

Supplemental Material S5. Model output for primary research questions.

Model 1a	Fixed Effects	Estimate	SE	z-value	p
	(Intercept)	−1.31	0.20	−6.66	< .001
	PCAphono	0.38	0.11	3.56	< .001
	PCAphonotactics	0.02	0.10	0.17	.867
	PCAlexsem	1.05	0.11	9.97	< .001
	AQ1	2.19	0.19	11.55	< .001
	Category1	−1.25	0.20	−6.40	< .001
	Category2	0.50	0.21	2.40	.016
	Category3	−0.05	0.21	−0.26	.797
	Category4	0.73	0.22	3.38	< .001
	Random Effects	Variance	SD		
	Item (Intercept)	1.20	1.09		
	ID (Intercept)	0.88	0.94		
Model 1b.1	Fixed Effects	Estimate	SE	z-value	p
	(Intercept)	−1.34	0.20	−6.81	< .001
	PCAlexsem	1.00	0.13	7.71	< .001
	semscores	0.46	0.21	2.15	.032
	AQ1	1.83	0.22	8.31	< .001
	PCAlexsem:semscores	0.19	0.07	2.77	.006
	Random Effects	Variance	SD		
	Item (Intercept)	1.96	1.40		
	ID (Intercept)	0.71	0.84		
Model 1b.2	Fixed Effects	Estimate	SE	z-value	p
	(Intercept)	−1.39	0.22	−6.19	< .001
	PCAphono	0.47	0.15	3.15	.002
	phonoscores	0.10	0.24	0.40	.692
	AQ1	2.11	0.25	8.37	< .001
	PCAphono:phonoscores	0.01	0.05	0.21	.832
	Random Effects	Variance	SD		
	Item (Intercept)	2.90	1.70		
	ID (Intercept)	0.87	0.93		
Model 1b.3	Fixed Effects	Estimate	SE	z-value	p
	(Intercept)	−1.40	0.23	−6.13	< .001
	PCAphonotactics	0.15	0.15	0.99	.320
	phonoscores	0.10	0.24	0.41	.681
	AQ1	2.11	0.25	8.38	< .001
	PCAphonotactics:phonoscores	−0.10	0.05	−1.92	.055
	Random Effects	Variance	SD		
	Item (Intercept)	3.16	1.78		
	ID (Intercept)	0.87	0.93		

Model 2a.1	Fixed Effects	Estimate	SE	z-value	p
Trained	(Intercept)	−0.59	0.31	−1.90	.057
	PCAlexsem	0.54	0.16	3.34	< .001
	Session	0.20	0.03	6.32	< .001
	AQ1	1.40	0.23	6.19	< .001
	PCAlexsem:Session	−0.03	0.01	−2.18	.030
	Random Effects	Variance	SD		
	Item (Intercept)	2.01	1.42		
	ID (Intercept)	2.21	1.49		
	Session ID (Slope)	0.03	0.16		
Model 2a.1	Fixed Effects	Estimate	SE	z-value	p
Monitored	(Intercept)	−0.91	0.36	−2.53	.011
	PCAlexsem	1.18	0.20	5.83	< .001
	Session	0.02	0.02	1.11	.266
	AQ1	3.33	0.35	9.50	< .001
	PCAlexsem:Session	−0.01	0.01	−0.55	.580
	Random Effects	Variance	SD		
	Item (Intercept)	3.27	1.81		
	ID (Intercept)	2.65	1.63		
	Session ID (Slope)	0.002	0.04		
Model 2a.2	Fixed Effects	Estimate	SE	z-value	p
Trained	(Intercept)	−0.61	0.30	−2.02	.044
	PCAphono	0.52	0.14	3.83	< .001
	Session	0.20	0.03	5.91	< .001
	AQ1	1.28	0.22	5.75	< .001
	PCAphono:Session	0.03	0.01	3.03	.002
	Random Effects	Variance	SD		
	Item (Intercept)	1.72	1.31		
	ID (Intercept)	2.21	1.48		
	Session ID (Slope)	0.03	0.17		
Model 2a.2	Fixed Effects	Estimate	SE	z-value	p
Monitored	(Intercept)	−0.94	0.37	−2.53	.012
	PCAphono	0.52	0.21	2.41	.016
	Session	0.02	0.02	1.21	.225
	AQ1	3.34	0.35	9.51	< .001
	PCAphono:Session	−0.01	0.01	−1.15	.248
	Random Effects	Variance	SD		
	Item (Intercept)	4.25	2.06		
	ID (Intercept)	2.60	1.61		
	Session ID (Slope)	0.002	0.04		

