Supplementary Table 1

Separate results for each participant in AB and CD stimulations.

For each participant, the frequency of stuttered syllables, the mean of the three highest stuttering moments and speech rate were analyzed to decide if TENS was effective, harmful, or had no effect. For the frequency of stuttered syllables and the mean of the three highest stuttering moments, a decrease of at least 20% was considered a positive result. For speech rate, an increase of at least 120% was considered a positive result. Using these guidelines, TENS was considered effective if (a) all three measures improved after stimulation; (b) two measures improved after stimulation, while the other one was not different; (c) two measures improved after stimulation, while the other one worsened; or (d) one measure improved after stimulation; (b) two measures worsened after stimulation, while the other one was not different; (c) two measures worsened after stimulation, while the other one improved; or (d) one measure worsened after stimulation, while the others two were not different. TENS was considered to have had no effect if, following stimulation, all three measures were not different or one measure improved, one measure worsened, and one measure was not different.

Participant	AB Stimulation	CD Stimulation	Positive
Number	AD Stillitiation	CD Stillitiation	Effects
1	Speech rate increased 126% after stimulation (i.e, from 119 to 150 fluent syllables per minute). Neither the percentage of stuttered syllables nor the mean of the three highest stuttering moments were different from pre- to post-stimulation.	The percentage of stuttered syllables decreased 20% after stimulation (from 48.1% to 38.5%). Speech rate increased 132% after stimulation (from 56 to 74 fluent syllables per minute). The mean of the three highest stuttering moments was not different from pre- to post-stimulation.	AB and CD stimulations
2	The percentage of stuttered syllables decreased 33% after stimulation (from 20% to 13.5%). The mean of the three highest stuttering moments decreased 22% after stimulation (from 2.68 seconds to 2.08 seconds). Speech rate increased 123% after stimulation (from 146 to 179 fluent syllables per minute).	The mean of the three highest stuttering moments increased 168% after stimulation (from 1.02 second to 1.71 second). The percentage of stuttered syllables and speech rate were not different from pre- to post-stimulation.	AB stimulation

Participant	AD Chimpletian	CD Stimulation	Positive
Number	AB Stimulation	CD Stimulation	Effects
	The percentage of stuttered syllables decreased 52%	Neither the percentage of stuttered syllables, the mean of the three highest stuttering moments, or speech rate were different stimulation.	
3	after stimulation (from 6.9% to 3.3%). Speech rate		
	increased 131% after stimulation (from 165 to 216		AB
	fluent syllables per minute). The mean of the three		stimulation
	highest stuttering moments was not different pre- and		
	post- stimulation.		
	The percentage of stuttered syllables decreased 27%	The percentage of stuttered syllables increased 159%	
4	after stimulation (from 9.5% to 6.9%). The mean of	after stimulation (from 7.5% to 11.9%). Speech rate	
	the three highest stuttering moments decreased 31%	decreased 32% after stimulation (from 259 to 175	AB
	after stimulation (from 2.36 seconds to 1.62 second).	fluent syllables per minute). The mean of the three	stimulation
	Speech rate was not different pre- and post-	highest stuttering moments did not differ pre- and	
	stimulation.	post-stimulation.	

Participant Number	AB Stimulation	CD Stimulation	Positive Effects
5	The percentage of stuttered syllables decreased 27% after stimulation (from 8.4% to 6.1%). The means of the three highest stuttering moments and speech rate were not different pre- and post- stimulation.	The percentage of stuttered syllables decreased 49% after stimulation (from 7.1% to 3.6%). The means of the three highest stuttering moments and speech rate were not different pre- and post- stimulation.	AB and CD stimulations
6	The percentage of stuttered syllables decreased 36% after stimulation (from 4.4% to 2.8%). The mean of the three highest stuttering moments decreased 50% after stimulation (from 1.89 second to 0.95 second). Speech rate was not different pre- and post-stimulation.	The percentage of stuttered syllables increased 159% after stimulation (from 2.2% to 3.5%). Speech rate increased 154% after stimulation (from 165 to 254 fluent syllables per minute). The mean of the three highest stuttering moments was not different pre- and post- stimulation.	AB stimulation

