

S3 Table. Analyses with the Control Variable “Talker”.

Note that, as stated in the results section, in addition to the results reported in the main text, we also inspected each model reported as follows: (i) we looked at the main effect of the control variable *talker* (ii) wherever we had found a reliable main effect or interaction with the experimental factors, we looked to see this was qualified by a higher level interaction with *talker*. These analyses are not reported in the main text except in cases where there *was* an interaction and it broke down to show that the effect was only reliable for one of the two talkers.

Task	Age group	Co-Efficient	
Training	Adults	Talker *	beta = 2.11, SE = 0.28, z = 7.41, p < .001
		condition by talker	beta = 1.73, SE = 0.45, z = 3.82, p < .001
		training-session by talker	beta = 0.26, SE = 0.06, z = 4.18, p < .001
		condition by training-session by talker	beta = 0.26, SE = 0.11, z = 2.44, p = .015
		female 1: condition	beta = 0.72, SE = 0.29, z = 2.53, p = .012
		female 1: training-session	beta = 0.21, SE = 0.02, z = 10.41, p < .001
		female 1: condition by training-session	beta = 0.07, SE = 0.04, z = 1.98 p = .048
		female 2: condition	beta = 2.47, SE = 0.44, z = 5.60, p < .001
		female 2: training-session	beta = 0.49, SE = 0.06, z = 7.53, p < .001
		female 2: condition by training-session	beta = 0.33, SE = 0.11, z = 3.10, p = .002
Training	Children	talker	beta = 0.19, SE = 0.22, z = 0.85, p = 0.395
		test-half by talker	beta = 0.19, SE = 0.28, z = 0.67, p = .506
		condition by test-half by talker	beta = 0.73, SE = 0.34, z = 2.16, p = .031
		female1, first half: condition	beta = -0.05, SE = 0.31, z = -0.16, p = .875
		female1, second half: condition	beta = 0.09, SE = 0.33, z = 0.27, p = .786
		female1, first half: condition	beta = 0.22, SE = 0.29, z = 0.76, p = .45
		female1, second half: condition	beta = 1.09, SE = 0.29, z = 3.83, p < .001

Training (high variability)	Both	talker age-group by talker female1: age-group female2: age-group	beta = 0.17, SE = 0.22, z = 0.80, p = .423 beta = -1.07, SE = 0.44, z = -2.46, p = .014 beta = -0.47, SE = 0.30, z = -1.53, p = .126 beta = -1.54, SE = 0.31, z = -4.94, p < .001
English Introduction	Children	talker training-session by talker training-session by condition by talker	beta = -0.1, SE = 0.28, z = -0.35, p = .728 beta = 0.14, SE = 0.50, z = 0.28, p = .780 beta = -0.56, SE = 1.00, z = -0.56, p = .579
Primed Auditory Lexical Decision, English prime trials (RT)	Adults	talker prime-target relationship by talker	beta = -47.84, SE = 57.93, t = -0.78, p = .438 beta = -71.58, SE = 40.29, t = -1.72, p = .09
Primed Auditory Lexical Decision, English prime trials (RT)	Children	talker test-session: talker prime-target relationship by talker	beta = -70.54, SE = 97.11, t = -0.70, p = .489 beta = -245.95, SE = 149.07, t = -1.58, p = .12 beta = -8.20, SE = 66.88, t = -0.12, p = .903
Primed Auditory Lexical Decision, English prime trials (accuracy)	Children	talker test-session: talker prime-target relationship by talker	beta = -0.20, SE = 0.26, z = -0.75, p = .453 beta = 0.13, SE = 0.23, z = 0.58, p = .566 beta = 0.63, SE = 0.32, z = 1.95, p = .052
Three-Interval Oddity Discrimination Test.	Adults	talker talker by test-session female1: test-session female2: test-session voice-novelty by test-session by condition by talker word-novelty by voice-novelty by test-session by condition by talker	beta = 1.68, SE = 0.13, z = 12.66, p < .001 beta = -0.59, SE = 0.23, z = -2.53, p = .011 beta = -0.23, SE = 0.15, z = -1.51, p = .13 beta = -0.82, SE = 0.23, z = -3.61, p < .001 beta = 0.37, SE = 0.92, z = 0.40, p = .69 beta = 1.89, SE = 1.84, z = 1.03, p = .305
Three-Interval Oddity Discrimination Test.	Children	talker test-session by word-type by talker test-session by condition by talker	beta = 0.80, SE = 0.07, z = 10.82, p < .001 beta = -0.17, SE = 0.30, z = -0.56, p = .578 beta = -0.36, SE = 0.31, z = -1.16, p = .246
Three-Interval Oddity Discrimination Test.	Both	talker talker by age group female1: age-group female2: age-group	beta = 1.17, SE = 0.07, z = 17.28, p < .001 beta = -0.83, SE = 0.14, z = -5.97, p < .001 beta = -0.40, SE = 0.13, z = -3.02, p = .003 beta = -1.22, SE = 0.16, z = -7.88, p < .001

*In each case, a positive coefficient for *talker* reflects greater performance with *female2*, which was the more intelligible talker across tasks.