Transparency, Reproducibility, and Replicability in

Human Resource Management Research

Herman Aguinis The George Washington University School of Business, Washington, D.C. <u>haguinis@gwu.edu</u>, ORCID: 0000-0002-3485-9484

Amando Cope The George Washington University School of Business, Washington, D.C. and United States Naval Academy, Annapolis, MD <u>amandocope@gwu.edu</u>, ORCID: 0000-0001-9697-5643

Ursula Martin The George Washington University School of Business, Washington, D.C. umartin70@gwu.edu, ORCID: 0000-0002-4569-1509

Ryosuke Yokoya The George Washington University School of Business, Washington, D.C. <u>r.yokoya@gwu.edu</u>, ORCID: 0009-0009-5623-0837

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Abstract

We describe the credibility crisis in science, evidenced by increasing retractions and research misconduct cases. We offer the TRRUST framework (i.e., Transparency, Replicability, Reproducibility, Unified Ontology, Shared Culture of Science, and Trust and Values) to discuss how to enhance the credibility of human resource management (HRM) research. Importantly, we offer 25 actionable recommendations for improving transparency, reproducibility, and replicability (e.g., data sharing, pre-registration and registration, independent reanalysis, conducting sensitivity analyses to assess robustness). The recommendations are valuable for novice and seasoned researchers alike. Moreover, journal reviewers and editors can refer to these recommendations when evaluating manuscripts for possible publication, and doing so will help minimize the number of future retractions. Given science's self-corrective nature, we look forward to future research building off our recommendations to continue to help us move forward with our lofty yet attainable goal of producing rigorous, credible, and impactful research that benefits individuals, organizations, and society.

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The credibility of research has come under intense scrutiny, with the 'credibility crisis' (Aguinis *et al.*, 2018) gaining significant attention in academic circles and the media. Without credible research, we cannot discern which theories hold validity nor confidently advise practitioners and policymakers on using them to improve organizations and society (Aguinis, Li, *et al.*, 2024; Kepes and McDaniel, 2013). This crisis is characterized by increasing cases of retractions and reports of research misconduct, undermining trust in scientific findings.

Several recent cases highlight the importance of these issues. Interestingly, a study published in *Nature Human Behaviour* (Protzko *et al.*, 2023) reported a positive and encouraging result: A very high 86% replication rate for behavioral science experiments, far exceeding the average 50% rate previously reported by others. But, in an ironic twist, the journal later retracted the article due to serious methodological flaws, including lack of transparency, misstatement of hypotheses, and improper pre-registration practices (Bak-Coleman and Devezer, 2024; Lee, 2024).

In the particular domain of HRM, a researcher recently admitted to intentionally inflating the results of two studies published in *Journal of Management* (DeGeest *et al.*, 2017; DeGeest *et al.*, 1n press). The papers explored how human resource practices can influence new firms' growth, productivity, and decisions to continue operating, and they were highlighted by the *Wall Street Journal* (Silverman, 2016) and *Inc.* (Frieswick, 2016). However, the lead author "made up several of the significance tests/effect sizes... with the goal of making the results look better and to support the hypotheses" (Stern, 2018). DeGeest was also implicated in two other retractions, both for analysis falsification, from *Journal of Organizational Behavior* (Kristof-Brown *et al.*,

2019) and *Journal of Occupational and Organizational Psychology* (DeGeest *et al.*, 2018). In a separate instance, another researcher had a human resource management article written in 2002 retracted from *Journal of Management Accounting Research* in 2016 (Wier *et al.*, 2002). Hunton, the third author, was the subject of an ethics investigation that uncovered evidence of career-long patterns of data fabrication and obstruction that cast doubt on the validity of the entire body of his scholarly work (Malone, 2016) and resulted in at least thirty-seven retractions across thirteen journals, according to retractiondatabase.org. In both cases, the researchers resigned their academic positions shortly after their retractions.

Several HRM journals have taken steps to address the credibility crisis. For example, *Human Resource Management Journal*'s (*HRMJ*) submission guidelines note that, "many studies fail to replicate... The problem is multidimensional and can be linked to the (unfortunately) widespread view among many editors, reviewers, and authors that only statistically significant findings are interesting and worth publishing... One could also point to widespread questionable research practices, including post-hoc *p*-hacking, HARKing, and selective data reporting, as well as perverse publication incentives, as potential sources of irreplicability" (*Human Resource Management Journal*, 2025). As a result, *HRMJ* now offers prospective authors the option of publishing registered reports. Other journals in our field, like *Journal of Applied Psychology*, have followed suit, providing similar options (*Journal of Applied Psychology*, 2025). We argue that the phenomena driving the credibility crisis are occurring everywhere. Indeed, if this were not a problem, HRM journals would not have introduced these innovations in the manuscript submission and review process.

Enhancing scientific credibility requires us to recognize that requiring increased transparency improves reproducibility and replicability, not serve as a means for political

censorship or targeted attacks on controversial studies (Ferguson, 2024). Further, transparency does not reduce researchers' freedom, creativity, or innovation (Frankenhuis and Nettle, 2018). It also does not impede methodological innovation, contextualization, or diversity. In contrast, transparency is essential for establishing credible research outcomes in HRM research (Kepes *et al.*, 2014; Klimchak *et al.*, 2020; Wright and Ulrich, 2017), particularly when examining complex relationships between practices and organizational outcomes (Paauwe and Boselie, 2005). For example, transparency means clearly documenting data collection methods, which can help identify potential biases that might bias research findings and lead to untenable conclusions (Aguinis, 2025).

Transparency, reproducibility, and replicability: Related but distinct concepts

It is important to clarify the distinct concepts of (a) transparency, (b) reproducibility, and (c) replicability, which have garnered growing emphasis in management research, including HRM (Bainbridge *et al.*, 2017; Rynes and Bartunek, 2017). *Transparency* refers to research processes' clear documentation and openness (Aguinis, 2025). *Reproducibility* is achieving consistent results using the same data and methods (Cortina *et al.*, 2023; Köhler and Cortina, 2021, 2023). *Replicability* involves obtaining similar findings using different methods or data (Köhler and Cortina, 2021, 2023).

In addition, we need to consider three contextual issues that affect transparency, reproducibility, and replicability. First, the absence of a shared HRM ontology makes addressing these issues challenging. Specifically, multiple definitions of concepts and constructs muddy the waters, and competing theories do not always offer helpful guidance for establishing transparency, reproducibility, and replicability. Pursuing transparency, reproducibility, and replicability is challenging without a unified ontology. Second, a lack of a shared culture of

science also results in lower levels of transparency, reproducibility, and replicability (Aguinis *et al.*, 2020). For example, there is variability in how editors evaluate the quality of reviewer assessments and recommendations. Some journals have formal systems for doing so, but others do not evaluate reviewer performance at all.

Our goal is to highlight the importance of establishing the credibility of our findings. But, it is only one side of the coin. We also need our research to be valuable and impact multiple stakeholders and beneficiaries (e.g., students, other researchers, organizations, and society), as discussed in detail elsewhere (e.g., Aguinis and Gibson, 2025).

The TTRUST model

Figure 1 visually represents our conceptual framework, the *TRRUST Model*. It includes the following six components: Transparency, **R**eplicability, **R**eproducibility, **U**nified Ontology (i.e., shared ontology), **S**hared Culture of Science, and Trust and Values (i.e., shared values and impact importance). In a nutshell, transparency, reproducibility, and replicability are affected by a shared ontology, science culture (i.e., research culture and scientific values), and values and beliefs about the impact and importance of research.

[Insert Figure 1 here]

In the remainder of our article, we address the critical importance of addressing transparency, reproducibility, and replicability to enhance the credibility of HRM research and, more broadly, social and behavioral science research. Moreover, we offer practical guidance on enhancing transparency, reproducibility, and replicability to produce meaningful and impactful research. We begin by focusing on transparency, which forms the foundation for reproducibility and replicability.

Improving transparency

Transparency encompasses multiple facets of the research process, including theory development, research design, measurement, analysis, and reporting of results (Boselie *et al.*, 2009; Guest, 2011; Wall and Wood, 2005), which allows other researchers to verify findings and build upon the reported results. The imperative for transparency in research mirrors the importance of transparency in HRM practices. For example, just as transparency in organizational communication enhances employee trust, transparent research reporting similarly enhances trust in scholarly work (Klimchak *et al.*, 2020).

Transparency in how a study was conducted diminishes knowledge gaps between researchers and their audiences (e.g., other researchers, practitioners, policymakers), promoting confidence regarding the execution and interpretation of research. Transparency is needed throughout the research process, including theory development, research design, measurement, analysis, and results reporting (Aguinis, 2025). Each of these stages presents unique opportunities for improving transparency. For example, regarding theoretical transparency, researchers should clearly define their constructs and specify the level of analysis at which they operate (e.g., individual, dyad, team, organization) (Aguinis *et al.*, 2018; Murphy and Aguinis, 2019; Margherita, 2022). Additionally, researchers should construct their hypotheses by reviewing theoretical foundations, identifying key mechanisms and relationships in the chosen theory, and verifying that each hypothesis directly connects to theoretical principles through clear reasoning (e.g., Guest *et al.*, 2021; Kehoe and Wright, 2013; McAbee *et al.*, 2017).

