SOMO Lab Data Check Procedures

Before data collection:

- ☐ All researchers sign off on preregistration.
- ☐ Minimum of 2 RAs "pilot" the study to provide feedback (either taking the online survey or running through the lab study).
- ☐ All researchers have access to raw data file (e.g., Qualtrics, Google doc of lab study).
- ☐ If lab study, all researchers have access to the live documents that are being updated by RAs.
- ☐ Lab manager sends the final notification of the survey (with sample size, cost, etc.) to Juliana for approval.

Data management / communication:

- ☐ All researchers must have access to a central Box or Google Drive folder that contains all materials, data, analyses and code, organized by study.

After data collection:

- ☐ Send results to the full team, ideally in a document that is embedded in the Box or Google Drive folder.
- ☐ As a good practice, include the methods & results notes in the document (which will also make the study easy to write for publication later).

Before submitting for publication:

- ☐ **Checking paper** (for typos): RA checks for typos in the written paper.
- ☐ **Checking references** (substantively): RA spot-checks ~10 references in paper by reading the cited paper abstract and making sure it fits in the manuscript as written.
- ☐ **Posting data**: Researcher prepares the data to post on OSF. To check—RA reviews the data file to make sure it is fully comprehensible and matches what is in the paper. Both raw data and cleaned data should be posted. For raw data, remove identifying information from columns and nothing else.
- ☐ **Posting analysis code**: Researcher prepares analysis code to post on OSF. To check—RA uses the analysis code to run data and check to make sure everything matches in the paper.
- ☐ **Posting surveys**: Researcher prepares surveys to post on OSF. To check—RA compares the surveys with the posted data and the Methods section in paper to make sure everything matches.
- ☐ **Checking analysis 1**: Researcher runs the paper through statcheck.io (to look for data analysis errors).
- ☐ **Checking analysis 2**: Minimum of 2 RAs review the posted data file to "spot-check" the analyses in the paper. Spot-checking means RAs independently try to run 1-2 analyses

from each study to see if they get the same results (not using the posted analysis code). RAs send the research team the spot-checked analyses so the team can sign off.

- [ ] **Checking data 1**: Researcher makes a document that lists the Qualtrics file for each study in the paper. To check—RA downloads the raw data file and compares it to the posted data file to look for inconsistencies.
- [ ] **Checking data 2**: To look at the posted data for issues, RA creates histograms of the primary DV in each study (by experimental condition) and sends histograms to the research team for sign-off.
- [ ] **Checking preregistrations**: RA compares the preregistrations against the results sections to identify inconsistencies. If there are inconsistencies, report in the SM.

*A potential way to implement the above list might be completing a Google sheet for each paper, with sign-offs for each check.
*Related resource: https://psycnet.apa.org/record/2023-32814-001