How the World's Largest Database of Social Science Research Can Inform Policymaking

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"Organization research" is shorthand for social-scientific research about human behavior in work organizations. Obviously studies of this sort could offer important insights to organizational leaders and public policymakers. But this promise has yet to be realized and one obstacle helps explain why: a lack of reliable professional guidance to help policymakers make efficient and productive use of research findings as they arrive at decisions. Without such guidance to help them make optimal use of available evidence, policymakers often find themselves in something of a *Catch-22*. They might want to use high quality scientific information, but they are overwhelmed by the vast quantities they or their staff assistants might have to sift through to find the most useful results. As a result, policymakers often rely on media for guidance, running the risk of operating in an echo chamber of outdated or misleading information. To date, very little has been done to link organizational research to practical decision-making, but a new cloud-based platform can help bridge the gap.

Introducing MetaBUS

MetaBUS is a free cloud-based platform that holds more than a million correlations published in organizational research journals. It offers a searchable database that returns an instant summarized analysis on a given topic – such as the relationship between worker satisfaction and various levels of performance outcomes – with related visualization tools. Obviously, the platform meets policymakers' need for urgent, real-time information about what previous studies show. Until recently, even a relatively straightforward academic literature review takes a lot of time to complete, and analysts may take years to pull together an overview (or "metanalysis") of results from many studies. Experts have carefully curated the findings stored in MetaBus and designed an inclusive taxonomy for all fields of research on industrial organizations and organizational behavior, so the user can retrieve a nearly instant synopsis of well-established findings and correlations. This alleviates another concern that policymakers often voice about overly verbose and abstract academic manuscripts, because MetaBUS results provide information in an easy-to-interpret and succinct formats, including tables and figures.

MetaBUS relies on a taxonomy of approximately 4,900 concepts that make up organizational research. All too often, academics and policymakers use different terminologies, making communication difficult even when the same topics are at hand. Social scientists regularly come up with new terms in their research, and practitioners may use a popular buzzword for only a short period of time. As a consequence, practitioners may miss dozens of empirical studies that investigate the same issues, simply because they use slightly different labels. By classifying key concepts into a standardized hierarchical taxonomy, MetaBUS allows policymakers to expand their search to account for literature representative of all findings relevant to an issue, or narrow the search to only the most relevant concepts.

In addition, MetaBUS allows users to get findings from primary research sources in summaries that have been carefully curated by research experts. At this time, users can get more than a million findings from 13,057 articles published in the top 25 organizational research journals over the past 15 years. With the click of a button, the user sets into motion a complex query that returns a comprehensive yet digestible summary of relevant findings.

Usefulness and Limits

MetaBUS helps policymakers make choices informed by a quantifiable synthesis of the best available evidence from studies designed and peer-reviewed by leading experts. This helps policymakers make informed decisions about designing, modifying, eliminating, or emulating programs. Furthermore, using the best research also lends legitimacy to policy proposals. Because a full range of relevant results are made available, policymakers can avoid pitfalls of using only selective evidence that may reinforce biases, prejudices, or ideological presumptions.

To make the most of MetaBUS, policymakers must understand its limits as well as advantages. Results that appear in the form of correlations are not the same thing as causal findings. Although synthesized results from multiple studies can reduce the possibility that relationship between two factors comes about by chance, policymakers still need to dig more deeply to avoid misinterpretations. To allow for this, MetaBUS results provide links to the respective web pages for each of the independent studies included in a response to a query. Many policymakers and staffers, however, might prefer to consult further with experts to assure proper interpretations.

Results from automated searches should always be screened and analyzed carefully to ensure that the studies retrieved really are using relevant concepts. Reproducibility of scientific results remains challenging, no matter how cleverly designed an automated platform may be.

Finally, of course, relationships established by sound research do not necessarily imply that policymaking based on such evidence is the best course of action. For instance, the need for greater investment in infrastructure is well-known and thoroughly supported by research –however, because the issue lacks emotional appeal the topic is unlikely to be the centerpiece of a successful campaign for a candidate running for elected office. Further, costs, practical considerations, and ethical or legal concerns may carry more weight. Policymakers should see MetaBUS represents as a useful tool for understanding organizational realities and grasping what proposals might, or might not, work. But they cannot use this tool to justify final policy choices, because such choices, in the end, depend on social conditions, values, and public acceptance, not just scientific findings.

This brief was drafted with the help of Frank Bosco and Fred Oswald.

Read more in Frank A. Bosco, Piers Steel, Fred L. Oswald, Krista Uggerslev, James G. Field, "Cloud-Based Meta-analysis to Bridge Science and Practice: Welcome to MetaBUS" *Personnel Assessment and Decisions* **, 1, no.1 (2015): 3-17; Frank A. Bosco, Krista Uggerslev, and Piers Steel "MetaBUS As A Vehicle for Facilitating Meta-analysis"** *Human Resource Management Review*, **27, no.1 (2017) 237-254.**