Table I summarizes key recommendations for improving transparency across the theory development, research design, measurement, analysis, and reporting of results stages of the empirical research process. In addition to the recommendations, Table I includes additional sources that readers can consult to obtain more detailed information and learn how the

recommendations have been implemented in current and past research. This demonstrates that our recommendations are actionable, not just "wishful thinking." Next, we discuss a few illustrative recommendations from Table I.

[Insert Table I here]

Use pre-registration and registered reports

Pre-registration and registered reports are valuable tools for transparently outlining research design. Pre-registration involves publicly documenting research questions, hypotheses, methods, and analysis plans before data collection or analysis (Nosek *et al.*, 2018). The Open Science Framework (OSF; <u>https://osf.io</u>) serves as a comprehensive registry for pre-registrations, while other platforms like AsPredicted.org (<u>https://aspredicted.org</u>) offer pre-registration tools but do not function as true registries since users can keep information private and selectively report preregistrations (Nosek *et al.*, 2018). True pre-registration requires public accessibility to prevent selective reporting. This practice enhances transparency, minimizes researchers' "degrees of freedom" (i.e., choices available to researchers in collecting, analyzing, and interpreting data, which sometimes introduce bias) and mitigates biases that may compromise reproducibility (Briker and Gerpott, 2024).

However, pre-registration is most effective when combined with other transparencyenhancing practices and is not necessarily tied to the publication process (van den Akker *et al.*, 2024). Registered reports extend pre-registration by integrating peer review into the study design phase. Researchers submit their study protocol to a journal, which evaluates and provisionally accepts the report based on methodological rigor rather than study outcomes (Gerpott *et al.*, 2024). This two-stage process continues with a second review after study completion to verify adherence to the approved protocol and appropriate interpretation of results, regardless of

whether findings support the original hypotheses. This approach helps reduce publication bias and promotes rigorous, transparent methods essential for reproducibility (Liu *et al.*, 2025; Gerpott *et al.*, 2024). Moreover, by addressing reviewer feedback early, researchers improve the study's credibility (Logg and Dorison, 2021).

Distinguish between a priori and post hoc hypotheses

While pre-registration and registered reports promote transparency in planned research, addressing transparency in developing and reporting hypothesis tests is also beneficial. This is particularly important when considering the distinction between a priori and post hoc hypotheses. Traditionally, many researchers have engaged in HARKing (Hypothesizing After Results are Known), a practice where hypotheses are retroactively created to fit the results. Two types of HARKing are especially detrimental regarding transparency (Murphy and Aguinis, 2019). First, *cherry-picking* involves searching through data involving alternative measures or samples to find the results that offer the strongest possible support for a particular hypothesis or research question. Second, *question trolling* involves searching through data involving several different constructs, measures of those constructs, interventions, or relationships to find seemingly notable results worth writing about.

We emphasize that reporting unanticipated discoveries is not detrimental to research credibility. Specifically, unlike HARKing, THARKing (i.e., Transparently HARKing) involves openly acknowledging when hypotheses have been developed inductively based on observed results. This practice can be a valuable investigative technique, potentially leading to interesting discoveries and new theoretical insights. However, it is also important that researchers clearly distinguish between a priori hypotheses and those developed through THARKing to maintain transparency (Hollenbeck and Wright, 2017; Murphy and Aguinis, 2019; McAbee *et al.*, 2017).

Report and interpret effect sizes

Transparent reporting in social and behavioral science research, particularly HRM research, hinges on adopting clearer reporting standards. Professional organizations have made efforts to establish such standards. For instance, the American Psychological Association (APA) has delineated specific reporting requirements for commonly used statistical techniques such as multiple regression and ANOVA. While APA has made strides in this direction, some areas still lack comprehensive guidance. For example, although the APA Publication Manual provides a sample table for reporting multilevel modeling results, it does not explain or justify the included information. Moreover, the manual does not explicitly address multilevel modeling. This leaves researchers without a thorough understanding of why certain elements should be reported, potentially limiting the template's effectiveness in ensuring comprehensive and transparent reporting of multilevel analyses, which have become common in HRM research.

As part of transparent reporting, presenting the exact *p*-value is crucial. Without a precise *p*-value, readers are unable to evaluate statistical significance at varying a priori Type I error rates (i.e., α levels), such as .05 versus .06 (Aguinis, 2025). Unfortunately, many studies tend to simplify *p*-value reporting using conventional and arbitrary thresholds such as .01 and .05. So, researchers should provide actual *p*-values instead of whether a value has reached a particular threshold (e.g., *p* < .01, *p* < .05).

Related to transparency regarding statistical significance is the issue of transparency in effect sizes, including discussing their meaning for theory and practice. While a *p*-value informs research consumers on whether an effect or relationship is unlikely to be different from zero in the population, it is not informative about the size of the effect. APA has advocated the inclusion of effect sizes in research reports since the publication of Cohen's (1994) article (Wilkinson and

Fowler, 1999). Reporting effect sizes such as correlation coefficients (e.g., Pearson's r), regression coefficients (e.g., b), the proportion of variance explained in outcome variables (e.g., R^2), and standardized differences between group means (d) go beyond simply stating numerical values. For instance, when reporting an $R^2 = .20$, researchers should interpret the meaning of this proportion of variance explained. Is this effect theoretically important? Is it practically meaningful? Researchers contribute to refining and developing HRM theories by reporting and interpreting effect sizes. Also, in terms of practice, effect sizes guide HRM professionals in deciding which interventions or practices might have the most significant impact. To enhance the practical interpretation of effect sizes, researchers can use contextualized benchmarks (Bosco et al., 2015) relevant to their field of study rather than relying solely on general or outdated guidelines (i.e., Cohen's "small," "medium," and "large" effects). They can contextualize effect sizes by comparing them to those found in similar studies or meta-analyses (e.g., Ng et al., 2024). Researchers should also consider using multiple methods to illustrate the practical significance of their findings (Bosco et al., 2015). This could involve translating effect sizes into more tangible metrics (e.g., dollar values, time saved, or productivity increases) or using visual aids to demonstrate the meaning of the magnitude of effects.

Disclose AI usage and report results based on using transparency tools

Generative artificial intelligence (AI) tools, such as ChatGPT and other large language models, pose additional challenges regarding transparency (Delios *et al.*, 2024; Gatrell *et al.*, 2024). To address these concerns, it is important to document how AI tools were used and to verify AI-generated content (Budhwar *et al.*, 2024; Delios *et al.*, 2024). More generally, practical tools are being developed to assist researchers in responding to the growing need for transparency in research. For example, the Research Transparency Index (RTI) is an automated

assessment tool designed to improve transparency in manuscripts (Aguinis, Li, *et al.*, 2024; available at <u>https://www.hermanaguinis.com/RTI.html</u>). Developing and implementing transparency-enhancing practices and tools represents significant steps toward more rigorous and trustworthy research practices. As these approaches evolve and adapt to changing transparency norms, they can significantly and positively impact how research is conducted and reported across various disciplines, including HRM.

Improving reproducibility

As mentioned earlier, reproducibility refers to the ability of different researchers to arrive at the same results when using the same dataset as in the precedent study (Bergh *et al.*, 2017; Cortina *et al.*, 2023). Thus, it is important for verifying claims, supporting evidence-based conclusions, and building cumulative knowledge. There are two types of reproducibility studies. *Literal* reproducibility refers to a different researcher using a "precise repetition of the analysis of the original researcher" (Cortina *et al.*, 2023, p. 172). In contrast, *constructive* reproducibility relies on the same data but applies a superior analytic approach to make findings more robust (Cortina *et al.*, 2023). Trustworthy cumulative knowledge through reproducibility is crucial for advancing the field and should motivate researchers to contribute to HRM research (Aguinis and Solarino, 2019). Table II summarizes recommendations for improving reproducibility and sources to obtain more detailed information and learn how the recommendations have been implemented in past research. Although Table II offers detailed information, we discuss an illustrative subset of the reproducibility recommendations below.

[Insert Table II here]

Share data

One of the most critical steps in improving credibility is fostering a culture of data

sharing (Cortina *et al.*, 2023). As key stakeholders in the research production process, researchers, journal editors, professional organizations, and funding bodies have a significant role in implementing this recommendation (Aguinis *et al.*, 2020). By adopting and enforcing policies that encourage researchers to share their data openly or make them available upon request, we can enhance the reproducibility of research. Furthermore, data-sharing platforms, such as institutional repositories and third-party services like the Open Science Framework (i.e., https://osf.io/), provide secure environments for storing and sharing data (Schwab *et al.*, 2023), as well as protective options that respect privacy and confidentiality requirements (Center for Open Science, Inc., 2018, 2023).

