Different factors determining Motor Execution and Motor Imagery performance in a serial reaction time task with intrinsic variability

Statistical Analysis - Tables

Table S1: Significant *post-hoc* pairwise comparison tests for data in the left side of Figure 3.

	Contrast	Constant	A	B	*p*-corr
0	stim_type	-	f1	f2	0.004369
66	stim_type	-	f1	f2	0.004369

Stim_type = event type; f1 = event F1; f2 = event F2; *p*-corr = *p* value.

Table S2: Significant *post-hoc* pairwise comparison tests for data in the right side of Figure 3

	Contrast	Constant	A	B	*p*-corr
3	stim_type	-	f2	v2	0.013480
6	block	-	1	2	0.020858
7	block	-	1	3	0.002181
8	block	-	1	4	0.019438
9	block	-	1	5	0.002114
16	stim_type * block	f1	1	2	0.026913
17	stim_type * block	f1	1	3	0.023242
19	stim_type * block	f1	1	5	0.005211

26	stim_type * block	f2	1	2	0.006886
27	stim_type * block	f2	1	3	0.016393
29	stim_type * block	f2	1	5	0.018731
39	stim_type * block	v2	1	5	0.029581
56	block	-	1	2	0.020858
57	block	-	1	3	0.002181
58	block	-	1	4	0.019438
59	block	-	1	5	0.002114
69	stim_type	-	f2	v2	0.013480

Stim_type = event type; Block = block of the sequence; f1 = event F1; f2 = event F2; v2 = event V2; *p*-corr = *p* value.

Table S3: Significant *post-hoc* pairwise comparison tests for data in Figure 4

	index	Contrast	fix	A	B	Paired	Parametric	T	dof	alternative	p-unc	p-corr	p-adjust	BF10	hedges
0	0	stim_type	-	f1	f2	True	True	-2.509989	19.0	two-sided	0.021287	0.127723	bonf	2.749	-0.486951
1	1	stim_type	-	f1	v2	True	True	-2.593998	19.0	two-sided	0.017812	0.106871	bonf	3.179	-0.335286
2	2	stim_type	-	f1	v3	True	True	-2.116157	19.0	two-sided	0.047759	0.286555	bonf	1.44	-0.330892
3	3	stim_type	-	f2	v2	True	True	0.503255	19.0	two-sided	0.620569	1.000000	bonf	0.26	0.114354

4	4	stim_type	-	f2	v3	True	True	0.745727	19.0	two-sided	0.464959	1.000000	bonf	0.298	0.158305
5	5	stim_type	-	v2	v3	True	True	0.299905	19.0	two-sided	0.767506	1.000000	bonf	0.242	0.029046
6	6	group	-	1	2	False	True	-2.711821	18.0	two-sided	0.014288	NaN	NaN	4.013	-1.161520
7	7	stim_type * group	f1	1	2	False	True	-3.712338	18.0	two-sided	0.001594	0.006377	bonf	20.775	-1.590058
8	8	stim_type * group	f2	1	2	False	True	-0.388269	18.0	two-sided	0.702371	1.000000	bonf	0.419	-0.166302
9	9	stim_type * group	v2	1	2	False	True	-3.271590	18.0	two-sided	0.004239	0.016955	bonf	9.796	-1.401278
10	10	stim_type * group	v3	1	2	False	True	-2.129001	18.0	two-sided	0.047317	0.189268	bonf	1.763	-0.911888
11	0	group	-	1	2	False	True	-2.711821	18.0	two-sided	0.014288	NaN	NaN	4.013	-1.161520
12	1	stim_type	-	f1	f2	True	True	-2.509989	19.0	two-sided	0.021287	0.127723	bonf	2.749	-0.486951
13	2	stim_type	-	f1	v2	True	True	-2.593998	19.0	two-sided	0.017812	0.106871	bonf	3.179	-0.335286
14	3	stim_type	-	f1	v3	True	True	-2.116157	19.0	two-sided	0.047759	0.286555	bonf	1.44	-0.330892

