Research Methods: Meta-science
The general term meta-science refers to research about research practices. The purpose of this type of research is to compare current research practices with best practices and to suggest strategies for bridging the gap.

**Meta-science: Publication bias and the trustworthiness of our cumulative knowledge**
Publication bias refers to a situation in which the publicly available literature on a particular relation of interest is not representative of all studies on that relation. Unfortunately, research has shown that our journals tend to publish articles with mostly statistically significant results, leading to a cumulative knowledge base that may not be trustworthy. Our research seeks to understand the extent to which our published results are robust and the associated conclusions trustworthy.

Sample papers:


**Meta-science: Detection of irregularities and inaccuracies in existing research**
To address issues such as publication bias and related threats to the accuracy of our cumulative knowledge, we seek to understand their causes. The reasons include hypothesizing after the results are known (HARKing), the disconnect between models that researchers claim to test and the models that they actually test, and the sheer misuse of statistical techniques. We have published extensively on these and related causes.

Sample papers:


**Meta-science: Research curation**

To attain a more accurate picture of our cumulative knowledge, one has to summarize the results of many scientific findings, which can be arduous and takes years. To facilitate this endeavor, we have started an effort to collect and curate scientific results in organizational behavior and human resource management and build a platform that allows for a rapid search, summary, and interaction with the data (see www.metaBUS.org).

Sample papers:

**Research Methods: Statistical techniques**

To obtain more accurate and robust results, the use of sound scientific processes and rigorous statistical techniques is paramount. Unfortunately, many published articles use less than optimal processes and statistical techniques. Therefore, in this research stream, we are examining commonly made mistakes and provide solutions in an effort to ensure that published results are accurate and robust, a requirement for a cumulative knowledge base that is trustworthy.

Sample papers: