Table S1

Robustness Check of the Response-Latency Mixed-Effects Model: Extended Model Including Sequence Length × Condition Interactions

Predictor	*β*	*SE*	95% *CI*	*z*	*p*
Intercept	2.006	0.169	[1.676, 2.337]	11.89	< .001
Modality (visual)	−0.037	0.098	[−0.229, 0.155]	−0.38	.706
Motor control (automatic-initiated)	−0.134	0.076	[−0.283, 0.016]	−1.75	.079
Temporal predictability (low)	−0.221	0.073	[−0.365, −0.078]	−3.02	.003
Block difficulty (Likert)	0.004	0.037	[−0.068, 0.077]	0.12	.904
Sequence length (centred)	0.282	0.024	[0.234, 0.329]	11.62	< .001
Modality × Motor control	0.127	0.081	[−0.033, 0.286]	1.56	.120
Modality × Temporal predictability	0.092	0.077	[−0.060, 0.244]	1.19	.236
Motor control × Temporal predictability	0.126	0.103	[−0.076, 0.327]	1.22	.221
Motor control × Sequence length	0.054	0.031	[−0.006, 0.115]	1.76	.078
Temporal predictability × Sequence length	−0.006	0.030	[−0.064, 0.053]	−0.20	.846
Modality × Motor control × Temporal predictability	−0.046	0.112	[−0.265, 0.173]	−0.41	.681

Note. Coefficients are reported on the log scale of response time, with the Gaussian generalized linear mixed-effects model fitted via glmmTMB. The model included random intercepts for participants and items. N = 1,115 trials from 61 participants and 64 items. Marginal R^2 = .327; conditional R^2 = .554; AIC = 1,612.4. Reference levels were auditory modality, self-initiated motor control, and high temporal predictability; sequence length was mean-centred. Confidence intervals were computed as $\beta \pm 1.96 \times SE$ on the log scale. A likelihood-ratio test comparing this extended model with the simpler model reported in the

main text (without sequence length × condition interactions; AIC = 1,611.3) was not significant, $\chi^2(2) = 2.91$, $p = .233$, favouring the simpler model.