Workshop (Via Zoom)

Summarizing 3 years of running a 100 replications & extensions with students at HKU: Our experience, running your own, and joining our team

3:00 p.m. – 6:00 p.m | January 18, 2021 (Monday)

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Abstract

Reproducibility and replicability are at heart of science, yet increasing evidence from recent years suggests that some of the findings across the sciences are irreproducible and non-replicable in what some have coined as a “replication/reproducibility crisis”, leading to a new “credibility revolution”, calling for significant changes in the way we do science, to embrace open-science practices. Even if we successfully endorse these changes, it will still take us decades to address the crisis.

Since 2018, I have been trying to address this challenge by mass mobilizing students at University of Hong Kong in taught courses and thesis work to implement collaborative open science and meta research with real impact.

This semester we will be concluding 3 years of running replication and extensions with students at University of Hong Kong (HKU) in my taught social-psychology courses at the University of Hong Kong (HKU) and my guided thesis students. I targeted this mass replication effort at impactful Judgment and Decision Making (JDM) literature classics. We have so far completed 72 pre-registered replications, with submission ready manuscripts after data collection. Beyond that, there are currently 13 (~2 teams) Replication Registered Report Stage 1 reports and 10 pre-registered replications, each with extensions. We conduct these replication using a Registered Reports manuscript format with pre-registrations of code analyzing simulated datasets, advanced templates for all outputs, comprehensive updated guides, and open peer-review with external reviewers from around the world, in collaboration with large-scale paid prediction markets. All completed reports are submitted to journals with early career researchers invited to take lead. In 2020 we published 12 of these projects with many working papers currently under review, all coauthored with the HKU students and the early career researcher team.

In the last year we also went beyond replications and extensions: 1) Students conducted open-science assessments of Registered Replication Reports articles and our students’ projects from previous years, 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. 3) Students contributed to meta-science projects aiming to support the credibility revolution by building tools, templates, and writing primers and opinion pieces regarding methods and the scientific process.

We also have several meta-science initiatives aiming to aggregate findings from all these projects to offer meta-science insights.

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 and teaching.

I will give some recommendations on how you could implement your own mass collaboration science projects and run these with students.

Finally, I will end with an open invitation to join our team, either in taking the lead over our completed projects to get involved in open-science and work with us to bring these to publication, or to join any of the many initiatives, guides, tools, and/or templates, which are open for all collaboration and cooperation.

Resources reviewed...
Project info/summary: http://mgto.org/pre-registered-replications/
Publication and completed preprints from this project: https://arxiv.org/abs/1802.08165
List of currently running replications: https://arxiv.org/abs/1908.04749
Join the project: http://mgto.org/joinmassreplication
Replications and extensions project examples: http://mgto.org/hkureplication2019
RRR assessment examples: https://mgto.org/2019-rrr-assessment
Collaborative RRR assessment template: http://mgto.org/RRRAssessment
Collaborative quantitative manuscript peer review template: http://mgto.org/peerreviewtemplate
Collaborative review/opinion guide peer review template: http://mgto.org/reviewpeerreviewtemplate
Collaborative Guide/primer template: https://mgto.org/guidetemplate
Collaborative Opinion piece template: https://mgto.org/opiniontemplate
Collaborative Phenomenon review template: https://mgto.org/reviewtemplate
Collaborative effect size, confidence intervals, and power guide: http://mgto.org/effectsizepowerguide
Collaborative extensions guide: http://mgto.org/extensionsguide
Collaborative open book on the science crisis credibility revolution: http://mgto.org/replicationcrisissummary2019
Previous workshops on Registered Reports and on R/JAMOVI/JASP: https://www.youtube.com/playlist?list=PLRAf8P3W1K&v=1nkkXXD0fJUR-OwVc9nk
Lecture about the Science Crisis and our replication project: https://www.youtube.com/watch?v=2vZcUF7bMzg

Please do go over the resources and prepare questions you'd like me to address in the workshop.
Feel free to email me in advance at gfeldman@hku.hk if there’s a specific concern or practicality you’d like me to address.

Register in advance for this meeting: https://hkzu.zoom.us/meeting/register/tJcqfuytrzQH97cCMDB8A0sjwNnzZ3vlgM
After registering, you will receive a confirmation email containing information about joining the meeting.

~All are Welcome~

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