

MANUSCRIPT PREPARATION INSTRUCTIONS

In an effort to enhance transparency, reproducibility, and replicability, we require authors to use the following checklists in preparing submissions to the *Journal of Applied Psychology*. There are five sections below for: (1) primary quantitative studies, (2) meta-analytic research, (3) qualitative and mixed-methods studies and (4) studies using machine learning, (5) simulation and computational modeling studies. Authors should use these instructions as a guide, as this is not a comprehensive list. It is also the author's responsibility to check text against tables for consistent and accurate statistical reporting (manually or using tools like statcheck.io). Also note that not all checklist items will apply to every manuscript. We also encourage authors to consult with the APA methodological guidelines as appropriate <http://dx.doi.org/10.1037/amp0000191> (quantitative research, including meta-analysis), <http://dx.doi.org/10.1037/amp0000151> (qualitative and mixed methods research) in addition to APA's Journal Reporting Standards for Race, Ethnicity and Culture (<https://apastyle.apa.org/jars/race-ethnicity-culture>).

Primary Quantitative Studies

Method

____ Sampling plan clearly described, including recruitment strategy and power analysis (as appropriate), any inclusion/exclusion criteria (including outliers detected and removed or winsorized; e.g., adults working more than 40 hours a week), and number of cases excluded.

____ Final sample size associated with each analysis included in text and/or tables, along with response rate in text. This includes differences between final sample and excluded data, or a change in sample size as a result of data matching. Effective sample sizes might be reported as a function of missing data analyses (e.g., multiple imputation).

____ Amount and treatment of missing data reported at the scale and the item levels (e.g., listwise deletion, pairwise deletion, multiple imputation, full information maximum likelihood (FIML) estimation).

____ For experimental research, provide sample size per condition; for within-subjects designs, report correlations between conditions. For multi-level/cross-level research, report total sample size at each level of analysis, along with descriptive statistics at each level (e.g., means, SDs, and correlations)).

____ Report full and observed scale range, along with scale anchors, and number of items for all measures.

____ For adapted or shortened measures, specific modifications are described.

____ For translated scales/measures, translation-back translation described (e.g., number and qualifications of translators, item modifications and/or deletions, how disagreements were resolved). Note: Simply stating that Brislin (1970, 1984, 1986) recommendations were followed is not sufficient.

____ Experimental manipulations, research protocols, and materials fully described in the manuscript. For measures and research materials, either (1) include sample content (e.g., 2-3 sample items and response scale) along with the citation/website/repository where the full content can be obtained or (2) provide the full content if you have obtained copyright permission from the original publisher.

Proprietary measures or materials should be noted as such and require citation but not sample items. Please be aware that photographs of individuals may require copyright permission from the original publisher.

_____ For longitudinal designs, time-lagged design or experience sampling methodology, provide rationale for measurement time interval(s).

_____ For path analysis, confirmatory factor analysis, and structural equation models include information on the specification of the measurement model (e.g., individual items vs. parcels, linear vs. ordinal, identification constraints) and degrees of freedom checked for accuracy (see <https://gmuiopsych.shinyapps.io/degreesoffreedom/>).

Inclusive Reporting

_____ Report year data were collected and describe efforts to obtain a sample representative of the broader population of interest.

_____ Ensure that race and ethnicity are not used interchangeably.

_____ If available, report the percentage of people in each unique racial and/or ethnic group rather than reporting “percent non-White”. If data on race/ethnicity was not collected, provide rationale.

_____ Use the group that is central to research question(s) as the reference group (i.e., do not default to using White participants as the referent).

_____ Provide an interpretation of race and/or ethnicity within the context/nation/country in which research was conducted.

_____ Report sociodemographic information (e.g., age, sex, race/ethnicity, job tenure) and research context information (e.g., country, industry, occupation, job, work tasks) in Method.

Analyses/Results

_____ Manipulation checks reported for experimental studies, including how failed manipulations were handled. Relevant analysis for each manipulation check presented for multiple predictor designs.

_____ Means, SDs, correlations, and reliability coefficients (if applicable) reported for all measured variables, including sociodemographic characteristics, control variables, and transformed/non-linear variables (e.g., interactive and curvilinear terms). When appropriate, skew and kurtosis for relevant variables are reported.

_____ Full results from model testing reported (e.g., if testing 3-way interaction, report its ΔR^2 over the all possible 2-way interactions and the main effects entered into the model). If testing moderated

mediation/mediated moderation, include the a, b, and c path coefficients as well as indirect and total effects; if unstandardized regression estimates are reported, also include intercepts/constants.

_____ Appropriate effect size and model explanatory power estimates included (e.g., r , R^2 , ΔR^2 , R , ΔR , *Cohen's f^2* , *Cohen's d* , η^2 , odds ratio). Confidence intervals around effect sizes are preferred.

_____ Information provided in tables and/or text describing how dichotomous/categorical variables (including control variables) were coded.

_____ Standard errors, confidence intervals, and/or test statistics (e.g., t-value) with p-value reported. Alpha level and/or confidence interval specified.

_____ For multilevel models, aggregation models (e.g., direct consensus, reference-shift, configural) and centering decision (e.g., group-mean centered, grand-mean centered) are justified and reported.

_____ For multilevel models, model testing procedures and relevant statistics reported (e.g., ICCs, variance component estimates).

_____ For plots of moderation on a Likert-scale based continuous variable (e.g., slopes at +/- 1 SD, or Johnson-Neyman intervals), results reported using relative ("higher" vs. "lower") not absolute ("high" vs. "low") language, and raw values reported for the levels selected. Plots should be scaled in a manner that represents effects appropriately.

