 2008 ³³	Hospital	SSRI plus cognitive behavioral therapy	12 to 18	2000-2006	1- Aged 12 to 18 years 2-In active treatment for MDD, with a clinically significant depression (CDRS-R total score >= 40 and a Clinical Global Impressions- Severity subscale>= 4) despite being in treatment with an SSRI regimen for at least 8 weeks the last 4 of which were at a dosage of at least 40 mg per day of fluoxetine or its equivalent	1-Two or more adequate trials of an SSRI 2-Participants currently receiving CBT 3-Participants taking medications with psychoactive properties with the exception of those who were prescribed stable doses (≥12 weeks) of stimulants, hypnotics, or antianxiety agents 4-Diagnoses of bipolar spectrum disorder 5-Diagnosis of psychosis 6-Diagnosis of pervasive developmental disorder or autism 7-Diagnosis of eating disorders 8-Diagnosis of substance abuse or dependence 9-Diagnosis of hypertension 10-Pregnancy 11-Breastfeeding 12-Having unprotected sex.
Brown, 2001 ³⁴	School	Project Chrysalis	14 to 17	1995-2000	1-Female students in grade 9, 10, or 11 in the Portland Public School District 2-Identified as a victim of sexual/physical/ emotional abuse 3-Identified as having a minimum of two risk factors	None

Brown, 2019 ³⁵	Hospital	prolonged exposure therapy	13-18	2006-2012	1- A primary diagnosis of chronic/subthreshold PTSD 2-sexual abuse index trauma at least 3 months earlier	1-Untreated bipolar disorder 2-Untreated schizophrenia 3-Untreated conduct disorder 4- Untreated pervasive developmental disorder 5- Diagnosis of substance abuse or dependence 6-Current inpatient psychiatric treatment 7-Initiation of psychotropic medication within the previous 12 weeks
Eggert, 2002 ³⁶	School	Counselors- CARE (C- CARE) and Coping and Support Training (CAST)	14 to 19	1995-1998	1-Seven high schools representing two Pacific Northwest urban school districts	1-not currently at risk for suicide (with the SRS) (n=556)
Esposito- Smythers, 2017 ³⁷	Hospital	adjunctive cognitive- behavioral family-based alcohol, DSH, and HIV prevention program (ASH-P)	13 to 17	2010-2014	1- Aged 13 to 17 years 2-Receiving mental healthcare in the community at the time of recruitment 3-Living with a parent/guardian willing to participate 4-English speaking	1-Unable to provide assent or participate in groups due to cognitive limitations 2-Psychotic 3-Homicidal (n=1) 4-Alcohol/drug dependent (n=20) 5-Pregnant (N=3) 6-HIV+ 7-Not within the age range (n=10) 8-Not in MH treatment (n=18) 9-Not living with gaurdian (n=12) 10-Not English speaking (n=9) 11-Moving out of state (n=8) 12-Sibling participting (n=2) 13-Intelectual disability (n=1)
Hill, 2019 ³⁸	Community	Lean, Explore, Assess, and Plan (LEAP) intervention	13-19	2015	1- Aged 13 to 19 years 2-Endorsing a perceived burdensomeness score >=17 on the Interpersonal Needs Questionnaire Perceived Burdensomeness subscale (n=593) 3-Having available Internet access for completion of the intervention modules	1-Current psychosocial treatment or use of psychoactive medications (n=15) 2-Severe suicide ideation (n=3) 3-parent did not speak English or Spanish (n = 2)
Kaminer, 2006 ³⁹	Hospital	In-Person Aftercare and Telephone Aftercare	14 to 18	2001-2006	1-Current diagnosis of DSM-IV Alcohol Abuse or Alcohol Dependence Disorder 2-Current level of potentially harmful drinking 3-Willingness to accept treatment and random assignment to aftercare condition 4-Residence within 45 minutes drive from the two treatment sites 5-Expectation of stable residence 6-Ability to comprehend and read English	1-Met DSM-IV criteria for substance dependence other than nicotine or marijuana 2-Llifetime diagnosis of schizophrenia 3-Lifetime diagnosis of bipolar disorder 4-Lifetime diagnosis of other psychotic disorder 5-Report suicidal ideation with a plan, suicidal behavior, or self injurious behavior in the last 30 days 6-Have any current medical condition that could compromise the participant's ability to regularly attend, and constructively participate, in treatment or aftercare

