Supplementary Materials

A – PRISMA Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Page 1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	Page 1-2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Page 3-5
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Page 5
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Page 6-7
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Page 6
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Page 6, S2
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	Page 7
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	Page 7-8
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	Page 7-9
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	Page 7-8
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	Page 8
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Page 9

Section and Topic	Item #	Checklist item	Location where item is reported
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	Page 9
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	Page 9
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Page 18-19, 22-23
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	Page 9
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	Page 10
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	Page 10
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	Page 10
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	Page 8
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Page 10-11
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Page 45 - 59
Study characteristics	17	Cite each included study and present its characteristics.	S3
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	S4
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	Page 15-19
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Page 14
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Page 15-19
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Page 18-

Section and Topic	Item #	Checklist item	Location where item is reported
			23
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	Page 18-19
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	Page 21, S5
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	Page 24, S6
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Page 24-27
	23b	Discuss any limitations of the evidence included in the review.	Page 26
	23c	Discuss any limitations of the review processes used.	Page 27-28
	23d	Discuss implications of the results for practice, policy, and future research.	Page 28-29
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Page 5
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	Page 5
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	N/A
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Page 30
Competing interests	26	Declare any competing interests of review authors.	Page 30
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Page 40

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

B – Search Strategy

Database	Search queries
PubMed	("caregiv*"[Title/Abstract] OR "carers"[Title/Abstract] OR "famil*"[Title/Abstract] OR "mothers"[Title/Abstract] OR "parents"[Title/Abstract] OR "spous*"[Title/Abstract] OR "partners"[Title/Abstract]) AND ("problem-solving"[Title/Abstract] OR "problem-solving"[Title/Abstract] OR "PST"[Title/Abstract] OR "social problem solving"[Title/Abstract]) AND ("intervention"[Title/Abstract] OR "therapy"[Title/Abstract] OR "training"[Title/Abstract] OR "counsel*"[Title/Abstract] OR "psychotherapy"[Title/Abstract])
Embase/Ovid	1.(caregiv* or carers or famil* or mothers or parents or spous* or partners).ab,ti. 2. ("problem solving" or "problem-solving" or PST or "social problem solving").ab,ti. 3. (intervention or therapy or training or counsel* or psychotherapy).ab,ti. 4. 1 and 2 and 3
Cochrane Library	(Caregiv* OR carers OR famil* OR mothers OR parents OR spous* OR partners):ti,ab,kw **AND** ("problem solving" OR "problem-solving" OR PST OR "social problem solving"):ti,ab,kw **AND** (intervention OR therapy OR training OR counsel* OR psychotherapy):ti,ab,kw
PsycNET APA	1. ((**abstract**: (Caregiv*) *OR* **abstract**: (carers) *OR* **abstract**: (famil*) *OR* **abstract**: (mothers) *OR* **abstract**: (parents) *OR* **abstract**: (spous*) *OR* **abstract**: (partners)) *AND* (**abstract**: ("problem solving") *OR* **abstract**: ("problem-solving") *OR* **abstract**: (PST) *OR* **abstract**: ("social problem solving")) *AND* (**abstract**: (intervention) *OR* **abstract**: (therapy) *OR* **abstract**: (training) *OR* **abstract**: (counsel*) *OR* **abstract**: (psychotherapy))) 2. ((**title**: (Caregiv*) *OR* **title**: (carers) *OR* **title**: (famil*) *OR* **title**: (mothers) *OR* **title**: (parents) *OR* **title**: (spous*) *OR* **title**: (partners)) *AND* (**title**: ("problem solving") *OR* **title**: ("problem-solving") *OR* **title**: (PST) *OR* **title**: ("social problem solving")) *AND* (**title**: (intervention) *OR* **title**: (therapy) *OR* **title**: (training) *OR* **title**: (counsel*) *OR* **title**: (psychotherapy))) 3. 1 or 2
CINAHL (EBSCOhost)	1.AB (caregiv* or carers or famil* or mothers or parents or spous* or partners) AND AB ("problem solving" or "problem-solving" or PST or "social problem solving") AND AB (intervention or therapy or training or counsel* or psychotherapy) 2.TI (caregiv* or carers or famil* or mothers or parents or spous* or partners) AND TI ("problem solving" or "problem-solving" or PST or "social problem solving") AND TI (intervention or therapy or training or counsel* or psychotherapy) 3. 1 or 2

