Social Sciences' Research
Methods Centre (SSRMC)

Cambridge Replication Workshop 2013

Instructor: Nicole Janz (nj248@cam.ac.uk)

This replication workshop will introduce students to the process of reproducing published work. Replicating other scientists' work is an essential tool to develop statistical skills. Through replication, students get familiar with methods and learn to think about steps the author has made. Most importantly, students will develop an understanding of what challenges and complications authors of published work have faced, and how they found a solution that is accepted in the scientific community. Students will also learn how to add value and knowledge to a replication, by e.g. including different (omitted) variables and conducting robustness checks. With the right amount of value added, a replication study is publishable after the workshop.

The module is created for Mphil and PhD students who use statistics in their own dissertation.

Duration and format
8 sessions (2h each): Lecture and practical work on the projects with TA's

Students will work on a paper that was approved as suitable by the lecturer. In Phase one, the first four sessions, they will be guided through replicating the paper. In the following four sessions they will be guided through the process of adding value to the replication and bring it into a publishable format.

Students will have to commit to at least 4-6 hours self-directed work per week.

Website:	http://schreiberin.de/teaching/replication.html
Email-List:	ucam-replication@lists.cam.ac.uk.
Dataverse:	http://dvn.iq.harvard.edu/dvn/dv/CambridgeReplication
Dropbox:	"Replication Workshop"
Blog:	https://politicalsciencereplication.wordpress.com/
Twitter:	@PolSciReplicate

Course Outline

Week 1	Terminology: What is replication? The "reproducibility debate" in statistical research Why replicate? How to pick a suitable paper for replication? Where and how to download data? How to approach the author in a professional manner to request data?
Week 2	How to structure a replication project Time plan for replication How to 'read' Rcode, STATA code and SPSS syntax provided by the authors

Week 3	Presenting first results Problem solving in replication Correcting Rcode
Week 4	Cross-Check: Students will exchange replication code and data and replicate each others' work Guidelines for cross-checking and constructive feedback
Week 5	How to add value to a replication Steps to advance knowledge
Week 6	Robustness checks, Sensitivity analysis, Dummy variables, Interactions, Omitted variables, Adjusted and improved models How to download and handle additional variables
Week 7	Cross-Check: Students will exchange replication code and replicate each others' work to check if value added can be reproduced Guidelines for cross-checking and constructive feedback
Week 8	Publishing the result in our dataverse http://dvn.iq.harvard.edu/dvn/dv/CambridgeReplication How to bring a replication into a publishable format for a journal

Literature

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