Keeton, 2019 ⁴⁰	Hospital	Sertraline with cognitive behavioral therapy	10 to 26	2002-2007	1-Aged 7 to 17 years 2-A primary diagnosis of separation or generalized anxiety disorder or social phobia 3-Substantial impairment 4- IQ >=80	1-Unstable medical condition 2-Refusing to attend school because of anxiety 3-Not had a response to two adequate trials of SSRIs 4-Not had a response to an adequate trial of cognitive behavioral therapy 5-Girls who were pregnant 6-Girls who were sexually active and were not using an effective method of birth control 7-Children who were receiving psychoactive medications other than stable doses of stimulants 8-Current major depressive 9-Current substance-use disorder 10- Unmedicated ADHD, combined type 11-Lifetime history of bipolar disorder 12-Lifetime psychotic disorder 13- Lifetime pervasive developmental disorders 14-Presented an acute risk to themselves or others
Kerr, 2014 ⁴¹	Juvenile justice	Multidimens ional Treatment Foster Care (MTFC)	Mean age 15.3 (SD=1.2	1997-2006	1-Aged 13 to 17 years 2-Had at least one criminal referral in the prior 12 months 3-Were placed in out- of-home care within 12 months following referral	1-pregnant at the time of recruitment
King, 2012 ⁴²	ED	In-person follow-up (IPF)	13 to 17	2009-2010	1-Aged 13 to 17 years 2-Seeking emergency services	1-A life-threatening condition (Level 1 trauma, e.g., intubated and unconscious) 2-Severe cognitive impairment (as reported by medical staff)
King, 2015 ⁴³	ED	Teen Options for Change (TOC)	14 to 19	NA	1-Aged 14 to 19 years 2-A positive suicide risk screen, defined as suicidal ideation, a recent suicide attempt or positive screens for both depression and alcohol or drug abuse (n=450) 3-Presenting with a non- psychiatric chief complaint	1- A psychiatric chief complaint (n = 15) 2A level one trauma 3-Significant cognitive impairment 4-Disposition of psychiatric hospitalization (n=9) 5-unknown disposition (n = 3)

March, 2004 ⁴⁴	Hospital	Treatment for Adolescents With Depression Study (TADS)	12 to 17	2000-2003	1-Aged 12 to 17 years 2-Ability to receive care as an outpatient 3-DSM-IV diagnosis of MDD at consent and again at baseline (n=408) 3- Children's Depression Rating Scale-Revised (CDRS-R) total score>=45 at baseline (n=55) 4- A full- scale IQ of 80 or higher (n=36) 5-Not taking antidepressant(s) prior to consent (n=82)	1-Current or past diagnosis of bipolar disorder 2-Current or past diagnosis of severe conduct disorder (n=37) 3-Current substance abuse or dependence 4-Pervasive developmental disorder(s) 5-Thought disorder 6-Concurrent treatment with psychotropic medication or psychotherapy outside the study (n=202) 7-Two failed selective serotonin reuptake inhibitor (SSRI) trials 8-A poor response to clinical treatment containing CBT for depression 9-Intolerance to fluoxetine 10-Confounding medical condition 11-Non- English speaking patient or parent 12-Pregnancy 13-Refusal to use birth control 14-Dangerousness to self or others (n=6) 15-Missed more than 25% of school days in previous 2 months (n=262) 16-Not Resided With a Primary Caretaker for ≥6 Months (n=65) 17-Hospitalized for a Psychiatric Indication in Past 3 Months (n=58) 18-Diagnosis of MDD Not Stable and Pervasive (n=275)
Vidot, 2016 ⁴⁵	School	Familias Unidas	Mean 13.9 years old (SD = 0.67)	2010-2014	1-Be of Hispanic origin 2-Attend 8 grade at the time of the baseline assessment 3-Live with an adult primary caregiver who was willing to participate 4-Live within the catchment areas of the participating middle school 5-Plan to live in South Florida for the duration of the study	None
Weinstein, 2018 ⁴⁶	Hospital	Child- and Family- Focused Cognitive Behavioral Therapy (CFF-CBT)	7 to 13	2010-2014	1-Youth stabilized on medication 2-Indicating no acute, severe symptoms requiring immediate, more intensive care	1- Youth IQ < 70 on the Kaufman Brief Intelligence 2- Active psychosis 3-Active substance abuse/dependence 4-Neurological or other medical problems 5-current severe suicidality with intent or plan requiring immediate hospitalization, n=0 6-Youth whose primary caretakers were experiencing current depressive or manic episodes (n=0)

