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eprints@whiterose.ac.uk https://eprints.whiterose.ac.uk/ **Supplementary Material.** Details of excluded data and additional analyses with alternative exclusion criteria.

Participant	Condition	Timepoint	Time of	Number of
			pulse	MEPs in
				analysis
1	Human	1	With	16
1	Human	1	Between	14
1	Human	2	With	25
1	Human	2	Between	23
2	Human	1	With	15
2	Human	1	Between	14
2	Human	2	With	23
2	Human	2	Between	25
3	Computer	1	With	14
3	Computer	1	Between	12
3	Computer	2	With	28
3	Computer	2	Between	28
4	Computer	1	With	17
4	Computer	1	Between	20
4	Computer	2	With	15
4	Computer	2	Between	13
5	Human	1	With	15
5	Human	1	Between	14
5	Human	2	With	24
5	Human	2	Between	28
6	Computer	1	With	8
6	Computer	1	Between	16
6	Computer	2	With	12
6	Computer	2	Between	8
7	Computer	1	With	17
7	Computer	1	Between	14
7	Computer	2	With	20
7	Computer	2	Between	23
8	Human	1	With	11
8	Human	1	Between	9
8	Human	2	With	10
8	Human	2	Between	5

Table S1. Number of MEPs included for each participant in Experiment 1.

Table S2. Summary of number of MEPs included in Experiment 1.

Condition	Timepoint	Number of MEPs in analysis
Human	1	108
Human	2	163
Computer	1	118
Computer	2	147

Participant	Condition	Timepoint	Time of	Number of
			pulse	MEPs in
				analysis
1	Human	1	With	18
1	Human	1	Between	20
1	Human	2	With	12
1	Human	2	Between	17
2	Human	1	With	29
2	Human	1	Between	27
2	Human	2	With	30
2	Human	2	Between	28
3	Human	1	With	19
3	Human	1	Between	22
3	Human	2	With	5
3	Human	2	Between	8
4	Human	1	With	7
4	Human	1	Between	8
4	Human	2	With	8
4	Human	2	Between	8
5	Computer	1	With	11
5	Computer	1	Between	14
5	Computer	2	With	29
5	Computer	2	Between	28
6	Computer	1	With	21
6	Computer	1	Between	18
6	Computer	2	With	30
6	Computer	2	Between	30
7	Computer	1	With	5
7	Computer	1	Between	15
7	Computer	2	With	4
7	Computer	2	Between	5
8	Computer	1	With	13
8	Computer	1	Between	10
8	Computer	2	With	13
8	Computer	2	Between	12

Table S3. Number of MEPs included for each participant in Experiment 2.

Table S4. Summary of number of MEPs included in Experiment 2.

Condition	Timepoint	Number of MEPs
Human	1	150
Human	2	116
Computer	1	107
Computer	2	151

Additional Analyses

No exclusion criteria

Using analysis identical to that reported in the manuscript the main effect of condition is not significant (b= 0.28, se = 0.12 t(6) = 2.3, p = .058), and there is no main effect of pulse timing (b = -0.02, se = 0.03, t(469) = 0.63, p = 0.53). There is also no significant interaction between the two (b = -0.06, se = 0.03, t(469) = 1.9, p = 0.059). Figure S1 gives the averaged data with exclusion based on visual inspection as reported in the manuscript. Figure S2 is the same graph using all the data as reported here.

Data exclusion using a cut-off of MEPs > 30 μ V

The main effect of condition is significant (b= 0.20, se = 0.04 t(4.8) = 4.6, p = .006), and there is no main effect of pulse timing (b = -0.03, se = 0.03, t(316) = 1.14, p = 0.26). There is a significant interaction between the condition and pulse timing (b = -0.07, se = 0.03, t(316) = 2.4, p = 0.02). Figure S3 gives the averaged data with this exclusion criterion.



Figure S1. Change in MEP amplitude (logged) in Experiment 1 the Human and Computer conditions for TMS pulses occurring 120 ms before the test timbre and 370 ms after the test timbre, with data as described in manuscript. Error bars give standard error of the grand mean.



Figure S2. Change in MEP amplitude (logged) in Experiment 1 the Human and Computer conditions for TMS pulses occurring 120 ms before the test timbre and 370 ms after the test timbre, with no data excluded. Error bars give standard error of the grand mean.



Figure S3. Change in MEP amplitude (logged) in Experiment 1 the Human and Computer conditions for TMS pulses occurring 120 ms before the test timbre and 370 ms after the test timbre, with MEPs $< 30 \,\mu$ V excluded. Error bars give standard error of the grand mean.