PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Title
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	Abstract
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Introduction, paragraphs 1-3
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Introduction, final paragraph
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Methods - Eligibility Criteria; grouping of studies by outcome (anxiety, depression) for synthesis: Methods - Data Synthesis
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.	Methods – Search Strategy (six databases; searched 15 February- 29 June 2025; final search 29 June 2025); Supplementary Table S1
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Methods - Search Strategy; Supplementary Table S1 (search terms, Boolean combination, limits and records per database; the exact database-specific search strings were not saved, as stated in Methods and Limitations)
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.	Methods - Protocol and Registration (four reviewers, independently, with consensus); duplicates removed with Covidence (Figure 1)
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.	Methods - Data Extraction (standardized form; four reviewers, independently); Supplementary Table S2
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.	Methods - Eligibility Criteria (anxiety and depressive symptoms) and Data Synthesis (rule for selecting time points); Supplementary Table S2
	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.	Methods - Data Extraction; Table 1
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.	Methods - Methodological Quality Assessment of Studies (RoB 2; four reviewers, independently); Supplementary Table S3
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.	Methods - Data Synthesis (standardized mean difference, Hedges' g with 95% CI)
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)).	Methods - Data Synthesis; Results - Quantitative Synthesis (first paragraph)

Section and Topic	Item #	Checklist item	Location where item is reported
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	Methods - Data Synthesis (SDs derived from 95% CIs, subscales averaged, multi-arm trial arms combined); Supplementary Table S2
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Table 1; Figures 2-5; Supplementary Tables S2-S3
	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.	Methods - Data Synthesis (random-effects model, DerSimonian-Laird estimator, Cochran's Q and I^2, Comprehensive Meta-Analysis version 4)
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	Not performed: subgroup analyses and meta-regression were not possible because of the small number of trials (Strengths and Limitations)
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	Methods - Data Synthesis (sensitivity analyses I-iii)
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	Methods - Data Synthesis (publication bias not assessed because fewer than ten trials were available)
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	Not performed: the certainty of the evidence was not formally assessed
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.	Results - Search Results; Figure 1
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Results - Search Results (Rouhi et al. [18], excluded because allocation was not randomized)
Study characteristics	17	Cite each included study and present its characteristics.	Results - Characteristics of Studies and Participants and Characteristics of Intervention; Table 1
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Results - Quality Assessment Results; Figures 2-3; Supplementary Table S3
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.	Figures 4-5; Supplementary Table S2
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Results - Characteristics of Studies and Participants, Quality Assessment Results and Quantitative Synthesis
	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.	Results - Quantitative Synthesis; Figures 4-5
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Not performed (see item 13e)
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	Results - Quantitative Synthesis
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting	Not assessed (fewer than ten trials); Methods - Data Synthesis;

Section and Topic	Item #	Checklist item	Location where item is reported
		biases) for each synthesis assessed.	Strengths and Limitations
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	Not performed (see item 15)
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Discussion
	23b	Discuss any limitations of the evidence included in the review.	Strengths and Limitations
	23c	Discuss any limitations of the review processes used.	Strengths and Limitations
	23d	Discuss implications of the results for practice, policy, and future research.	Discussion (final two paragraphs); Conclusion
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.	Abstract; Methods - Protocol and Registration (PROSPERO, CRD420251022254)
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	The protocol is available in the PROSPERO record (CRD420251022254); Methods - Protocol and Registration
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	Methods - Data Synthesis (sensitivity analyses ii and iii were not prespecified in the protocol and were added during peer review)
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Funding
Competing interests	26	Declare any competing interests of review authors.	Conflict of Interest
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.	Data Availability (data extracted from included studies and used for all analyses: Supplementary Table S2; data collection forms and analytic code available from the corresponding author on request)

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.
This work is licensed under CC BY 4.0. To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/