# Appendices

#### The Effects of Psychological Treatment for Depression among People not Actively Seeking Help: A Meta-analysis

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## Appendix A. Amendments to the Protocol

According to the protocol, the originally planned aims were examining the effects of psychological treatments for adults with depression when patients were recruited from systematic screening and how many patients have to be screened to have one more positive outcome. Based on previous meta-analyses, we expected that the psychotherapies are not more effective when compared to control conditions. Besides, the initially planned data extraction included:

* the number of people that are enrolled in the program and eligible to be screened;
* the number of people that completed the questionnaires or screening tools;
* the number scoring positive (of those screened, the number of patients with scores at or above the screening cut-off).

Following this, the originally planned analyses included: calculating the number of people that need to be enrolled, that need to complete the questionnaires, and that need to score positive to get one more positive effect.

However, when we started full-text screening, we found it is complicated to define systematic screening in a trial. Therefore, we reformulated the study design and measured variables. In the current study, we examined the effects of psychological treatments among people in any setting not actively seeking help but who were approached by researchers and screened for trial eligibility. Besides since the mixed results of the previous studies, we couldn’t make a hypothesis before the analysis. In addition to the main analyses of intervention effects, we explored the proportion of participants in the trial from the number of participants who received the depression questionnaires and the proportion of participants in the trial from the number of participants who completed the depression questionnaires.

Instead of extracting “the number of patients with scores at or above the screening cut-off”, we extracted the number of patients who were randomized in the trial.

## Appendix B. Full search strings

**PubMed**

Psychotherapy [MH] OR psychotherap\*[All Fields] OR cbt[All Fields] OR "behavior therapies"[All Fields] OR "behavior therapy"[All Fields] OR "behavior therapeutic"[All Fields] OR "behavior therapeutical"[All Fields] OR "behavior therapeutics"[All Fields] OR "behavior therapeutist"[all Fields] OR "behavior therapeutists"[All Fields] OR "behavior treatment"[All Fields] OR "behavior treatments"[All Fields] OR "behaviors therapies"[All Fields] OR "behaviors therapy"[All Fields] OR "behaviors therapeutics"[All Fields] OR "behaviors therapeutic"[All Fields] OR "behaviors therapeutical"[All Fields] OR "behaviors therapeutist"[All Fields] OR "behaviors therapeutists"[All Fields] OR "behaviors treatment"[All Fields] OR "behaviors treatments"[All Fields] OR "behavioral therapies"[All Fields] OR "behavioral therapy"[All Fields] OR "behavioral therapeutics"[All Fields] OR "behavioral therapeutic"[All Fields] OR "behavioral therapeutical"[All Fields] OR "behavioral therapeutist"[All Fields] OR "behavioral therapeutists"[All Fields] OR "behavioral treatment"[All Fields] OR "behavioral treatments"[All Fields] OR "behaviour therapies"[All Fields] OR "behaviour therapy"[All Fields] OR "behaviour therapeutic"[All Fields] OR "behaviour therapeutical"[All Fields] OR "behaviour therapeutics"[All Fields] OR "behaviour therapeutist"[all Fields] OR "behaviour therapeutists"[All Fields] OR "behaviour treatment"[All Fields] OR "behaviour treatments"[All Fields] OR "behaviours therapies"[All Fields] OR "behaviours therapy"[All Fields] OR "behaviours therapeutics"[All Fields] OR "behaviours therapeutic"[All Fields] OR "behaviours therapeutical"[All Fields] OR "behaviours therapeutist"[All Fields] OR "behaviours therapeutists"[All Fields] OR "behaviours treatment"[All Fields] OR "behaviours treatments"[All Fields] OR "behavioural therapies"[All Fields] OR "behavioural therapy"[All Fields] OR "behavioural therapeutics"[All Fields] OR "behavioural therapeutic"[All Fields] OR "behavioural therapeutical"[All Fields] OR "behavioural therapeutist"[All Fields] OR "behavioural therapeutists"[All Fields] OR "behavioural treatment"[All Fields] OR "behavioural treatments"[All Fields] OR "cognition therapies"[All Fields] OR "cognition therapie"[All Fields] OR "cognition therapy"[All Fields] OR "cognition therapeutical"[All Fields] OR "cognition therapeutic"[All Fields] OR "cognition therapeutics"[All Fields] OR "cognition therapeutist"[All Fields] OR "cognition therapeutists"[All Fields] OR "cognition treatment"[All Fields] OR "cognition treatments"[All Fields] OR psychodynamic[All Fields] OR Psychoanalysis[MH] OR psychoanalysis[All Fields] OR psychoanalytic\*[All Fields] OR counselling[All Fields] OR counseling[All Fields] OR Counseling[MH] OR "problem-solving"[All Fields] OR mindfulness[All Fields] OR (acceptance[All Fields] AND commitment[All Fields] ) OR "assertiveness training"[All Fields] OR "behavior activation"[All Fields] OR "behaviors activation"[All Fields] OR "behavioral activation"[All Fields] OR "cognitive therapies"[All Fields] OR "cognitive therapy"[All Fields] OR "cognitive therapeutic"[All Fields] OR "cognitive therapeutics"[All Fields] OR "cognitive therapeutical"[All Fields] OR "cognitive therapeutist"[All Fields] OR "cognitive therapeutists"[All Fields] OR "cognitive treatment"[All Fields] OR "cognitive treatments"[All Fields] OR "cognitive restructuring"[All Fields] OR (("compassion-focused"[All Fields] OR "compassion-focussed"[All Fields]) AND (therapy[SH] OR therapies[All Fields] OR therapy[All Fields] OR therape\*[All Fields] OR therapis\*[All Fields]OR Therapeutics [OR treatment\*[All Fields])) OR ((therapy[SH] OR therapies[All Fields]

