

Checklist for assessing methodological quality of TMS studies	Barbe 2018	Boudreau 2007	Dancey 2019
Were the following participant factors:	Reported	Controlled	Reported
Age of subjects	Yes	No	Yes
Gender of subjects	Yes	N/A	Yes
Handedness of subjects	Yes	Yes	No
Subjects prescribed medication	No	No	No
Use of CSN active drugs (e.g. anti-convulsant)	No	No	No
Presence of neurological/psychiatric disorders when studying healthy subjects	Yes	Yes	Yes
Any medical conditions	Yes	Yes	Yes
History of specific repetitive motor activity	No	No	No
Were the following methodological factors:	Reported	Controlled	Reported
Position and contact of EMG electrodes	Yes	Yes	Yes
Amount of relaxation/contraction of target muscles	Yes	Yes	Yes
Prior motor activity of the muscle to be tested	Yes	No	Yes
Level of relaxation of muscles other than those being tested	N/A	No	N/A
Coil type (size and geometry)	Yes	Yes	Yes
Coil orientation	Yes	Yes	Yes
Direction of induced current in the brain	No	No	Yes
Coil location and stability	No	No	Yes
Type of stimulation used (e.g. brand)	Yes	Yes	Yes
Stimulation intensity	Yes	N/A	Yes
Pulse shape (monophasic or biphasic)	No	No	No
Determination of optimal hotspot	No	No	Yes
The time between MEP trials	No	No	Yes
Times between days of testing	N/A	N/A	Yes
Subject attention (level of arousal) during testing	No	No	No
Method for determining threshold (active/resting)	Yes	Yes	Yes
Number of MEP measures made	Yes	Yes	Yes
Paired puls only: Intensity of test puls	N/A	N/A	N/A
Paired puls only: Intensity of conditioning puls	N/A	N/A	N/A
Paired puls only: Inter-stimulus interval	N/A	N/A	N/A
Were the following analytical factors:	Reported	Controlled	Reported
Method for determining MEP size during analysis	Yes	Yes	Yes
Size of unconditioned MEP	N/A	N/A	N/A

De Martino 2018a		De Martino 2018b		Hoeger Bement 2014		Ingham 2011		Masse Alaine 2014		Masse Alaine 2016	
Reported	Controlled	Reported	Controlled	Reported	Controlled	Reported	Controlled	Reported	Controlled	Reported	Controlled
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A
Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	No	No
No	No	No	No	No	No	No	No	No	No	No	No
No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A
Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	Yes	Yes	Yes
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	Yes	Yes	Yes
Reported	Controlled	Reported	Controlled	Reported	Controlled	Reported	Controlled	Reported	Controlled	Reported	Controlled
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Yes	Yes	Yes	Yes

Tsao 2010**Vallence 2013****Reported Controlled Reported Controlled**

Yes	Yes	Yes	Yes
Yes	N/A	Yes	N/A
Yes	Yes	Yes	Yes
No	No	No	No
No	No	Yes	Yes
N/A	N/A	Yes	Yes
Yes	Yes	Yes	Yes
No	No	No	No

Reported Controlled Reported Controlled

Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	No	No
N/A	No	N/A	N/A
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
No	No	Yes	Yes
Yes	Yes	N/A	N/A
No	No	No	No
No	No	Yes	Yes
Yes	Yes	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Reported Controlled Reported Controlled

Yes	Yes	Yes	Yes
N/A	N/A	N/A	N/A

