Big Data Research in the Social Sciences

Katie Metzler, Executive Head of Methods Innovation at SAGE Publishing
Why Big Data?

“The social sciences are undergoing a dramatic transformation from studying problems to solving them; from making do with a small number of sparse data sets to analyzing increasing quantities of diverse, highly informative data; from isolated scholars toiling away on their own to larger scale, collaborative, interdisciplinary, lab-style research teams…” Professor Gary King, IQSS @Harvard
But who is actually doing it?

- Survey of 9412 academics
- Sent to 550k+ from SAGE’s mailing list
- Mostly social scientists
33% have done “big data” research in the past.

744 respondents said all or most of their research was using “big data”.

Of those who haven’t done big data research, 49% “definitely planning on doing so in the future” or “might do so in the future.”
Figure 10  Data types used by respondents in most recent research involving big data (n = 3077)

- Administrative data: 1690
- Commercial or proprietary data: 697
- Other social media: 533
- Photographs, video, or audio: 515
- Facebook: 460
- Twitter: 358
- Sensor data: 299
- Survey data: 228
- Mobile data: 221
- Medical/scientific data: 70
- Media/press: 44
- Bibliographical data: 34
- Census: 24
Figure 15  Challenges facing big data researchers (n = 2273)

- Getting funding for my research: 1290 (Big problem), 1181 (Something of a problem), 585 (Not a problem)
- Getting access to commercial or proprietary data for my research: 970 (Big), 1224 (Something), 827 (Not)
- Finding collaborators with the right skills and knowledge: 677 (Big), 1343 (Something), 1039 (Not)
- Learning new software for myself: 672 (Big), 1449 (Something), 944 (Not)
- Learning new analytic methods for myself: 615 (Big), 1485 (Something), 960 (Not)
- Choosing a suitable journal in which to publish my research: 608 (Big), 1339 (Something), 1098 (Not)
- Establishing a successful career in an interdisciplinary field: 554 (Big), 1295 (Something), 1183 (Not)
- Developing effective research designs: 404 (Big), 1402 (Something), 1243 (Not)
- Getting ethical approval for my research: 261 (Big), 824 (Something), 1954 (Not)
Primary challenges reported

- Funding
- Skills
- Access to data
- Collaboration
- Software
- Getting credit
Join our community

We’re building a community of social scientists, data science experts and tech entrepreneurs to help more social researchers work with big data and new technology.

If you’re working on a project related to big data research, computational social science or new technology, we’d love to hear from you.

SHARE YOUR STORY
Tell us about your research using big data or computational methods and we'll promote your work.

BECOME A SPEAKER
Share your expert knowledge about computational social science and big data analysis.

SUBMIT A RESOURCE
Submit tools, software and other resources for inclusion in our recommended resources list.
SAGE White Paper

Who Is Doing Computational Social Science? Trends in Big Data Research

Katie Metzler, Head of Methods Innovation, SAGE Publishing

David A. Kim, Stanford University, Department of Emergency Medicine

Nick Allum, Professor of Sociology and Research Methodology, University of Essex

Angella Denman, University of Essex

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