OR therapy [All Fields] OR therape\*[All Fields] OR therapis\*[All Fields] OR Therapeutics[MH] OR treatment\*[All Fields]) AND constructivist\*[All Fields]) OR "metacognitive therapies"[All Fields] OR "metacognitive therapy"[All Fields] OR "metacognitive therapeutic"[All Fields] OR "metacognitive therapeutics"[All Fields] OR "metacognitive therapeutical"[All Fields] OR "metacognitive therapeutist"[All Fields] OR "metacognitive therapeutists"[All Fields] OR "metacognitive treatment"[All Fields] OR "metacognitive treatments"[All Fields] OR "meta-cognitive therapies"[All Fields] OR "meta-cognitive therapy"[All Fields] OR "meta-cognitive therapeutic"[All Fields] OR "meta-cognitive therapeutics"[All Fields] OR "meta-cognitive therapeutical"[All Fields] OR "meta-cognitive therapeutist"[All Fields] OR "meta-cognitive therapeutists"[All Fields] OR "meta-cognitive treatment"[All Fields] OR "meta-cognitive treatments"[All Fields] OR "solution-focused therapies"[All Fields] OR "solution-focused therapy"[All Fields] OR "solution-focused therapeutic"[All Fields] OR "solution-focused therapeutics"[All Fields] OR "solution-focused therapeutical"[All Fields] OR "solution focused therapies"[All Fields] OR "solution focused therapy"[All Fields] OR "solution focused therapeutic"[All Fields] OR "solution focused therapeutics"[All Fields] OR "solution focused therapeutical"[All Fields]OR "solution-focussed therapies"[All Fields] OR "solution-focussed therapy"[All Fields] OR "solution-focussed therapeutic"[All Fields] OR "solution-focussed therapeutics"[All Fields] OR "solution-focussed therapeutical"[All Fields]OR "solution focussed therapies"[All Fields] OR "solution focussed therapy"[All Fields] OR "solution focussed therapeutic"[All Fields] OR "solution focussed therapeutics"[All Fields] OR "solution focussed therapeutical"[All Fields] OR "self-control therapies"[All Fields] OR "self-control therapy"[All Fields] OR "self-control therapeutics"[All Fields] OR "self-control therapeutical"[All Fields] OR "self-control therapeutic"[All Fields] OR "self- control training"[All Fields] OR "self-control trainings"[All Fields] OR "self control therapies"[All Fields] OR "self control therapy"[All Fields] OR "self control therapeutics"[All Fields] OR "self control therapeutical"[All Fields] OR "self control therapeutic"[All Fields] OR "self control training"[All Fields] OR "self control trainings"[All Fields]

AND
(Depressive Disorder[MH] OR Depression[MH]OR dysthymi\*[All Fields] OR "affective disorder"[All Fields]OR "affective disorders"[All Fields] OR "mood disorder"[All Fields] OR "mood disorders"[All Fields] OR depression\*[All Fields] OR depressive\*[All Fields] OR "dysthymic disorder"[MeSH Terms])
Limits: RCTs