Participant Number	AB Stimulation	CD Stimulation	Positive
			Effects
	The percentage of stuttered syllables decreased 21%		
	after stimulation (from 7% to 5.5%). The mean of the		
7	three highest stuttering moments decreased 32% after	Not done.	AB
1	stimulation (from 0.77 second to 0.52 second).		stimulation
	Speech rate decreased 20% after stimulation (from		
	222 to 178 fluent syllables per minute).		
	The mean of the three highest stuttering moments		
	increased 191% after stimulation (from 1.46 second	The percentage of stuttered syllables decreased 39%	
o	to 2.79 seconds). Speech rate decreased 36% after	after stimulation (from 9.7% to 5.9%). The means of	CD
8	stimulation (from 245 to 156 fluent syllables per	the three highest stuttering moments and speech rate	stimulation
	minute). The percentage of stuttered syllables was not	were not different pre- and post- stimulation.	
	different pre- and post-stimulation.		

Participant	AB Stimulation	CD Stimulation	Positive
Number	. 12 2		Effects
		Speech rate increased 134% after stimulation (from	
	The percentage of stuttered syllables, the mean of the	222 to 298 fluent syllables per minute). Neither the	CD stimulation
9	three highest stuttering moments, and speech rate	percentage of stuttered syllables nor the mean of the	
	were not different pre- and post- stimulation.	three highest stuttering moments were different pre-	
		and post- stimulation.	
	The percentage of stuttered syllables decreased 77%	The mean of the three highest stuttering moments	AB and CD stimulations
	after stimulation (from 5.6% to 1.3%). Speech rate		
10	increased 159% after stimulation (from 200 to 317	decreased 30% after stimulation (from 1.02 second to	
10	fluent syllables per minute). The mean of the three	0.71 second). The percentage of stuttered syllables	
	highest stuttering moments was not different pre- and	and speech rate were not different pre- and post-	
	post-stimulation.	stimulation.	

Participant	AB Stimulation	CD Stimulation	Positive
Number	AD Sunitration	CD Sumuration	Effects
	Neither the percentage of stuttered cyllobles, the	The percentage of stuttered syllables decreased 50%	
		after stimulation (from 12.1% to 6.1%). The mean of	
11	Neither the percentage of stuttered syllables, the mean of the three highest stuttering moments, nor	the three highest stuttering moments increased 168%	None
11	speech rate differed pre- and post-stimulation.	after stimulation (from 0.91 second to 1.53 second).	
	speech rate differed pre- and post-stimulation.	Speech rate was not different pre- and post-	
		stimulation.	
	The percentage of stuttered syllables decreased 27%		
12	after stimulation (from 3% to 2.2%). The mean of the	Neither the percentage of stuttered syllables, the	
	three highest stuttering moments decreased 32% after	mean of the three highest stuttering moments, nor	
	stimulation (from 0.73 second to 0.5 second). Speech	speech rate differed pre- and post- stimulation.	
	rate was not different pre- and post-stimulation.		

Participant	AB Stimulation	CD Stimulation	Positive
Number			Effects
13	The mean of the three highest stuttering moments decreased 43% after stimulation (from 4.61 seconds to 2.64 seconds). Neither the percentage of stuttered syllables nor the speech rate differed pre- and post-stimulation.	The percentage of stuttered syllables decreased 24% after stimulation (from 7.9% to 6%). The mean of the three highest stuttering moments decreased 51% after stimulation (from 3.87 seconds to 1.89 second). Speech rate was not different pre- and post-stimulation.	AB and CD stimulations
14	Not done.	The percentage of stuttered syllables decreased 44% after stimulation (from 3.6% to 2%). The mean of the three highest stuttering moments decreased 71% after stimulation (from 2.52 seconds to 0.73 second). Speech rate increased 125% after stimulation (from 207 to 259 fluent syllables per minute).	CD stimulation