Checklist for reporting pre-processing decisions, version 2

This version of the checklist was a part of the initial submission to the "Cortex" journal.

Section	What to report?	Example
Participants	Total number of participants collected	"We recruited a sample of 262 adult, English-speaking participants via Prolific." (Primbs, Rinck, et al., 2022)
	Total number of participants excluded per reason for exclusion (participant-level data exclusion)	"After application of our pre-registered exclusion criteria, a final sample size of 155 participants remained. Please note that most excluded participants (n = 102) did not actually complete the experiment – they failed the attention check presented during the instructions and were directly forwarded to the end of the experiment, skipping all experimental trials." The other participants were removed because they were too slow (3SD from the mean reaction time; n = 3) or made too many mistakes (n = 2)." (Primbs, Rinck, et al., 2022) "From the remainder, participants were excluded (starting with those who participated last) to create equal numbers of participants per counterbalancing version" (Zwaan et al., 2018)
	Total number of participants (per condition) included in final analysis	"The final sample consisted of 97 males and 58 females between 18 and 64 years (M = 25.58, SD = 8.75) from 25 countries." (Primbs, Rinck, et al., 2022)
Materials	Number of trials (per condition, per participant)	"The speeded categorisation task consisted of 192 trials: 2 Emotion (anger, sadness) * 2 Model Gender (male, female) * 2 Mask Status (masked, unmasked) * 12 Actors, with each unique face being presented twice." (Primbs, Rinck, et al., 2022)
	Stimuli-level data exclusion	"Anger and sadness were recognized with less than chance level accuracy on two of the facial stimuli. Therefore, we excluded all trials based on these stimuli from all analyses." (Hypothetical example)
Analysis	Proportion of trials included in final analysis / proportion of trials excluded for a particular reason	"For each participant, we first removed all RTs exceeding two standard deviations from the grand mean (cf. Van Selst & Jolicoeur, 1994). Across participants, RTs <214 ms (0.6%) and RTs <512 ms (3.7%) were excluded from further analyses." (Wühr & Ansorge, 2005)
	Type of Trial-level data exclusion	"For the minimum threshold, we varied the response time cut-off from 0ms to 300ms in steps of 50ms, resulting in 7 levels. For the data-based outlier trimming method we varied the number of median absolute deviations from the median (Leys et al., 2013) from 1 to 3 in steps of 0.5 or

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		applied no data-based trimming, resulting in 6 levels." (Primbs, Rinck, et al., 2022)
	Data Transformation	"We performed data analysis on the log-transformed reaction times. However, we report the mean, standard deviation, and mean differences of the non-transformed reaction time to facilitate interpretation of the findings." - Hypothetical example.
	Data Aggregation	"One observation corresponds to the RT of one participant and one trial combination" (Hypothetical example)
	Order	"For RT analyses, we first excluded error trials (4.1%) and we then discarded trials with RTs less than 200 ms as anticipations (0.001%)." (Mittelstädt & Miller, 2018)
	Transparency (reporting discrepancies between pre-registered and actually used pre-processing pathways)	"All confirmatory analyses were pre-registered on the Open Science Framework (https://osf.io/pz4xh/?view_only=c05a128203944b9e81fdf7e285ef909e), whereas all exploratory analyses were conducted post-hoc with the aim of further understanding the data. The confirmatory analyses did not deviate from the pre-registered analyses. The data and analysis code are accessible on the Open Science Framework." (Primbs, Rinck, et al., 2022)