**Embase**

#1 'psychotherapy'/exp OR 'psychotherapy' OR 'psychotherapies' OR 'psychotherapeutics' OR 'psychotherapeutical' OR 'cognitive therapy'/exp OR 'cognitive behavior therapy'/exp OR 'behavior therapy'/exp OR ́cbt ́ OR ́cognitive behavioural therapy ́ OR ́cognitive behavioural therapies ́ OR cognitive behavioral therapy ́ OR 'cognitive behavioral therapies' OR 'behavior therapy' OR 'behavior therapies' OR 'behaviour therapy' OR 'behaviour therapies' OR 'cognition therapy' OR 'cognitive therapies' OR 'cognitive therapy' OR 'cognitive therapeutic' OR 'cognitive therapeutics' OR 'cognitive therapeutical' OR 'cognitive therapeutist' OR 'cognitive therapeutists' OR 'cognitive treatment' OR 'cognitive treatments' OR 'cognitive restructuring' OR 'cognition therapies' OR 'cognition therapie' OR 'cognition therapeutical' OR 'cognition therapeutic' OR 'cognition therapeutics' OR 'cognition therapeutist' OR 'cognition therapeutists' OR 'cognition treatment' OR 'cognition treatments' OR 'behavior therapeutic' OR 'behavior therapeutical' OR 'behavior therapeutics' OR 'behavior therapeutist' OR 'behavior therapeutists' OR 'behavior treatment' OR 'behavior treatments' OR 'behaviors therapies' OR 'behaviors therapy' OR 'behaviors therapeutics' OR 'behaviors therapeutic' OR 'behaviors therapeutical' OR 'behaviors therapeutist' OR 'behaviors therapeutists' OR 'behaviors treatment' OR 'behaviors treatments' OR 'behavioral therapies' OR 'behavioral therapy' OR 'behavioral therapeutics' OR 'behavioral therapeutic' OR 'behavioral therapeutical' OR 'behavioral therapeutist' OR 'behavioral therapeutists' OR 'behavioral treatment' OR 'behavioral treatments' OR 'behaviour therapeutic' OR 'behaviour therapeutical' OR 'behaviour therapeutics' OR 'behaviour therapeutist' OR 'behaviour therapeutists' OR 'behaviour treatment' OR 'behaviour treatments' OR 'behaviours therapies' OR 'behaviours therapy' OR 'behaviours therapeutics' OR 'behaviours therapeutic' OR 'behaviours therapeutical' OR 'behaviours therapeutist' OR 'behaviours therapeutists' OR 'behaviours treatment' OR 'behaviours treatments' OR 'behavioural therapies' OR 'behavioural therapy' OR 'behavioural therapeutics' OR 'behavioural therapeutic' OR 'behavioural therapeutical' OR 'behavioural therapeutist' OR 'behavioural therapeutists' OR 'behavioural treatment' OR 'behavioural treatments' OR 'behavior activation' OR 'behaviors activation' OR 'behavioral activation' OR 'behaviour activation' OR 'behaviours activation' OR 'behavioural activation' OR 'psychoanalytic therapy'/exp OR 'psychodynamic' OR 'psychodynamical' OR 'psychoanalysis' OR 'psychoanalytical' OR 'counselling'/exp OR 'counseling'/exp OR 'counselling' OR 'counseling' OR 'problem-solving' OR 'problem solving' OR 'supportive therapy' OR 'metacognitive therapy' OR 'metacognitive therapies' OR 'metacognitive therapeutic' OR 'metacognitive therapeutics' OR 'metacognitive therapeutical' OR 'metacognitive therapeutist' OR 'metacognitive therapeutists' OR 'metacognitive treatment' OR 'metacognitive treatments' OR 'meta-cognitive therapy' OR 'meta-cognitive therapies' OR 'meta-cognitive therapeutic' OR 'meta-cognitive therapeutics' OR 'meta-cognitive therapeutical' OR 'meta-cognitive therapeutist' OR 'meta-cognitive therapeutists' OR 'meta-cognitive treatment' OR 'meta-cognitive treatments' OR 'solution-focused therapies' OR 'solution focused therapies' OR 'solution-focussed therapies' OR 'solution focused therapies' OR 'solution- focused therapy' OR 'solution focused therapy' OR 'solution-focussed therapy' OR 'solution focused therapy' OR 'solution-focused therapeutic' OR 'solution focused therapeutic' OR 'solution-focussed therapeutic' OR 'solution focussed therapeutic' OR 'solution-focused therapeutics' OR 'solution focused therapeutics' OR 'solution-focussed therapeutics' OR 'solution focused therapeutics' OR 'solution-focused therapeutical' OR 'solution focused therapeutical' OR 'solution-focussed therapeutical' OR 'solution focused therapeutical' OR 'self-control therapies' OR 'self control therapies' OR 'self-control therapy' OR 'self control therapy' OR 'self-control therapeutics' OR 'self control therapeutics' OR 'self-control therapeutical' OR 'self control therapeutical' OR 'self-control therapeutic' OR 'self control therapeutic' OR 'self-control training' OR 'self control training' OR 'self control trainings' OR 'self-control trainings' OR 'mindfulness' OR 'acceptance commitment' OR 'acceptance and commitment' OR 'assertiveness training'
#2 'compassion-focused' OR 'compassion-focussed' OR 'compassion focused' OR 'compassion focussed' OR 'constructivist' OR 'constructivists'
#3 'therapies' OR 'therapy' OR 'therapeutics' OR 'therapist' OR 'treatment' OR 'treatments'
#4 Combine: #2 AND #3
#5: #1 OR #4

