

CRED-nf checklist summary (checklist version 1)

01 November, 2019

[1] "NA"

Item #	Checklist item	Manuscript Details
Pre-experiment		
1a	Pre-register experimental protocol and planned analyses	Pre-register experimental protocol and planned analyses
1b	Justify sample size	Justify sample size
Control groups		
2a	Employ control group(s) or control condition(s)	Employ control group(s) or control condition(s)
2b	When leveraging experimental designs where a double-blind is possible, use a double-blind	When leveraging experimental designs where a double-blind is possible, use a double-blind
2c	Blind those who rate the outcomes	Blind those who rate the outcomes
	Blind those who analyse the data	Blind those who analyse the data
2d	Examine to what extent participants and experimenters remain blinded	Examine to what extent participants and experimenters remain blinded
2e	In clinical efficacy studies, employ a standard-of-care intervention group as a benchmark for improvement	In clinical efficacy studies, employ a standard-of-care intervention group as a benchmark for improvement
Control measures		
3a	Collect data on psychosocial factors	Collect data on psychosocial factors
3b	Report whether participants were provided with a strategy	Report whether participants were provided with a strategy
3c	Report the strategies participants used	Report the strategies participants used
3d	Report methods used for online-data processing and artifact correction	Report methods used for online-data processing and artifact correction
3e	Report condition and group effects for artifacts	Report condition and group effects for artifacts

Feedback specifications		
4a	Report how the online-feature extraction was defined	Report how the online-feature extraction was defined
4b	Report and justify the reinforcement schedule	Report and justify the reinforcement schedule
4c	Report the feedback modality and content	Report the feedback modality and content
4d	Collect and report all brain activity variable(s) and/or contrasts used for feedback, as displayed to experimental participants	Collect and report all brain activity variable(s) and/or contrasts used for feedback, as displayed to experimental participants
4e	Report the hardware and software used	Report the hardware and software used
Outcome measures - brain		
5a	Report neurofeedback regulation success based on the feedback signal	Report neurofeedback regulation success based on the feedback signal
5b	Plot within-session and between-session regulation blocks of feedback variable(s), as well as pre-to-post resting baselines or contrasts	Plot within-session and between-session regulation blocks of feedback variable(s), as well as pre-to-post resting baselines or contrasts
5c	Statistically compare the experimental condition/group to the control condition(s)/group(s) (not only each group to baseline measures)	Statistically compare the experimental condition/group to the control condition(s)/group(s) (not only each group to baseline measures)
Outcome measures - behaviour		
6a	Include measures of clinical or behavioural significance, defined a priori, and describe whether they were reached	Include measures of clinical or behavioural significance, defined a priori, and describe whether they were reached
6b	Run correlational analyses between regulation success and behavioural outcomes	Run correlational analyses between regulation success and behavioural outcomes
Data storage		
7a	Upload all materials, analysis scripts, code, and raw data used for analyses, as well as final values, to an open access data repository, when feasible	Upload all materials, analysis scripts, code, and raw data used for analyses, as well as final values, to an open access data repository, when feasible