Dependency learning

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Appendix

Table A1

Fixed effects summary of the models fitted for the response-time data of Experiment 1 and Experiment 2. Shown are the estimated effects for Adjacency (levels: adjacent, nonadjacent), Dependency (levels: dependency, baseline), Block (levels: 1-7), and all by-Block 2-way interactions with Dependency and Adjacency. Effects summarised by its most probable parameter value $\hat{\mu}$ with 95% HPDIs are shown in msecs.

	Experiment 1: Adults			Experiment 2: Children		
Predictor	$\hat{\mu}$	95% HPDI	$P(\hat{\mu} < 0)$	$\hat{\mu}$	95% HPDI	$P(\hat{\mu} < 0)$
(Intercept)	851	[794, 915]	<.001	1,113	[1046, 1176]	<.001
Dependency	-393	[-556, -114]	.992	207	[-276, 1062]	.148
Adjacency	-162	[-290, -39]	.989	-26	[-313, 329]	.548
Block 1-2	753	[615, 893]	<.001	677	[504, 845]	<.001
Block 2-3	137	[73, 213]	<.001	119	[10, 233]	.015
Block 3-4	139	[72, 218]	<.001	-144	[-225, -47]	.998
Block 4-5	33	[-30, 101]	.151	84	[-21, 200]	.057
Block 5-6	25	[-29, 95]	.168	9	[-92, 127]	.369
Block 6-7	-104	[-171, -16]	.991	-198	[-306, -81]	.998
Dependency * Block 1-2	202	[134, 278]	<.001	203	[91, 314]	<.001
Adjacency * Block 1-2	-2	[-62, 57]	.547	-63	[-151, 36]	.89
Dependency * Block 2-3	12	[-56, 75]	.416	6	[-94, 128]	.406
Adjacency * Block 2-3	-24	[-81, 33]	.799	23	[-69, 127]	.323
Dependency * Block 3-4	-2	[-69, 61]	.548	-42	[-151, 58]	.807
Adjacency * Block 3-4	37	[-18, 92]	.094	14	[-85, 96]	.453
Dependency * Block 4-5	-4	[-67, 61]	.564	71	[-44, 192]	.102
Adjacency * Block 4-5	-57	[-106, -6]	.984	11	[-72, 106]	.37
Dependency * Block 5-6	2	[-62, 71]	.444	-13	[-129, 91]	.656

Table A1 continued

	Experiment 1: Adults			Experiment 2: Children		
Predictor	$\hat{\mu}$	95% HPDI	$P(\hat{\mu} < 0)$	$\hat{\mu}$	95% HPDI	$P(\hat{\mu} < 0)$
Adjacency * Block 5-6	42	[-10, 99]	.052	-16	[-100, 77]	.641
Dependency * Block 6-7	-89	[-172, 14]	.954	-90	[-215, 75]	.836
Adjacency * Block 6-7	-1	[-60, 79]	.423	-6	[-100, 124]	.464
Repetition within block	-21	[-27, -16]	>.999	-13	[-22, -6]	>.999

Note. $\hat{\mu}$ indicates the most probable *a posteriori* parameter value. 95% HPDI is the range containing 95% of the posterior probability mass. $P(\hat{\mu} < 0)$ is the posterior probability that the true parameter value is smaller than 0. '*' indicates interactions.