REGISTERED REPORTS
Stage 1 Tips for Success

Tips for Avoiding Desk Rejection at Stage 1

Many Registered Report submissions are desk rejected (rejected prior to full, in-depth, peer review) at Stage 1 for failing to sufficiently meet the Stage 1 editorial criteria. Often, authors are invited to resubmit once specific shortcomings are addressed, but sometimes major problems can lead to outright rejection. To help minimize the chances of authors' submissions being desk rejected, we list below the top ten reasons why Stage 1 submissions are rejected prior to full review.

1. Cover letter doesn't make necessary statements, provide required information, concerning ethics, data archiving, and so forth.

2. The protocol contains insufficient methodological detail to enable replication and prevent researcher degrees of freedom. One commonly neglected area is the criteria for excluding data, both at the level of animals/participants and at the level of data within animals/participants. In the interests of clarity, we recommend listing these criteria systematically rather than presenting them in prose.

3. Lack of correspondence between the scientific hypotheses and the pre-registered statistical tests. This is a common problem and severe cases are likely to be desk rejected outright. To maximize clarity of correspondence between predictions and analyses, authors are encouraged to number their hypotheses in the Introduction and then number the proposed analyses in the Methods to make clear *which analysis tests which prediction*. Ensure also that power analysis, where applicable, is based on the actual test procedures that will be employed to test those hypotheses; e.g., don't propose a power analysis based on an ANOVA but then suggest a linear mixed effects model to test the hypothesis.

4. Power analysis, where applicable, fails to reach the minimum level stated in journal policy.

5. Power analysis is over-optimistic (e.g., based on previous literature but not taking into account publication bias) or insufficiently justified (e.g., based on a single point estimate from a pilot experiment or previous study). Proposals should be powered to detect the smallest effect that is plausible and of theoretical value. Pilot data can help inform this estimate but is unlikely to form an acceptable basis, alone, for choosing the target effect size.

6. Intention to infer support for the null hypothesis from statistically non-significant results, without proposing use of Bayes factors or frequentist equivalence testing.

7. Inclusion of exploratory analyses in the analysis plan. Manuscripts proposing exploratory analyses will usually be desk rejected until such analyses are removed because inclusion of exploratory "plans" at Stage 1 blurs the line between confirmatory and exploratory outcomes at Stage 2. Instead, such analyses can be included at Stage 2 and need not be pre-registered. Under some circumstances, exploratory analyses could be discussed at Stage 1 where they are necessary to justify study variables or procedures that are included in the design exclusively for exploratory analysis.

8. Failure to clearly distinguish work that has already been done from work that is planned. Where a proposal contains a mixture of pilot work that has already been undertaken and a proposal for work not yet undertaken, authors should use the past tense for pilot work but the future tense for the proposed work. At Stage 2, all descriptions shift to past tense.

9. Lack of pre-specified positive controls or other quality checks, or an appropriate justification for their absence (See Stage 1 criterion 5 of the Author Guidelines). We recognize that positive controls are not possible with all study designs, in which case authors should discuss why they are not included.

10. When applicable, remember to include power analysis within proposed positive controls that depend on hypothesis testing.