Model 2a.3	Fixed Effects	Estimate	SE	z-value	p
Trained	(Intercept)	−0.58	0.31	−1.86	.063
	PCAphonotactics	0.20	0.14	1.39	.163
	Session	0.20	0.03	6.04	< .001
	AQ1	1.40	0.24	5.90	< .001
	PCAphonotactics:Session	−0.002	0.01	−0.24	.814
	Random Effects	Variance	SD		
	Item (Intercept)	2.13	1.46		
	ID (Intercept)	2.24	1.50		
	Session ID (Slope)	0.03	0.17		
Model 2a.3	Fixed Effects	Estimate	SE	z-value	p
Monitored	(Intercept)	−0.88	0.37	−2.37	.018
	PCAphonotactics	0.24	0.21	1.18	.240
	Session	0.02	0.02	1.11	.266
	AQ1	3.34	0.35	9.48	< .001
	PCAphonotactics:Session	−0.02	0.01	−2.06	.040
	Random Effects	Variance	SD		
	Item (Intercept)	4.40	2.10		
	ID (Intercept)	2.62	1.62		
	Session ID (Slope)	0.002	0.04		
Model 2b.1	Fixed Effects	Estimate	SE	z-value	p
Trained	(Intercept)	−0.56	0.28	−2.00	.046
	semscores	0.89	0.30	3.03	.002
	Session	0.20	0.03	7.16	< .001
	AQ1	1.15	0.28	4.12	< .001
	semscores:Session	0.09	0.03	3.13	.002
	Random Effects	Variance	SD		
	Item (Intercept)	2.17	1.47		
	ID (Intercept)	1.66	1.29		
	Session ID (Slope)	0.02	0.14		
Model 2b.1	Fixed Effects	Estimate	SE	z-value	p
Monitored	(Intercept)	−0.87	0.36	−2.42	.016
	semscores	0.47	0.39	1.19	.232
	Session	0.01	0.02	0.78	.434
	AQ1	2.96	0.42	7.12	< .001
	semscores:Session	0.03	0.02	1.42	.156
	Random Effects	Variance	SD		
	Item (Intercept)	4.39	2.10		
	ID (Intercept)	2.37	1.54		
	Session ID (Slope)	0.002	0.04		

Model 2b.2	Fixed Effects	Estimate	SE	z-value	p
Trained	(Intercept)	−0.49	0.29	−1.66	.098
	phonoscores	0.60	0.32	1.89	.059
	Session	0.21	0.02	9.29	< .001
	AQ1	1.43	0.28	5.13	< .001
	phonoscores:Session	0.13	0.02	5.32	< .001
	Random Effects	Variance	SD		
	Item (Intercept)	2.16	1.47		
	ID (Intercept)	1.89	1.37		
	Session ID (Slope)	0.01	0.10		
Model 2b.2	Fixed Effects	Estimate	SE	z-value	p
Monitored	(Intercept)	−0.88	0.36	−2.42	.015
	phonoscores	0.20	0.42	0.48	.628
	Session	0.03	0.01	2.36	.018
	AQ1	3.13	0.42	7.46	< .001
	phonoscores:Session	0.07	0.02	3.69	< .001
	Random Effects	Variance	SD		
	Item (Intercept)	4.40	2.10		
	ID (Intercept)	2.42	1.56		
	Session ID (Slope)	< 0.001	0.02		