Checklist for Reporting Reaction Time Pre-Processing Decisions, version 3

This version of the checklist was re-submitted to the "Cortex" journal after it underwent a major revision.

This checklist can be used by authors to ensure they reported their data pre-processing in sufficient detail, by reviewers to get a quick overview on methods used and by researchers new to the field who want to learn about common approaches. We recommend all users to thoroughly go through the different pre-processing actions and reflect on whether they reported them (checkbox **reported**) or whether these actions are not applicable (checkbox **NA**). If reported, please add, ideally, the corresponding **page number** in the manuscript (or preprint) to facilitate the review process. Authors should include the corresponding page numbers if they have provided any justifications for **not** performing certain pre-processing actions.

For cases where no or only some pre-processing has been applied, it doesn't make sense to upload an (almost) empty checklist. Instead, we would like to recommend the following sentences in the analysis section of the manuscript:

- When no pre-processing was done: "In our analysis, we have used unpreprocessed (raw) data."
- If the authors conducted only parts of the pipelines, they should explicitly state: "First, we excluded erroneous data, then RT >2000ms or <150ms. No other preprocessing actions were performed."

Section	What to report?	Reported	NA	On page
General	Order of applied pre-processing actions	☐	☐	_____
	Transparency (e.g., reporting discrepancies between pre-registered and actually used pre-processing pathways)	☐	☐	_____
	Theoretical or empirical justification for chosen pre-processing actions	☐	☐	_____
Participants	Total number of participants collected	☐	☐	_____
	Total number of participants excluded per reason for exclusion (participant-level data exclusion)	☐	☐	_____
	Total number of participants (per condition) included in final analysis	☐	☐	_____
Materials	Number of trials (per condition, per participant)	☐	☐	_____
	Stimuli-level data exclusion: how many stimuli were excluded for which reason?	☐	☐	_____
Analysis	Proportion of trials included in final analysis / proportion of trials excluded for a particular reason	☐	☐	_____
	Type of Trial-level data exclusion	☐	☐	_____
	Data Transformation	☐	☐	_____
	Data Aggregation	☐	☐	_____
	Reason for choosing a specific method	☐	☐	_____

* *Note:* The checklist provided here is primarily based on the conventions commonly followed in psychology. However, it is important to note that users have the flexibility to adapt and customize the checklist according to the guidelines of their specific research discipline.

Further Information: Loenneker, H.D., Buchanan, E.M., Martinovici, A., Primbs, M.A., Elsherif, M.M., Baker, B.J., Dudda, L.A., Đurđević, D.F., Mišić, K., Peetz, H.K., Röer, J.P., Schulze, L., Wagner, L., Wolska, J.K., Kührt, C., & Pronizius, E. (2023). We don't know what you did last summer. On the importance of transparent reporting of reaction time data pre-processing. *Cortex*. [DOI URL]