

Transparency Practices for Empirical Social Science Research

Institute Report



June 2-6, 2014

University of California, Berkeley

OVERVIEW

The Berkeley Initiative for Transparency in the Social Sciences (BITSS) held its first summer institute from June 2 to 6, 2014 at the University of California, Berkeley. The weeklong series of workshops provided participants with an overview of the latest trends in the shift towards increased transparency, combining presentations on conceptual issues in current research practices with hands-on training on emerging tools and approaches to further openness and integrity.

A group of 32 graduate students and junior faculty attended the institute – representing a total of 13 academic institutions in the US, six overseas, and four research non-profits. The agenda was developed by a team of BITSS affiliates together with staff from the Center for Effective Global Action (CEGA), the Center for Open Science, and the UC Berkeley D-Lab.

The event was sponsored by the Alfred P. Sloan Foundation, the Laura and John Arnold Foundation, and an anonymous donor, and organized by CEGA in partnership with the Interuniversity Consortium for Political and Social Research (ICPSR).

BITSS SUMMER INSTITUTE AGENDA

DAY 1

- Introduction & Welcome
- Emerging Issues in the Practice of Empirical Social Science (Ted Miguel, UC Berkeley, Economics)
- Ethics in Social Science Research (Scott Desposato, UC San Diego, Political Science)
- False-Positives, p-Hacking, Statistical Power, and Evidential Value (Leif Nelson, UC Berkeley, Psychology)
- Reporting Standards for Social Science Experiments (Kevin Esterling, UC Riverside, Political Science)

DAY 2

- Pre-Registration & Transparent Reporting: Perspectives from Biomedical Research (Maya Petersen, UC Berkeley, Biostatistics)
- Comparing and Consolidating Empirical Findings (Solomon Hsiang, UC Berkeley, Economics)

<ul style="list-style-type: none"> • Pre-specification across Research Projects (Thad Dunning, UC Berkeley, Political Science) • Theory and Implementation of Pre-analysis Plans (Kate Casey, Stanford University, Economics)
DAY 3 <ul style="list-style-type: none"> • Dataverse: Research Transparency through Data Sharing (Merce Crosas, Harvard University, Data Science) • A Student-Oriented Protocol for Research Documentation and Replicability (Richard Ball, Haverford College, Economics)
DAY 4 <ul style="list-style-type: none"> • Reproducible and Collaborative Statistical Data Science (Philip Stark, UC Berkeley, Statistics) • Tools and Resources for Data Curation (Staff from California Digital Library) • Computing for Data-intensive Social Science (Staff from UC Berkeley D-Lab) – two tracks • Data Science Meets Social Science (Optional Evening Seminar)
DAY 5 <ul style="list-style-type: none"> • Open Science Framework: Enabling Open Practices and Increasing Organization (Staff from Center for Open Science) • Participant Presentations • Open Discussion, Next Steps & Participant Feedback

PARTICIPANTS PROFILE

The institute participants were carefully selected from a competitive pool of 57 applicants. Candidates were asked to submit a cover letter outlining their interest in the workshop along with their CV and an optional letter of reference. Three key elements were used to assess applicants during the selection process: (i) strength of credentials and prospects of future research, (ii) eagerness to attend the institute and to adopt transparency tools and approaches, and (iii) diversity in terms of gender, origin, and academic discipline.

