Review of the Quality of RCTs of tCS for Psychiatric Disorders

We developed a 21-item checklist, based on the GRADE scoring guidelines (20) that reflected the authors' opinion of elements of a well-designed, randomized controlled trial of tCS. To enter this quality assessment, studies had to be a randomized, controlled treatment trial. We applied our criteria and came up with a percentage score (0-100; rounded to the nearest whole number), with higher scores indicative of higher quality. Each item was weighed equally. All papers were reviewed by at least two coauthors, and both authors arrived at 100% consensus on their ratings for the final percentage score.

Question	**Definition (first two items in *italics* are entrance criteria for this quality assessment)**	**Number of RCTs Meeting Criteria (n, %)**
Randomized	*Random allocation into two or more treatment groups*	33 (100)
Sham-Controlled	*A sham group was compared to active stimulation group*	33 (100)
Other Therapy	Are other concomitant treatments (prescription medications, psychotherapy) described including stability of treatment prior to participation	23 (70)
Double Blind	Patient and Clinical Raters were both Blinded to treatment condition (if not explicitly mentioned, assume parties were not blinded)	31 (94)
Triple Blind	Patient, Rater, and Person Administering Stimulation were all blinded to treatment condition. Blinded self-administration counts as a triple-blind	12 (36)
Blinding Stats	Participants were systematically queried and provided a guess regarding their stimulation group assignment and results are presented in the report	11 (33)
Self-Rating	One or more standard self-rating assessment tool was used to measure outcomes of the trial	25 (76)
Clinician- Rating	One or more standard clinician-rated assessments were used to measure clinical outcomes of the trial	29 (88)
Parallel Groups Design	Comparison was made between groups containing different subjects rather than same	24 (73)

	subjects in a cross-over design	
Standardized Environment	There was standardization of what the subjects were doing/other environmental variables during administration of stimulation, and this element of the experiment is mentioned in the report	6 (18)
Follow-up Assessments	In addition to endpoint assessments, the study systematically collected clinical assessments after some follow-up period (typically weeks or months after the final treatment)	20 (61)
Sample Comorbidity	Report describes the comorbid conditions of the participants	6 (18)
Sample Diagnostic Homogeneity	Report describes the diagnostic entry criterion restricted enrollment to those with one primary disorder (e.g., MDD) rather than permitting multiple primary diagnoses (e.g., MDE inclusive of Bipolar and Unipolar Depression)	25 (76)
Baseline Equivalence	Tests were done to ensure the treatment groups were not significantly different at baseline on key illness severity variables	27 (82)
A Priori Primary Outcome	A single a priori outcome is identified in the report	26 (78)
Effect Size	Effect size reported by authors	12 (36)
Intent to Treat Analysis	Outcome analyses are reported for the entire intent to treat sample	15 (45)
Multiple Outcome Types	Both categorical (e.g., response or remission rates) as well as continuous (change in illness severity over time) outcomes are reported	17 (51)
Serial Assessments	Assessments were conducted serially rather than simply at baseline and endpoint	21 (64)
Adverse Effects Report	Systematic reporting of side effects (e.g., description of how side effects were measured)	23 (70)
Consort Diagram	Disposition of all randomized subjects is explained so the reader can clear account for number in final analyses (in diagram or through sufficiently detailed explanation via text)	16 (48)