

*The pressure to communicate efficiently continues to shape language use later in life*

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**Supplementary Table S1.***Model output for RCA rate*

Fixed effect	Coefficient	SE	P-value
Display Type	2.0103	2.0257	.3210
Order	7.1083	2.9939	.0176
Age	2.3101	1.4563	.1127
Switching	-2.2351	1.3614	.1006
Version	.9330	2.9943	.7553
Display Type x Order	3.1009	4.1398	.4538
Display Type x Age	-2.4747	1.9933	.2144
Order x Age	3.4879	2.9855	.2427
Display Type x Switching	-1.6739	1.6050	.2970
Order x Switching	-4.3160	2.7162	.1084
Age x Switching	-2.1200	1.3261	.1099
Display Type x Version	5.1838	4.0565	.2013
Order x Version	6.3367	5.9588	.2876
Age x Version	6.4692	2.9138	.0264
Switching x Version	-2.9445	2.7559	.2853
Display Type x Order x Age	-3.0273	4.0112	.4510
Display Type x Order x Switching	7.5936	3.2659	.0201
Display Type x Age x Switching	.7449	1.5891	.6393
Order x Age x Switching	-1.5204	2.6753	.5698
Display Type x Order x Version	-1.5522	8.0923	.8479
Display Type x Age x Version	2.8257	3.9690	.4765
Order x Age x Version	4.6712	5.8011	.4207
Display Type x Switching x Version	1.4716	3.2251	.6482
Order x Switching x Version	-7.3771	5.5020	.1800
Age x Switching x Version	-3.1565	2.6581	.2350
Display Type x Order x Age x Switching	.4231	3.2458	.8963
Display Type x Order x Age x Version	-7.5004	7.9708	.3467
Display Type x Order x Switching x Version	2.6918	6.4080	.6744
Display Type x Age x Switching x Version	4.1043	3.1731	.1958
Order x Age x Switching x Version	-8.4914	5.3357	.1115
Display Type x Order x Age x Switching x Version	-7.8872	6.3532	.2144

Notes: Significant main effects and interactions are shaded.

**Supplementary Table S2.***Model output for disfluency rate*

Fixed effect	Coefficient	SE	P-value
Display Type	-.009748	.183307	.957590
Order	.164795	.220541	.454925
Age	-.228496	.110384	.038450
Switching	-.510077	.104248	<.001
Version	-.168747	.238164	.478616
Display Type x Order	.747845	.450281	.096746
Display Type x Age	.029372	.115873	.799892
Order x Age	.093474	.213435	.661423
Display Type x Switching	.055423	.109864	.613933
Order x Switching	-.216934	.208062	.297114
Age x Switching	-.049674	.109941	.651393
Display Type x Version	-.010840	.366620	.976412
Order x Version	-.177975	.441149	.686627
Age x Version	.719840	.213811	<.001
Switching x Version	.337217	.208231	.105353
Display Type x Order x Age	-.218643	.247032	.376114
Display Type x Order x Switching	.068767	.218026	.752452
Display Type x Age x Switching	-.005344	.118046	.963891
Order x Age x Switching	.147561	.219804	.502009
Display Type x Order x Version	.940514	.735570	.201031
Display Type x Age x Version	.044638	.231713	.847239
Order x Age x Version	.409601	.426766	.337167
Display Type x Switching x Version	.153750	.217901	.480439
Order x Switching x Version	.124570	.416206	.764711
Age x Switching x Version	.125595	.226026	.578441
Display Type x Order x Age x Switching	-.262108	.236613	.267970
Display Type x Order x Age x Version	.271892	.464244	.557970
Display Type x Order x Switching x Version	.637684	.457333	.163211
Display Type x Age x Switching x Version	.097193	.236134	.680630
Order x Age x Switching x Version	.365403	.439556	.405804
Display Type x Order x Age x Switching x Version	-.449332	.472833	.341961

Notes: Significant main effects and interactions are shaded.