

Research Reproducibility 2020
Educating for Reproducibility: Pathways to Research Integrity
University of Florida, Gainesville, FL, USA

Towards Reproducible Social Work Research:
A Graduate Course on Reproducibility, Rigor, and Meta-Science

Daniel J. Dunleavy(1), Jeffrey R. Lacasse(2)

⁽¹⁾*Florida State University, College of Medicine, djd09e@fsu.edu*

⁽²⁾*Florida State University, College of Social Work, jlacasse@fsu.edu*

ABSTRACT

Introduction. The veracity of scientific findings in the biomedical and social sciences has come under intense scrutiny over the last two decades in what has been called the “replication crisis”. Though a key contributor to the development of social welfare policy and a primary creator/consumer of social welfare research, social workers have been relatively silent (or unaware) about many of these issues. Like other social science disciplines, social work is susceptible to many of the underlying causes of this crisis (e.g. flexible data analysis, Questionable Research Practices, publication bias, etc.). As concerned social work scholars and educators, we believe the discipline requires a renewed focus on research reproducibility and rigor.

Objectives. We aim to: (1) increase the knowledge of graduate social work students on the topics of replicability and optimal research practices, (2) educate social work students about the field of meta-research, and (3) prepare social work students to engage in reproducible research projects, by using an interdisciplinary approach, which integrates scholarly works from social work with adjacent fields (e.g. medicine, epidemiology, social psychology, economics, and statistics).

Methods. Our poster outlines a novel semester-long, graduate-level research course, which is split across eight topic areas: (1) Critical Thinking, Epistemology, and the Philosophy of Science, (2) Cognitive Errors and Biases, (3) The Replication Crisis, (4) Statistical Inference, (5) Questionable Research Practices, (6) The Sociology of Science and Knowledge Dissemination, (7) Meta-Research, and (8) Reproducibility and Research Integrity. Students are exposed to a mixture of articles and texts from across the sciences, including philosophy and statistics. Assignments include: Critiquing published research articles (in the student’s area of interest), creating and utilizing a public repository for future research projects, evaluating and critiquing the preregistration of a published study, and a term paper on a topic of their choosing (building upon a topic area from the course).

Conclusion. This semester-long course provides social work students with a much-needed overview of current issues in scientific research. As educators, we believe this is but one step towards a more comprehensive effort to reform our field, and scientific practice more broadly.