

Journal of Business Venturing Insights (JBVI)
Special Issue - Call for Papers
Advancing Entrepreneurship Science with Meta-Analysis

Guest Editors

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Motivation

Using meta-analytic methods to improve our understanding of entrepreneurship phenomena is a timely issue. As highlighted by Combs et al. (2021) in a recent editorial, entrepreneurship research is at a “crossroads.” As a young field, entrepreneurship has recently accumulated an abundance of empirical evidence across studies that “report seemingly conflicting findings and draw dissimilar conclusions (Schmidt & Hunter, 2015)” (Combs et al., 2021, p. 343). Meta-analysis is a powerful method for systematically synthesizing fragmented and dispersed research to improve our understanding of phenomena and advance an area of science (Aguinis et al., 2011; Combs et al., 2019). Indeed, meta-analyses provide a quantitative consensus on associations of interest (Rudolph et al., 2018) and “set the standard for what is considered state of the science, for what we know and do not know, and for which theory is considered valid and which one is not (Schmidt, 1992, 1996)” (Aguinis et al., 2011, p. 6). Furthermore, meta-analysis integrates findings in a way that eliminates the need for nonreplicable “cognitive algebra” (Rudolph et al., 2018) and provides evidence that researchers can be confident about (Cooper & Hedges, 2009). Given their power, the results of meta-analyses have been suggested to provide an area of research with an authoritative perspective (Bosco et al., 2017). Taken together, meta-analyses are important for the continued development of entrepreneurship as a science (Aguinis et al., 2011).

Papers Considered for the Special Issue

The special issue aims to publish empirical/quantitative meta-analyses (i.e., studies that quantify associations reflecting entrepreneurship phenomena using meta-analytic methods). Conceptual review papers (e.g., narrative reviews) that do not quantify associations at the meta-analytic level are not appropriate for this special issue. Rigorous meta-analytic methodology using best practices is expected of papers submitted to this special issue. Examples of appropriate methods for the special issue are as follows (not exhaustive):

- Conventional psychometric meta-analysis (Hunter & Schmidt, 2004; Schmidt & Hunter, 2015).
- Following the fundamentals of best practice (e.g., implementation guidelines; Steel et al., 2021).
- Meta-analytic regression (without mediators; Schmidt et al., 2008).
- Meta-analytic structural equation modeling (MASEM; Bergh et al., 2016; Yu et al., 2016; Cheung, 2015a; 2015b).
- Second-order meta-analysis (Schmidt & Oh, 2013).
- Other secondary uses of meta-analytic data (SUMAD; Oh, 2020).

Theoretical context of papers (advancing theory through inductive methodology)

Studies are encouraged to adhere to an inductive methodology (*a priori* hypotheses are not necessary; McAbee et al., 2017; Woo et al., 2017). Insights into future theory development can be articulated in a *post hoc* manner [i.e., based on the results of the meta-analysis; see Fisher & Aguinis (2017) and Weick (1995) for examples of providing theoretical contributions]. As noted by Woo et al. (2017), inductive research is typically “conceived as “bottom-up,” data driven, and/or exploratory” (p. 256). Woo et al. (2017) explain that there is an imbalance in favor of deductive methods (i.e., top-down, theory driven). Strict adherence to deductive methods, however, creates a methodological gap in an area of science, and thus can hamper its progress (McAbee et al., 2017). McAbee et al. (2017) explain how the availability of big data (e.g., meta-analytic data) complemented with inductive methods can help fill theoretical gaps and ultimately provide a “shock to the system” in a way that contributes to scientific progress.

Inductive research described. We describe inductive research as it is discussed by McAbee et al. (2017) and Woo et al. (2017). For instance, inductive research involves theorizing based on “general inferences from particulars or cases of empirical data” (p. 278), namely the results of meta-analyses. Inductive methods are exploratory by nature but are not atheoretical. Inductive studies are based on general research questions and should be situated in theoretical contexts (i.e., the literature the study is expected to inform) that guide the methods and analyses. Theory is developed in a *post hoc* manner (see Weick, 1995 for an overview) that can later be tested using deductive methods (McAbee et al., 2017). In short, an inductive approach “allows researchers to maximize the value of data” (Woo et al., 2017, p. 256).

Implications for policy/practice

Authors are encouraged to provide insights for policy, practice, and/or research design based on the meta-analytic findings (e.g., evidence-based practice; Oh, 2020; Rousseau et al., 2008). As explained by Oh (2020), using meta-analysis for more practical insights in organizational research is still rare, but those that do “can significantly help to design and implement evidence-based management practices and inform both practitioners and researchers about significant research-practice gaps (Le et al., 2007)” (p. 143). Indeed, this rationale is consistent with that discussed by Rousseau et al. (2008), who advocate for the synthesis and systematic accumulation of empirical evidence to provide practical insights for scholars and practitioners alike. As noted by Rousseau et al. (2008), synthesis (e.g., meta-analysis) “is *not* a conventional literature review. Literature reviews are often position papers, cherry picking studies to advocate a point of view” (p. 476). Indeed, the purpose of this special issue is to avoid (or at least mitigate) the influence of personal biases on the results of the research. As such, by providing insights for practice and policy based on a meta-analytic synthesis, the studies published in the special issue may provide relatively more objective insights for entrepreneurs, managers, and policy makers (Rousseau et al., 2008).