Web of Science (Clarivate)	1. ((AB=(Caregiv* OR carers OR famil* OR mothers OR parents OR spous* OR partners)) AND AB=("problem solving" OR "problem-solving" OR PST OR "social problem solving")) AND AB=(intervention OR therapy OR training OR counsel* OR psychotherapy) 2. ((TI=(Caregiv* OR carers OR famil* OR mothers OR parents OR spous* OR partners)) AND TI=("problem solving" OR "problem-solving" OR PST OR "social problem solving")) AND TI=(intervention OR therapy OR training OR counsel* OR psychotherapy) 3. #2 OR #1

C – Excluded studies in full text review

Study	Reason for exclusion (PICO)
Abdelaziz 2024	PST < 4 sessions
Abramowitz 1989	Not PST
Actrn 2008	protocol
Argen 2012	PST < 4 sessions
Argen 2013	Not PST
Askins 2009	companion paper - Sahler 2013
Asnani 2018	protocol
Badr 2023	conference proceeding
Bahrami 2014	PST < 4 sessions
Bazzoni 2003	foreign language
Blanchard 1996	companion paper - Toseland 1995
Blom 2013	Not PST
Blom2015	not PST
Boele 2012	Not PST
Burke 1997	Not PST
Castillo 2018	foreign language
Chen 2015	Not PST
Cheng 2015	conference proceeding

ChiCtr 2023	protocol
Chien 2016	companion paper - Chien2016
Chiu 2015	Not RCT
Daniel2015	wrong outcomes
Dawalt2018	not PST
Demiris 2011	Not RCT
Demiris 2012	no control
Demiris 2018	companion paper
Demiris 2019	PST < 4 sessions
Diehl-Schmid 2017	conference proceeding
Dionne-Odom 2020	PST < 4 sessions
Dixon 2011	PST < 4 sessions
Dolgin 2021	companion paper
Donmez 2018	Not PST
Doyle 1986	Thesis
Ducharme 2011	Not PST
Dunbar 2014	conference proceeding
Durkin 2023	no control
Ejem 2020	companion paper, Dionne-Odom 2020
Elliott 2009	PST < 4 sessions
Ergüner-Tekinalp 2004	Not PST
Evans 1988	wrong outcomes
Ferré-Grau 2012	foreign language
Flores Stevens 2016	Not PST
Fortinsky 2016	not PST
Gada 2003	no full text
Garand 2019	companion paper - Garand2014
Gendron 1996	Not PST
Gitlin 2003	Not PST

Gleeson 2014	Not PST
Gleeson 2023	Not PST
Hultman 2023	Thesis
Hutchison 2012	conference proceeding
Intagliata 1984	not RCT
Jprn 2023	trial register
Juengst2025(1)	no control
Juengst2025(2)	no control
Kaufman 2010	not RCT
Kazdin 1992	wrong population
Kurz 2010	Not PST
Laakkonen 2013	Not PST
Laakkonen 2016	Not PST
Lamanna 2013	PST < 4 sessions
Lane 2004	Thesis
Lazcano 2014	foreign language
Lee 2003	foreign language
Lee 2018	not PST
López 2020	companion paper - Gonzalez 2013
López-Liria 2020	Not PST
Martín-Carrasco 2009	Not PST
McCann 2014	companion paper, included, McCann 2017
McCann 2017	companion paper - McCann 2013
McKinnon 2012	conference proceeding
McKinnon 2013	Not RCT
Meyers 2011	PST < 4 sessions
Miller 2010	no full text
Minshall2020	not PST
Mirhosseini2025	not PST

