The social sciences have begun to take a careful look at the way we process and interpret data, as many famous experiments do not appear to replicate (Open Science Collaboration, 2015). The Open Science Foundation (OSF) was founded in 2013 to promote a transparent research process from formation of the hypotheses to completely reproducible papers (Nosek et al., 2015). This project examines the impact of the formation of OSF and changing research culture on the publication of information concerning data screening methods for outliers, as the impact of outliers can critically change the findings and interpretation of experiments.

In the wake of the reproducibility crisis and publications such as (many labs, osf’s rep paper), it is worthwhile to investigate changes that may have taken place.

One diagnostic feature of particular interest to us was outliers, influential observations, or fringliers—those datapoints that stand apart from our model for whatever reason. While there are a plethora of statistics available to researchers to identify and describe these datapoints, this discussion of outliers rarely makes it to the page. Consider, for example, (inster IO article where 0% mentioned outliers). This is not to say that researchers are not taking these datapoints into consideration (or even out of consideration, by removing them from their analyses) during their data cleaning and analysis plan. But this, by definition, is a problem. The current zeitgeist of increased transparency and reproducibility applies not only to the manner in which data is collected, but also the various ways the data is transformed, cleaned, pared down, and analyzed. Therefore, it is just as important for a researcher to state how they identified outliers within their data, how the outliers were handled, and how this choice of handling impacted the estimates and conclusions of their analyses, as it is for them to report their sample size.

Some may argue that use of the precious word limit dictated by journals to describe such acts as outlier identification and handling may be irrational. However, we contest that given the current availability and use of online supplements and appendixes, as well as the invent of the Open Science Framework (OSF; cite) which allows researchers the ability to upload any number of additional resources and supplements that can be easily referenced in their manuscripts in as little as 4 words: See supplement at osf.io/52mqw.

Improvements that have come about in our new research culture:

Recommendations on how to be more transparent, journals and granting agencies are asking more about openness and transparency, online repositories like GitHub, OSF, and OpenDOAR allow for full disclosure of research material, data, and code. Registered replications including detailed data analysis plans are encouraged by many journals.

Within this manuscript we sought to identify the impact of this new research culture on the publication of information concerning data screening methods for outliers.

We chose to focus on outliers because they have been shown to increase error variance and bias estimates, reduce effect size and power, and ultimately change the conclusions of an analysis. Any one of these outcomes can lead to a failure to replicate. For example, if one researcher identifies a number of outliers within their dataset, but decides to allow the datapoints to remain in the analysis, this researcher may likely come to different conclusions than another individual who identified the same outliers, but chose to remove them.

Previous work has suggested that researchers have an ethical obligation to report removal of outliers (Rosenthal, 1994), but how often is this actually occurring? Previous work in blah has suggested reporting as low as 8%. However, we are unaware of any other research that has attempted to quantify the rates of reporting of outliers across psychology to date. Herein, we aim to do just this, across a variety of sub disciplines in psychology, and at two time points—before the beginning of the replication crisis and 5 years later—to identify not only how often we have been reporting outliers, but also how that rate of reporting may have changed with the new research culture introduced by the replicability crisis.

Can point to Pashler, Harold; Wagenmakers, Eric Jan (2012). "Editors' Introduction to the Special Section on Replicability in Psychological Science: A Crisis of Confidence?". *Perspectives on Psychological Science*. **7** (6): 528–530. [doi](https://en.wikipedia.org/wiki/Digital_object_identifier):[10.1177/1745691612465253](https://doi.org/10.1177%2F1745691612465253). [PMID](https://en.wikipedia.org/wiki/PubMed_Identifier) [26168108](https://www.ncbi.nlm.nih.gov/pubmed/26168108).

As a timestamp for the start of the replicability crisis.