Pre-Submission Checklist

Essential

yes no

- ◉ ○ states a purpose, problem, objective, or research question
- ◉ ○ explains why the purpose, problem, etc. is important (motivation)
- ◉ ○ defines jargon, acronyms and key concepts

- ◉ ○ names the methodology or methodologies used
- ◉ ○ methodology is appropriate (not necessarily optimal) for stated purpose, problem, etc.
- ◉ ○ describes in detail what, where, when and how data were collected (see the Sampling Supplement)
- ◉ ○ describes in detail how the data were analyzed
- ◉ ○ identifies the target population and defines the sampling strategy (see the Sampling Supplement)
- ◉ ○ describes how the questionnaire instrument was created
- ◉ ○ describes how participants were selected or recruited (e.g. sampling frame, advertising, invitations, incentives)
- ◉ ○ EITHER: measures constructs using (or adapting) validated scales OR: analyzes construct validity (including content, convergent, discriminant and predictive validity) ex post
- ◉ ○ describes how responses were managed/monitored, including contingency actions for non-responses and drop-outs
- ◉ ○ explains handling of missing data (e.g. imputation, weighting adjustments, discarding)
- ◉ ○ step-by-step, systematic, replicable description of data collection and analysis

- ◉ ○ presents results
- ◉ ○ results directly address research questions

- ◉ ○ enumerates and validates assumptions of statistical tests used (if any)
- ◉ ○ analyzes response rates

- ◉ ○ discusses implications of the results
- ◉ ○ discusses the study's limitations and threats to validity
- ◉ ○ states clear conclusions which are linked to research question (or purpose, etc.) and supported by explicit evidence (data/observations) or arguments
- ◉ ○ acknowledges generalizability threats; discusses how respondents may differ from target population

- ◉ ○ contributes in some way to the collective body of knowledge
- ◉ ○ language is not misleading; any grammatical problems do not substantially hinder understanding
- ◉ ○ acknowledges and mitigates potential risks, harms, burdens or unintended consequences of the research (see the ethics supplements for Engineering Research, Human Participants, or Secondary Data)
- ◉ ○ visualizations/graphs are not misleading (see the Information Visualization Supplement)
- ◉ ○ provides the questionnaire instrument (as an appendix or supplementary materials)
- ◉ ○ the questionnaire design matches the research aims and the target population

Desirable

- ☐ states epistemological stance
- ☑ summarizes and synthesizes a reasonable selection of related work (not every single relevant study)
- ☑ clearly describes relationship between contribution(s) and related work
- ☑ demonstrates appropriate statistical power (for quantitative work) or saturation (for qualitative work)
- ☑ describes reasonable attempts to investigate or mitigate limitations

- [x] discusses study's realism, assumptions and sensitivity of the results to its realism/assumptions
- [x] provides plausibly useful interpretations or recommendations for practice, education or research
- [x] concise, precise, well-organized and easy-to-read presentation
- [x] visualizations (e.g. graphs, diagrams, tables) advance the paper's arguments or contribution
- [x] clarifies the roles and responsibilities of the researchers (i.e. who did what?)
- [ ] provides an auto-reflection or assessment of the authors' own work (e.g. lessons learned)
- [ ] publishes the study in two phases: a plan and the results of executing the plan (see the Registered Reports Supplement)
- [ ] uses multiple raters, where philosophically appropriate, for making subjective judgments (see the IRR/IRA Supplement)

- [x] provides supplementary materials including instrument(s), code books, analysis scripts and dataset(s)
- [x] characterizes the target population including demographic information (e.g. culture, knowledge)
- [x] accounts for the principles of research ethics (e.g. informed consent, re-identification risk)
- [x] explains and justifies instrument design and choice of scales (e.g. by research objectives or by analogy to similar studies)
- [x] validates whether the instrument's items, layout, duration, and technology are appropriate (e.g. using pilots, test-retest, or expert and non-expert reviews)
- [x] reports how the instrument has evolved through the validation process (if at all)
- [x] analyzes response bias (quantitatively)
- [ ] includes attention-check items in the questionnaire, and excludes participants who fail one or more of these checks
- [ ] applies techniques for improving response rates (e.g. incentives, reminders, targeted advertising)
- [ ] applies an advanced method of handling missing data (e.g. Full Information Maximum Likelihood, Multiple Imputation, Bayesian

methods)

- [x] discusses possible effects of incentives (e.g. on voluntariness, response rates, response bias) if used
- [ ] describes the stratification of the analysis (if stratified sampling is used)
- [ ] defines and estimates the size of the population strata (if applicable)
- [x] clearly distinguishes evidence-based results from interpretations and speculation

Extraordinary

- [ ] applies two or more data collection or analysis strategies to the same research question (see the Multimethodology Standard)
- [ ] approaches the same research question(s) from multiple epistemological perspectives
- [ ] innovates on research methodology while completing an empirical study

- [ ] provides feasibility check of the anticipated data analysis techniques
- [ ] reports on the scale validation in terms of dimensionality, reliability, and validity of measures
- [ ] longitudinal design in which each respondent participates two or more times

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For more information, see:

- General Standard
- Questionnaire Surveys