Mizuno 1999	Not PST
Mohammadi 2023	foreign language
Mohide 1990	Not PST
Nazer 2016	foreign language
Nct 2014	companion paper
Nct, trial	no full text
Negovanska 2011	foreign language
Nezu 2003	wrong outcomes
Noll 2011	conference proceeding
Oruche 2018	PST < 4 sessions
Otero 2015	companion paper - Gonzalez 2013
Otero 2015	companion paper - Gonzalez 2013
Otero 2015	companion paper - Gonzalez 2013
Palli 2015	foreign language
Perrin 2010	Not PST
Phipps 2020	no control
Pickett-Schenk 2006	Not PST
Powell 2014	no full text
Powell 2014	conference proceeding
Quayhagen 1989	Not PST
Quayhagen 2000	Not PST
Quinn 2023	PST < 4 sessions
Rainey 2018	conference proceeding
Raveis 2011	conference proceeding
Raveis 2016	conference proceeding
Reese 1995	Thesis
Sarmadi2025	not PST
Scherrmann 1992	foreign language
Schmidt 1988	no control

Schure 2003	companion paper - van Heuvel 2002
Schwartz 1998	PST < 4 sessions
Sherwood 2012	PST < 4 sessions
Silverstein 2011	companion paper - Silverstein 2011
Somayeh 2018	wrong outcomes
Sousa 2021	not PST
Stromberg 2010	companion paper, Argen2012
Sun 2019	protocol
Szmukler 1996	not PST
Tang 2018	not PST
Tanner 2013	protocol
Tierney 2021	no full text
Toseland 1992	not PST
Tremont 2011	conference proceeding
Tremont 2013	conference proceeding
Wade 2014	companion paper - Petranovich 2015
Wade 2019	no control
Wagener 2014	foreign language
Walsh 1992	foreign language
Washington 2018	conference proceeding
Webster 1994	Not PST
Winger 2018	Not PST
Winning 2023	wrong population
Wray 2010	wrong outcomes
Wysocki 1999	not PST
Wysocki 2008	wrong outcomes
Zerth 2009	Thesis

Abdelaziz, E. M., Alsadaan, N., Alqahtani, M., Elsharkawy, N. B., Ouda, M. M. A., Ramadan, O. M. E., ... & Shokre, E. S. (2024). Effectiveness of cognitive behavioral therapy (CBT) on psychological distress among mothers of children with autism spectrum disorder: the role of problem-solving appraisal. *Behavioral Sciences*, *14*(1), 46.

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D – Selected characteristics of included studies (n = 50)

Studies	Country	n	Participants	Care recipients condition	Recruitment setting	Assessment time points	Intervention	No sessions	Delivery	Comparators
Abedi 2020	Iran	72	Age: 39 (12); 75% female; 24% parent; 19% spouse	mental health	hospital	T0, T1, T1+1M	Problem-Solving Skill Program	8	in person, group	attention
Asnani 2021	Jamaica	64	Age: 29 (6); 100% female; 100% parent	sickle cell	hospital	T0, T1	Bright IDEAS	6	in person, group	usual care
Bagheri 2024	Iran	60	Age: 31; 100% female; 100% parent	preterm	hospital	T0, T1, T1+1M	D'Zurilla and Goldfried (1971)	6	in person, group	usual care
Bemis 2025	United States	38	Age: 37; 95% female; 100% parent	unspecified	hospital	T0, T1, T1+1M, +4M	Bright IDEAS	6-8	in person	usual care
Berry 2012	United States	147	Age: 57 (13); 88% female; 50% parent	disabilities	home	T0, T0+4M, T0+8M, T0+12M (T1)	PST adapted protocol (e.g. Grant et al., 2002)	12	telephone + in person (2:1)	attention
Bruvick 2013	Norway	230	Age: 64 (12); 77% female; 53% spouse; 40% child	dementia	community	T0, T1 (T0+12)	Multicomponent of PST counselling, education, group	5	in person, group	usual care
Cheng 2018	Hong Kong	128	Age: 50 (13); 75% female; 37% spouse; 57% child	stroke	community	T0, T1, T1+1M, T1+3M	Problem solving skills training (D'Zurilla and Nezu, 2007)	8	telephone + in person (2:1)	usual care