Sandler, 2016 ⁴⁷	Community	Family Bereavemen t Program (FBP)	8 to 16	1994-2000	1-Death of a biological parent or parent figure 2-Death occurrence no more recent than 4 months or more distant than 30 months prior to the start of the program 3-At least one child and one caregiver were willing to be randomly assigned to either the group or self-study program and participate in assessments 4-caregiver and child could complete the assessment battery in English	1-Caregiver or child was currently receiving other mental health or bereavement services 2-In a special class for the mentally handicapped 3-Planning to move out of the area in the next 6 months 4-Child or caregiver expressed suicidal intent 5-Caregiver had a current diagnosis of major depression 5-Conduct disorder, oppositional defiant disorder 6-Attenattention-deficit/hyperactive disorder 7-Parent and adolescent lived together
Spirito, 2015 ⁴⁸	Hospital	Parent- Adolescent- CBT [PA- CBT]	11 to 17	2009-2012	1-Aged 11 to 17 years 2-Current MDE 3-CDRS t score >= 65 4- Experienced current or past suicidality 5-Parent-current or past MDE 6-Parent- a minimum BDI score of 15 for parents with a current MDE and a minimum BDI score of 10 for parents with a past MD	1- Bipolar disorder 2-Substance use disorder 3-Developmental/cognitive delays 4-Psychosis 5-Not Spoke English 6-who not lived together in the Northeast
Slesnick, 2019 ⁴⁹	drop-in center	Cognitive Therapy for Suicide Prevention (CTSP) + Treatment as Usual (TAU)	18-24	2015-2019	1-Aged 18 to 24 years 2-Currently homeless 3-Were able to provide informed consent 4-Reported one or more episodes of severe suicidal ideation in the past 90 days 5-Complete the Social Network Interview 6-Score > 16 on the Scale for Suicide Ideation-Worst Point (n=43)	1- Under age 18 (n=2) 2-Over age 24 (n=4) 3-Not require hospitalization 4-Psychotic 5-Does not meet criteria for homelessness (n=21) 6-Reported no suicidal thoughts (n=368)
Grupp- Phelan, 2019 ⁵⁰	ED	The Suicidal Teens Accessing Treatment After an Emergency Department Visit (STAT-ED) intervention	12 to 17	2013-2015	1-Aged 12 to 17 years 2-Positive screen result for suicide risk 3-Lived within 100 miles of the hospital 4-No contact with a mental health care practitioner in the 90 days preceding the index ED visit 5-Stable as determined by vital signs and triage criteria	1-Presented to the ED with a chief concern of suicidal behavior or a primary or secondary psychiatric concern or altered mental status attributable to illness or medication 2-lacked telephone access 3-Unable to understand the study process 4-Unable to speak or read English adequately
Indicated	1				1	
Asarnow, 2011 ⁵¹	ED	Family- based cognitive- behavior therapy	10 to 18	2003-2005	1-Aged 10 to 18 years 2-presenting to the ED for suicide attempts and/or ideation	1-Acute psychosis/symptoms that impede consent/assessment 2-No parent/guardian to consent 3-Youth not English-speaking 4-Parents/guardians not English or Spanish-speaking 5-Intoxicated

