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Caution Preprint Study 1 (#40455)

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A non-anonymized version (containing author names) will become publicly available only if an author makes it public. Until that happens the contents of this pre-registration are confidential.

1) Have any data been collected for this study already?

No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?

We are interested in participants' credibility evaluation of preprints and peer-reviewed articles. Participants read short descriptions of five different research findings. Depending on the condition, participants are told that these findings were either originally published in a preprint or in a peer-reviewed article. We predict that participants will evaluate research findings that were published in peer-reviewed articles as equally credible to research findings published in preprints.

Please note that, compared to an earlier study, this time we do not provide participants with a detailed description of preprints and peer-reviewed articles, and thus do not expect a significant difference.

3) Describe the key dependent variable(s) specifying how they will be measured.

We will measure the perceived credibility of research findings with one item for each description.

4) How many and which conditions will participants be assigned to?

Participants will be assigned to one of two conditions. They will either learn that all of the presented five research findings were originally published in peer-reviewed articles (peer-review condition), or in preprints (preprint condition). We employ a between-subject design.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.

Replicating our prior study, we will calculate a mean credibility rating of all five credibility ratings. We will then compute a t-test for independent samples comparing the perceived mean credibility of research findings in the preprint condition and the perceived mean credibility of study results in the peer-review condition, to test whether there are significant differences. We expect no significant differences.

Crucially, and as the main test of our hypothesis, we will then conduct an equivalence test (Lakens, 2017; Lakens, Scheel, & Isager, 2018) to test whether our observed effect sizes are statistically equivalent to an interval only containing small to medium effect ($|d| < .5$).

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.

We will exclude participants who indicate having participated in our prior study on this topic.

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.

We aim to recruit a sample of at least 204 participants. If by chance, we collect more (as it can happen in online studies), we will analyze data from all participants.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)

We collect age, gender, whether participants study or have studied psychology, whether participants took part in our prior study on this topic, and finally prior knowledge on preprints and peer-review. Participants who indicate having prior knowledge on preprints and/or peer review are also asked to briefly explain what preprints and/or peer-review are.