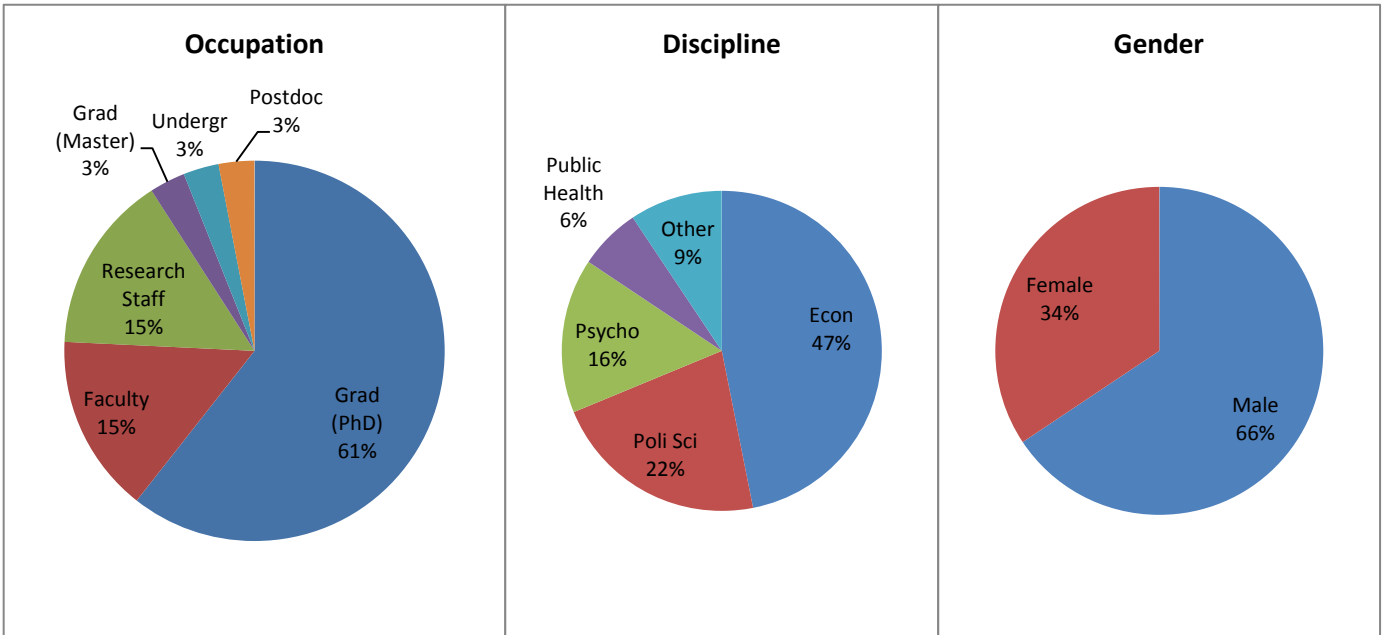


Figure 1: Distribution of BITSS 2014 Institute participants by occupation, discipline, and gender.

LIST OF INSTITUTE PARTICIPANTS

Ali Sanaei	PhD Candidate	Political Science	University of Michigan
Amir Jina	PhD Candidate	Economics	Columbia University
Anja Tolonen	PhD Candidate	Economics	University of Gothenburg (Sweden)
Baobao Zhang	PhD Candidate	Political Science	Yale University
Ben Levy	Assistant Professor	Psychology	University of San Francisco
Bernardo Lara Escalona	PhD Candidate	Economics	Stanford University
Christopher Rutt	PhD Candidate	Psychology	Harvard University
Craig Loschmann	PhD Candidate	Economics	University of Maastricht (Netherlands)
Dalson Figueiredo	Adjunct Professor	Political Science	Federal University of Pernambuco (Brazil)
Drew Cameron	Research Associate		3ie
Erika Salomon	PhD Candidate	Psychology	University of Illinois at Urbana Champaign
Etienne Lebel	Assistant Professor	Psychology	Montclair State University
Francis Meyo	Field Coordinator		Innovations for Poverty Action (Kenya)
Garrett Christensen	Assistant Professor	Economics	Swarthmore College
Hannah Moshontz	PhD Candidate	Psychology	Duke University
Harrison Diamond Pollock	Research Analyst		Innovations for Poverty Action
Jeanine Condo	Lecturer & Director of Research	Public Health	National University of Rwanda (Rwanda)
Jennifer Muz	PhD Candidate	Economics	UC Irvine
Joseph Cummins	PhD Candidate	Economics	UC Davis
Karina Hermawan	PhD Candidate	Economics	UC Irvine
Laura Boudreau	PhD Candidate	Economics	UC Berkeley
Maria Acevedo	PhD Candidate	Political Science	Harvard University
Martin Aragonese Torrego	BA Candidate	Economics	Complutense University of Madrid (Spain)
Mathias Poertner	PhD Candidate	Political Science	UC Berkeley
Nicole Hildebrandt	PhD Candidate	Economics	New York University
Peter Carroll	PhD Candidate	Political Science	University of Michigan
Proloy Barua	MS Candidate	Economics	Brandeis University
Raphael Calel	Postdoctoral Fellow	Economics	UC Berkeley
Samuel Oti	Senior Research Officer	Public Health	African Population and Health Research Center (Kenya)
Sandra Polania Reyes	PhD Candidate	Economics	University College London (UK)
Sean Tanner	PhD Candidate	Political Science	UC Berkeley
Yared Seid	Country Economist	Economics	International Growth Center (Ethiopia)

FEEDBACK

Collecting feedback from participants was essential, given this was the first time we organized this institute. Three different forms of evaluation were used to assess the workshop throughout the week:

- Short surveys sent daily via email asking participants to rate each session individually
- A more detailed paper survey at the end of the week, common to all ICPSR-sponsored courses
- A 90-minute open discussion at the end of the last day

While it will be interesting to compare the ratings of this course with other ICPSR classes at the end of the summer, survey results show positive feedback overall with regards to both the value of the institute sessions (average of 4.13 on a scale from 1 to 5,) and the pace at which they were taught (71% of participants answered 'just about right' on average).