#6 'depressive disorder'/exp OR 'depression'/exp OR 'depressive' OR 'major depression'/exp OR 'major depressive disorder'/exp OR 'depression' OR 'depressions' OR 'depressive' OR 'dysthymic disorder'/exp OR 'dysthymic disorder' OR 'dysthymia'/exp OR 'dysthymic' OR 'mood disorder'/exp OR 'affective disorder'/exp OR 'affective disorder' OR 'affective disorders' OR 'mood disorder' OR 'mood disorders'
Combine: #5 AND #6
Limits: RCTs

**PsycINFO**

(DE "Psychotherapy" OR "Psychotherapy" OR "psychotherapies" OR "psychotherapeutic" OR "psychotherapeutical" OR "psychotherapeutics" OR DE "Behavior Therapy" OR DE "Cognitive Behavior Therapy" OR "CBT" OR "behavior therapies" OR "behavior therapy" OR "behavior therapeutic" OR "behavior therapeutical" OR "behavior therapeutics"

OR "behavior therapeutist" OR "behavior therapeutists" OR "behavior treatment" OR "behavior treatments" OR "behaviors therapies" OR "behaviors therapy" OR "behaviors therapeutics" OR "behaviors therapeutic" OR "behaviors therapeutical" OR "behaviors therapeutist" OR "behaviors therapeutists" OR "behaviors treatment" OR "behaviors treatments" OR "behavioral therapies" OR "behavioral therapy" OR "behavioral therapeutics" OR "behavioral therapeutic" OR "behavioral therapeutical" OR "behavioral therapeutist" OR "behavioral therapeutists" OR "behavioral treatment" OR "behavioral treatments" OR "behaviour therapies" OR "behaviour therapy" OR "behaviour therapeutic" OR "behaviour therapeutical" OR "behaviour therapeutics" OR "behaviour therapeutist" OR "behaviour therapeutists" OR "behaviour treatment" OR "behaviour treatments" OR "behaviours therapies" OR "behaviours therapy" OR "behaviours therapeutics" OR "behaviours therapeutic" OR "behaviours therapeutical" OR "behaviours therapeutist" OR "behaviours therapeutists" OR "behaviours treatment" OR "behaviours treatments" OR "behavioural therapies" OR "behavioural therapy" OR "behavioural therapeutics" OR "behavioural therapeutic" OR "behavioural therapeutical" OR "behavioural therapeutist" OR "behavioural therapeutists" OR "behavioural treatment" OR "behavioural treatments" OR "cognition therapies" OR "cognition therapie" OR "cognition therapy" OR "cognition therapeutical" OR "cognition therapeutic" OR "cognition therapeutics" OR "cognition therapeutist" OR "cognition therapeutists" OR "cognition treatment" OR "cognition treatments" OR "cognitive therapies" OR "cognitive therapy" OR "cognitive therapeutic" OR "cognitive therapeutics" OR "cognitive therapeutical" OR "cognitive therapeutist" OR "cognitive therapeutists" OR "cognitive treatment" OR "cognitive treatments" OR "cognitive restructuring" OR DE "Emotion Focused Therapy" OR DE "Psychoanalysis" OR "psychoanalysis" OR "psychoanalytic" OR "psychoanalytical "OR DE "Psychodynamic Psychotherapy" OR "psychodynamic" OR DE "Psychotherapeutic Counseling" OR "counselling" OR "counseling" OR "problem-solving" OR "problem solving" OR "mindfulness" OR ("acceptance" AND "commitment") OR "assertiveness training" OR "behavior activation" OR "behaviors activation" OR "behavioral activation" OR "behaviour activation" OR "behaviours activation" OR "behavioural activation" OR "metacognitive therapies" OR "metacognitive therapy" OR "metacognitive therapeutic" OR "metacognitive therapeutics" OR "metacognitive therapeutical" OR "metacognitive therapeutist" OR "metacognitive therapeutists" OR "metacognitive treatment" OR "metacognitive treatments" OR "meta-cognitive therapies" OR "meta-cognitive therapy" OR "meta-cognitive therapeutic" OR "meta-cognitive therapeutics" OR "meta-cognitive therapeutical" OR "meta-cognitive therapeutist" OR "meta-cognitive therapeutists" OR "meta-cognitive treatment" OR "meta-cognitive treatments" OR DE "Solution Focused Therapy" OR "solution- focused therapies" OR "solution-focused therapy" OR "solution-focused therapeutic" OR "solution-focused therapeutics" OR "solution-focused therapeutical" OR "solution-focussed therapies" OR "solution-focussed therapy" OR "solution-focussed therapeutic" OR "solution-focussed therapeutics" OR "solution-focussed therapeutical" OR "solution focused therapies" OR "solution focused therapy" OR "solution focused therapeutic" OR "solution focused therapeutics" OR "solution focused therapeutical" OR "solution focussed therapies" OR "solution focussed therapy" OR "solution focussed therapeutic" OR "solution focussed therapeutics" OR "solution focussed therapeutical" OR "self- control therapies" OR "self-control therapy" OR "self-control therapeutics" OR "self-control therapeutical" OR "self- control therapeutic" OR "self-control training" OR "self-control trainings" OR "self control therapies" OR "self control therapy" OR "self control therapeutics" OR "self control therapeutical" OR "self control therapeutic" OR "self control training" OR "self control trainings" OR (("compassion-focused" OR "compassion-focussed" OR "compassion focused" OR "compassion focussed") AND ("therapies" OR "therapy" OR "therapie" OR "therapist" OR "therapists" OR "therapeut" OR "treatment" OR "treatments")) OR ("constructivist" AND ("therapies" OR "therapy" OR "therapie" OR "therapist" OR "therapists" OR "therapeut" OR "treatment" OR "treatments")))
AND
(DE "Depression (Emotion)" "depressive disorder" OR "depression" OR "depressions" OR "depressive" OR DE "Major Depression" OR "major depression" OR "major depressive disorder" OR DE "Dysthymic Disorder" OR "Dysthymia" OR " dysthymic disorder" OR DE "Affective Disorders" OR "Affective Disorder" OR "affective disorders" OR "Mood Disorder" OR "Mood disorders")
Limits: Methodology is ME=(treatment outcome/clinical trial): papers

