

Bridging Methodology and Computational Social Science

Joshua Claassen (DZHW; Leibniz University Hannover)

Oriol J. Bosch (Leverhulme Center for Demographic Science; University of Oxford)

Jan Karem Höhne (DZHW; Leibniz University Hannover)

In today's world, daily activities, work, and communication are continuously tracked via digital devices, generating highly granular data, including digital traces (e.g., app usage and browsing) and sensor data (e.g., geolocation). Researchers from various disciplines are increasingly utilizing these data sources, though often with different research objectives. Methodologists tend to focus on evaluating the quality and errors of digital data, while Computational Social Scientists (CSS) often leverage these data to answer more substantive research questions. However, there is a lack of collaboration between both worlds, resulting in a discipline divide.

For example, CSS researchers have embraced data donations, yet methodologists have not provided sufficient empirical evidence on the quality of such data. Moreover, web tracking data is rapidly being adopted in CSS, but methodological guidelines on how to gather the substantive content of website visits and apps (e.g., through HTML scraping) is lacking. However, there are methodological error frameworks covering both measurement and representation. These frameworks are yet to be (fully) leveraged.

This session invites contributions that bridge the gap between methodology and CSS, fostering collaboration across disciplines. We particularly welcome CSS work that incorporates a strong methodological foundation, as well as methodological research with clear relevance to substantive CSS inquiries. Topics may include, but are not limited to:

- Substantive research showcasing best practices when using digital data
- Assessments of digital data in terms of quality and errors
- Approaches reducing representation, sampling, and measurement errors of digital data
- Studies substituting more traditional data collections (e.g., web surveys) with digital data (e.g., measuring opinions with digital traces)
- Studies that go beyond the pure tracking (or donating) of app, search term, and URL data, including data integration and enrichment strategies