ABSTRACT

The past few years has witnessed much debate regarding research practices that can potentially undermine the accuracy of reported research findings (e.g., Questionable Research Practices, or QRPs). A strong case can be made that, for example, that the Type I error rate is in fact much higher than the nominal \( \alpha \) level of .05 because of study design and data analytic flexibility. Combined with the typically low levels of statistical power (~50%) in the published research, and the fact that over 90% of published findings are reported as statistically significant, a non-trivial number of published research findings are false-positives. But which ones? The most effective way to reliably distinguish true positives is to conduct high quality close replications of published research in order to derive more precise effect size estimates for presumed effects. Different types of replication (e.g., very near to very far) are also needed to test and advance theory. To encourage replication research in young scholars, as well as to teach open science practices, I have developed a graduate course on research methods in social psychology that implements a hands-on replication project from an open-science perspective (syllabus available online: https://osf.io/nxytf/). In this presentation I will discuss how such a hands-on approach to teaching replication and open science practices is an excellent opportunity to teach how to do good science at an early stage in training new scientists. The goal is to make these teaching resources openly available to encourage widespread adoption as well as solicit feedback for improvement.

BIOGRAPHY

Dr. Campbell earned his Ph.D. in Social Psychologist at Texas A&M University in 2001. He was an assistant professor at Simon Fraser University before joining the faculty at the University of Western Ontario in 2002, where he is currently a professor of psychology. From 2008-09 Lorne was a Harrington Faculty Fellow at the University of Texas at Austin in the Department of Human Development and Family Sciences, and he was nominated a faculty scholar at the University of Western Ontario from 2012-13. Dr. Campbell is a recognized expert in the fields of interpersonal relationships, research design and data analysis, and is an advocate of open science practices. He was the Editor of journal Personal Relationships from 2008-2012, and was an Associate Editor at Personality and Social Psychology Bulletin as well as Social Psychological and Personality Science. His research is currently funded by the Social Science and Humanities Research Council of Canada (SSHRC).