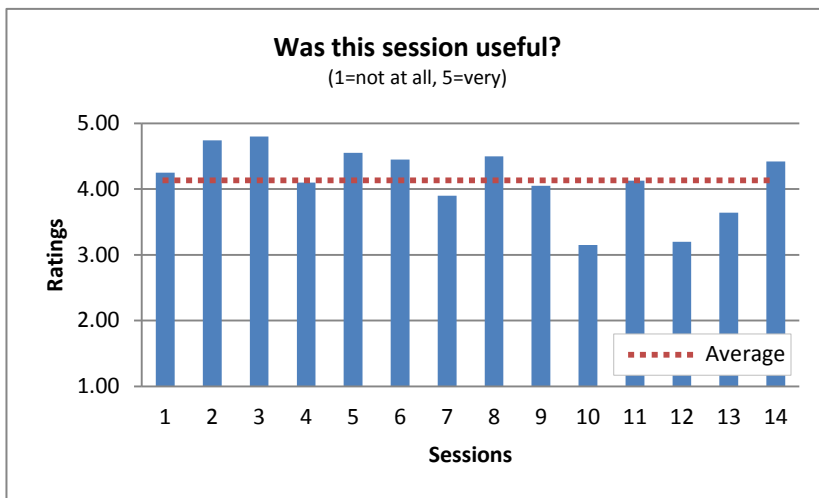


Figure 2: Ratings of BITSS Institute sessions

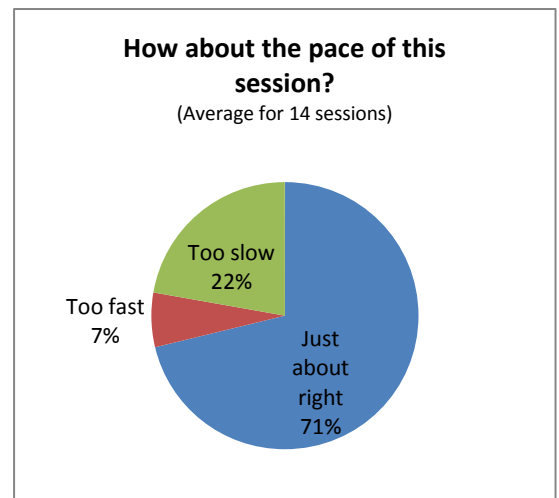


Figure 3: Average pace of BITSS Institute sessions

Two main lessons emerged from informal conversations with participants throughout the week and were again emphasized during the open group conversation on the last day of the institute:

- **More hands-on training, less conceptual presentations:** Most of the participants were already convinced of the advantages of this form of science. Hence, more time could have been spent on the integration of transparency tools and strategies into participants' own research projects and practices. A challenge for the future will be to design effective hands-on sessions, which can accommodate different levels of familiarity with new tools as well as various interests.
- **More guidance on which tools to use:** After presenting several data sharing platforms, version control systems, and other mechanisms for organizing data workflow, participants reported feeling a bit overwhelmed by the abundance of transparency tools available, wishing they could have more guidelines on which ones to choose. It is important to note that most of the tools presented are still under development and additional time is needed to identify the most effective. We expect to be able to provide more guidance to participants and other researchers next year.

NEXT STEPS

We are pleased to see the emergence of a community around the ideals of openness and transparency among young scholars. There was tremendous interest among participants in sharing what they had learned at the institute and promoting the adoption of transparency practices at their home campus, professional association, or via online fora. We plan to support these activities in different ways:

1. **Providing space for the transparency community to grow:** As a first step, we set up a collaborative group page on the Open Science Framework (accessible at osf.io/9epju) for participants to discuss common issues in the implementation of transparency practices to their own research and share teaching and research material about those experiences.
2. **Facilitating the dissemination of training material:** All institute material, including presentations and background readings, is available on the OSF group page. Next steps include (i) revamping the BITSS website over the summer to include a curated list of transparency tools and resources, (ii) leveraging the material put together by BITSS instructors to develop a manual of best practices in time for next year's institute, and (iii) designing online training material available to the global research community.
3. **Collecting continuous feedback:** We will reconnect with institute participants in a couple of months, to inquire about the tools they are using, those they are not, and why.



The 2014 cohort of the BITSS Summer Institute



A training session at the institute

Thank You!

