EVALUATING THE SUCCESS OF OPEN DATA BADGES

Reproducibility, or the ability to find the same results using the same data, is a part of the open science movement to make science transparent. How can journals identify reproducible studies?

In recent years, *Psychological Science* has adopted an "open practices" policy, which grants badges to articles that have made their data and research methods publicly available. Are the badges accurately identifying reproducible studies, as *Psychological Science* intends them to?

Bradley Baker teamed up with researchers across the world to examine whether the studies that have received this badge were, in fact, reproducible. They focused on a *Psychological Science* issue from April 2021, which was the first issue where all articles had the Open Data badge.

Several researchers from the team attempted to reproduce the findings of each article. In the end, only one article was exactly reproducible. Three were essentially reproducible, six were partially reproducible, and four were mostly or not at all reproducible.

While Baker expected that not all articles would be reproducible, the findings indicate a concerningly high rate of badged studies that were not reproducible. Baker applauds *Psychological Science* for taking steps to improve research transparency, and hopes that the findings can move forward discussions about how journals can more effectively promote high quality research.

MAJOR TAKEAWAYS:

- Psychological Sciences adopted an "open practices" policy intending to grant badges to articles that are reproducible.
- Upon examination, a high percentage of articles that received Open Data badges are not reproducible.
- These findings should contribute to ongoing discussions about the most effective strategies of promoting high quality research.

WHO NEEDS TO KNOW:

- Academic journals
- Researchers
- Academics studying corporate governance or exchange rate exposures

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- What's in a Badge? A Computational Reproducibility Investigation of the Open Data Badge Policy in One Issue of Psychological Science.

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