**Cochrane**

#1  MeSH descriptor: [Depressive Disorder] explode all trees : 6, 777

#2  ''depress\*'' (Word variations have been searched) : 51, 768

#3  #1or#2 :51,783

#4  ''major depressive disorder'' (Word variations have been searched) : 5, 435

#5  #3or#4 :51,783

#6  MeSH descriptor: [Dysthymic Disorder] explode all trees : 129

#7  ''dysthymi\*'' (Word variations have been searched) : 649

#8  #6or#7 :649

#9  #5or#8 :51,800

#10  ''mood disorder'' (Word variations have been searched) :4, 034

#11  ''affective disorder'' (Word variations have been searched) : 2, 882

#12  #10or#11:6,055

#13  #9or#12:53,227

#14  MeSH descriptor: [Psychotherapy] explode all trees : 13, 568

#15  ''psychotherap\*'' (Word variations have been searched) : 7, 758

#16  ''CBT'' (Word variations have been searched) : 2, 029

#17  ''Cognitive Behav\* therap\* (Word variations have been searched) : 8, 893

#18  #14or#15or#16or#17 :20,795

#19  'psychodynamic'' (Word variations have been searched) : 469

#20  MeSH descriptor: [Psychoanalysis] explode all trees : 13

#21  ''psychoanaly\*'' (Word variations have been searched) : 345

#22  MeSH descriptor: [Counseling] explode all trees : 2, 783

#23  ''counseling\*'' (Word variations have been searched) : 6, 913

#24  ''problem solving'' (Word variations have been searched) : 2, 867

#25  #18or#19or#20or#21or#22or#23or#24 :28,149

#26  ''acceptance commitment'' (Word variations have been searched) : 168

#27  ''assertiveness training'' (Word variations have been searched) :231

#28  ''behavior activation'' (Word variations have been searched) : 663

#29  ''mindfulness'' (Word variations have been searched) : 466

#30  ''metacognitive therap\*'' (Word variations have been searched) :56

#31  ''solution focused therap\*'' (Word variations have been searched) :858

#32  ''self control training'' (Word variations have been searched): 5850

#33  #25or#26or#27or#28or#29or#30or#31or#32 :32,748

#34  ''Randomized Controlled Trial'':ti,ab,kw (Word variations have been searched) : 120, 901

#35  #13 and #33 and #34 in Trials

## Appendix C. References of the included studies

Ammerman, R. T., Putnam, F. W., Altaye, M., Teeters, A. R., Stevens, J., & Van Ginkel, J. B. (2013). Treatment of depressed mothers in home visiting: Impact on psychological distress and social functioning. *Child Abuse and Neglect*, *37*(8), 544–554. https://doi.org/10.1016/j.chiabu.2013.03.003

