RUNNING HEAD: FECHNER'S LAW AND REPRESENTATION UPDATING

The foundation of Fechner's law: representation updating in working memory decodes the conscious perception of logarithmic magnitudes

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Supplementary materials

Supplementary Table 1. Best-fitting parameter values of the classical model

	ω				w_p				$BIAS_{0.8}$				$BIAS_{1.2}$			
	M	95% CI			M	95% CI			M	95% CI			M	95% CI		
S1	0.999	[	0.996	1.001]	0.248	[	0.193	0.302]	0.402	[	0.215	0.589]	0.281	[	0.137	0.425]
S2	0.999	[	0.998	1.000]	0.269	[	0.249	0.289]	0.065	[	-0.008	0.138]	-0.067	[	-0.173	0.038]
S3	1.001	[	0.998	1.003]	0.279	[	0.176	0.382]	-0.080	[	-0.267	0.106]	-0.287	[	-0.603	0.029]
S4	1.000	[	0.997	1.002]	0.427	[	0.334	0.521]	0.860	[	0.624	1.096]	0.640	[	0.331	0.948]
S5	0.998	[	0.996	1.000]	0.334	[	0.299	0.369]	0.343	[	0.163	0.523]	0.339	[	0.119	0.559]
S6	0.999	[	0.997	1.000]	0.429	[	0.402	0.455]	0.320	[	0.147	0.493]	0.106	[	-0.064	0.275]
S7	0.999	[	0.998	1.001]	0.205	[	0.176	0.234]	0.228	[	0.114	0.341]	-0.103	[	-0.233	0.027]
S8	1.000	[	0.997	1.002]	0.256	[	0.196	0.317]	0.580	[	0.410	0.750]	0.287	[	0.061	0.512]
S9	0.998	[	0.997	1.000]	0.642	[	0.589	0.694]	0.687	[	0.585	0.790]	0.134	[	-0.053	0.321]
S10	0.999	[	0.996	1.001]	0.394	[	0.315	0.474]	0.654	[	0.358	0.951]	0.468	[	0.286	0.651]
S11	0.998	[	0.996	1.001]	0.835	[	0.750	0.921]	0.741	[	0.413	1.069]	0.501	[	0.241	0.762]
S12	1.000	[	0.998	1.001]	0.253	[	0.227	0.280]	0.238	[	0.114	0.363]	0.042	[	-0.087	0.171]

Supplementary Table 2. Best-fitting parameter values of the logarithmic version of the classical model (LCM)

	ω				w_p				$BIAS_{0.8}$				$BIAS_{1.2}$			
	M	95% CI			M	95% CI			M	95% CI			M	95% CI		
S1	0.992	[	0.987	0.998]	0.240	[	0.227	0.253]	0.421	[	0.385	0.458]	0.281	[	0.216	0.346]
S2	0.994	[	0.989	1.000]	0.265	[	0.250	0.280]	0.061	[	0.017	0.105]	-0.105	[	-0.169	-0.041]
S3	0.997	[	0.985	1.010]	0.245	[	0.206	0.284]	-0.133	[	-0.220	-0.046]	-0.395	[	-0.507	-0.284]
S4	0.993	[	0.979	1.008]	0.406	[	0.370	0.442]	0.840	[	0.663	1.017]	0.632	[	0.485	0.778]
S5	0.984	[	0.978	0.990]	0.313	[	0.298	0.328]	0.333	[	0.297	0.370]	0.323	[	0.246	0.400]
S6	0.993	[	0.984	1.002]	0.427	[	0.402	0.453]	0.341	[	0.252	0.430]	0.133	[	0.048	0.219]
S7	0.994	[	0.986	1.001]	0.196	[	0.180	0.212]	0.222	[	0.160	0.284]	-0.139	[	-0.215	-0.063]
S8	1.001	[	0.995	1.007]	0.251	[	0.238	0.265]	0.609	[	0.575	0.643]	0.330	[	0.256	0.404]
S9	0.988	[	0.973	1.002]	0.629	[	0.567	0.691]	0.664	[	0.508	0.821]	0.123	[	-0.031	0.277]
S10	0.993	[	0.985	1.001]	0.378	[	0.351	0.405]	0.676	[	0.623	0.729]	0.468	[	0.360	0.575]
S11	0.987	[	0.965	1.009]	0.809	[	0.694	0.924]	0.748	[	0.547	0.949]	0.492	[	0.259	0.725]
S12	1.000	[	0.988	1.011]	0.251	[	0.236	0.266]	0.259	[	0.142	0.376]	0.054	[	-0.032	0.139]