Understandably, there may be a reluctance to share data, often stemming from concerns about confidentiality when sensitive information about employees, organizations, and performance metrics is involved or in situations where such data are protected by non-disclosure agreements (Tedersoo *et al.*, 2021; Watson, 2022). Therefore, developing and standardizing anonymization techniques and proper data handling protocols are crucial in protecting participants' privacy while allowing other researchers to potentially reproduce results (DeCelles *et al.*, 2021). Providing clear guidelines for anonymization and ethical data-sharing practices, as detailed in Table I, would alleviate many confidentiality and ethical concerns.

Promote independent reanalysis of datasets

Encouraging independent reanalysis of datasets is another recommendation that can significantly enhance reproducibility (Köhler and Cortina, 2021). This practice helps identify potential errors or oversights in the original analysis and provides additional validation for the findings (Cortina *et al.*, 2023; Schwab *et al.*, 2023). Journals could create special sections dedicated to reproduction and reanalysis, giving researchers the space and incentive to engage in

this important work. Additionally, incorporating independent reanalysis into peer review processes, where reviewers or designated analysts are tasked with reproducing or replicating key analyses before publication, would further strengthen the reliability of published findings. Clearly, the current peer review process model would need to be revised, given that many journal editors and reviewers are already overburdened.

Perform sensitivity analyses to assess robustness

Conducting analyses with and without various statistical controls enhances reproducibility by testing the robustness of results (Atinc *et al.*, 2012; Bernerth and Aguinis, 2016). As Cortina *et al.* (2023) noted, studies that contain large numbers of control variables might point to the fact that "authors sometimes hunt for the permutation of controls that allows them to conclude support for hypotheses" (pp. 183-184). Adding or replacing control variables allows researchers to demonstrate the strength of these variables 'influence and encourage adequate reproducibility by highlighting which control variables were used and in what manner (Atinc *et al.*, 2012). Additionally, by systematically removing certain controls, researchers can identify whether a more parsimonious model will provide interpretable results (York, 2018). Furthermore, researchers promote clarity and make it easier for other scholars to reproduce their work by running simpler and more parsimonious models. By presenting results from both a critical or complex model and a simpler model, researchers paint a fuller picture of the relationships between variables, allowing for greater reproducibility.

Improving replicability

Whereas reproducibility studies are those that reanalyze the same data from a precedent article (Bergh *et al.*, 2017), replication studies refer to those that test similar hypotheses with new data (Kraimer *et al.*, 2023). Replication studies may also be categorized along literal and

constructive lines: a *literal* replication faithfully reproduces the original study's data collection techniques, research methods, and analyses to test the original findings' reliability and robustness, whereas a *constructive* replication involves conducting the same study with slight modifications to the original methodology, measures, or sample (Aguinis, Beltran, *et al.*, 2024; Cortina *et al.*, 2023; Köhler and Cortina, 2021). Additionally, *generalizability* studies, a type of constructive replication, add substantive moderators to existing studies (Köhler and Cortina, 2021), thus clarifying the boundaries of extant theories and applying findings across varied contexts and populations to understand the conditions under which results hold (or do not) (Aguinis, Beltran, *et al.*, 2024). Constructive replications, including generalizability studies, are more likely to make unique and value-added contributions to the literature than literal replications. This is the likely reason a review of 84,834 articles published from 2010 to 2021 in the 100 highest-impact psychology journals reported that only 0.2% (i.e., 169 articles) were literal replications (Clarke *et al.*, 2024). Table III presents key recommendations for improving replicability, and we discuss a subset of them next.

[Insert Table III here]

Promote literal replications

Literal replications may be conducted by the same researchers who conducted the original study (i.e., a *dependent* literal replication) or by those not initially involved (i.e., an *independent* literal replication). As such, dependent literal replications can address issues such as sampling error in the precedent study, whereas independent literal replications may also address the original researchers' reporting accuracy or even malfeasance (Köhler and Cortina, 2021). Literal replications increase confidence in findings, identify biases and errors, and build accumulated knowledge, improving credibility in research.

Literal replications additionally offer students opportunities to familiarize themselves with the research process and the decisions the original authors faced when designing, collecting, and analyzing the data in precedent studies (Schwab *et al.*, 2023). Doctoral students experientially learn research design and how to execute empirical research from precedent studies. In conducting literal replications, it is important to choose precedent studies that have made important contributions to the literature and provide detailed information regarding all methodological procedures (Schwab *et al.*, 2023). Also, it is important not to frame replication studies as "hit jobs": studies that are perceived, whether fairly or not, as being explicitly conducted to discredit or undermine the original research and its authors. Instead, it is essential to emphasize how the replication study is making value-added contributions on its own. *Address contextual variability*

One of the significant challenges of replicability in HRM research is the influence of contextual factors, such as organizational culture, industry type, geographic location, and workforce demographics (Aguinis, Beltran, *et al.*, 2024). A generalizability study may, for example, reconsider the design of an original study to broaden sample locations or introduce new control variables relevant to the research context (Aguinis, Beltran, *et al.*, 2024). Schwab *et al.* (2023) offered several examples of generalizability studies that test the contextual boundaries of original studies, highlighting replications of the Milgram and Asch social conformity experiments that expanded contextual boundaries to new organizational and geographic domains. These approaches can help researchers understand whether the findings are specific to certain environments or have broader applicability, thereby enhancing credibility. *Examine the effects of model changes and methodological choices*

Once data have been reanalyzed with modified or new procedures, researchers can

compare the new results against those from the precedent study, paying close attention to changes in the effect sizes and their statistical, theoretical, and practical significance. Substantial differences may imply limitations or errors of the original study (Cortina *et al.*, 2023; Hollenbeck *et al.*, 2006). So, researchers should reflect on these differences and the motivation to test them in their reporting (Aguinis, Beltran, *et al.*, 2024). For instance, researchers should explain if they elected to use a more sophisticated method due to the nature of the data (e.g., non-normal distributions that violate assumptions of the general linear model) or if additional variables were included to mitigate bias. Highlighting differences helps assess the original findings' robustness and demonstrates how choices can impact conclusions, enhancing the credibility of the replication and offering important insight for HRM theory and practice.

Conclusions

Scholarly research is currently experiencing a credibility crisis in HRM and many other fields, with numerous studies exhibiting deficiencies in transparency, reproducibility, and replicability, which, in turn, compromise their credibility (Hardwicke *et al.*, 2022). Crawford *et al.* (2022) underscored this issue by attempting to replicate 19 prominent empirical studies, only six of which yielded successful replications. Such problems highlight persistent challenges related to research credibility, ultimately undermining scholarly findings' ability to generate positive organizational and societal improvements (Aguinis, 2025). Based on the TRRUST conceptual framework shown in Figure 1, our article addressed the pivotal roles of transparency, reproducibility, and replicability in strengthening the credibility of research. Furthermore, we offered specific and actionable recommendations for improving transparency, reproducibility, and replicability throughout the research process, including theory development, research design, and data analysis.

We want to emphasize that there is no "silver bullet" solution for addressing the credibility crisis. In other words, no single recommendation listed in Tables I-III can fully address the research credibility crisis in isolation. For instance, pre-registration can enhance research transparency, though it is not a complete solution (van den Akker *et al.*, 2024). However, when researchers implement multiple recommendations in combination, they can offer powerful solutions for addressing transparency, reproducibility, and replicability. Research credibility is not a binary variable; instead, it is a matter of degree. So, the larger the number of recommendations implemented for enhancing transparency, reproducibility, and replicability, the better. Notably, we referred to many published articles that support and have implemented our recommendations, underscoring that these suggestions are actionable, practical, and realistic.

We believe the recommendations for improving transparency, reproducibility, and replicability summarized in our tables are valuable for both novice and seasoned researchers. These guidelines empower researchers to adopt more credible research practices, making our article informative and directly applicable to advancing HRM scholarship. Moreover, journal reviewers and editors can refer to these recommendations when evaluating manuscripts for possible publication, and doing so may help minimize the number of future retractions. Like all knowledge produced in the social and behavioral sciences, and HRM in particular, the issue of addressing the credibility crisis is an ongoing process. Given science's self-corrective nature, we look forward to future research building off our recommendations to continue to help us move forward with our lofty yet attainable goal of producing rigorous, credible, and impactful research that benefits individuals, organizations, and society.