Chien 2016	Hong Kong	116	Age: 50 (10); 65% female; 44% parent; 19% spouse; 19% child	psychosis	community	T0, T1+1W, T1+6M, T1+12M	Clinician-supported Problem-solving Based Bibliotherapy (CSPSB)	10	self-help, guided	usual care
Chien 2020	Hong Kong	114	Age: 34 (9); 67% female; 33% parent; 35% spouse	psychosis	community	T0, T1+1W, T1+6M	Problem-solving based self-learning program (PBSP)	4	self-help, guided	**usual care**, psychoeducation
Elliott 2008	United States	61	Age: 54 (15); 89% female; 31% parent; 39% spouse	spinal cord injury	home	T0, T0+6M, T0+12M	Problem solving therapy	12	videoconferencing	attention
Elliott 2009	United States	81	Age: 58 (12); 79% female; 54% parent; 17% spouse	disabilities	home	T0, T0+4M, T0+8M, T0+12M (T1)	Problem solving therapy	12	telephone + in person (2:1)	attention
Feinberg 2014	United States	122	Age: 34 (7); 100% female; 100% parent	ASD	home/ community	T0, T0+3M	Problem solving education	6	in person	usual care
Gallagher 2000	United States	161	Age: 60 (11); 83% female; 52% spouse; 46% child	unspecified	community	T0, T1	Problem solving skills class	10	in person, group	**waitlist**, BA
Garand 2014	United States	73	Age: 65 (11); 78% female; 57% spouse	MCI	home	T0, T1+1M, +6M, +12M	PST	9	telephone + in person (1:2)	attention
Gerkensmeyer 2013	United States	61	Age: 43 (9); 97% female; 100% parent	mental health	home	T0, T1, T1+3, +6	Building Our Solutions and Connections (BOSC)	9	telephone	waitlist

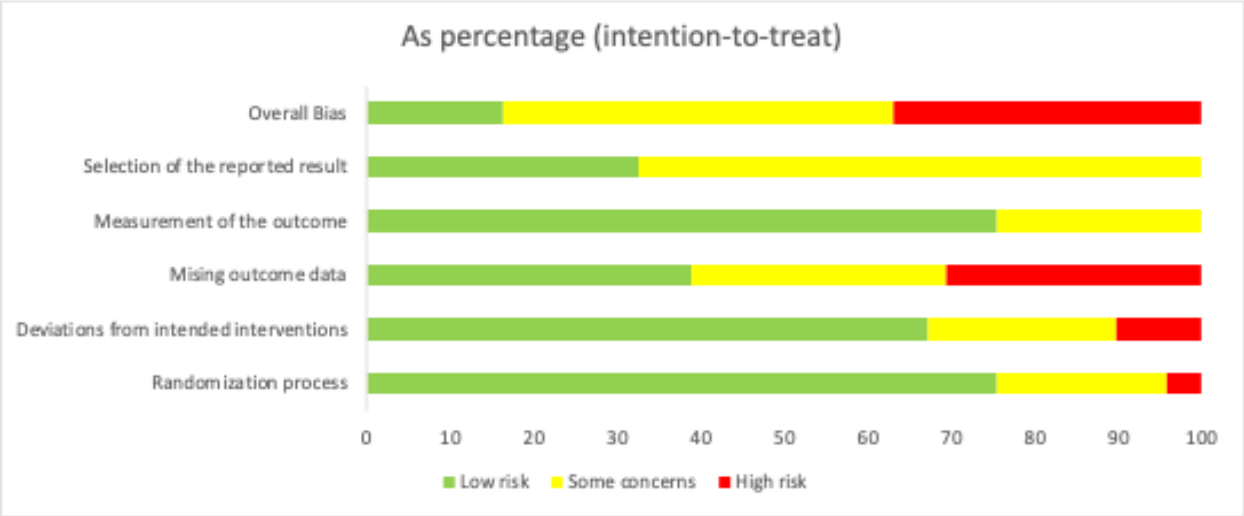
Gokalp 2025	Turkey	82	Age: 38; 100% female; 100% parent	special needs	community	T0, T1	Problem-Solving Training Program	10	in person, group	no intervention
Gonzalez 2013	Spain	173	Age: 54 (9); 100% female; 51% child	unspecified	community	T0, T1	PS: brief group intervention	5	in person, group	usual care
Grant 1999	United States	30	Age: 56; N/A female	stroke	home	T0, T1	social problem-solving partnerships	12	phone	**sham**, PST home
Grant 2002	United States	74	Age: 57 (12); 91% female; 41% spouse	stroke	home	T0, T1	Social problem-solving telephone partnerships (SPTPs)	8	telephone	**usual care**, sham
Gregory 2020	United States	37	Age: 63 (12); 81% female; 38% spouse; 51% child	hospice	home	T0, T1	PST-Hospice intervention	5	in person	attention
Hebert 2003	Canada	158	Age: 60; 80% female; 61% spouse	dementia	community	T0, T1	Psychoeducative Program	15	in person, group	usual care
Jones 2024	United States	169	Age: 51 (12); 83% female; 40% parent; 50% spouse	acquired brain injury (ABI)	hospital	T0, T1, T1+1, +3M	Problem-Solving Training	6	videoconferencing	**usual care**, psychoeducation
Juengst 2023	United States	94	Age: 50 (14); 81% female; 23% parent; 45% spouse; 24% child	TBI	home/ community	T0, T1+1M, +6M	PST + education	6	in person or telephone	usual care

