ESTIMATING THE RELIABILITY & ROBUSTNESS OF RESEARCH

ERROR REVIEW

Bem, D. J. (1987). Writing the empirical journal article. In M. P. Zanna & J. M. Darley (Eds.), *The Compleat Academic: A Practical Guide for the Beginning Social Scientist* (pp. 171-201). Psychology Press.

*reviewed by*

**Dorian J. Primestein**, Shangri-La University

*Review version 1.0 (DATE)*

*Review template version 1.0*

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*For the sections below, indicate whether you discovered any errors using the dropdown menu. Describe the* ***errors*** *you discovered, the* ***methods*** *that you used to find them, and the* ***amount of time*** *you invested in the search. Refer to specific files to allow verification of your review. For the assessment below, make sure to check if authors have provided* ***supplementary analyses*** *as these may clear concerns arising from the (interpretation of) the primary analyses. If you have written code yourself for the review, please attach it to the report. Please indicate the version of software/packages you used to run the original code and/or your own code.*

# 

# I. METHODS, MEASUREMENT, AND DESIGN

**1. Design** Didn't check

Are there errors in the conceptual design of the study? E.g., flawed randomisation technique

*Time spent: minutes/hours*

**2. Measurement** Didn't check

Are there any measures, techniques, or devices that were incorrectly applied or inappropriate for the specific task described in the paper?

*Time spent: minutes/hours*

**3. Preregistration Consistency** Didn't check

Are there substantial deviations from the preregistration, particularly undisclosed ones?

*Time spent: minutes/hours*

**4. Sampling** Didn't check

Is there an error in the sampling strategy? Is the power analysis reproducible? Does the model used for the power analysis match the model in the substantive analyses? Were separate power analyses conducted for all primary analyses?

*Time spent: minutes/hours*

**5. Other Aspects Related to Methods and Measures**  Didn't check

*Time spent: minutes/hours*

# II. DATA, CODE, AND STATISTICAL ANALYSES

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**1. Code Functionality** Didn't check

Does the provided code run without the need to make any adjustments and without errors? If not, what steps were needed to get it to run (if it was eventually possible)?

*Time spent: minutes/hours*

**2. Computational Reproducibility of Reported Statistics** Didn't check

Is there a clear traceability of reported stats to code? Does the code output match what’s reported in the paper? Are all reported statistics findable within the analysis code?

*Time spent: minutes/hours*

**3. Data Processing Errors** Didn't check

Are there substantive errors during the preparation or cleaning of data (e.g. duplication of rows during a merge) prior to substantive analyses and hypothesis tests?

*Time spent: minutes/hours*

**4. Model Misspecification** Didn't check

Are there any consequential issues with the assumptions or the form of a statistical model (e.g., overfitting, wrong distribution assumption) used to describe data?

*Time spent: minutes/hours*

**5. Erroneous/Impossible/Inconsistent Statistical Reporting** Didn't check

Are there inconsistencies between test statistics, degrees of freedom, and p-values? Are there implausible degrees of freedom between compared SEM models? Are there point estimates outside the confidence interval bounds?

*Time spent: minutes/hours*

**6. Other Aspects Related to Data or Code**  Didn't check

*Time spent: minutes/hours*

# III. CLAIMS, PRESENTATION, AND INTERPRETATION

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**1. Interpretation Issues** Didn't check

Throughout the entire paper, is there an incorrect substantive interpretation of data or statistical tests, causal inference issues, etc.?

*Time spent: minutes/hours*

**2. Overclaiming Generalisability** Didn't check

Does the paper overclaim the generalisability of the findings with regards to stimuli, situations, populations, etc.? Is there hyping or overselling of the importance or relevance of findings?

*Time spent: minutes/hours*

**3. Citation Accuracy** Didn't check

Are there misrepresentations of substantive claims by cited sources? Inaccurate direct quotes? Incorrectly cited or interpreted estimates? Citations of retracted papers?

*Time spent: minutes/hours*

**4. Other Aspects Related to Interpretation**  Didn't check

*Time spent: minutes/hours*