REFERENCES

- Aguinis, H. (2025), Research Methodology: Best Practices for Rigorous, Credible, and Impactful Research, SAGE Publications, Inc., Thousand Oaks.
- Aguinis, H., Banks, G.C., Rogelberg, S., and Cascio, W.F. (2020), "Actionable recommendations for narrowing the science-practice gap in open science", *Organizational Behavior and Human Decision Processes*, Vol. 158, pp. 27-35, <u>https://doi.org/10.1016/j.obhdp.2020.02.007</u>
- Aguinis, H., Beltran, J.R., and Marshall, J.D. (2024), "Performance: Confirming, refining, and refuting theories", *Journal of Management Scientific Reports*, Vol. 2 No. 2, pp. 135-153, <u>https://doi.org/10.1177/27550311241247487</u>
- Aguinis, H. and Gibson, B.C. (2025), "Making waves: How to improve scholarly impact performance through stakeholder engagement", *Business Research Quarterly*, advance online publication, <u>https://doi.org/10.1177/23409444251316310</u>
- Aguinis, H. and Harden, E.E. (2009), "Cautionary note on conveniently dismissing χ² goodness-of-fit test results: Implications for strategic management research", Bergh, D.D. and Ketchen, D.J. (Eds.), *Research Methodology in Strategy and Management*, Vol. 5, Emerald Group Publishing, pp. 111-120, <u>https://doi.org/10.1108/S1479-8387(2009)0000005005</u>
- Aguinis, H., Hill, N.S., and Bailey, J.R. (2021), "Best practices in data collection and preparation: Recommendations for reviewers, editors, and authors" *Organizational Research Methods*, Vol. 24 No. 4, pp. 678-693, <u>https://doi.org/10.1177/1094428119836485</u>
- Aguinis, H., Li, Z.A., and Der Foo, M. (2024), "The research transparency index" *The Leadership Quarterly*, Vol. 35 No. 4, 101809, <u>https://doi.org/10.1016/j.leaqua.2024.101809</u>
- Aguinis, H., Ramani, R.S., and Alabduljader, N. (2018), "What you see is what you get? Enhancing methodological transparency in management research", *Academy of Management Annals*, Vol. 12 No. 1, pp. 83-110, <u>https://doi.org/10.5465/annals.2016.0011</u>
- Aguinis, H. and Solarino, A.M. (2019), "Transparency and replicability in qualitative research: The case of interviews with elite informants", *Strategic Management Journal*, Vol. 40 No. 8, pp. 1291-1315, <u>https://doi.org/10.1002/smj.3015</u>
- Aguinis, H., Werner, S., Abbott, J.L., Angert, C., Park, J.H., and Kohlhausen, D. (2010),
 "Customer-centric science: Reporting significant research results with rigor, relevance, and practical impact in mind", *Organizational Research Methods*, Vol. 13 No.3, pp. 515-539,

https://doi.org/10.1177/1094428109333339

- Anderson, J.C. and Gerbing, D.W. (1988), "Structural equation modeling in practice: A review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423, <u>https://doi.org/10.1037/0033-2909.103.3.411</u>
- Antonakis, J., Bendahan, S., Jacquart, P., and Lalive, R. (2010), "On making causal claims: A review and recommendations", *The Leadership Quarterly*, Vol. 21 No. 6, pp. 1086-1120, <u>https://doi.org/10.1016/j.leaqua.2010.10.010</u>
- Atinc, G., Simmering, M.J., and Kroll, M.J. (2012), "Control variable use and reporting in macro and micro management research", *Organizational Research Methods*, Vol. 15 No. 1, pp. 57-74, <u>https://doi.org/10.1177/1094428110397773</u>
- Bainbridge, H.T., Sanders, K., Cogin, J.A., and Lin, C.H. (2017), "The pervasiveness and trajectory of methodological choices: A 20-year review of human resource management research", *Human Resource Management*, Vol. 56 No. 6, pp. 887-913, https://doi.org/10.1002/hrm.21807
- Bak-Coleman, J. and Devezer, B. (2024), "Claims about scientific rigour require rigour", *Nature Human Behaviour*, Vol. 8, pp. 1890-1891, <u>https://doi.org/10.1038/s41562-024-01982-w</u>
- Bergh, D. D., Sharp, B. M., Aguinis, H., and Li, M. (2017), "Is there a credibility crisis in strategic management research? Evidence on the reproducibility of study findings", *Strategic Organization*, Vol. 15 No. 3, pp. 423-436. https://doi.org/10.1177/1476127017701076
- Bernerth, J. and Aguinis, H. (2016), "A critical review and best-practice recommendations for control variable usage", *Personnel Psychology*, Vol. 69 No. 1, pp. 229-283, https://doi.org/10.1111/peps.12103
- Bonett, D.G. (2020), "Design and analysis of replication studies", *Organizational Research Methods*, Vol. 24 No. 3, pp. 513-529, <u>https://doi.org/10.1177/1094428120911088</u>
- Boon, C., Den Hartog, D.N., and Lepak, D.P. (2019), "A systematic review of human resource management systems and their measurement", *Journal of Management*, Vol. 45 No. 6, pp. 2498-2537, https://doi.org/10.1177/0149206318818718
- Boon, C., Jiang, K., and Eckardt, R. (2025), "The role of time in strategic human resource management research: A review and research agenda", *Journal of Management*, Vol. 51 No. 1, pp. 172-211, <u>https://doi.org/10.1177/01492063241264250</u>
- Boon, C. and Kalshoven, K. (2014), "How high-commitment HRM relates to engagement and

commitment: The moderating role of task proficiency", *Human Resource Management*, Vol. 53 No. 3, pp. 403-420, <u>https://doi.org/10.1002/hrm.21569</u>

- Bosco, F.A., Aguinis, H., Singh, K., Field, J.G., and Pierce, C.A. (2015), "Correlational effect size benchmarks", *Journal of Applied Psychology*, Vol. 100 No. 2, p. 431, <u>https://doi.org/10.1037/a0038047</u>
- Boselie, P., Brewster, C., and Paauwe, J. (2009), "In search of balance–Managing the dualities of HRM: An overview of the issues", *Personnel Review*, Vol. 38 No. 5, pp. 461-471, <u>https://doi.org/10.1108/00483480910977992</u>
- Briker, R. and Gerpott, F.H. (2024), "Publishing registered reports in management and applied psychology: Common beliefs and best practices", *Organizational Research Methods*, Vol. 27 No. 4, pp. 588-620, <u>https://doi.org/10.1177/10944281231210309</u>
- Brutus, S., Aguinis, H., and Wassmer, U. (2013), "Self-reported limitations and future directions in scholarly reports: Analysis and recommendations", *Journal of Management*, Vol. 39 No. 1, pp. 48-75, <u>https://doi.org/10.1177/0149206312455245</u>
- Budhwar, P., Wood, G., Chowdhury, S., Aguinis, H., Breslin, D., Collings, D.G., Cooke, F.L., Darabi, F., Eby, L.E., Martin, U.M., Morley, M.J, Morris, S., Ren, S., Saunders, M.N.K., and Suddaby, R. (2024), "Articulating scholarship in human resource management: Guidance for researchers", *Human Resource Management Journal*, Vol. 34 No. 3, pp. 830-863, https://doi.org/10.1111/1748-8583.12567
- Center for Open Science, Inc. (2023), "Control your privacy (OSF Projects) settings OSF support", available at: <u>https://help.osf.io/article/285-control-your-privacy-settings</u> (accessed October 11, 2024)
- Center for Open Science, Inc. (2018), "Privacy policy", available at: <u>https://github.com/CenterForOpenScience/cos.io/blob/master/PRIVACY_POLICY.md</u> (accessed October 11, 2024)
- Clarke, B., Lee, P.Y.(K.), Schiavone, S.R., Rhemtulla, M., and Vazire, S. (2024), "The prevalence of direct replication articles in top-ranking psychology journals", *American Psychologist*, advance online publication, <u>https://doi.org/10.1037/amp0001385</u>
- Cohen, J. (1994), "The earth is round (*p* <.05)", *American Psychologist*, Vol. 49 No. 12, pp. 997-1003, <u>https://doi.org/10.1037/0003-066X.49.12.997</u>
- Cortina, J.M., Köhler, T., and Aulisi, L.C. (2023), "Current reproducibility practices in

management: What they are versus what they could be", *Journal of Management Scientific Reports*, Vol. 1 No. 3-4, pp. 171-205, <u>https://doi.org/10.1177/27550311231202696</u>