Kazdin 2003	United States	127	Age: 36 (6); N/A female; 98% parent	aggressive and antisocial behaviour	clinical (psychiatry clinic)	T0, T1	Parent problem-solving (PPS)	5	in person	usual care
King 2012	United States	255	Age: 55 (15); 78% female; 63% spouse	stroke	home	T0, T1+3M, 6M, 12M	Caregiver PS (CPSI)	10	telephone	waitlist
Lelaurin 2020	United States	54	Age: 60 (10); 93% female; 74% spouse	stroke	home	T0, T1, T1+4M	RESCUE - 8 sessions	8	telephone	**usual care**, attention control
Malcarne 2019	United States	164	Age: 62 (11); 100% female; 100% spouse	prostate cancer	home	T0, T1, T1+3M	Bright IDEAS	8	in person	usual care
Mccann 2013	Australia	124	Age: 47.2 (8.3); 82% female; 91% parent	psychosis	home	T0, T1, T0+4M	Problem-Solving Bibliotherapy Intervention	5	self-help, guided	usual care
Narad 2019	United States	152	Age: N/A; N/A female; 100% parent	TBI	home	T0, T1	Teen Online Problem Solving-Family TOPS-F	8	videoconferencing	attention
Palermo 2016	United States	61	Age: 45.7 (6.8); 98% female; 100% parent	chronic pain	clinical (pain clinic)	T0, T1, T1+3M	Bright IDEAS	6	in person	usual care
Petranovich 2015	United States	132	Age: 41.9 (7.34); 89% female; 94% parent	TBI	home	T0, T1, T1+6M, 12M	Counselor-assisted problem solving (CAPS) (Wade 2014)	8	videoconferencing	attention
Pleiffer 2014	Germany	122	Age: 66–67 (10); 78%	stroke	home	T0, T1, T1+12M	Problem solving intervention	10	telephone	attention

			female; 87% spouse							
Powell 2016	United States	153	Age: 50 (14); 82% female; 35% parent; 54% spouse	TBI	home	T0, T1	education and mentored problem solving	10	telephone	usual care
Rajabi 2021	Iran	80	Age: 30 (6); 100% female; 100% parent	preterm	hospital	T0, T1	problem-solving counselling	4	in person	usual care
Rivera 2008	United States	67	Age: 51 (12); 94% female; majority mother	TBI	home	T0, 3M, 6M, 12M (T1)	Problem-solving training	12	telephone + in person (2:1)	attention
Roberts 1999	Canada	77	Age: 61 (13); 70% female; 52% spouse	dementia	community	T0, T1, T1+6M	Problem-solving counselling	10	in person	usual care
Ruffolo 2005	United States	94	Age: N/A; 95% female; 100% parent	serious emotional disturbance	community	T0, T0+9, T0+18M (T1+12)	Multiple family group psychoeducation intervention(MFGPI)	12	in person, group	usual care
Sahler 2002	United States, Israel	92	Age: 36; 100% female; 100% parent	cancer	hospital	T0, T1, T1+3M	Bright IDEAS	8	in person	usual care
Sahler 2005	United States, Israel	430	Age: 35–36; 100% female; 100% parent	cancer	hospital	T0, T1, T1+6M	Bright IDEAS	8	in person	usual care
Sahler 2013	United States	309	Age: 37 (8); 100% female; 100% parent	cancer	hospital	T0, T1, T1+3	Bright IDEAS	8	in person	usual care
Schmitter 2014	United States	46	Age: 66 (9); 70% female; 68% spouse	MCI	community	T0, T1	Cognitive rehabilitation and multi-family group	20	in person, group	usual care

