

Using Subjective Expectations to Assess Research Credibility

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Abstract

A growing literature emphasizes threats to research credibility, such as a study's having low statistical power. The leading approach to estimate the magnitude of this problem leverages results from meta-analyses to estimate true effect sizes. This approach, while valuable, is not feasible when only a small number of studies have been conducted on a particular topic. This paper explores a potential alternative: leveraging subjective expectations of research results. We use these expectations to generate estimates of the likelihood of false positives as well as Type S and Type M errors for studies in development economics. We then compare these statistics with the values that would have been estimated using meta-analysis results. We find that the large majority of studies in our sample are generally credible, with some noted exceptions, and that use of subjective expectations delivers the same conclusions in our sample as meta-analysis. We discuss current gaps in the literature and how more systematic collection and analysis of prior expectations could strengthen this approach.

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