

Open Research Working Group Guide

Preregistration and Pre-Analysis for Experimental Research

For experimental social science researchers using statistical inference and hypothesis testing in their research design, reproducibility of methods is a key measure of rigour. Preregistration and pre-analysis plans (PAP) are ways to document your hypotheses, methods, and analysis decisions ahead of time. Registering your hypotheses and methods improves reproducibility as hypotheses and methods are clearly documented. It makes research more efficient by ensuring negative results are published, preventing others from pursuing paths that have already proven fruitless. Furthermore, preregistering your study facilitates collaborative research and provides you a time-stamped record of your research ideas before publication of the article.

Can I preregister my study? No matter where you intend to publish, you can preregister your study in a registry such as **OSF Registries**.

Select a preregistration registry. Two popular, rigorous, and user-friendly preregistration platforms for experimental research are **AsPredicted** and the **OSF Registries**. Your decision depends on visibility of that resource within your field and general conventions of your field.

Create a plan, following the registry's template, being both precise and concise.

Decide at what point to preregister. Best practice is to preregister before any data has been collected. However, where data already exist, there are circumstances where you may preregister before human observation of the data, before accessing data, or before data analysis.

Decide whether your research plan is confirmatory, exploratory, or a combination of both. The type of research will affect the information you need to include in your preregistration as confirmatory work tests hypotheses and exploratory work generates hypotheses. **Some registries** require at least one confirmatory test to be included in a preregistration.

When submitting an article with a preregistered study, **use the registry's option to create an anonymous version for peer review.**

When writing up the article, **describe any deviations from the preregistered plan clearly,** giving reasons for such deviations.

When your article is accepted, **check the links to your preregistration are up-to-date, and update them to the non-anonymous versions.**