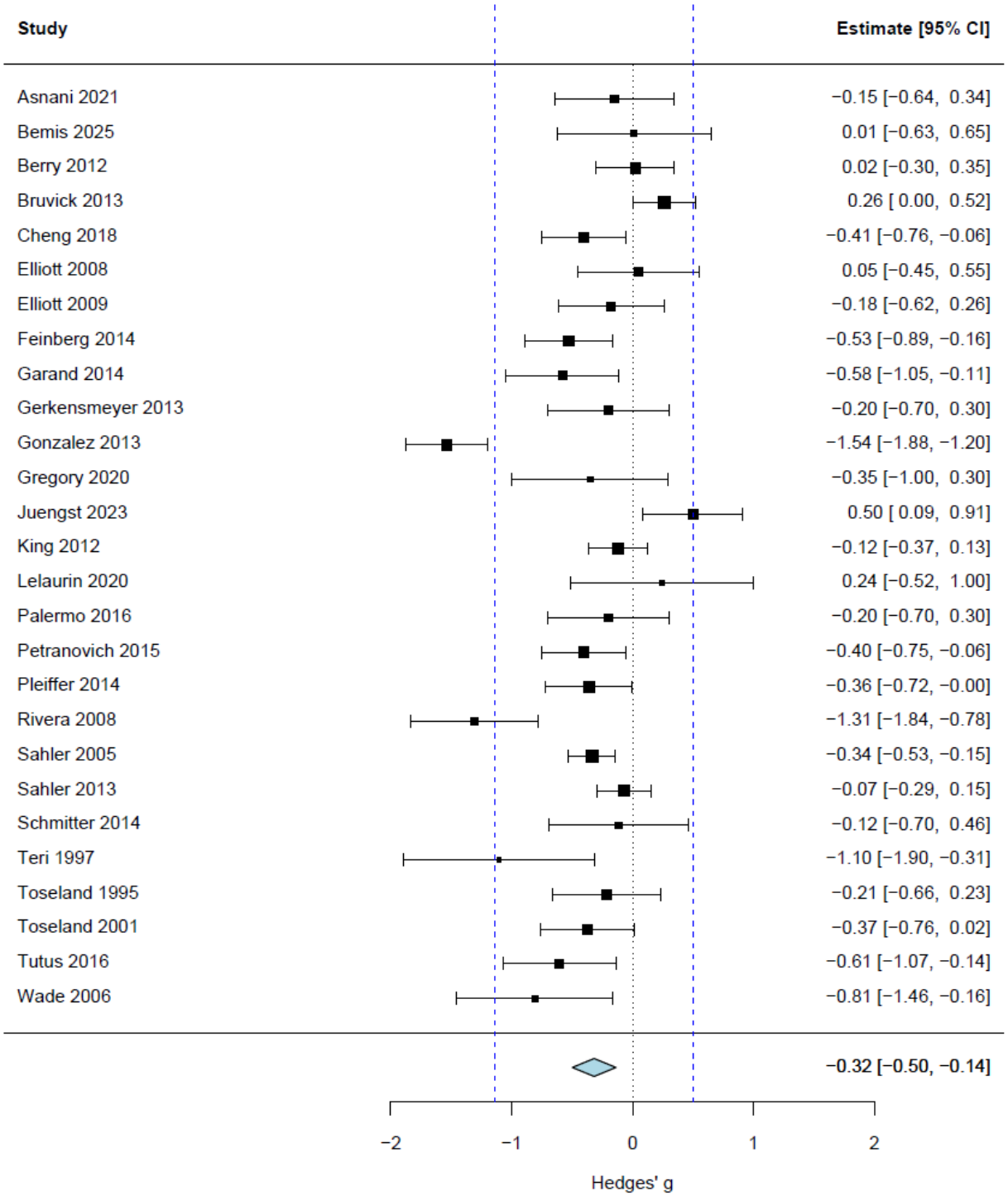
							treatment (CR-MFG)			
Silverstein 2011a	United States	50	Age: 27 (6); 100% female; 100% parent	preterm	hospital	T0, T0+1-6M	problem-solving education (PSE)	4	in person	usual care
Teri 1997	United States	72	Age: 67 (11); 69% female; 79% spouse; 14% child	dementia	community	T0, T1	Behaviour Therapy-Problem-solving	9	in person	**usual care**, waitlist, BA
Toseland 1995	United States	80	Age: 51–56; 50% female; 100% spouse	cancer	clinical (oncology center)	T0, T0+6W, T0+6M	Coping With Cancer (short term PST)	6	in person	usual care
Toseland 2001	United States	105	Age: 69; 70% female; 100% spouse	frail old	community	T0, T1	Health Education Group (HEP)	18	in person, group	usual care
Tutus 2016	Germany	74	Age: 40 (8); 89% female; 100% parent	rare chronic	home	T0, T1+3, T1+6	WEP-CARE	12	self-help, guided	usual care
Ulstein 2007	Norway	171	Age: 65 (13); 64% female; 82% spouse	dementia	clinical (memory clinic)	T0, T1, T0+12M	psychosocial including structured problem-solving	6	in person, group	usual care
Vanheuvel 2000	Netherlands	257	Age: 64 (10); 73% female; 95% spouse	stroke	home/ community	T0, T1+1	PS group	8	in person, group	waitlist
Wade 2006	United States	40	Age: N/A; N/A % female; 100% parent	TBI	home	T0, mid-intervention	Family problem solving therapy (FPS)	8	videoconferencing	attention
Wade 2012	United States	41	Age: 41 (6); N/A female; 100% parent	TBI	home	T0, T1	Teen Online Problem Solving (TOPS)	10	videoconferencing	attention