Regarding practical insights for research, meta-analyses are useful for evidence-based benchmarking (e.g., establishing effect size standards; Oh, 2020; Bosco et al., 2015). Indeed, as explained by Oh (2020), quantitative benchmarks based on meta-analytic data can “play a more significant role in retiring statistical significance tests and facilitating the use of point estimates and confidence intervals (Amrhein et al., 2019)” (p. 144). Moreover, the benchmarks set by meta-analytic findings can lead to improved interpretations of the findings of primary level studies. For instance, generic benchmarks [e.g., Cohen’s (1988) longstanding benchmarks] are considered too large for many areas of social science research. As such, researchers advocate for context specific benchmarks (e.g., specific to a topic or area of research) for a more appropriate

interpretation of empirical/quantitative findings (Bosco et al., 2015). In short, in addition to implications for managers and organizations, meta-analyses published in the special issue may also provide insights into practical concerns for scholars and their research.

Submission Guidelines

Deadline. There is no deadline for the special issue. This is an ongoing ‘special issue’ section of JBVI. Papers will go through the typical review process of JBVI. Papers should be submitted through JBVI’s website: <https://www.journals.elsevier.com/journal-of-business-venturing-insights> - Select ‘Meta-Analysis Special Issue’ in the submission portal.

Submission format. The initial submission to JBVI is limited to 12 pages of text, double-spaced (this does not include the reference list, tables, figures, or appendices). Authors can refer to previously published meta-analyses in JBVI (Geiger, 2020; Hansen & Block, 2020; Miao et al., 2017; Rostain, 2021; Williams & Crook, 2021) regarding the approximate length of manuscripts submitted to the special issue. Authors might also find it helpful to review meta-analyses in medical journals, which tend to publish systematic and quantitative meta-analyses that are shorter in length (e.g., Scott et al., 2018). Authors are encouraged to use APA formatting for the initial submission. Given the limited number of pages for first submission, authors are strongly encouraged to submit a detailed *Methods Section/Appendix* as supplemental material.

Methods section/appendix (supplemental material). Manuscripts must be explicit and transparent regarding the methods and analyses used for the meta-analysis. The main text should provide readers with the basics of the meta-analytic procedures and analyses (e.g., search and inclusion criteria, number of samples and observations, description and coding of variables, software used, type of meta-analysis, etc.). Authors can refer to previously published meta-analyses in JBVI (Geiger, 2020; Hansen & Block, 2020; Miao et al., 2017; Rostain, 2021; Williams & Crook, 2021) for insights into the type of information provided in the main text. *Supplementary material* should provide information that allows for the reproduction of data collection and analysis steps (see Steel et al., 2021 for best practice recommendations). Supplementary material may include, but are not limited to, coding tables that include the effect sizes used in the meta-analysis, full list of included/excluded studies, list and operationalization of constructs, method bias analyses, robustness checks, syntax when appropriate, etc. Meta-analyses will vary in the amount and type of supplemental material needed. Authors should consider the size and complexity of their meta-analysis and the amount of supplementary material needed for transparency and replication purposes.

(Optional) Proposal of a Meta-Analysis for the Special Issue

Authors are welcome to email a proposal of a meta-analysis to the special issue editors. The proposal should discuss (a) the topic and motivation of the meta-analysis, (b) research questions and associations examined, (c) details of the meta-analytic methods and analyses, and (d) potential implications for theory, policy, and/or practice.

Questions about the Meta-Analysis Special Issue should be directed to Mark Geiger, geigerm1@duq.edu