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Fuhr, D. C., Weobong, B., Lazarus, A., Vanobberghen, F., Weiss, H. A., Singla, D. R., … Patel, V. (2019). Delivering the Thinking Healthy Programme for perinatal depression through peers: an individually randomised controlled trial in India. *The Lancet Psychiatry*, *6*(2), 115–127. https://doi.org/10.1016/S2215-0366(18)30466-8

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## Appendix D. Proportions of the included studies

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|   |   |   |   |   |   |   |
| *Study* | *N enrolled* | *N screened* | *N randomized* | *Prop1* | *Prop2* | *Screening tool* |
| Ammerman, 2013a | 1768 | 1240 | 93 | 0.05 | 0.08 | epds |
| Beutel, 2014 | 5989 | 1306 | 157 | 0.03 | 0.12 | hads |
| Burns, 2007 | 594 | 293 | 293 | 0.49 | 1.00 | gds |
| Burns, 2013 | 5409 | 5409 | 36 | 0.01 | 0.01 | other |
| Cooper, 2003  | 3222 | 3222 | 193 | 0.06 | 0.06 | epds |
| Davoudi, 2020 | 149 | 76 | 50 | 0.34 | 0.66 | bdi |
| Dekker, 2012 | 80 | 80 | 42 | 0.53 | 0.53 | bdiii |
| Desautels, 2017 | 2635 | 743 | 62 | 0.02 | 0.08 | hads |
| Doering, 2013 | 731 | 729 | 81 | 0.11 | 0.11 | bdi |
| Evans, 1995 | 95 | 95 | 78 | 0.82 | 0.82 | cesd |
| Farshi, 2020 | 332 | 332 | 76 | 0.23 | 0.23 | bdiii |
| Freedland, 2009  | 2955 | 2823 | 123 | 0.04 | 0.04 | bdi |
| Fuhr, 2019 | 6409 | 6369 | 280 | 0.04 | 0.04 | pgq9 |
| Furukawa, 2012 | 4916 | 3105 | 118 | 0.02 | 0.04 | k6 |
| Gellis, 2008 | 618 | 618 | 69 | 0.11 | 0.11 | cesd |
| Goodman, 2015 | 790 | 42 |  | 0.05 | epds |
| Herrmann-Lingen, 2016 | 18542 | 15582 | 570 | 0.03 | 0.04 | hads |
| Holden, 1989 | 734 | 734 | 55 | 0.07 | 0.07 | epds |
| Hou, 2014 | 1713 | 1713 | 249 | 0.15 | 0.15 | epds |
| Joling, 2011 | 325 | 275 | 170 | 0.52 | 0.62 | cesd |
| Kamga, 2017 | 1223 | 258 | 80 | 0.07 | 0.31 | pgq9 |
| Kim, 2018 | 152 | 152 | 60 | 0.39 | 0.39 | cesd |
| Lamers, 2010 | 8326 | 5578 | 361 | 0.04 | 0.06 | pgq9 |
| Lerner, 2015 | 18102 | 17306 | 431 | 0.02 | 0.02 | pgq9 |
| Lexis, 2011 | 23973 | 8892 | 139 | 0.01 | 0.02 | hads |
| Lloyd-Williams, 2018 | 284 | 57 |  | 0.20 | pgq9 |
| Lund, 2019  | 2187 | 2187 | 425 | 0.19 | 0.19 | epds |
| Lundgren, 2016 | 2855 | 64 | 50 | 0.02 | 0.78 | pgq9 |
| Lynch, 1997 | 275 | 239 | 29 | 0.11 | 0.12 | other |
| Lynch et al, 2004 | 1752 | 54 |  | 0.03 | other |
| Milgrom, 2005  | 4148 | 192 |  | 0.05 | epds |
| Milgrom, 2011  | 3531 | 3531 | 68 | 0.02 | 0.02 | epds |
| Mossey, 1996 | 1804 | 1530 | 89 | 0.05 | 0.06 | gds |
| Neugebauer, 2006 | 97 | 72 | 19 | 0.20 | 0.26 | hamd |
| Ngai, 2015 | 5670 | 1605 | 397 | 0.07 | 0.25 | epds |
| Nollett, 2016 | 1008 | 1008 | 85 | 0.08 | 0.08 | gds |
| O'Mahen, 2013 - I | 2382 | 1421 | 55 | 0.02 | 0.04 | epds |
| O'Neil, 2014 | 3071 | 387 | 121 | 0.04 | 0.31 | pgq9 |
| Onuigbo, 2019 | 105 | 98 | 65 | 0.62 | 0.66 | bdiii |
| Pibernik, 2015 | 4858 | 1740 | 209 | 0.04 | 0.12 | pgq2 |
| Richards, 2018 | 1228 | 614 | 30 | 0.02 | 0.05 | pgq9 |
| Salamanca-Sanabria, 2020 | 604 | 604 | 214 | 0.35 | 0.35 | pgq9 |
| Schulberg, 1996 | 7652 | 276 |  | 0.04 | cesd |
| Sheeber, 2012 | 793 | 555 | 70 | 0.09 | 0.13 | cesd |
| Sikander, 2019  | 1910 | 1731 | 570 | 0.30 | 0.33 | pgq9 |
| Strong, 2008 | 8153 | 8153 | 200 | 0.02 | 0.02 | hads |
| Van Schaik, 2006 | 6719 | 4301 | 143 | 0.02 | 0.03 | gds |
| Vázquez, 2020 | 603 | 603 | 219 | 0.36 | 0.36 | cesd |
| Verduyn, 2003  | 3692 | 2248 | 119 | 0.03 | 0.05 | bdi |
| Wickberg, 1996 | 1874 | 1655 | 41 | 0.02 | 0.02 | epds |
| Xie, 2019 | 317 | 317 | 80 | 0.25 | 0.25 | gds |
| Zhao, 2019  | 1524 | 1524 | 352 | 0.23 | 0.23 | epds |
|  |  |  |  |  |  |  |

