

We thank the Reviewers for their constructive comments - our detailed responses to each comment can be found below:

Reviewer 1 - Comment 1: This comment has been addressed on page 6 of the manuscript

Reviewer 2 - Comment 1: We have made a series of changes to reduce the manuscript's length:

- The detailed narrative description of included studies has been moved to supplementary material
- All figures except Figures 1-4 have been moved to supplementary materials
- Detailed narrative discussion of the Risk of Bias assessment criteria, cumulative meta-analysis and sensitivity analysis results have also been moved to supplementary materials
- The results of the heterogeneity analyses (subgroup analyses and meta-regression) have been summarised into tables and the detailed narrative description has been moved to supplementary materials
- The Discussion section has been revised and word length has been reduced by 50%

Reviewer 2 - Comment 2: Given that the search was completed only 6 months ago, we would be interested in extending the search as part of a living systematic review

Reviewer 2 - Comment 3: That is correct, micro dosing was eligible as control but not as psilocybin treatment - we have clarified this on page 6

Reviewer 2 - Comment 4: As highlighted on "Table 1. Characteristics of the included studies" on page 14, the shortest interval between dosing and outcome measuring included in this study was 2 weeks (for the studies of von Rotz et al. (2023) and Grob et al. (2011))

Reviewer 2 - Comment 5: Initials (AM and DT) have been added on page 7. The second reviewer (DT) did not participate in the authorship of this manuscript and was blind to the study's aim and hypotheses.

Reviewer 2 - Comment 6: We believe the Reviewer is referring to eta squared ( $\eta^2$ ) and not Hedge's  $g$  when mentioning the 'Greek term'. Eta squared ( $\eta^2$ ) was only mentioned as part of a narrative summary of the results of the included studies because it was used as a measure of effect size by von Rotz et al. (2023)

Reviewer 2 - Comment 7: We have corrected this numerical error

Reviewer 2 - Comment 8: We have converted '% Female' to a whole percentage on Table 1

Reviewer 2 - Comment 9: The individual studies' results were summarised on a table (Table 2) in the style of similar systematic reviews (e.g., Li et al., 2022; Yu et al., 2022). Heterogeneity exploration and subgroup analyses were also summarised on a table (Table 3) and detailed narrative description was moved to the supplemental materials.

Reviewer 2 - Comment 10: We have corrected decimal places throughout the text

Reviewer 2 - Comment 11: We have corrected PIs across all tables

Reviewer 2 - Comment 12: We changed the relevant figure titles to "Forest plot for the pre- to post-treatment change in depression scores"

Reviewer 2 - Comment 13: We moved the tables showing the results of the sensitivity analysis and all figures except Figures 1-4 to the supplementary materials

Reviewer 2 - Comment 14: We have removed the numbers from the Discussion section – they are now only presented in the Results section