

# COHEN R. SIMPSON

c.r.simpson@lse.ac.uk • cohensimpson.com • UK Right-To-Work: Tier 1 Exceptional Talent Visa

## STATISTICAL ANALYSIS COMPETENCIES (R Programming Language)

- Causal Inference (i.e., Potential Outcomes) + Experimental Design
- Generalised Linear Models
- Beta/Dirichlet Regression for Proportions (e.g., Vote Shares)
- Multilevel Models (e.g., Meta-Regression, Dyadic Regression)
- Social Network Analysis (e.g., Models of Network Formation)
- Survival Analysis/Time-to-Event Models (i.e., Cox Regression)
- Bayesian Inference with RStan
- Visualisation of Data and Results using “ggplot2”

## EDUCATION

**PhD:** Social Research Methods (i.e., Applied Social Statistics), **London School of Economics** 2012 – 2016  
**Visiting Student:** Media Lab (Human Dynamics Group), **Massachusetts Institute of Technology** Autumn 2013  
**MSc:** Social Science of the Internet [**Clarendon Scholar**], **University of Oxford** 2011 – 2012  
**BA:** Communication Studies [Summa Cum Laude], **Clemson University** 2007 – 2011

## EXPERIENCE

**Fellow in Quantitative Research Methods, London School of Economics** Jan 2022 – Dec 2022

- Co-designed 3-year project on inter-group cooperation in Ethiopia – leading creation of hypotheses, design of the statistical analysis ( $\approx 400$  adults), and key aspects of survey design and project roadmap. Secured \$447,116 in project funding from US National Science Foundation.
- Used multilevel models to gauge the probability of lending money to friends and kin in 16 villages in Uganda (3,184 adults;  $\approx 680k$  cases).

**In-Progress Project:** “The Relational Bases of Informal Financial Cooperation.” [R Code: <https://github.com/cohensimpson/moneyaid>]

- Lead practical, 1-hour classes (3/week) on highly interpretable forms of supervised learning (i.e., simple linear, binary logistic, multinomial logistic, ordinal logistic, Poisson, and negative binomial regression) using R + Markdown for  $\approx 60$  non-technical students (MSc & PhD).
- Effectively communicated complex statistical concepts to students, achieving an average student satisfaction survey rating of 4.5/5.

**British Academy Postdoctoral Fellow, University of Oxford** Jan 2018 – Dec 2020

- Executed 4 research projects (3 solo) on the formation of social relationships (i.e., friendship, social support) end-to-end – moving from broad, ambiguous aims to testable hypotheses, wrangling + analysing tabular data, and writing all elements of the articles reporting results.
- Built simulations of network dynamics (e.g., reciprocity, popularity-bias) in 3 villages – 2 in India (782 adults), 1 in Nicaragua (108 adults).
- Leveraged multivariate meta-regression to assess variation in network dynamics across 162 villages in China (4,713 adults).

**Published Project:** “Dynamics of Cooperative Networks Associated with Gender Among South Indian Tamils.” *Philosophical Transactions of the Royal Society: Biological Sciences*. [R Code: [https://github.com/cohensimpson/gendernet\\_PhilTransB](https://github.com/cohensimpson/gendernet_PhilTransB)]

**Published Project:** “Social Support and Network Formation in a Small-Scale Horticulturalist Population.” *Scientific Data*. [R Code: [https://github.com/cohensimpson/smallnet\\_ScientificData](https://github.com/cohensimpson/smallnet_ScientificData)]

- Flexibly collaborated with colleagues (cross-functional) to discuss, prioritise, and complete tasks regarding teaching, research, and hiring.
- Co-led R-based course on basic statistical inference (e.g.,  $p$ -values) – delivering weekly lectures + practicals to  $\approx 50$  students (MSc & PhD).
- Provided 1-to-1 advice on statistical modelling in weekly surgeries for students, working backwards from their needs (e.g., time efficiency).
- Evaluated work (i.e., exams, R code, theses) – tactfully communicating feedback to students with diverse levels of statistics knowledge.
- Supervised two MSc students (one-year degree) to completion – providing career mentorship, pastoral care, and research direction.

**Postdoctoral Researcher, University of Oxford** Mar 2017 – Dec 2017

- Led a project on police behaviour end-to-end – crafting the hypotheses and analytic strategy, and publishing results in a leading journal.
- Wrangled two-years of structured data (numeric + text) on malfeasance and daily collaboration among 3,475 US police ( $\approx 1.2m$  cases).
- Independently analysed data on police malfeasance using repeated-events survival models (i.e., Cox Regression with Frailties).

**Published Project:** “Is Police Misconduct Contagious? Non-Trivial Null Findings from Dallas, Texas.” *Journal of Quantitative Criminology*. [R Code: <https://osf.io/g93m7/>]

**Postdoctoral Research Assistant, University of Cambridge** Feb 2016 – Dec 2017

- Solely secured £337,789 in research funding (10% Success Rate) from the British Academy (i.e., UK’s National Academy of Social Sciences).
- Pulled data using Twitter’s API and the R package “twitterR” to study message forwarding among 60 UK human rights organisations.

## ACADEMIC INTERESTS + PERSONAL INTERESTS + FAVOURITE APPLIED STATISTICS BOOKS

**A:** Ecological Determinants of Human Behaviour; Evolutionary and Sociological Theories of Cooperation; Zoology.

**P:** Video Games (3rd-Person Action; Japanese RPGs); Weightlifting; Landscape Photography; Horror Podcasts; Classical Music.

**B:** “Regression and Other Stories” (Gelman et al., 2022); “An Introduction to Statistical Learning” (James et al., 2021).