



Transparency and Reproducibility Methods for Social Science Research 2015 Summer Institute Report

University of California, Berkeley
June 10-12, 2015

Overview

The Berkeley Initiative for Transparency in the Social Sciences (BITSS) held its second Summer Institute June 10-12, 2015 at the University of California, Berkeley.¹ In addition to learning about the many theoretical aspects of research transparency, participants were introduced to a number of tools and methods to increase the transparency and reproducibility of their workflow - including conducting a replication, version control using GitHub, registration using OSF and how to publicly release data using Dataverse.

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

¹ All materials are available online at: <https://osf.io/n9dxc/>

Participant Profile

Of 82 applicants, 35 participants, 15 male and 20 female, were selected and invited to attend the Summer Institute. This cohort included 20 PhD students, 11 research practitioners and 4 professors/postdoctoral scholars. Attendees came from seven countries, including four developing countries. **It is important to note that more than 54% of participants have a background in economics. While many see both psychology and political science as disciplines that have embraced the research transparency movement, it is encouraging to see BITSS leverage its connections within the economics discipline to attract students and practitioners in economics to the Institute.**

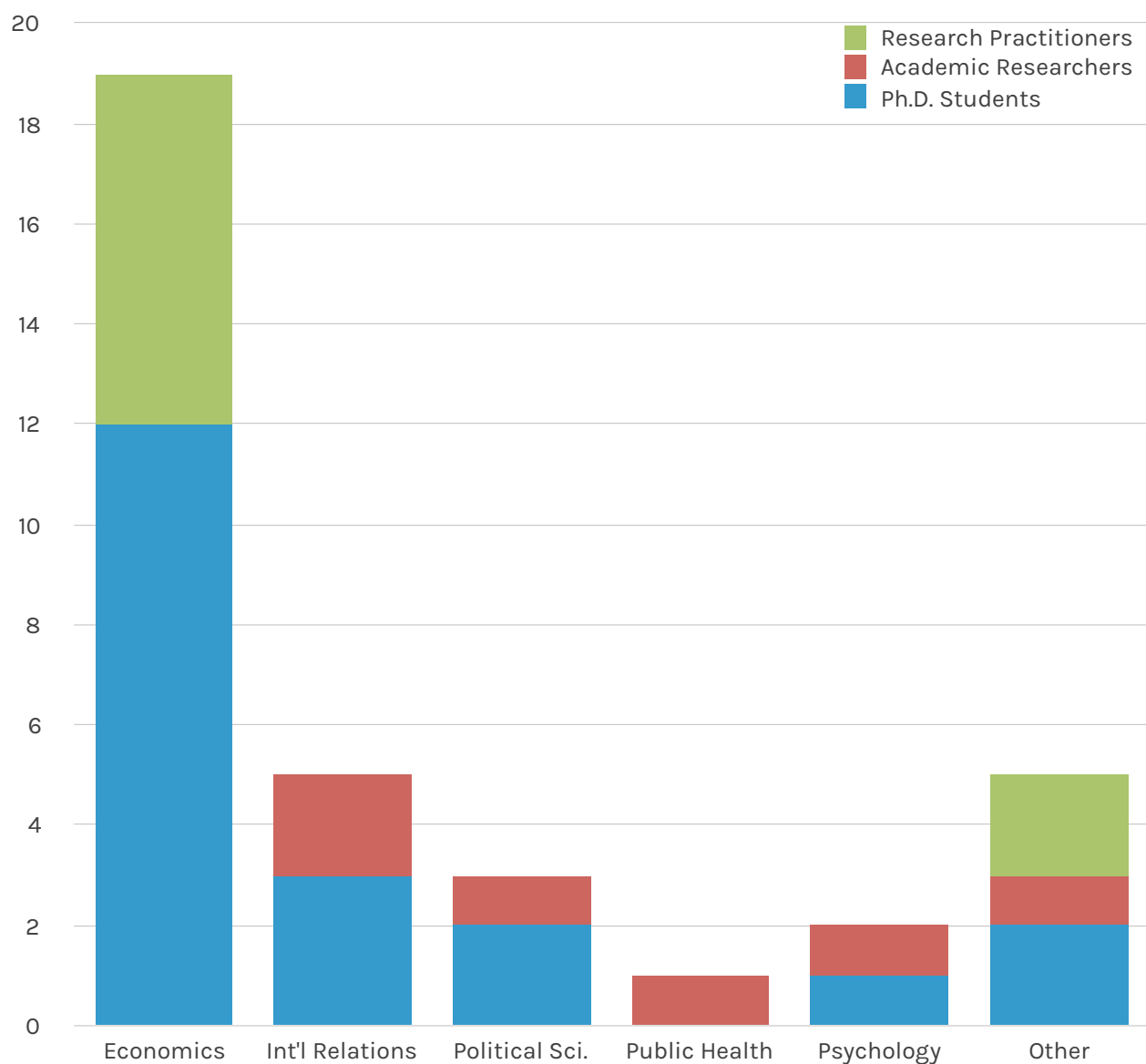


Figure 1: Distribution of BITSS 2015 Institute participants by discipline and profession.

