(Working Title) Appendix: Task Switching Replication Cognitive Control under varying Posture

Authors

Texas A&M University - Commerce

December 9, 2021

Abstract

Appendix of all figures, tables and materials generated by the project. Not all figures and tables may be used in final document, so can refer to this document for details of data analysis, visualizations, summary tables and other products of this project.

Appendix

Tables

Table 1: Summary of experiment participants results

date	part	cond	trials	accuracy	std	rt	std
2021-11-10 10:22:00	1	1	392	0.9362	0.2447	0.6261	0.2593
2021-11-10 11:15:00	2	2	392	0.7372	0.4407	0.7229	0.2321
2021-11-10 12:20:00	3	3	392	0.8929	0.3097	0.6639	0.2069
2021-11-10 13:18:00	4	4	392	0.8980	0.3031	0.6203	0.2293
2021-11-10 14:23:00	5	5	392	0.8648	0.3424	0.5228	0.2238
2021-11-10 15:12:00	6	6	392	0.9490	0.2203	0.4158	0.1742
2021-11-11 15:07:00	7	7	392	0.9413	0.2353	0.6213	0.1860
2021-11-11 16:36:00	8	8	392	0.5051	0.5006	0.8147	0.2958
2021-11-12 10:11:00	9	9	392	0.9133	0.2818	0.6064	0.2139
2021-11-12 11:11:00	10	10	392	0.8316	0.3747	0.5448	0.2168
2021-11-12 12:36:00	11	11	392	0.9566	0.2039	0.3704	0.1200
2021-11-12 13:51:00	12	12	392	0.9056	0.2927	0.5624	0.2464
2021-11-15 10:01:00	13	13	392	0.9592	0.1981	0.5520	0.2059
2021-11-15 11:16:00	14	14	392	0.9490	0.2203	0.5738	0.2094
2021-11-15 14:40:00	15	15	392	0.7474	0.4350	0.6924	0.2392
2021-11-15 15:42:00	16	16	392	0.9362	0.2447	0.6721	0.1855
2021-11-16 09:58:00	17	1	392	0.9413	0.2353	0.4943	0.1988

Table 1: Summary of experiment participants results

date	part	cond	trials	accuracy	std	rt	std
2021-11-16 11:08:00	18	2	392	0.8342	0.3724	0.5749	0.2511
2021-11-16 15:54:00	19	3	392	0.8214	0.3835	0.7109	0.3027
2021-11-17 10:00:00	20	4	392	0.9337	0.2492	0.7255	0.2156
2021-11-17 11:23:00	21	5	392	0.8189	0.3856	0.7644	0.2195
2021-11-17 13:17:00	22	6	392	0.9337	0.2492	0.4628	0.2244
2021-11-18 11:17:00	23	7	392	0.9286	0.2579	0.6091	0.2096
2021-11-18 13:20:00	24	8	392	0.9133	0.2818	0.6075	0.2137
2021-11-18 13:58:00	25	9	392	0.9082	0.2892	0.5286	0.2018
2021-11-19 09:59:00	26	10	392	0.9592	0.1981	0.5599	0.2064
2021-11-19 11:08:00	27	11	392	0.8801	0.3253	0.6441	0.2510
2021-11-19 13:24:00	28	12	392	0.9133	0.2818	0.6074	0.2290
2021-11-19 14:34:00	29	13	392	0.7959	0.4035	0.8403	0.2194
2021-11-19 15:42:00	30	14	392	0.8827	0.3222	0.5731	0.1775
2021-11-22 10:03:00	31	15	392	0.8087	0.3938	0.7446	0.2778
2021-11-22 14:35:00	32	16	392	0.8801	0.3253	0.7515	0.2157
2021-11-22 15:49:00	33	1	392	0.8903	0.3129	0.5135	0.2474
2021-11-23 10:06:00	34	2	392	0.8980	0.3031	0.6465	0.2511
2021-11-23 11:35:00	35	3	392	0.9311	0.2536	0.6248	0.2190
2021-11-23 13:20:00	36	4	392	0.9184	0.2742	0.5850	0.2458
2021-11-23 14:24:00	37	5	392	0.8724	0.3340	0.5825	0.2438
2021-11-29 09:54:00	38	6	392	0.8648	0.3424	0.5265	0.2220
2021-11-29 11:18:00	39	7	392	0.8418	0.3654	0.6804	0.2400
2021-11-29 14:39:00	40	8	392	0.9923	0.0873	0.4015	0.0940
2021-11-29 15:46:00	41	9	392	0.9209	0.2702	0.4644	0.1749
2021-11-30 10:23:00	42	10	392	0.8291	0.3769	0.6301	0.2612
2021-11-30 11:03:00	43	11	392	0.9388	0.2400	0.7206	0.2126
2021-11-30 13:21:00	44	12	392	0.6888	0.4636	0.4559	0.1891
2021-11-30 14:42:00	45	13	392	0.9388	0.2400	0.6182	0.2510
2021-11-30 15:58:00	46	14	392	0.8444	0.3630	0.7765	0.2450
2021-12-01 10:02:00	47	15	392	0.9362	0.2447	0.4400	0.1808
2021-12-01 11:18:00	48	16	392	0.8750	0.3311	0.7266	0.2787
2021-12-01 13:16:00	49	1	392	0.6250	0.4847	0.7623	0.2344
2021-12-01 14:36:00	50	2	392	0.9082	0.2892	0.6924	0.2501
2021-12-01 15:25:00	51	3	392	0.7653	0.4243	0.7162	0.1974
2021-12-02 10:02:00	52	4	392	0.9592	0.1981	0.5970	0.1716
2021-12-02 11:49:00	53	5	392	0.9056	0.2927	0.5215	0.1968
2021-12-02 14:23:00	54	6	392	0.9439	0.2305	0.4687	0.1979
2021-12-03 13:25:00	55	7	392	0.8138	0.3898	0.7926	0.2635
2021-12-03 14:30:00	56	8	392	0.9158	0.2780	0.6329	0.2121
2021-12-03 15:45:00	57	9	392	0.9541	0.2096	0.5686	0.2185

