Leading Psychological Science Journal Launches Initiative on Research Replication

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Reproducing the results of research studies is a vital part of the scientific process. Yet for a number of reasons, replication research, as it is commonly known, is rarely published. Now, a leading journal is adopting a novel way to promote and publish well-designed replications of psychological studies.

Perspectives on Psychological Science, published by the Association for Psychological Science, is launching an initiative aimed at encouraging multi-center replication studies. One of the innovative features of this initiative is a new type of article in which replication study designs are peer-reviewed *before* data collection.

The new approach is designed to give researchers more incentive to pursue replications, which involve repeating a study using the same methods as the original experiment, but with different subjects. Scientists traditionally have garnered far more credit for publishing novel results rather than verifying earlier published findings.

The goal of the new *Perspectives* initiative is to help make replication a valued part of daily scientific practice.

According to Barbara A. Spellman, Professor of Psychology at the University of Virginia and Editor of *Perspectives*, "Some research findings are so important that we should publish high quality replications of them regardless of the outcome. When multiple laboratories coordinate with original study designers to do multiple replications, we can learn about the robustness, generalizability, and effect sizes of noteworthy research."

Perspectives plans to begin publishing collections of replications of original studies conducted independently by multiple labs. Each participating lab will follow a shared, vetted, pre-registered, and publicly available protocol. Each collection of replications will be compiled into a single article (a "registered replication report"), and all researchers contributing replications will be listed as authors. In addition to providing input on the replication protocol, the author of the original article that was the focus of the collected replications will be encouraged to submit a short commentary discussing the final report. Daniel J. Simons, Professor of Psychology at University of Illinois at Urbana-Champaign, and Alex O. Holcombe, Associate Professor of Psychology at University of Sydney, will serve as editors for these replication projects.

Published reports will be available without a subscription to the journal. And reports in the journal will link to more extensive information and data from each replicating lab on the Open Science Framework (OSF), <u>http://openscienceframework.org/</u>, a website that helps scientists store their research materials, collaborate with others, and share findings publicly. OSF is a signature project of the Center for Open Science (<u>http://centerforopenscience.org/</u>), a new non-profit opening this month in Charlottesville,

Virginia. Founded by Brian Nosek, Associate Professor of Psychology at the University of Virginia (UVA) and Jeffrey Spies, a graduate student in Quantitative Psychology at UVA, COS aims to develop innovative practices and offer grants to scientists and journals to encourage replications of important research.

"Two core values of science are openness and reproducibility," says Nosek. "The new initiative in *Perspectives* is an important step toward aligning scientific practices with these values. The Center for Open Science will provide support to scientific journals like *Perspectives* to improve how science is conducted and communicated. This includes infrastructure support for documenting, archiving, and sharing research materials and data, methods for registering research designs and analysis plans, and material support for conducting replications."

This unique approach to publishing replications is part of broader efforts in psychological science to improve scientific practices. Psychological science is leading the way with initiatives that may have applications in other disciplines.

For more information, please visit

http://www.psychologicalscience.org/index.php/replication

<u>Perspectives on Psychological Science</u> is ranked among the top 10 general psychology journals for impact by the Institute for Scientific Information. It publishes an eclectic mix of thought-provoking articles on the latest important advances in psychology.