- Crawford, G.C., Skorodziyevskiy, V., Frid, C.J., Nelson, T.E., Booyavi, Z., Hechavarria, D.M., Li, X., Reynolds, P.D., and Teymourian, E. (2022), "Advancing entrepreneurship theory through replication: A case study on contemporary methodological challenges, future best practices, and an entreaty for communality", *Entrepreneurship Theory and Practice*, Vol. 46 No. 3, pp. 779-799, https://doi.org/10.1177/10422587211057422
- Crowston, K., Allen, E., and Heckman, R. (2012), "Using natural language processing for qualitative data analysis", *International Journal of Social Research Methodology*, Vol. 15 No. 6, pp. 523-543, <u>https://doi.org/10.1080/13645579.2011.625764</u>
- DeCelles, K.A., Howard-Grenville, J., and Tihanyi, L. (2021), "From the editors—Improving the transparency of empirical research published in *AMJ*", *Academy of Management Journal*, Vol. 64 No. 4, pp. 1009-1015, https://doi.org/10.5465/amj.2021.4004
- DeGeest, D.S., Follmer, E.H., and Lanivich, S.E. (In press), "RETRACTED: Timing matters; When high-performance work practices enable new venture growth and productivity", *Journal of Management*, Vol. 44 No. 4, pp. NP6-NP33, <u>https://doi.org/10.1177/0149206316652481</u> (Retraction published 2018, *Journal of Management*, Vol. 44 No. 4, p. 1703, https://doi.org/10.1177/0149206318763581)
- DeGeest, D.S., Follmer, E.H., Walter, S.L., and O'Boyle, E.H. (2017), "RETRACTED: The benefits of benefits: A dynamic approach to motivation-enhancing human resource practices and entrepreneurial survival", *Journal of Management*, Vol. 43 No. 7, pp. 2303-2332, <u>https://doi.org/10.1177/0149206315569313</u> (Retraction published 2018, *Journal of Management*, Vol. 44 No. 4, p. 1703, <u>https://doi.org/10.1177/0149206318763581</u>)
- DeGeest, D.S., Seibert, S., and O'Boyle, E. (2018), "The relationship of general mental ability to entrepreneurial firm performance: A meta-analysis", *Journal of Occupational and Organizational Psychology*, Vol. 91 No. 2, pp. 1-34, <u>https://doi.org/10.1111/joop.12198</u> (Retraction published 2018, *Journal of Occupational and Organizational Psychology*, Vol. 91 No. 2, p. 440, <u>https://doi.org/10.1111/joop.12198</u>)
- Delios, A., Tung, R.L., and van Witteloostuijn, A. (2024), "How to intelligently embrace generative AI: The first guardrails for the use of GenAI in IB research", *Journal of International Business Studies*, advance online publication, <u>https://doi.org/10.1057/s41267-</u>

<u>024-00736-0</u>

- Dreher, G.F., Carter, N.M., and Dworkin, T. (2019), "The pay premium for high-potential women: A constructive replication and refinement", *Personnel Psychology*, Vol. 72 No. 4, pp. 495-511, <u>https://doi.org/10.1111/peps.12357</u>
- Ferguson, C.J. (2024), "Retractions have become politicized: Ideological grandstanding and corporate malfeasance threaten science", *The Chronicle of Higher Education*, <u>https://www.chronicle.com/article/retractions-have-become-politicized</u>
- Fisher, P.A., Risavy, S.D., Robie, C., König, C.J., Christiansen, N.D., Tett, R.P., and Simonet, D.V. (2021), "Selection myths: A conceptual replication of HR professionals' beliefs about effective human resource practices in the US and Canada", *Journal of Personnel Psychology*, Vol. 20 No. 2, pp. 51-60, <u>https://doi.org/10.1027/1866-5888/a000263</u>
- Frankenhuis, W. and Nettle, D. (2018), "Open Science is liberating and can foster creativity", *Perspectives on Psychological Science*, Vol. 13 No. 4, pp. 439-447, https://doi.org/10.1177/1745691618767878
- Frieswick, K. (Apr 2016), "Why timing is everything with benefits: When you offer benefits is more important than what they are", *Inc. Magazine*, <u>https://www.inc.com/magazine/201604/kris-frieswick/should-your-startup-offer-benefits.html</u>
- Gatrell, C., Muzio, D., Post, C., and Wickert, C. (2024), "Here, there and everywhere: On the responsible use of artificial intelligence (AI) in management research and the peer-review process", *Journal of Management Studies*, Vol. *61 No.* 3, pp. 739-751, https://doi.org/10.1111/joms.13045
- Gelman, A. (2014), "The connection between varying treatment effects and the crisis of unreplicable research: A Bayesian perspective", *Journal of Management*, Vol. 42 No. 2, pp. 632-643, <u>https://doi.org/10.1177/0149206314525208</u>
- Gerpott, F.H., Briker, R., and Banks, G. (2024), "New ways of seeing: Four ways you have not thought about registered reports yet", *The Leadership Quarterly*, Vol. 35 No. 2, 101783, <u>https://doi.org/10.1016/j.leaqua.2024.101783</u>
- Grandey, A.A., Houston, L., and Avery, D.R. (2019), "Fake it to make it? Emotional labor reduces the racial disparity in service performance judgments", *Journal of Management*, Vol. 45 No. 5, pp. 2163-2192, <u>https://doi.org/10.1177/0149206318757019</u>

- Guest, D.E. (2011), "Human resource management and performance: Still searching for some answers", *Human Resource Management Journal*, Vol. 21 No. 1, pp. 3-13, <u>https://doi.org/10.1111/j.1748-8583.2010.00164.x</u>
- Guest, D.E., Sanders, K., Rodrigues, R., and Oliveira, T. (2021), "Signalling theory as a framework for analysing human resource management processes and integrating human resource attribution theories: A conceptual analysis and empirical exploration", *Human Resource Management Journal*, Vol. 31 No. 3, pp. 796-818, <u>https://doi.org/10.1111/1748-8583.12326</u>
- Guo, F., Gallagher, C.M., Sun, T., Tavoosi, S., and Min, H. (2024), "Smarter people analytics with organizational text data: Demonstrations using classic and advanced NLP models", *Human Resource Management Journal*, Vol. 34 No. 1, pp. 39-54, <u>https://doi.org/10.1111/1748-8583.12426</u>
- Hammond, M.M., Schyns, B., Lester, G.V., Clapp-Smith, R., and Thomas, J.S. (2023), "The romance of leadership: Rekindling the fire through replication of Meindl and Ehrlich", *The Leadership Quarterly, Special Registered Report Issue on Replication and Rigorous Retesting of Leadership Models*, Vol. 34 No.4, 101538, https://doi.org/10.1016/j.leaqua.2021.101538
- Hardwicke, T.E., Thibault, R.T., Kosie, J.E., Wallach, J.D., Kidwell, M.C., and Ioannidis, J.P.A. (2022), "Estimating the prevalence of transparency and reproducibility-related research practices in psychology (2014-2017)", *Perspectives on Psychological Science*, Vol. 17 No. 1, pp. 239-251, <u>https://doi.org/10.1177/1745691620979806</u>
- Hoijtink, H., Mulder, J., van Lissa, C., and Gu, X. (2019), "A tutorial on testing hypotheses using the Bayes factor", *Psychological Methods*, Vol. 24 No. 5, pp. 539-556, <u>https://doi.org/10.1037/met0000201</u>
- Hollenbeck, J.R., DeRue, D.S., and Mannor, M. (2006), "Statistical power and parameter stability when subjects are few and tests are many: Comment on Peterson, Smith, Martorana, and Owens (2003)", *Journal of Applied Psychology*, Vol. 91 No. 1, 1-5. <u>https://doi.org/10.1037/0021-9010.91.1.1</u>
- Hollenbeck, J.R. and Wright, P. (2017), "Harking, sharking, and tharking: Making the case for post hoc analysis of scientific data", *Journal of Management*, Vol.. 43 No. 1, pp. 5-18, <u>https://doi.org/10.1177/0149206316679487</u>

- Hughes, D.J., Lee, A., Tian, A.W., Newman, A., and Legood, A. (2018), "Leadership, creativity, and innovation: A critical review and practical recommendations", *The Leadership Quarterly*, Vol. 29 No. 5, pp. 549-569, <u>https://doi.org/10.1016/j.leaqua.2018.03.001</u>
- Human Resource Management Journal (2025), "Registered reports FAQs", https://onlinelibrary.wiley.com/journal/17488583/registered-reports
- Iqbal, Q., Volpone, S.D., and Piwowar-Sulej, K. (2025), "Workforce neurodiversity and workplace avoidance behavior: The role of inclusive leadership, relational energy, and selfcontrol demands", *Human Resource Management*, Vol. 64 No. 1, pp. 37-57, <u>https://doi.org/10.1002/hrm.22249</u>
- Journal of Applied Psychology (2025), "Transparency and openness", <u>https://www.apa.org/pubs/journals/apl#:~:text=Open%20Science-</u> <u>,Transparency%20and%20Openness%20Promotion,-APA%20endorses%20the</u>
- Kehoe, R.R. and Wright, P.M. (2013), "The impact of high-performance human resource practices on employees' attitudes and behaviors", *Journal of Management*, Vol. 39 No. 2, pp. 366-391, <u>https://doi.org/10.1177/0149206310365901</u>
- Kemery, E.R., Bedeian, A.G., Mossholder, K.W., and Touliatos, J. (2017), "Outcomes of role stress: A multisample constructive replication", *Academy of Management Journal*, Vol. 28 No. 2, pp. 363-375, <u>https://doi.org/10.5465/256206</u>
- Kepes, S., Banks, G.C., and Oh, I.S. (2014), "Avoiding bias in publication bias research: The value of "null" findings", *Journal of Business and Psychology*, Vol. 29, pp. 183-203, <u>https://doi.org/10.1007/s10869-012-9279-0</u>
- Kepes, S. and McDaniel, M.A. (2013), "How trustworthy is the scientific literature in industrial and organizational psychology?", *Industrial and Organizational Psychology*, Vol. 6 No. 3, pp. 252-268, <u>https://doi.org/10.1111/iops.12045</u>
- Klein, R.A., Vianello, M., Hasselman, F., Adams, B.G., Adams, R.B., Alper, S., Aveyard, M., Axt, J.R., Bahník, S., Batra, R., Berkics, M., Bernstein, M.J., Bialobrzeska, O., Binan, E.D., Bocian, K., Brandt, M.J., Rédei, A.C., Cai, H., Cambier, F., ... Neijenhuijs, K. (2018).
 "Many Labs 2: Investigating variation in replicability across samples and settings", *Advances in Methods and Practices in Psychological Science*, Vol. 1 No. 4, pp. 443-490, https://doi.org/10.1177/2515245918810225

