Registred Reports

Registered Report is a publication format that emphasizes the importance of the research question and the quality of the methodology. It is a research **article** that **undergoes peer review in two stages**, with the first stage of review occurring before the data collection even begins. The goal of Registered Reports is to reduce questionable research practices aimed at achieving positive outcomes and to minimize publication bias, which is the tendency of publishers to only publish statistically significant positive results.

Stage 1

Researchers prepare a research question and a detailed methodology proposal (the introduction and methodology sections of a research article), which they submit to a journal for peer review. During this phase (Stage 1 Peer Review), editors and reviewers assess whether the research question is important, relevant and whether the proposed methodology is suitable for answering the research question. If the research question and the methodology are approved, the author receives an **in-principle acceptance** from the journal, which is a commitment that if the research is conducted according to the approved methodology, the article will be accepted regardless of the final results. After receiving in-principle acceptance, authors are typically invited to preregister the study design.

Stage 2

Researchers then conduct the study and submit the final article, which now includes the results and discussion, back to the journal for review. In the second phase of the peer review process (Stage 2 Peer Review), reviewers assess whether the authors adhered to the approved methodology and whether the interpretation of the results makes sense. If the editors and reviewers do not identify any significant issues, the article is accepted for publication after the second round of peer review.

Researchers can usually include **additional analyses** in the final article **that were not part of the preregistration**. However, these analyses must be clearly labeled as post hoc exploratory analyses.



Publication process of a registered report (source: Center for Open Science)

Perhaps the most commonly voiced objection to RRs is that the format somehow limits exploration or creativity by requiring authors to adhere to a pre-specified methodology. However, RRs place no restrictions on creative analysis practices or serendipity.

The registered report format may not be suitable for every type of research. It is primarily used for research aimed at hypothesis testing (confirmatory research), whereas it is not appropriate for purely exploratory studies.

You can find **a list of journals** that offer the option to publish registered reports on the <u>Center for Open Science website</u> (under the "Participating Journals" tab).

Registered Reports in the Czech Republic

You may encounter the registered report publication format in the requirements of some Czech funding providers. For example, in the calls within the <u>Johannes Amos Comenius Programme</u>, it is listed among the so-called optional open science practices.

According to the definition of types of results in the M17+ methodology, registered reports fall under category J – peer-reviewed scientific article.

Sources

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