***Note.*** Indicators of the columns:

* N enrolled: the number of people who enrolled in the study and received depression questionnaires
* N screened: the number of people who got screened using depression scales and completed/responded to the scale
* N randomized: the number of people who got randomized
* Prop1: the proportion of participants in the trial from the total number of participants who received the depression questionnaires
* Prop2: the proportion of participants in the trial from the total number of participants who completed the depression questionnaires
* Screening tool: name of the questionnaire (bdi/bdiii: Beck Depression Inventory; cesd: Center for Epidemiologic Studies Depression Scale; epds: Edinburgh Postnatal Depression; gds: Geriatric Depression Scale; hads: Hospital Anxiety and Depression Scale; phq9: Patient Health Questionnaire– Depression).

## Appendix E. Description of sample of included studies

In most studies, most participants were women (26.9% had between 50% and 75% women, and 55.8% had more than 75% women). Most studies (76.92%) were conducted in western countries (14 in the US, 10 in the UK, 10 in Europe, 3 in Australia, 2 in Canada, and 1 in South Korea), 12 were conducted in non-western countries (23.1%). A total of 6 studies (11.5%) were published between 1989 and 2000, 4 between 2001 and 2005 (7.7%), 7 between 2006 and 2010 (13.5%), 17 between 2011 and 2015 (32.7%), and 18 after 2016 (34.6%). Of the included 52 studies, 32 were focused on the adults’ population (61.5%), while the other 20 were focused on older people (38.5%). 37 studies (71.2%) were conducted in samples selected through a cut-off on a self-report scale. Only 14 (26.9%) used diagnostic interviews. Most studies (88.5%) were aimed at specific subgroups of depressed populations (46.2% were participants with both depression and comorbid general medical disorders, 28.9% were women with postpartum depression, and 13.5% belonged to another specific population), while 11.5% were aimed at general populations of depressed persons not otherwise specified. Most studies (86.5%) employed usual care, whereas 7 (13.5%) used other control conditions. Among 61 comparisons, half of the interventions were CBT, followed by non-directive supportive therapy (14.8%) and problem-solving therapy (9.83%). Most therapies used an individual (50.8%) format. Most studies had seven to twelve sessions (54.1%), whereas the rest had fewer (32.8%) or more sessions (13.1%). Among 52 included studies, the most used screening tool was the EPDS (23.1%), followed by the PHQ-9 (19.2%), the BDI or BDI-II (15.4%), and the CES-D (13.5%).

## Appendix F. Funnel plots

### F.1. Funnel plot for effects of psychotherapy compared with control groups



### F.2. Funnel plot for proportion of participants in the trial from the number of participants who received the depression questionnaires



### F.3. Funnel plot for proportion of participants in the trial from the number of participants who completed the depression questionnaires



## Appendix G. Standardized regression coefficients of effect size: Multivariate meta-regression analysis

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  | *Coeff* | *SE* | *p* |
| Setting (other vs general medical) | 0.09 | 0.18 | 0.60 |
| Age group (older vs younger adults) | -0.20 | 0.19 | 0.29 |
| Publication year (continuous) | 0.00 | 0.01 | 0.68 |
| Diagnosis (yes vs no)  |  | 0.22 | 0.16 | 0.19 |
| Risk of bias (low vs high) | 0.01 | 0.16 | 0.96 |
| Psychotherapy type (other vs cbt) | -0.19 | 0.15 | 0.22 |
|  |  |  |  |  |
| Intercept |  | -8.43 | 21.63 | 0.70 |