Klimchak, M., Ward Bartlett, A.K., and MacKenzie, W. (2020), "Building trust and commitment

through transparency and HR competence: A signaling perspective", *Personnel Review*, Vol. 49 No. 9, pp. 1897-1917, <u>https://doi.org/10.1108/PR-03-2019-0096</u>

- Köhler, T. and Cortina, J.M. (2021), "Play it again, Sam! An analysis of constructive replication in the organizational sciences", *Journal of Management*, Vol. 47 No. 2, pp. 488-518, https://doi.org/10.1177/0149206319843985
- Köhler, T. and Cortina, J.M. (2023), "Constructive replication, reproducibility, and generalizability: Getting theory testing for *JOMSR* right", *Journal of Management Scientific Reports*, Vol. 1 No. 2, pp. 18-41, <u>https://doi.org/10.1177/27550311231156880</u>
- Kraimer, M.L., Martin, X., Schulze, W., and Seibert, S.E. (2023), "What does it mean to test theory?", *Journal of Management Scientific Reports*, Vol. 1 No. 1, 8-17, https://doi.org/10.1177/27550311231153484
- Kristof-Brown, A.L., Seong, J.Y., Degeest, D.S., Park, W.W., and Hong, D.-S. (2014),
 "Retracted: Collective fit perceptions: A multilevel investigation of person-group fit with individual-level and team-level outcomes", *Journal of Organizational Behavior*, Vol. 35 No. 7, pp. 969-989, <u>https://doi.org/10.1002/job.1942</u> (Retraction published 2018, *Journal of Organizational Behavior*, Vol. 40 No. 4, p. 522, <u>https://doi.org/10.1002/job.2365</u>)
- Lacerenza, C.N., Reyes, D.L., Marlow, S.L., Joseph, D.L., Salas, E., and Chen, G. (2017),
 "Leadership training design, delivery, and implementation: A meta-analysis", *Journal of Applied Psychology*, Vol. 102 No.12, pp. 1686-1718, https://doi.org/10.1037/apl0000241
- Lee, S.M. (2024), "This study was hailed as a win for science reform. Now it's being retracted", *The Chronicle of Higher Education*, <u>https://www.chronicle.com/article/this-study-was-</u> hailed-as-a-win-for-science-reform-now-its-being-retracted
- Liu, Z., Wang, X.T.(X.), Wang, Z., Yan, W., and Hu, M. (2025), "Registered reports in psychology across scholarly citations and public dissemination: A comparative metaevaluation of more than a decade of practice", *American Psychologist*, advance online publication, <u>https://doi.org/10.1037/amp0001503</u>
- Logg, J.M. and Dorison, C.A. (2021), "Pre-registration: Weighing costs and benefits for researchers", Organizational Behavior and Human Decision Processes, Vol. 167, pp. 18-27, <u>https://doi.org/10.1016/j.obhdp.2021.05.006</u>
- Malone, J.A. (2016), "Report of Judith A. Malone, Bentley University Ethics Officer, concerning Dr. James E. Hunton", *Behavioral Research in Accounting*, Vol. 28 No. 2, pp. 1-5

- Margherita, A. (2022), "Human resources analytics: A systematization of research topics and directions for future research" *Human Resource Management Review*, Vol. 32 No. 2, p. 100795, <u>https://doi.org/10.1016/j.hrmr.2020.100795</u>
- McAbee, S.T., Landis, R.S., and Burke, M.I. (2017), "Inductive reasoning: The promise of big data", *Human Resource Management Review*, Vol. 27 No. 2, pp. 277-290. https://doi.org/10.1016/j.hrmr.2016.08.005
- Meier-Barthold, M., Biemann, T., and Alfes, K. (2023) "Strong signals in HR management: How the configuration and strength of an HR system explain the variability in HR attributions", *Human Resource Management*, Vol. 62 No. 2, pp. 229-246, https://doi.org/10.1002/hrm.22146https://doi.org/10.1002/hrm.22146
- Munafò, M.R., Nosek, B.A., Bishop, D.V.M., Button, K.S., Chambers, C.D., Percie du Sert, N., Simonsohn, U., Wagenmakers, E.-J., Ware, J.J., and Ioannidis, J.P.A. (2017), "A manifesto for reproducible science", *Nature Human Behavior*, Vol. 1 No. 1, pp. 1-9, https://doi.org/10.1038/s41562-016-0021
- Murphy, C., Klotz, A.C., and Kreiner, G.E. (2017), "Blue skies and black boxes: The promise (and practice) of grounded theory in human resource management research", *Human Resource Management Review*, Vol. 27 No. 2, pp. 291-305. https://doi.org/10.1016/j.hrmr.2016.08.006
- Murphy, K.R. and Aguinis, H. (2019), "HARKing: How badly can cherry picking and question trolling produce bias in published results?", *Journal of Business and Psychology*, Vol. 34 No. 1, pp. 1-17, <u>https://doi.org/10.1007/s10869-017-9524-7</u>
- Murphy, K.R. and Aguinis, H. (2022), "Reporting interaction effects: Visualization, effect size, and interpretation", *Journal of Management*, Vol. 48 No. 8, pp. 2159-2166, <u>https://doi.org/10.1177/01492063221088516</u>
- Ng, T.W.H., Yim, F.H.K., Chen, H., and Zou, Y. (2024), "Employer-sponsored career development practices and employee performance and turnover: A meta-analysis", *Journal of Management*, Vol. 50 No. 2, pp. 685-721, <u>https://doi.org/10.1177/01492063221125143</u>
- Nielsen, J.D., Thompson, J.A., Wadsworth, L.L., and Vallett, J.D. (2020), "The moderating role of calling in the work-family interface: Buffering and substitution effects on employee satisfaction", *Journal of Organizational Behavior*, Vol. 41 No. 7, pp. 622-637, <u>https://doi.org/10.1002/job.2469</u>

- Nosek, B.A., Ebersole, C.R., DeHaven, A.C., and Mellor, D.T. (2018), "The pre-registration revolution", *Proceedings of the National Academy of Sciences*, Vol. 115 No. 11, pp. 2600-2606, https://doi.org/10.1073/pnas.1708274114
- Obenauer, W.G. (2024), "Designing, executing, and publishing replication research: Best practices for successfully taking replication ideas from conceptualization to publication", *Journal of Management Scientific Reports*, Vol. 2 No. 1, pp. 3-26, <u>https://doi.org/10.1177/27550311241232661</u>
- Oc, B., Chintakananda, K., Bashshur, M.R., and Day, D. V. (2023), "The study of followers in leadership research: A systematic and critical review", *The Leadership Quarterly*, Vol. 34 No. 1, p. 101674, <u>https://doi.org/10.1016/j.leaqua.2022.101674</u>
- Ontrup, G., Schempp, P.S., and Kluge, A. (2022), "Choosing the right (HR) metrics: digital data for capturing team proactivity and determinants of content validity", *Journal of Organizational Effectiveness: People and Performance*, Vol. 9 No. 2, pp. 212-232, https://doi.org/10.1108/JOEPP-03-2021-0064https://doi.org/10.1108/JOEPP-03-2021-0064
- Paauwe, J. and Boselie, P. (2005), "HRM and performance: What next?", *Human Resource Management Journal*, Vol. 15 No. 4, pp. 68-83, <u>https://doi.org/10.1111/j.1748-8583.2005.tb00296.x</u>
- Pandey, S. and Pandey, S.K. (2017), "Applying natural language processing capabilities in computerized textual analysis to measure organizational culture", *Organizational Research Methods*, Vol. 22 No. 3, pp. 765-797, <u>https://doi.org/10.1177/1094428117745648</u>
- Pavlov, A., Jananji, R., and Tchuisseu, F., (2023), "Declining worker turnover: The role of short duration employment sells – A comment on Pries and Rogerson (2022)", *I4R Discussion Paper Series*, <u>https://ideas.repec.org/p/zbw/i4rdps/93.html</u>
- Peyton, T. and Zigarmi, D. (2024), "Employee perceptions of their work environment, work passion, and work intentions: A replication study using three samples", *Business Research Quarterly*, Vol. 27 No. 2, pp. 121-143, https://doi.org/10.1177/23409444211002210
- Pries, M.J. and Rogerson, R. (2022), "Declining worker turnover: The role of short-duration employment spells", *American Economic Journal: Macroeconomics*, Vol. 14 No.1, pp. 260-300, <u>https://doi.org/10.1257/mac.20190230</u>
- Protzko, J., Krosnick, J., Nelson, L., Nosek, B.A., Axt, J., Berent, M., Buttrick, N., DeBell, M., Ebersole, C.R., Lundmark, S., MacInnis, B., O'Donnell, M., Perfecto, H., Pustejovsky, J.E.,