15	4	stim_type	-	f2	v2	True	True	0.503255	19.0	two-sided	0.620569	1.000000	bonf	0.26	0.114354
16	5	stim_type	-	f2	v3	True	True	0.745727	19.0	two-sided	0.464959	1.000000	bonf	0.298	0.158305
17	6	stim_type	-	v2	v3	True	True	0.299905	19.0	two-sided	0.767506	1.000000	bonf	0.242	0.029046
18	7	group * stim_type	1	f1	f2	True	True	-5.280522	9.0	two-sided	0.000507	0.006081	bonf	72.182	-1.729338
19	8	group * stim_type	1	f1	v2	True	True	-1.546007	9.0	two-sided	0.156505	1.000000	bonf	0.77	-0.612307
20	9	group * stim_type	1	f1	v3	True	True	-2.488823	9.0	two-sided	0.034489	0.413862	bonf	2.34	-0.919687
21	10	group * stim_type	1	f2	v2	True	True	1.963194	9.0	two-sided	0.081226	0.974715	bonf	1.228	0.870201
22	11	group * stim_type	1	f2	v3	True	True	1.348842	9.0	two-sided	0.210344	1.000000	bonf	0.631	0.610908
23	12	group * stim_type	1	v2	v3	True	True	-1.859568	9.0	two-sided	0.095879	1.000000	bonf	1.088	-0.251994
24	13	group * stim_type	2	f1	f2	True	True	0.915102	9.0	two-sided	0.384001	1.000000	bonf	0.436	0.133694
25	14	group * stim_type	2	f1	v2	True	True	-3.629391	9.0	two-sided	0.005491	0.065890	bonf	10.053	-0.293100

26	15	group * stim_type	2	f1	v3	True	True	-0.274779	9.0	two-sided	0.789690	1.000000	bonf	0.319	-0.040896
27	16	group * stim_type	2	f2	v2	True	True	-3.219512	9.0	two-sided	0.010498	0.125971	bonf	5.963	-0.448430
28	17	group * stim_type	2	f2	v3	True	True	-2.163063	9.0	two-sided	0.058774	0.705284	bonf	1.561	-0.188142
29	18	group * stim_type	2	v2	v3	True	True	2.089578	9.0	two-sided	0.066229	0.794744	bonf	1.428	0.276139

Stim_type = event type; Block = block of the sequence; Group = experimental groups; f1 = event F1; f2 = event F2; v2 = event V2; v3 = event V3; *p*-corr = *p* value.

Table S4: Significant *post-hoc* pairwise comparison tests for data in the left side of Figure 5

	Contrast	fix	A	B	Paired	Parametric	T	dof	alternative	p-unc	p-corr	p-adjust	BF10	hedges
0	stim_type	-	f1	f2	True	True	-3.441234	9.0	two-sided	0.007376	0.044257	bonf	7.917	-1.148951
1	stim_type	-	f1	v2	True	True	-1.298951	9.0	two-sided	0.226251	1.000000	bonf	0.601	-0.407638
2	stim_type	-	f1	v3	True	True	-2.187394	9.0	two-sided	0.056490	0.338938	bonf	1.608	-0.617024
3	stim_type	-	f2	v2	True	True	1.427451	9.0	two-sided	0.187212	1.000000	bonf	0.681	0.610475

4	stim_type	-	f2	v3	True	True	1.051951	9.0	two-sided	0.320245	1.000000	bonf	0.484	0.435229
5	stim_type	-	v2	v3	True	True	-1.630891	9.0	two-sided	0.137350	0.824102	bonf	0.842	-0.173912
6	prev	-	v2	v3	True	True	-1.004880	9.0	two-sided	0.341206	NaN	NaN	0.467	-0.218038
7	stim_type * prev	f1	v2	v3	True	True	2.966780	9.0	two-sided	0.015785	0.063139	bonf	4.31	1.016544
8	stim_type * prev	f2	v2	v3	True	True	-3.638019	9.0	two-sided	0.005418	0.021670	bonf	10.163	-0.824656
9	stim_type * prev	v2	v2	v3	True	True	-1.339042	9.0	two-sided	0.213392	0.853567	bonf	0.625	-0.341446
10	stim_type * prev	v3	v2	v3	True	True	-0.353571	9.0	two-sided	0.731801	1.000000	bonf	0.326	-0.107397
11	prev * stim_type	v2	f1	f2	True	True	-0.466599	9.0	two-sided	0.651875	1.000000	bonf	0.339	-0.149808
12	prev * stim_type	v2	f1	v2	True	True	1.071455	9.0	two-sided	0.311855	1.000000	bonf	0.492	0.230145
13	prev * stim_type	v2	f1	v3	True	True	-0.274608	9.0	two-sided	0.789817	1.000000	bonf	0.319	-0.063966

