Replication Module
Michaelmas/Lent 2013/14
Alison Richard Building, Room 138
Thursdays 5-7pm (and occasionally a double session 4-8pm)

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Overview
This module will introduce students to the process of reproducing published work. Replicating other scholars' work is an essential tool to get familiar with methods, learn to select suitable models, and get a chance to publish early during their PhD. This replication module will therefore provide students with a deeper understanding of statistical modelling and professionalism in their field. With the right amount of value added, a replication study is publishable after the module.

Duration and format
Each session consists of a short lecture part, and an extensive practical part. There will be a weekly assignment in which you work on your replication, and bring the results (and problems) to the next session.

Final Project
The main focus of the course is the final project = a paper in which you have replicated and extend previously published results.

Preparation for first session
Please bring a copy of the article(s) you would like to replicate so we can discuss if it is suitable. A rough guideline:

1) Pick a paper where the data set is available at the Journal's webpage, the author's webpage or a data verse. Do not pick a paper where you cannot locate the data and code!
2) To increase the probability that your paper will eventually be published, pick an article from a top journal**.**
3) The article should be published 2008 or later.
4) Your paper should use methods you can manage or learn over the Christmas break.
5) Bring the paper(s) including the data on your laptop to the first session.

More information
Website: http://nicolejanz.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: @PolSciReplication

Outline

Week 1
Nov 28, 2013
5-7pm

What is replication? The "reproducibility debate" in statistical research - why replicate? How to pick a suitable paper for replication? Please bring 1-3 papers, including the data, to the first session to pick your project.

Readings:
King, Gary. 1995. Replication, Replication. PS: Political Science and Politics 28: 443–499. http://j.mp/jCyfF1

	Symposium on Replication in International Studies Research, with articles by Bruce Bueno de Mesquita, Nils Petter Gleditsch, Patrick James, Gary King, Claire Metelits, James Lee Ray, Bruce Russett, Håvard Strand, Brandon Valeriano, in International Studies Perspectives. Volume 4, Issue 1, pages 72–107, March 2003 http://onlinelibrary.wiley.com/doi/10.1111/1528-3577.04105/abstract
Week 2: **Dec 5, 2013** **5-7pm**	How to structure a replication project; Time plan for replication; How to 'read' Rcode, STATA code and SPSS syntax provided by the authors; Preparation of your first replication steps during Christmas vacation **Readings:** King, Gary "How to Write a Publishable Paper as a Class Project ", http://gking.harvard.edu/papers **Each student will be assigned a published replication paper and present its structure and added value components in class**
Week 3+4 **Jan 16, 2014** **4-8pm** **double session** *Room change:* *119 ARB*	Presenting first results; Problem solving; Help with Rcode How to add value to a replication; steps to advance knowledge: Robustness checks, Sensitivity analysis, Dummy variables, Interactions, Omitted variables, Adjusted and improved models **No readings for this session; but have all your code and questions ready for the practical part of the session**
Week 5 **Jan 23, 2014** **5-7pm**	Cross-Check: As an assignment for next week, students will exchange replication code and replicate each others' work; guidelines for cross-checking and constructive feedback – including how to make your own work reproducible for others **Readings:** "How to make your work reproducible" https://politicalsciencereplication.wordpress.com/2013/06/04/how-to-make-your-work-reproducible/ Christopher Gandrud, Getting Started with Reproducible Research: A chapter from my new book http://christophergandrud.blogspot.co.uk/2013/07/getting-started-with-reproducible.html Watch this video by Gary King on sharing data: http://tinyurl.com/cpzwbzb
Week 6+7 **Jan 30, 2014** **4-8pm** **double session** *Room change:* *119 ARB*	Reports on Cross Check; Problem solving; How to bring a replication into a publishable format for a journal **Readings:** Mark Bell and Nicholas Miller, Guest post: How to persuade journals to accept your replication paper http://tinyurl.com/pqh7b2x "Publishing as a grad student: replication helps" http://tinyurl.com/oksyln3
Week 8 **Feb 6, 2014** **5-7pm**	Publishing the result in our dataverse http://dvn.iq.harvard.edu/dvn/dv/CambridgeReplication **No readings for this session; bring your final paper draft, Rcode and data**