Roeder, S.S., Walleczek, J., and Schooler, J.W. (2023), "RETRACTED ARTICLE: High replicability of newly discovered social-behavioural findings is achievable", *Nature Human Behaviour*, Vol. 8 No. 2, pp. 311-319, <u>https://doi.org/10.1038/s41562-023-01749-9</u> (Retraction published 2024, *Nature Human Behaviour*, Vol. 8 No. 10, p. 2067, <u>https://doi.org/10.1038/s41562-024-01997-3</u>)

- Rynes, S.L. and Bartunek, J.M. (2017), "Evidence-based management: Foundations, development, controversies, and future", *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 4 No.1, pp. 235-261, <u>https://doi.org/10.1146/annurevorgpsych-032516-113306</u>
- Sarstedt, M. and Danks, N.P. (2022), "Prediction in HRM research–A gap between rhetoric and reality", *Human Resource Management Journal*, Vol. 32 No. 2, pp. 485-513, https://doi.org/10.1111/1748-8583.12400
- Schmitt, M. and Sadowski, D. (2003), "A cost-minimization approach to the international transfer of HRM/IR practices: Anglo-Saxon multinationals in the Federal Republic of Germany", *The International Journal of Human Resource Management*, Vol. 14 No. 3, pp. 409-430, <u>https://doi.org/10.1080/0958519022000031825</u>
- Schwab, A., Aguinis, H., Bamberger, P., Hodgkinson, G.P., Shapiro, D.L., Starbuck, W.H., and Tsui, A.S. (2023), "How replication studies can improve doctoral student education", *Journal* of Management Scientific Reports, Vol. 1 No. 1, pp. 18-41, https://doi.org/10.1177/27550311231156880
- Silverman, R.E. (Jan 24, 2016), "Don't offer big benefits until your company turns three: Startups that offer generous perks earlier than that have a higher chance of going under", *Wall Street Journal*, <u>https://www.wsj.com/articles/dont-offer-big-benefits-until-your-</u> company-turns-three-1453690989
- Speer, A.B., Perrotta, J., and Kordsmeyer, T.L. (2024), "Taking it easy: Off-the-shelf versus fine-tuned supervised modeling of performance appraisal text", *Organizational Research*

Methods, advance online publication, https://doi.org/10.1177/10944281241271249

- Stern, V. (Mar 21, 2018), "Management researcher admits to falsification, resigns", *Retraction Watch*, <u>https://retractionwatch.com/2018/03/21/marketing-researcher-admits-to-falsification-resigns/</u>
- Tedersoo, L., Küngas, R., Oras, E., Köster, K., Eenmaa, H., Leijen, Ä., Pedaste, M., Raju, M., Astapova, A., Lukner, H., Kogermann, K., and Sepp, T. (2021), "Data sharing practices and data availability upon request differ across scientific disciplines", *Scientific Data*, Vol. 8 No. 1, <u>https://doi.org/10.1038/s41597-021-00981-0</u>
- van den Akker, O.R., van Assen, M.A.L.M., Bakker, M., Elsherif, M., Wong, T.K., and Wicherts, J.M. (2024), "Pre-registration in practice: A comparison of preregistered and nonpreregistered studies in psychology", *Behavior Research Methods*, Vol. 56 No. 6, pp. 5424-5433, <u>https://doi.org/10.3758/s13428-023-02277-0</u>
- Verschuere, B., Meijer, E.H., Jim, A., Hoogesteyn, K., Orthey, R., McCarthy, R.J., Skowronski, J.J., Acar, O.A., Aczel, B., Bakos, B.E., Barbosa, F., Baskin, E., Bègue, L., Ben-Shakhar, G., Birt, A.R., Blatz, L., Charman, S.D., Claesen, A., Clay, S.L., Coary, S.P., Crusius, J., Evans, J.R., Feldman, N., Ferreira-Santos, F., Gamer, M., Gomes, S., González-Iraizoz, M., Holzmeister, F., Huber, J., Isoni, A., Jessup, R.K., Kirchler, M., klein Selle, N., Koppel, L., Kovacs, M., Laine, T., Lentz, F., Loschelder, D.D., Ludvig, E.A., Lynn, M.L., Martin, S.D., McLatchie, N.M., Mechtel, M., Nahari, G., Özdoğru, A.A., Pasion, R., Pennington, C.R., Roets, A., Rozmann, N., Scopelliti, I., Spiegelman, E., Suchotzki, K., Sutan, A., Szecsi, P., Tinghög, G., Tisserand, J.-C., Tran, U.S., Van Hiel, A., Vanpaemel, W., Västfjäll, D., Verliefde, T., Vezirian, K., Voracek, M., Warmelink, L., Wick, K., Wiggins, B.J., Wylie, K., and Yıldız, E., (2018), "Registered replication report on Mazar, Amir, and Ariely (2008)", *Advances in Methods and Practices in Psychological Science*, Vol. 1 No. 3, pp. 299-317, https://doi.org/10.1177/2515245918781032
- Wall, T.D. and Wood, S.J. (2005), "The romance of human resource management and business performance, and the case for big science", *Human Relations*, Vol. 58 No.4, pp. 429-462. <u>https://doi.org/10.1177/0018726705055032</u>
- Watson, C. (2022), "Many researchers say they'll share data But don't", *Nature*, Vol. 606 No. 7916, pp. 853-853, <u>https://doi.org/10.1038/d41586-022-01692-1</u>
- Weber, L. and Bauman, C.W. (2019), "The cognitive and behavioral impact of promotion and

prevention contracts on trust in repeated exchanges", *Academy of Management Journal*, Vol. 62 No. 2, pp. 361-382, <u>https://doi.org/10.5465/amj.2016.1230</u>

- Wier, B., Stone, D.N., and Hunton, J.E. (2002), "Promotion and performance evaluation of managerial accountants (retracted)", *Journal of Management Accounting Research*, Vol. 14 No. 1, pp. 189-208, <u>https://doi.org/10.2308/jmar.2002.14.1.189</u> (Retraction published 2016, *Journal of Management Accounting Research*, Vol. 28 No. 1, p. 151, https://doi.org/10.2308/jmar-10442)
- Wilkinson, L., & Fowler, R. D. (1999), "Statistical Methods in Psychology Journals: Guidelines and Explanations", *American Psychologist*, Vol. 54 No. 8, pp. 594-604, <u>https://doi.org/10.1037/0003-066X.54.8.594</u>
- Wright, P.M. and Ulrich, M.D. (2017), "A road well traveled: The past, present, and future journey of strategic human resource management", *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 4 No.1, pp. 45-65, https://doi.org/10.1146/annurev-orgpsych-032516-113052
- Yao, J., Marescaux, E., Ma, L., and Storme, M. (2023), "A contingency approach to HRM and firm innovation: The role of national cultures", *Human Resource Management*, Vol. 62 No. 5, pp. 685-699, https://doi.org/10.1002/hrm.22149
- Yin, J., Wu, Y., Liden, R.C., Kluemper, D., Sauerwald, S., and Gu, J. (2024), "The interactive effects of abusive CEOs and philanthropic corporate social responsibility on organizational innovation and performance", *Academy of Management Journal*, Vol. 67 No. 6, pp. 1612-1633, <u>https://doi.org/10.5465/amj.2022.0380</u>
- York, R. (2018), "Control variables and causal inference: A question of balance", *International Journal of Social Research Methodology*, Vol. 21 No. 6, pp. 675-684, https://doi.org/10.1080/13645579.2018.1468730
- Yuan, S., Kroon, B., and Kramer, A. (2024), "Building prediction models with grouped data: A case study on the prediction of turnover intention", *Human Resource Management Journal*, Vol. 34 No. 1, pp. 20-38, <u>https://doi.org/10.1111/1748-8583.12396</u>
- Zhou, Q., Hirst, G., and Shipton, H. (2012), "Context matters: Combined influence of participation and intellectual stimulation on the promotion focus-employee creativity relationship", *Journal of Organizational Behavior*, Vol. 33 No. 7, pp. 894-909, <u>https://doi.org/10.1002/job.779</u>