Asarnow,	ED	SAFETY	11 to	2011-2015	1-Aged 11 to 18 years (n=5)	1-psychosis (n=7)
2017 ⁵²		Program	18		2-A recent (past 3 months) SA 3-NSSI as primary problem, with the additional requirement of repetitive SH (n=29) 4-Living in a stable family situation 5-At least one parent willing to participate in treatment	2-Substance dependence (n=2)) 3-Inability to speak English (n=2) 4-Living in a stable family situation (no plans for residential placement) (n=13) 5-Medical condition (n=1) 6- Left emergency room/unit (n=11)
Bernal, 2019 ⁵³	Hospital	A parent psychoeduca tion intervention (TEPSI) as part of cognitive-behavioral therapy (CBT)	13-17.5	2005-2007	1-Aged 13 to 17.5 years 2-Had a Children's Depression Inventory score ≥ 20 or a Children's Depression Rating Scale-Revised score ≥ 44 3-Met full DSM-IV criteria for MDD 4-Maintained clinically significant depressive symptoms for at least 6 weeks before randomization	1-Be on antidepressants 2-History of any bipolar disorder 3-Psychotherapy and pharmacological treatment for other conditions (e.g., anxiety, ADHD, or disruptive disorders) if it was considered to impact depression symptoms. 4-Current diagnosis of other Axis I disorder that was more primary than MDD 5-Current sexual or physical abuse 6-Subnormal intellectual capacity (IQ below 80) 7-Evidence of any medical or neurological condition that could preclude participation 8-Pregnancy of more than 3 months 9-Current chronic pain 10-Substance abuse or dependency within the past year 11-Current suicide risk sufficient to preclude outpatient treatment 12-Adolescent or caregiver serious legal problems 13-Unavailability to attend to the assessment 14-History of any psychotic disorder 15-History of organic brain syndrome
Diamond, 2010 ⁵⁴	Hospital	Attachment- Based Family Therapy (ABFT)	12 to 17	2005-2007	1-Aged 12 to 17 years 2-Scores above 31 on the Suicidal Ideation Questionnaire and Score above 20 (i.e., moderate depression) on the Beck Depression Inventory (n=199)	1-Needed psychiatric hospitalization (n=6) 2-Recently discharged from a psychiatric hospital 3-Current psychosis (n=3) 4-Mental retardation or history of borderline intellectual functioning
Diamond, 2019 ⁵⁵	Hospital	Attachment- based family therapy (ABFT)	12 to 18	2012-2015	1-At least clinically significant levels of suicidal ideation and moderate levels of depressive symptoms 2-At least 1 primary caregiver required to participate in assessments and treatments	1- Imminent risk of harm to self or others 2-Psychotic features 3-Severe cognitive impairment based on educational records, parent report and/or clinical impression 4-Non–English-speaking participating parent 5-Began psychiatric medication within 3 weeks of the initial pretreatment screening

Hooven, 2012 ⁵⁶	Home	Promoting CARE	14 to 19	1999-2005	1-Suicide attempts and elevated suicide ideation or depression 2-Two criteria must be met and include moderate depression, moderate suicide ideation/threats, and/or alcohol and drug use in conjunction with suicide risk)	1-Not currently at risk for suicide (with the SRS)
Huey, 2004 ⁵⁷	Hospital	Multisystemi c Therapy (MST)	10 to 17	NA	1-Aged 10 to 17 years 2-Medicaid-funded or without health insurance 3-Residing in a noninstitutional environment	1-Diagnosis of autism 2-Family already received MST treatment
Kennard, 2018 ⁵⁸	Hospital	As Safe as Possible (ASAP), supported by a smartphone app (BRITE)	12 to 18	2014-2017	1-Aged 12 to 18 years 2-Presented to psychiatric inpatient units at two academic medical centers with recent suicidal ideation with a plan or intent or a recent suicide attempt	1-Need for residential treatment 2-Active involvement of child protective services 3-Mania 4-Psychosis 5-Autism 6-Intellectual disability
King, 2006 ⁵⁹	Hospital	Youth- Nominated Support Team— Version 1 (YST–1)	12 to 17	1998-2000	1-Aged 12 to 17 years 2-Suicide attempt or significant suicidal ideation/intent during the past month 3-A score of 20 or 30 on the Self-Harm subscale of the Child and Adolescent Functional Assessment Scale 4- At least one completed baseline measure	1-Severely or profoundly mentally retarded (special education certification) 2-Presented with incapacitating psychosis
King, 2009 ⁶⁰	Hospital	Youth- Nominated Support Team – Version 2 (YST-2)	13 to 17	2002-2005	1-Aged 13 to 17 years 2-Significant suicidal ideation or suicide attempt within the past four weeks	1- Mental retardation & Acute psychosis (n=196) 2-Direct transfer to medical unit/residential placement (n=2) 3-Lived > 1-hour drive (n=123) 4-No legal guardian availableward of court or state (n = 36)
Rudd, 1996 ⁶¹	Hospital	Outpatient intervention	NA	1990-1995	1-Individuals who made an attempt precipitating referral 2-Those suffering a mood disorder with concurrent ideation 3-Those abusing alcohol episodically with concurrent ideation	1- substance dependence or chronic abuse requiring separate treatment 2-Psychotic component to the patient's presentation 3-A diagnosable thought disorder 4-A personality disorder diagnosis
Thompson, 2001 ⁶²	School	Counselors- CARE (C- CARE) and Coping and Support Training (CAST)	14 to 18	1995-2000	1-Potential high school dropouts 2-At risk for suicide	1-not currently at risk for suicide (with the SRS)