_____ Continuous data (e.g., a moderator variable) should not be converted to binary or categorical data without sufficient rationale.

_____ Estimation procedure and methods reported for more advanced analytical approaches (e.g., *dfs* or *df* correction, bootstrapping approach, Bayesian credibility interval).

_____ Statistical packages and programs (including version number) used for data analysis cited.

_____ Alternative data analysis (e.g., including a variable that was subsequently dropped through the review process) and robustness tests described in footnote or appendix.

Meta-Analytic Research

_____ PRISMA-type search flowchart included to describe search protocols (<http://www.prisma-statement.org/>).

_____ Information provided about inter-coder agreement/reliability, coder qualifications/calibrations/training (if necessarily, anonymized for review), and methods used to resolve inter-coder discrepancies.

_____ If corrections for psychometric artifacts applied (e.g., unreliability, range restriction), method used (e.g., individual correction, artifact-distribution, Case II, Case IV, Case V) reported in text with

rationale. Artifact distribution statistics (e.g., mean and SD of the relevant artifact, how missing reliability estimates were handled) reported along with the order in which corrections were applied.

_____ Justification provided for corrections/no corrections for psychometric artifacts.

_____ Information on each primary study, relevant code(s), reliability information (where relevant), sample size(s), and effect size(s) included in Appendix or made available online (e.g., Open Science Framework, osf.io).

_____ If the Schmidt-Hunter method is used, all relevant results are reported by referring to recommended result tables (see Schmidt & Hunter, 2015, p. 492).

_____ Confidence and/or credibility intervals used when interpreting meta-analytic estimates rather than NHST.

_____ For moderator testing, justify choice of method (e.g., subgroup, meta-regression).

_____ Publication bias check (including results) reported in text and/or tables or made available online (e.g., osf.io).

_____ Text checked against tables for consistent and accurate statistical reporting.

Qualitative and Mixed-Methods Research

_____ Qualitative approach (e.g., grounded theory, phenomenological, thematic analysis, consensual qualitative research) described.

_____ Data collection procedures (e.g., context of data collection, participant recruitment, interview protocol, observational methods, time in field, number of researchers involved in data collection) described.

_____ Level or unit of analysis (e.g., individual word, meaningful thought, participant) specified.

_____ If coding taxonomy used, development of codes and coding procedures described in detail. Total number of coders, number of coders per code, coder training/expertise, and coder agreement (e.g., percent agreement or hit rate, Cohen's or Fleiss' kappa) reported.

_____ If relevant, statistical packages and programs (including version number) used for data analysis are reported.

_____ Clearly describe how raw data were analyzed and/or interpreted. Direct quotations, observations or other examples of raw data included.

_____ Consult with the APA JARS Guidelines <https://apastyle.apa.org/jars/qualitative> and <https://apastyle.apa.org/jars/mixed-methods> as appropriate.

_____ For additional information, see Levitt, H. M., Bamberg, M., Creswell, J. W., Frost, D. M., Joseeliong, R., & Suarez-Orozco, C. (2018). Journal reporting standards for qualitative primary, qualitative

meta-analytic, and mixed methods research in psychology: The APA Publications and Communications Board task force report. *American Psychologist*, 73, 26-46. <http://dx.doi.org/10.1037/amp0000151>

____ For additional information, see Pratt, Kaplan, & Whittington (2020). Editorial essay: The tumult over transparency: Decoupling transparency from replication in establishing trustworthy qualitative research. *Administrative Science Quarterly*, 65, 1-19. doi: 10.1177/0001839219887663

Machine Learning

____ Describe and data pre-processing or data transformations (feature engineering) performed, both for quantitative data (e.g., converting non-numeric to numeric, encoding categorical data, data aggregation) and text data (e.g., stemming, lemmatization, n-grams, tokenization)

____ Describe the process used to deal with any missing data or outliers and how those outliers were identified

____ Provide information regarding the distribution of all variables

____ In the case of classification data, if class imbalance is present, describe the methods used to address this (e.g., over- and under-sampling techniques)

____ Describe the analysis in transparent detail (e.g., what is the nature of the algorithm, how was the chosen model selected, describe the underlying parameters of the model, explain the cross-validation and model-tuning process).

____ For neural network architecture, describe the various layers (e.g., nature of the embedding layer, number of hidden layers, number of nodes per layer)

____ Describe the process for model tuning: what parameters were tuned, what range of values were evaluated, and how those values were selected (e.g., random grid search).

____ Describe the process for model validation, including both internal and external model validation. Transparently report cross-validation techniques (e.g., k-fold cross-validation, nested-cross validation).

____ When reporting validation metrics, report multiple metrics whenever appropriate. Whenever possible, report measures of effect size and confidence intervals along with parameter estimates.

____ If using a Large Language Model (LLM), detail the model and prompts used, the process for prompt generation and evaluation.

____ Cite the software, programs, and packages used and provide the code when possible.

Simulation and Computational Modeling

____ Ensure that simulations and models capture and accurately reflect all hypotheses being tested.

____ Describe all relevant conditions for the simulation or computational model (e.g., parameter settings, conditions, number of iterations, stopping rules).

____ Justify the range of parameters being simulated (both fixed and free).

____ Compare more complex simulations and models against simpler versions, when appropriate. Ensure that 'winning' models undergo stringent tests that guard against model overfitting.

____ Rerun simulations and models, when appropriate, to help ensure that global optima were reached (vs. trapped in local minima).

____ Provide useful information that extends beyond the average effects for each condition (e.g., SDs for each condition, d-values between conditions, visualizations of variability across simulation or model runs)

____ Share all simulation or model code (and data, if they cannot be generated easily on one's own).