Table I. Recommendations for Improving Research Transparency

Recommendations	Details and Implementation Guidelines	Relevant Sources (i.e., additional information and illustrations)
Theory Development Stage		
Define the constructs and specify their level of analysis	 Define each construct and specify its level of analysis (e.g., individual, team, organization). When applicable, illustrate how constructs interact or evolve across levels of analysis using visualizations (e.g., conceptual diagrams, flow charts, models). 	Aguinis <i>et al.</i> (2018) Margherita (2022) Murphy and Aguinis (2019)
Clearly articulate the hypotheses	 Construct hypotheses by: Reviewing theoretical foundations Identifying key mechanisms and relationships in the chosen theory, and Verifying that each hypothesis directly connects to theoretical principles through clear reasoning. 	Guest <i>et al.</i> (2021) Kehoe and Wright (2013) McAbee <i>et al.</i> (2017)
Distinguish between a priori and post hoc hypotheses	 Differentiate between hypotheses formulated before data analysis (a priori) and those developed after results are known (post hoc): Avoid misrepresenting post hoc hypotheses as a priori (HARKing—Hypothesizing After Results are Known). In contrast, THARKing—Transparently Hypothesizing After Results are Known—openly acknowledges post hoc hypotheses as such. 	Hollenbeck and Wright (2017) McAbee <i>et al.</i> (2017) Murphy and Aguinis (2019)
Research Design Stage		
Use pre-registration and registered reports to outline the research design	 Document research plans through pre-registration by specifying hypotheses and methods before data collection. For registered reports, submit a protocol for peer review to obtain preliminary feedback before beginning the study. 	Briker and Gerpott (2024) Gerpott <i>et al.</i> (2024) Logg and Dorison (2021)

	• Address reviewer feedback on study design before proceeding with data collection.	
Justify research design choices and methodological decisions	 Assess the strengths and limitations of each approach for your research questions. Document your design choices with clear reasoning. Anticipate potential methodological concerns. 	Bainbridge <i>et al.</i> (2017) Meier-Barthold <i>et al.</i> (2023) Murphy <i>et al.</i> (2017)
Define participant selection criteria and sampling requirements	 Determine the required sample by: Conducting a power analysis Specifying eligibility criteria for each participant type, and Documenting sampling strategies across organizational levels. 	Antonakis <i>et al.</i> (2010) Iqbal <i>et al.</i> (2025) Oc <i>et al.</i> (2023)
Measurement Stage		
Share measurement details, evidence of validation, and adaptations	 Provide scale items exactly as they were administered. Specify response formats and scoring procedures. Report reliability coefficients and validation evidence. Detail any adaptations or translations. Share all validation analyses. 	Boon and Kalshoven (2014) Hughes <i>et al.</i> (2018) Ontrup <i>et al.</i> (2022)
Make supplementary materials accessible	 Archive research materials by uploading measurement instruments, coding schemes, and documentation to online repositories. Provide clear access information in the manuscript. Ensure materials are organized and properly labeled (e.g., using the Open Science Framework, <u>https://osf.io</u>). 	Boon <i>et al.</i> (2019) Boon <i>et al.</i> (2025) Lacerenza <i>et al.</i> (2017)
Analysis Stage		•
Document data preparation	 Document all data cleaning steps. Specify handling of missing data, outliers, and transformations. Provide rationale for all data cleaning and preparation procedures. 	Aguinis <i>et al.</i> (2021) Guo <i>et al.</i> (2024) Iqbal <i>et al.</i> (2025)

List the statistical software used, including package specifications Reporting of Results Stage	 Report software names and version numbers. List all packages and extensions. Detail computational parameters. Note any deviations from default settings. 	Oc <i>et al.</i> (2023) Ringle <i>et al.</i> (2020) Yuan <i>et al.</i> (2024)
Report all results, including unexpected outcomes	 Report all results, including unexpected ones. Acknowledge methodological limitations. Specify where causal claims cannot be made. Outline specific recommendations for addressing limitations in future research. 	Brutus <i>et al.</i> (2013) Guo <i>et al.</i> (2024) Yuan <i>et al.</i> (2024)
Report and interpret effect sizes	• Present effect size estimates and discuss not only statistical significance but also their meaning for theory and practice.	Aguinis <i>et al.</i> (2010) Bosco <i>et al.</i> (2015) Ng <i>et al.</i> (2024)
Disclose AI usage and report results based on using transparency tools	• Disclose all AI assistance and use automated tools such as the Research Transparency Index (RTI) to assess manuscript transparency through automated checks, scoring, and feedback.	Aguinis, Li, <i>et al.</i> (2024) Budhwar <i>et al.</i> (2024) Gatrell <i>et al.</i> (2024)

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Table II.	Recommendation	s for Improving	g Research Rei	oroducibility
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Recommendations	Details and Implementation Guidelines	Relevant Sources (i.e., additional information and illustrations)
Share data	• Make raw data (e.g., interview transcripts) and analysis scripts (e.g., Rmarkdown files) publicly available through online platforms (e.g., the Open Science Framework, <u>https://osf.io</u>).	Aguinis <i>et al</i> . (2020) Pavlov <i>et al</i> . (2023) Pries and Rogerson (2022)
Promote independent reanalysis of datasets	• Journals should encourage submissions including reproductions, comments, and reanalysis of published articles.	Cortina <i>et al.</i> (2023) Hollenbeck <i>et al.</i> (2006) Munafò <i>et al.</i> (2017)
Perform sensitivity analyses to assess robustness	 Show whether results vary using different statistical approaches. This can be done by: Conducting analyses with different sets of statistical controls (i.e., by using additional control variables) Conducting analyses without any statistical controls (i.e., to achieve a more parsimonious model), or by Using variables constructed in different ways (e.g., using different scales or combinations of items to reach a total score). 	Yao <i>et al.</i> (2023) Yin <i>et al.</i> (2024) York (2018)
Leverage machine learning tools	• Use AI to assist in systematically coding qualitative data, ensuring consistent application of themes across datasets, to help identify patterns and insights.	Crowston <i>et al</i> . (2012) Pandey and Pandey (2017) Speer <i>et al.</i> (2024)
Conduct analyses using different techniques	 Use multiple analytical techniques, such as: Regression with and without fixed effects Multilevel modeling with and without higher-level effects. 	Cortina <i>et al.</i> (2023) Schmitt and Sadowski (2003) Weber and Bauman (2019)
Use models relying on different assumptions	 Be explicit about the assumptions associated with each statistical approach and check that they are met. Fit each model to the data carefully and compare their relative performance. 	Cortina <i>et al.</i> (2023) Sarstedt and Danks (2022) Zhou <i>et al.</i> (2012)

Source(s): Table created by the authors

Table III. Recommendations for Improving Research Replicability

Recommendations	Details and Implementation Guidelines	Relevant Sources (i.e., additional information and illustrations)
Promote literal replications	• Journals should solicit replication studies that closely recreate a precedent study's methods and analyses.	Köhler and Cortina (2023) Obenauer (2024) Verschuere <i>et al.</i> (2018)
Promote constructive replications	• Journals should solicit replication studies that recreate studies with modifications that can improve the original methodology, measures, or data.	Kemery <i>et al.</i> (2017) Köhler and Cortina (2021) Nielsen <i>et al.</i> (2020)
Address contextual variability	• Expand the sample to different populations and contexts to test generalizability and improve understanding of conditions under which the original results hold.	Aguinis, Beltran, <i>et al.</i> (2024) Hammond <i>et al.</i> (2023) Peyton and Zigarmi (2024)
Choose impactful precedent studies that provide full transparency	 Focus on precedent studies that made important contributions and provide complete information about how the research was conducted. Conduct replication studies that make contributions on their own merit, rather than being positioned as a "hit job" to discredit the original research and its authors. 	Dreher <i>et al.</i> (2019) Fisher <i>et al.</i> (2021) Schwab <i>et al.</i> (2023)
Examine the effects of model changes and methodological choices	 Constructively assess: The original research design Data collection, and Analysis methods to demonstrate robustness, Then, attempt to replicate the results using the original methods or with intentional variations to the modeling or methodology. 	Bonett (2020) Hollenbeck <i>et al.</i> (2006) Schwab <i>et al.</i> (2023)
Consider using Bayesian and meta-analytic approaches	 Use Bayesian and meta-analytic techniques to compare and integrate findings from precedent and replication studies. Perform analyses that combine data from different studies to check for consistency across the results. 	Gelman (2014) Hoijtink <i>et al.</i> (2019) Whitson <i>et al.</i> (2017)

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Figure 1. The TRRUST Model: A Framework for Understanding Research Credibility



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