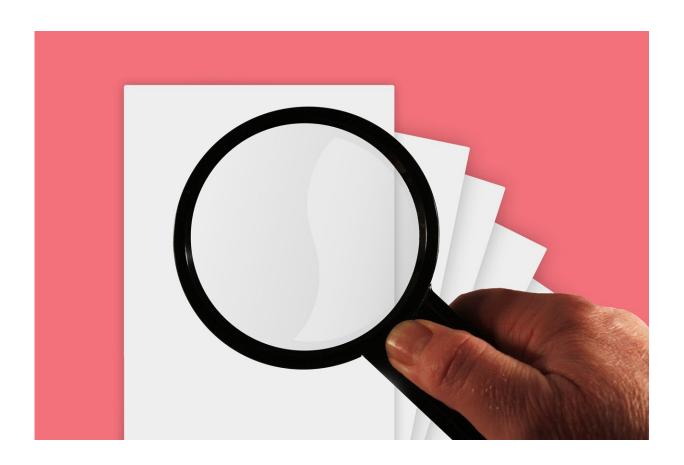


New literature review on 'crisis of confidence' due to lack of reproducibility in academic research

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In light of recent cases of plagiarism and academic fraud at institutions across the country, a Virginia Commonwealth University professor's new



study provides a timely review of the current state of research findings in academia, especially fields related to psychology and management.

"If a scientific discipline's research is deemed untrustworthy, it can have dire consequences, including the withdraw[al] of funding for future research," Sven Kepes, professor of management in the VCU Business School, writes in the psychology journal *Acta Psychologica*.

In the article, "The trustworthiness of the cumulative knowledge in industrial/organizational psychology: The current state of affairs and a path forward," Kepes and co-authors Sheila K. Keener of Old Dominion University, a former VCU Business Ph.D. student, and Ann-Kathrin Torka of TU Dortmund University review literature related to the "crisis of confidence" stemming from the lack of reproducibility and replicability of many academic research findings in the field of industrial/organizational psychology.

Ironically, they note, the purpose of industrial/organizational psychology is to build and organize trustworthy knowledge about people-related phenomena in the workplace. Yet the prevalence of <u>scientific</u> <u>misconduct</u> and <u>questionable research practices</u> make it less likely that research findings will be trustworthy.

"To make evidence-based decisions, people need to understand how to properly evaluate scientific research," Kepes and his colleagues write. "To do so, they need to know about potential problems in the field, including scientific misconduct."

The study highlights internal factors, such as personal characteristics, that can raise an individual's probability to engage in questionable behaviors. But it also points to external factors, such as insufficient training, a <u>reward system</u> that incentivizes research quantity, journals preferring statistically significant results, and the opportunity to engage



in behaviors that increase the likelihood of publishing as many studies as possible.

"It is likely not possible to address every potential reason why researchers may engage in misconduct and questionable research practices and make errors," the paper reads. "However, there are several changes that we can make, which should help reduce the frequency and impact of misconduct, questionable research practices and errors."

Those changes include:

- Improving scientific training formally and informally.
- Addressing the incentive structure in academia.
- Implementing a reward system that promotes quality over quantity.
- Improving the <u>peer review</u> process.
- Implementing open science practices.

More information: Sheila K. Keener et al, The trustworthiness of the cumulative knowledge in industrial/organizational psychology: The current state of affairs and a path forward, *Acta Psychologica* (2023). DOI: 10.1016/j.actpsy.2023.104005

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