Yen, 2020 ⁶³	Hospital	Skills to Enhance Positivity (STEP)	12 to 18	2015-2016	1-Aged 12 to 18 years (n=11) 2-English speaking (n=4) 3-Have access to text messaging (n=1)	1-Diagnosed with a psychotic disorder (n=53) 2-Exhibited cognitive or intellectual disabilities (n=1) 3-A ward of the state (n=56) 4-Autism Spectrum Disorder (n=6) 5-Lives too far way (n=1) 6-Homicidal Ideation (n=8) 7-Moving out of area (n=4) 8-Wayward (n=1) 9-Completed STEP OPEN (n=4) 10-Too close to discharge (n=20) 11-Treating MD suggested passing (n=2)
Thompson, 2000 ⁶⁴	School	Personal Growth Class (PGC) Program	14 to 18	1990-1993	1-Prior school dropout 2-Below-expected credits earned for current grade level 3-Top 25th percentile for days absent per semester 4-GPA<2.3 with a pattern of declining grades or a precipitous drop in GPA >0.7 5-Referral from school personnel as being in jeopardy of school failure or dropping out	1-Not currently at risk for suicide (with the SRS)
Wharff, 2019 ⁶⁵	ED	Family- Based Crisis Intervention (FBCI)	13-18	2012-2014	1-Presenting to the ED with suicidality 2-Presence of a consenting parent or legal guardian	1- Either adolescent or parent/guardian lacked fluency in English 2-Adolescent was not medically stable, including intoxication 3-Demonstrated cognitive limitations prohibiting completion of research instruments 4-Presented with active psychosis. 5-Required physical or medication restraint in the ED.
Yen, 2019 ⁶⁶	Hospital	Coping Long Term with Active Suicide Program (CLASP)	12 to 18	2011-2012	1-Aged 12 to 18 years 2-Admitted to the inpatient psychiatric unit on the basis of suicide risk (attempt or ideation)	1-Psychotic disorders that would preclude full understanding of the protocol, intervention, and assessment materials 2-Cognitive deficits that would preclude full understanding of the protocol, intervention, and assessment materials 3-Wards of the state
Esposito- Smythers, 2019 ⁶⁷	Hospital	family- focused outpatient cognitive behavioral treatment (F-CBT)	12 to 18	2012-2017	1-English speaking 2-Met criteria for major depressive disorder, dysthymia, depression, or mood disorder not otherwise specified 3-Were hospitalized for a SA or SI 4-Had at least one of the following co-occurring risk factors: a SA prior to the index admission, NSSI, or a substance use disorder	1-Cognitive or developmental delays 2-A diagnosis of autism spectrum disorder 3-A primary diagnosis of a psychotic disorder 4-A primary diagnosis of Obsessive—compulsive disorder 5-A primary diagnosis of Eating disorder 6-Used "hard" illicit substances, such as opiates.