14	prev * stim_type	v2	f2	v2	True	True	0.860810	9.0	two-sided	0.411687	1.000000	bonf	0.42	0.344645
15	prev * stim_type	v2	f2	v3	True	True	0.128866	9.0	two-sided	0.900298	1.000000	bonf	0.311	0.045984
16	prev * stim_type	v2	v2	v3	True	True	-1.132026	9.0	two-sided	0.286882	1.000000	bonf	0.518	-0.233029
17	prev * stim_type	v3	f1	f2	True	True	-4.506411	9.0	two-sided	0.001475	0.017704	bonf	29.572	-1.811698
18	prev * stim_type	v3	f1	v2	True	True	-2.216332	9.0	two-sided	0.053886	0.646628	bonf	1.666	-1.010067
19	prev * stim_type	v3	f1	v3	True	True	-3.090693	9.0	two-sided	0.012915	0.154980	bonf	5.054	-1.283177
20	prev * stim_type	v3	f2	v2	True	True	1.696057	9.0	two-sided	0.124110	1.000000	bonf	0.905	0.755842
21	prev * stim_type	v3	f2	v3	True	True	1.714065	9.0	two-sided	0.120662	1.000000	bonf	0.923	0.793824
22	prev * stim_type	v3	v2	v3	True	True	-0.192276	9.0	two-sided	0.851794	1.000000	bonf	0.314	-0.050715

Stim_type = event type; Prev = previous event; f1 = event F1; f2 = event F2; v2 = event V2; v3 = event V3; *p*-corr = *p* value.

Table S.5: Significant *post-hoc* pairwise comparison tests for data in the right side of Figure 5

	Contrast	fix	A	B	Paired	Parametric	T	dof	alternative	p-unc	p-corr	p-adjust	BF10	hedges
0	stim_type	-	f1	f2	True	True	2.533318	9.0	two-sided	0.032060	0.192362	bonf	2.476	0.241356
1	stim_type	-	f1	v2	True	True	-1.343266	9.0	two-sided	0.212074	1.000000	bonf	0.627	-0.162058
2	stim_type	-	f1	v3	True	True	-0.596043	9.0	two-sided	0.565833	1.000000	bonf	0.359	-0.062503
3	stim_type	-	f2	v2	True	True	-3.483199	9.0	two-sided	0.006904	0.041422	bonf	8.352	-0.412083
4	stim_type	-	f2	v3	True	True	-2.283293	9.0	two-sided	0.048302	0.289810	bonf	1.809	-0.312567
5	stim_type	-	v2	v3	True	True	0.545966	9.0	two-sided	0.598360	1.000000	bonf	0.351	0.102426
6	prev	-	v2	v3	True	True	1.235319	9.0	two-sided	0.247986	NaN	NaN	0.567	0.110393
7	stim_type * prev	f1	v2	v3	True	True	2.830323	9.0	two-sided	0.019712	0.078848	bonf	3.617	0.250341
8	stim_type * prev	f2	v2	v3	True	True	1.386670	9.0	two-sided	0.198924	0.795698	bonf	0.654	0.145647

9	stim_type * prev	v2	v2	v3	True	True	-2.745312	9.0	two-sided	0.022650	0.090599	bonf	3.244	-0.383232
10	stim_type * prev	v3	v2	v3	True	True	3.101411	9.0	two-sided	0.012694	0.050774	bonf	5.124	0.440918
11	prev * stim_type	v2	f1	f2	True	True	2.348552	9.0	two-sided	0.043408	0.520895	bonf	1.962	0.295292
12	prev * stim_type	v2	f1	v2	True	True	1.216993	9.0	two-sided	0.254555	1.000000	bonf	0.558	0.159414
13	prev * stim_type	v2	f1	v3	True	True	-1.299438	9.0	two-sided	0.226091	1.000000	bonf	0.602	-0.141890
14	prev * stim_type	v2	f2	v2	True	True	-1.636622	9.0	two-sided	0.136137	1.000000	bonf	0.848	-0.133786
15	prev * stim_type	v2	f2	v3	True	True	-2.671707	9.0	two-sided	0.025551	0.306611	bonf	2.952	-0.446230
16	prev * stim_type	v2	v2	v3	True	True	-1.954882	9.0	two-sided	0.082319	0.987824	bonf	1.216	-0.304885
17	prev * stim_type	v3	f1	f2	True	True	1.759258	9.0	two-sided	0.112394	1.000000	bonf	0.971	0.177043
18	prev * stim_type	v3	f1	v2	True	True	-3.572144	9.0	two-sided	0.006004	0.072049	bonf	9.35	-0.476633
19	prev * stim_type	v3	f1	v3	True	True	0.259522	9.0	two-sided	0.801072	1.000000	bonf	0.318	0.036503

20	prev * stim_type	v3	f2	v2	True	True	-3.688983	9.0	two-sided	0.005005	0.060063	bonf	10.838	-0.649401
21	prev * stim_type	v3	f2	v3	True	True	-1.247271	9.0	two-sided	0.243777	1.000000	bonf	0.573	-0.145651
22	prev * stim_type	v3	v2	v3	True	True	2.136542	9.0	two-sided	0.061365	0.736384	bonf	1.511	0.522497

Stim_type = event type; Prev = previous event; f1 = event F1; f2 = event F2; v2 = event V2; v3 = event V3; *p*-corr = *p* value.