Department of Psychology
The University of Hong Kong
香港大學心理學系

Mass mobilizing under-graduate students for collaborative open-science: Replications & extensions, assessments, templates, guides, and books

4:00 p.m. – 5:30 p.m. │ December 5, 2019 (Thursday)
CPD 3.28, 3/F, The Jockey Club Tower │ Centennial Campus │The University of Hong Kong

Dr. Gilad Feldman

Assistant Professor
Department of Psychology
The University of Hong Kong

Abstract

Reproducibility and replicability are at heart of science, yet increasing evidence from recent years suggests that many of the findings in psychological science are irreproducible and non-replicable in what some termed as a "replication/reproducibility crisis" and a new "credibility revolution" calling for significant changes in the way we do science, to embrace open-science practices. Even if we adopt these changes, it would take us decades to address the crisis. I will argue that to successfully address the situation we must mass mobilize undergraduate students and leverage our courses to implement collaborative open science with real impact.

I have been trying to implement such a change in my taught social-psychology courses at the University of Hong Kong (HKU). We have concluded the 3rd semester of running a mass replication effort of impactful Judgment and Decision Making (JDM) literature classics (summary: http://mgto.org/pre-registered-replications/). Last year we completed 45 pre-registered replications (examples: https://tinyurl.com/hkureplicationexamples), and this year we pushed things further with 22 teams conducting replications of 11 new target studies, with 2 extensions for each article (https://tinyurl.com/extensionsguide). We implemented a Registered Reports format (https://tinyurl.com/RRmanuscripttemplate, and https://tinyurl.com/RRsupplementarytemplate), with pre-registrations of code analyzing simulated datasets, advanced templates for all outputs, comprehensive updated guides, Slack open communications, and open peer-review (https://tinyurl.com/peerreviewtemplate) with external reviewers from around the world (https://airtable.com/shrPPCl68LbhHrN8X), in collaboration with large-scale paid prediction markets (https://predict.replicationmarkets.com/).

This semester, we also went beyond replications and extensions, to try out new directions: 1) Students conducted open-science assessments of impactful Registered Replication Reports articles and our students' projects from previous years (https://tinyurl.com/RRRassessment), testing, coding, and learning from others' pre-registrations, open-science code/data sharing, and reports, 2) Students collaboratively wrote a book detailing the development of the credibility revolution (https://tinyurl.com/replicationcrisissummary2019), 3) Students designed and ran in-class experiment activities on their class-mates to gain hands-on experience with adjustment and implementation of classics for engagement in real-life.

I will briefly present the process, findings, main insights, and my own take-aways, and will review open resources we developed such as course materials, collaborative guides, and tools that can be used by all in their research labs.

~All are Welcome~

Enquiry: gfeldman@hku.hk | Dr. Gilad Feldman