## Appendix H. Long-term effects of psychotherapies for depression: Hedges’*g*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |
| Long-term effects |  | Effect Size |  |  |  | Heterogeneity |  |  |
|  | *N* (comparisons) | *g* | 95% CI |  | *I2* | 95% CI  |  | NNT |
|  6-8 months FU |  | 25 | 0.33 | 0.14~0.52 |  | 75 | 63~83 |  | 9.83 |
|  9-12 months FU |  | 13 | 0.24 | 0.11~0.37 |  | 31 | 0~64 |  | 13.99 |
|  13-24 months FU |  | 7 | 0.32 | -0.19~0.82 |  | 92 | 87~96 |  | 10.23 |
|  >24 months FU |  | 3 | 0.18 | 0.15~0.21 |  | 0 | 0~0 |  | 18.85 |

***Note.*** FU: follow-up

## Appendix I. Forest plots

### I.1. Forest plot for proportion of participants in the trial from the number of participants who received the depression questionnaires



### I.2. Forest plot for proportion of participants in the trial from the number of participants who completed the depression questionnaires



## Appendix J. Pooled proportion of participants in the trial from the number of participants who received the depression questionnaires

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |
|  |  | Proportion |  | Heterogeneity |  |
|  |  | *N* (studies) | *Prop* | 95% CI |  | *I2* | 95% CI  | *p*  |
| All comparisons |  | 47 | 0.09 | 0.06~0.13 |  | 99.5 | 99.5~99.6 |  |
| Adjusted for publication bias (add 2) | 49 | 0.08 | 0.05~0.12 |  | 99.5 | 99.5~99.6 |  |
| Removing 36 outliers |  | 11 | 0.08 | 0.06~0.09 |  | 86.1 | 77.0~91.6 |  |
| Only low risk of bias |  | 25 | 0.07 | 0.04~0.13 |  | 99.6 | 99.5~99.6 |  |
|  |  |  |  |  |  |  |  |  |
| Subgroup analyses |  |  |  |  |  |  |  |  |
| Setting |  |  |  |  |  |  |  | 0.407  |
|  General medical |  | 21 | 0.10 | 0.06~0.15 |  | 99.4 | 99.4~99.5 |  |
|  Primary care |  | 3 | 0.12 | 0.01~0.68 |  | 99.7 | 99.7~99.8 |  |
|  Perinatal |  | 12 | 0.05 | 0.03~0.09 |  | 99.5 | 99.4~99.5 |  |
|  Other |  | 11 | 0.10 | 0.04~0.24 |  | 99.7 | 99.6~99.7 |  |
| Age group |  |  |  |  |  |  |  | 0.428  |
|  Adults |  | 28 | 0.10 | 0.06~0.15 |  | 99.6 | 99.5~99.6 |  |
|  Elderly |  | 19 | 0.07 | 0.05~0.12 |  | 99.4 | 99.3~99.4 |  |
| Diagnosis |  |  |  |  |  |  |  | *0.001*  |
|  Cut-off |  | 34 | 0.11 | 0.07~0.17 |  | 99.6 | 99.5~99.6 |  |
|  Mood disorder |  | 13 | 0.04 | 0.03~0.06 |  | 98.6 | 98.3~98.9 |  |
| Risk of bias  |  |  |  |  |  |  |  | 0.255  |
|  low |  | 25 | 0.07 | 0.04~0.11 |  | 99.6 | 99.5~99.6 |  |
|  high |  | 22 | 0.11 | 0.06~0.17 |  | 99.5 | 99.5~99.6 |  |

***Note*.** Prop: proportion.

## Appendix K. Post-hoc analysis for number of sessions

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   |   | Effect Size |   | Heterogeneity |   |   |   |   |
|   |   | *N* (comparisons) | *g* | 95% CI |   | *I2* | 95%CI  |   | *p* a) |   | NNT |
| Number of sessions |  |  |  |  |  |  |  | 0.61 |  |  |
| 6 or fewer |  | 17 | 0.74 | 0.17~1.31 |  | 97 | 95~97 |  |  |  | 3.92 |
| 7 to 11 |  | 26 | 0.55 | 0.31~0.80 |  | 73 | 61~82 |  |  |  | 5.46 |
| 12 or more | 7 | 0.44 | 0.18~0.71 |   | 79 | 56~90 |   |   |   | 7.10 |

a) The p-value indicates whether the difference between subgroups is significant.