

## Checklist for Reporting Reaction Time Pre-Processing Decisions

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).

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 unprocessed (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 steps were performed."

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

**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]