McCauley,	Hospital	dialectical	10 to	2012-2014	1-Aged 12 to 18 years	1-IQ less than 70 on the Kauffman
2018 ⁶⁸		behavior	24		2-At least 1 lifetime suicide	Brief Intelligence Test
		therapy			attempt	2-Primary problem of psychosis
		(DBT)			3-Elevated past-month suicidal	3-Primary problem of Mania
					ideation	4-Primary problem of anorexia
					4-Self-injury repetition	5-Life-threatening condition
					5-Three or more borderline	6-Youth without English fluency
					personality disorder criteria	7-Parent without English or Spanish
						fluency

Supplementary Table 3. Prevalence of exclusion criteria of RCTs (Selective & indicated level) by specific exclusion criterion

Criteria	Studi	es using the criteria
	N	% Median percent (range)*
Sociodemographic criterion	25	
Specific age or grade included	25	3.3 (0.9-3.6)
Be Hispanic origin	1	Not available
Not being at risk of suicide determined by the cut-off points of the	13	36.4 (2.0-83.8)
suicide screening tools		(213 3313)
Not being at risk of suicide determined by self-report or clinical	25	38.9 (0.4-83.8)
impression		
Mental, behavioral and cognitive conditions	25	
Psychotic disorder/psychotic features (lifetime, current)	22	2.9 (0.9-15.3)
Substance abuse or dependence or used "hard" illicit	11	1.4 (0.9-7.0)
substances		
Subnormal intellectual capacity	11	0.8 (0.2-7.9)
Imminent risk of harm to self or others	10	0.4 (0.2-7.8)
Bipolar disorder (lifetime, current)	8	5.2
Significant cognitive impairment	7	0.3
Pervasive developmental disorders	7	1.7
Conduct disorder/oppositional defiant disorder (current, past)	4	1.3 (0.3-1.7)
Eating disorders	3	Not available
Homicidal Ideation	3	0.3 (0-2.3)
Attention-deficit/hyperactive disorder (ADHD)	2	Not available
A primary Axis I disorder (current)	2	1.8
Current major depressive	1	Not available
Obsessive–compulsive disorder	1	Not available
Personality disorder diagnosis	1	Not available
current sexual or physical abuse	1	Not available
Primary caretakers experiencing current depressive episodes	2	Not available
Primary caretakers experiencing manic episodes	1	Not available
Medical or health related conditions	12	
Current serious/unstable medical condition	10	0.4 (0.1-0.7)
HIV positive	1	Not available
Hypertension	1	Not available
Service/treatment utilization	21	
Receiving psychotropic medication & not stabilized on	9	2.1 (1.7-10.1)
medication		
Inpatient psychiatric treatment/recently discharged	7	1.6 (1.1-2.1)
Currently receiving CBT/ psychosocial treatment	4	Not available
History of failed antidepressant treatment	3	Not available
Not in mental health treatment	3	6.3
A poor response CBT for depression	2	Not available
Intolerance to fluoxetine	1	Not available
Logistical challenges	17	
Not living with a parent/guardian	14	3.3 (1.4-16.1)
Not English-speaking participants	11	1.3 (1.1-1.4)
Not English-speaking parent	5	3.2
Lives too far away	5	2.6 (0.3-4.9)
Unstable residence/planning to move out of the area	4	3.1 (1.2-9.3)

Not English or Spanish-speaking parents/guardians	3	0.3
No Internet/text messaging/phone access	3	0.3
Problem with attending school	2	11.1
Too close to discharge (n=20)	1	20 (5.8)
Pregnancy/reproductive health	6	
Pregnancy	6	1.1
Having unprotected sex/refused to use birth control methods	3	Not available
Breastfeeding	1	Not available
Miscellaneous	3	
Sibling participating	1	0.7
Not under Medicaid or health insurance	1	Not available
Adolescent or caregiver serious legal problems	1	Not available

CBT: Cognitive-Behavioral Therapy

^{*}Where there is only one RCT, the number reported is the value for that RCT, otherwise median percent and range were reported.