References

- Aguinis, H., Dalton, D. R., Bosco, F. A., Pierce, C. A., & Dalton, C. M. (2011). Meta-analytic choices and judgment calls: Implications for theory building and testing, obtained effect sizes, and scholarly impact. *Journal of Management*, 37(1), 5-38.
- Amrhein V, Greenland S, & McShane B. (2019). Retire statistical significance. *Nature*, 567, 305–7.
- Bergh, D. D., Aguinis, H., Heavey, C., Ketchen, D. J., Boyd, B. K., Su, P., Lau, C. L. L., Joo, H., 2016. Using meta-analytic structural equation modeling to advance strategic management research: Guidelines and an empirical illustration via the strategic leadership-performance relationship. *Strategic Management Journal*, 37(3), 477-497.
- Bosco, F. A., Aguinis, H., Singh, K., Field, J. G., & Pierce, C. A. (2015). Correlational effect size benchmarks. *Journal of Applied Psychology*, 100(2), 431-449.
- Bosco, F. A., Uggerslev, K. L., & Steel, P. (2017). MetaBUS as a vehicle for facilitating meta-analysis. *Human Resource Management Review*, 27(1), 237-254.
- Cheung, M. W. L. (2015a). metaSEM: An R package for meta-analysis using structural equation modeling. *Frontiers in Psychology*, 5, 1521.
- Cheung, M. W.-L., (2015b). *Meta-analysis: A structural equation modeling approach*. Chichester, West Sussex: John Wiley & Sons, Inc.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Combs, J. G., Crook, T. R., Ketchen Jr, D. J., & Wright, M. (2021). Entrepreneurship at a crossroads: Meta-analysis as a foundation and path forward. *Strategic Entrepreneurship Journal*, 15(3), 343-351.
- Combs, J. G., Crook, T. R., & Rauch, A. (2019). Meta-analytic research in management: Contemporary approaches, unresolved controversies, and rising standards. *Journal of Management Studies*, 56(1), 1-18.
- Cooper, H., & Hedges, L. V. (2009). Research synthesis as a scientific process. In F. Cooper, & L. Hedges (Eds.), *The handbook of research synthesis* (pp. 3-17). New York: Russell Sage Foundation
- Fisher, G., & Aguinis, H. (2017). Using theory elaboration to make theoretical advancements. *Organizational Research Methods*, 20(3), 438-464.
- Geiger, M. (2020). A meta-analysis of the gender gap(s) in venture funding: Funder-and entrepreneur-driven perspectives. *Journal of Business Venturing Insights*, 13, e00167.
- Hansen, C., & Block, J. (2020). Exploring the relation between family involvement and firms' financial performance: A replication and extension meta-analysis. *Journal of Business Venturing Insights*, 13, e00158.

Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings*. Sage.

Le, H., Oh, I. S., Shaffer, J., & Schmidt, F. (2007). Implications of methodological advances for the practice of personnel selection: How practitioners benefit from meta-analysis. *Academy of Management Perspectives*, 21(3), 6-15.

McAbee, S. T., Landis, R. S., & Burke, M. I. (2017). Inductive reasoning: The promise of big data. *Human Resource Management Review*, 27(2), 277-290.

Miao, C., Rutherford, M. W., & Pollack, J. M. (2017). An exploratory meta-analysis of the nomological network of bootstrapping in SMEs. *Journal of Business Venturing Insights*, 8, 1-8.

Oh, I. S. (2020). Beyond meta-analysis: Secondary uses of meta-analytic data. *Annual Review of Organizational Psychology and Organizational Behavior*, 7, 125-153.

Rostain, M. (2021). The impact of organizational culture on entrepreneurial orientation: A meta-analysis. *Journal of Business Venturing Insights*, 15, e00234.

Rousseau, D. M., Manning, J., & Denyer, D. (2008). Evidence in management and organizational science: Assembling the fields full weight of scientific knowledge through syntheses. *Academy of Management Annals*, 2(1), 475-515.

Rudolph, C. W., Kooij, D. T., Rauvola, R. S., & Zacher, H. (2018). Occupational future time perspective: A meta-analysis of antecedents and outcomes. *Journal of Organizational Behavior*, 39(2), 229-248.

Schmidt, F. L. (1992). What do data really mean? Research findings, meta-analysis, and cumulative knowledge in psychology. *American Psychologist*, 47(10), 1173-1181.

Schmidt, F. L. (1996). Statistical significance testing and cumulative knowledge in psychology: Implications for training of researchers. *Psychological Methods*, 1(2), 115-129.

Schmidt, F. L. & Hunter, J. E. (2015). *Methods of meta-analysis: Correcting error and bias in research findings*. Thousand Oaks, CA: Sage.

Schmidt, F. L., & Oh, I. S. (2013). Methods for second order meta-analysis and illustrative applications. *Organizational Behavior and Human Decision Processes*, 121(2), 204-218.

Schmidt, F. L., Shaffer, J. A., & Oh, I. S. (2008). Increased accuracy for range restriction corrections: Implications for the role of personality and general mental ability in job and training performance. *Personnel Psychology*, 61(4), 827-868.

Scott, J. M., Zabor, E. C., Schwitzer, E., Koelwyn, G. J., Adams, S. C., Nilsen, T. S., ... & Jones, L. W. (2018). Efficacy of exercise therapy on cardiorespiratory fitness in patients with cancer: A systematic review and meta-analysis. *Journal of Clinical Oncology*, 36(22), 2297-2305.

Steel, P., Beugelsdijk, S., & Aguinis, H. (2021). The anatomy of an award-winning meta-analysis: Recommendations for authors, reviewers, and readers of meta-analytic reviews. *Journal of International Business Studies*, 52(1), 23-44.

Weick, K. E. (1995). What theory is not, theorizing is. *Administrative Science Quarterly*, 40(3), 385-390.

Williams, D. W., & Crook, T. R. (2021). Unpacking the age at initial internationalization-performance relationship: A meta-analytic investigation. *Journal of Business Venturing Insights*, 15, e00210.

Woo, S. E., O'Boyle, E. H., & Spector, P. E. (2017). Best practices in developing, conducting, and evaluating inductive research. *Human Resource Management Review*, 27(2), 255-264.

Yu, J. J., Downes, P. E., Carter, K. M., & O'Boyle, E. H. (2016). The problem of effect size heterogeneity in meta-analytic structural equation modeling. *Journal of Applied Psychology*, 101(10), 1457.