Of the 23 participants who answered the questions “How did you hear about the Summer Institute?” most responded word-of-mouth (see Table 1). Twelve participants reported having known about the workshop from UC Berkeley or Summer Institute faculty, a former participant or another colleague.

	Number of Responses	Percentage of Responses
Summer Institute Faculty	4	17.39%
Former participant	3	13.04%
Berkeley Professor	2	8.70%
Colleague	3	13.04%
Partner organization	2	8.70%
CEGA Communications	4	17.39%
Course page on ICPSR Website	2	8.70%
Department email	3	13.04%
Total	23	100%

Table 1: How participants heard about the Summer Institute.

Feedback and Lessons Learned

A survey was administered to participants at the end of each day of the Summer Institute in order to gather a rating on each session in terms of usefulness and pace. The survey also had a comments section that permitted participants to submit any additional feedback they had for each session. Below is a summary of the key findings from survey responses.

The Institute included 13 sessions. The average session rating, on a scale from 1-5 (5 being the most useful), was 4.22, an increase from last year’s institute where the average session rating was a 4.09. The five classes rated highest and found to be the most useful among participants were Emerging Issues in Transparency, False-positives and P-hacking, Registration & Data-sharing, Approaches to the Replication and Next Steps for the transparency movement.

The survey revealed many suggestions for improvement; one prevailing theme indicated a **need to increase opportunities for participants to apply transparent tools and methods into their workflow through hands-on training**. When asked “What would you like to have more information about?” over half of the participants stated they wanted to learn more about transparent methods and tools (see Table 2). Similarly, when asked “what did you find most useful?” coverage of practical tools was the most common answer (see table 2 in the appendix).

	Number of Responses	Percentage of Responses
Other	1	7%
Practical tools	6	43%
Methods	3	21%
Training materials	2	14%
Demand for Ambassador program	1	7%
Possibilities to collaborate	1	7%
Total	14	100%

Table 2: Participants request for more information.

The survey also indicated that teaching practical tools and methods to a diverse group of participants is challenging and may require more narrowly tailored sessions to match the varying interests and levels of expertise of the participants. As an example, the training on R (programming language) received a rating of 3.41, the lowest review of any session and over half of the participants stated in the comments section that the session was not useful because it was either too advanced or too remedial.

To address this issue, a number of participants suggested creating smaller breakout sessions covering tools and methods for transparent research. This could mean in addition to providing a session on various aspects of pre-analysis plans, another optional session could be offered to participants interested in writing their own pre-analysis plans. Alternatively, there could be a dedicated session that would conclude with participants having created an account on Open Science Framework (OSF), Dataverse, or GitHub etc. A number of participants also stated they would have liked to complete the Summer Institute with concrete steps to make their work more transparent.

The following five suggestions come from the open feedback section of the survey:

- Provide participants the opportunity to take concrete steps towards applying what they learn during the summer institute to their own research projects.
- Offer shorter more tailored breakout sessions that cater to the specific interests of the participants (e.g. a session on transparent practices for qualitative research, pre-analysis-plans for non-experimental research, data privacy etc.). Many sessions were very relevant for some participants but not at all for others.
- Provide more opportunities for networking and collaboration between participants. Set up a formal registration table with agendas, participant list and pre-printed name tags so that participants come in knowing each other.
- Add presentations of working papers, and include a short introduction of presenters in the program brochure.

Long Term Impact and Broader Implications

Participants commented on the overall value of the workshop and how it informed their future work. The responses revealed 1) the workshop's potential to impact research practices well beyond those participating and 2) a high demand for BITSS trainings and services.

	# of Responses
Training materials	4
MOOC	2
Create webcasts, online forum, listserv to ask questions, newsletter with a list of new resources	5
Additional workshops at other institutions	5
Want to integrate transparency into courses, labs, policy institutes, academic departments etc.	6
More possibilities to collaborate with BITSS	2
Other	4
Total	28

Table 3: How BITSS can support you or your home institution be more transparent.

Nearly half of participants indicated they would like to further the transparency movement in their home institutions or engage in future collaborations with BITSS (see Table 3). Six attendees reported they would integrate what they learned into their courses, labs, policy institutes, academic departments etc., another five would like to develop training sessions at their home institutions and two would like to pursue other additional collaboration with BITSS.

Six participants stated they would use educational resources put on the BITSS site, the BITSS Manual of Best Practices in Transparent Social Science Research and the forthcoming massive online open course (MOOC).

Lastly, five participants suggested new services BITSS could provide to foster more communication among BITSS community members and to increase awareness of online opportunities to learn about transparency. In particular, a number of participants suggested **BITSS develop an online forum that would provide researchers with a venue to ask questions about transparency.**