E - Risk of Bias Ratings for Included Studies (n=50)



F – Forest Plots

Depression



G – GRADE Assessment

Depression

GRADE criteria	**Rating*** (circle one)	**Footnotes** (explain reasons for down- or upgrading)	**Quality of the evidence** (Circle one)
Study design	RCT (starts as high quality) Non-RCT (starts as low quality)	All RCTs ⊕⊕⊕⊕ High quality of evidence	⊕⊕⊕⊕ High ⊕⊕⊕ Moderate ⊕⊕ Low ⊕ Very Low
Risk of Bias	No serious (-1) very serious (-2)	>50% studies have high risk of bias ⊕⊕⊕ Moderate quality of evidence	
Inconsistency	No serious (-1) very serious (-2)	Substantial between-study heterogeneity (I^2>75%) ⊕⊕ Low quality of evidence	
Indirectness	No serious (-1) very serious (-2)	 ⊕⊕ Low quality of evidence	
Imprecision	No serious (-1) very serious (-2)	 ⊕⊕ Low quality of evidence	
Publication Bias	Undetected Strongly suspected (-1)	 ⊕⊕ Low quality of evidence	
Other (upgrading factors, circle all that apply)	Large effect (+1 or +2) Dose response (+1 or +2) No Plausible confounding (+1 or +2)	Not applicable	

Note. Results are interpreted as follows

- **High quality:** Further research is very unlikely to change our confidence in the estimate.
- **Moderate quality:** Future research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.
- **Low quality:** Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.
- **Very low quality:** Any estimate of effect is very uncertain.

*Possible grading in parentheses. Evidence based on RCTs begins as high quality evidence and the quality may be downgraded (-), upgraded (+) or remain unchanged based on the other criteria.