



Does emotional support and being in nature influence stress?

A recommendation by **Chris Chambers**  based on peer reviews by **Siu Kit Yeung** and **Felix Schönbrodt** of the STAGE 2 REPORT:

Alessandro Sparacio, Ivan Ropovik, Gabriela M. Jiga-Boy, Adar Cem Lağap, Hans IJzerman (2023) Stage 2 Registered Report: Stress regulation via being in nature and social support in adults, a meta-analysis. OSF, ver. <https://psyarxiv.com/a4zmj>, peer-reviewed and recommended by Peer Community in Registered Reports.

<https://doi.org/10.31234/osf.io/a4zmj>

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Chambers, C. (2023) Does emotional support and being in nature influence stress?. *Peer Community in Registered Reports*, 100369. [10.24072/pci.rr.100369](https://doi.org/10.24072/pci.rr.100369)

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Stress is a familiar presence in modern life and may be rising in severity (Almeida et al., 2020). As a key driver of many health problems, controlling stress and its impacts is a central goal in clinical and health psychology, yet the effectiveness of existing interventions to regulate stress remains unclear. In the current study, Sparacio et al tackled this question from a meta-analytic perspective, focusing on a corpus of existing research that has addressed the efficacy of two specific stress regulation interventions: *being in nature* and *emotional social support*. As well as evaluating the evidential content of the relevant literatures, the authors also examined signs of publication bias and the moderating role of personality traits. After correcting for publication bias, the results reveal evidence that *being in nature* is effective at reducing stress while *emotional social support* is not. The moderating role of personality for both interventions was inconclusive due to lack of evidence. In addition, the quality of the surveyed literature was found to be low overall, suffering from a high risk of bias and high rate of statistical reporting errors. The authors offer several recommendations to improve the rigour and quality of studies in this field, including open data, open materials, code review, preregistration and the use of Registered Reports. The Stage 2 manuscript was evaluated over one round of in-depth review. Based on detailed responses to the reviewers' comments, the recommender judged that the manuscript met the Stage 2 criteria and awarded a positive recommendation. **URL to the preregistered Stage 1 protocol:** <https://osf.io/c25qw> **Level of bias control achieved: Level 3.** *At least some data/evidence that was used to the answer the research question had been previously accessed by the authors (e.g. downloaded or otherwise received), but the authors certify that they did not observe ANY part of the data/evidence prior to Stage 1 IPA.*

List of eligible PCI RR-friendly journals:

- [F1000Research](#)
- [Peer Community Journal](#)
- [PeerJ](#)
- [Royal Society Open Science](#)
- [Swiss Psychology Open](#)

References:

1. Almeida, D. M., Charles, S. T., Mogle, J., Drewelies, J., Aldwin, C. M., Spiro, A. III, & Gerstorf, D. (2020). Charting adult development through (historically changing) daily stress processes. *American Psychologist*, 75(4), 511–524. <https://doi.org/10.1037/amp0000597>
2. Sparacio, A., Ropovik, I., Jiga-Boy, G. M., Lağap, A. C. & Ijzerman, H. (2023). Stage 2 Registered Report: Stress regulation via being in nature and social support in adults, a meta-analysis. Acceptance of version 2 by Peer Community in Registered Reports. <https://doi.org/10.31234/osf.io/a4zmj>

Reviews

Evaluation round #1

DOI or URL of the preprint: [10.31234/osf.io/a4zmj](https://doi.org/10.31234/osf.io/a4zmj)
Version of the preprint: <https://psyarxiv.com/a4zmj>

Authors' reply, 04 April 2023

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Decision by [Chris Chambers](#) , posted 20 January 2023, validated 20 January 2023

Minor Revision

The two reviewers from Stage 1 kindly returned to evaluate your completed Stage 2 submission. Both are positive about your manuscript – a sentiment with which I concur; this is a fine example of a rigorous, RR-based meta-analysis. The enclosed comments focus almost entirely on additional points to consider in the Discussion. Please address all points comprehensively in a revision and response. I anticipate then being able to issue a final Stage 2 recommendation without further in-depth review.

Reviewed by [Felix Schönbrodt](#), 17 January 2023

2A. Whether the data are able to test the authors' proposed hypotheses (or answer the proposed research question) by passing the approved outcome-neutral criteria, such as absence of floor and ceiling effects or success of positive controls or other quality checks.

This criterion is not really applicable to meta-analyses.

2B. Whether the introduction, rationale and stated hypotheses (where applicable) are the same as the approved Stage 1 submission. This can be readily assessed by referring to the tracked-changes manuscript supplied by the authors.

Yes.

2C. Whether the authors adhered precisely to the registered study procedures.

Yes.

2D. Where applicable, whether any unregistered exploratory analyses are justified, methodologically sound, and informative.

They are.

2E. Whether the authors' conclusions are justified given the evidence.

Yes, they are justified. In fact, this is one of the most methodologically sound meta-analyses I have read so far.

I just stumbled across one sentence, on p. 13: "After all, large samples have large expected sampling variability, leading to imprecise results". Shouldn't that be the other way round?

Felix Schönbrodt

(signed review)

Reviewed by [Siu Kit Yeung](#), 14 January 2023

Please see attached file.

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