Table 2: Means and standard deviations of accuracy and reaction times (in sec) as a function of posture and experiment trial types.

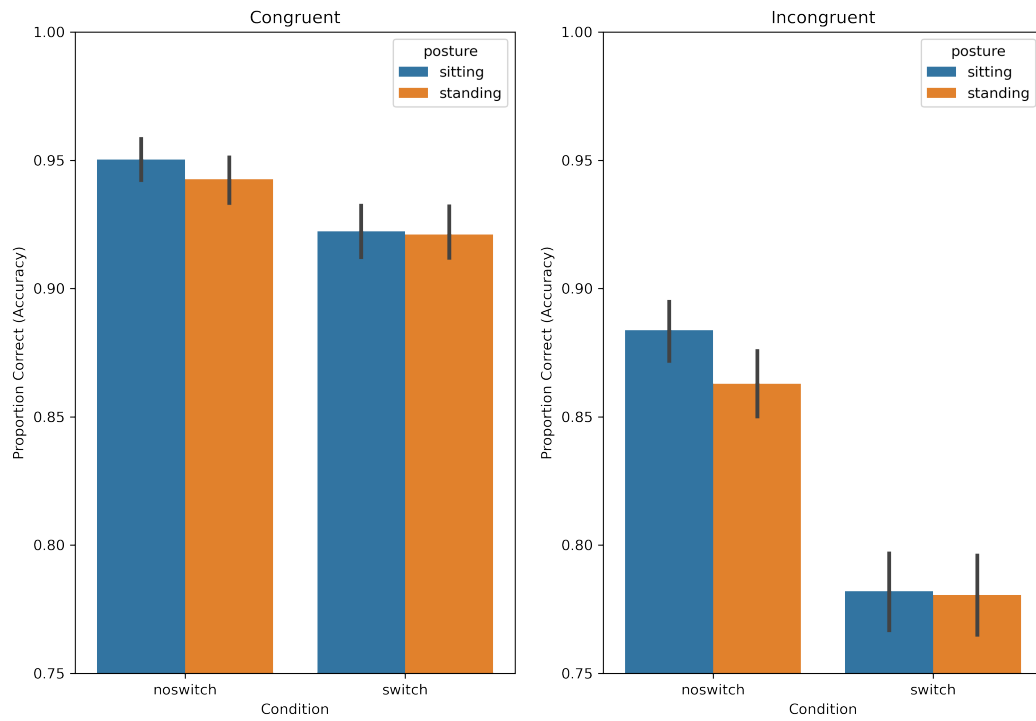| posture	congruentTrialType	switchTrialType	accuracy	std	rt	std
sitting	congruent	buffer	0.8707	0.3370	0.7197	0.2417
		noswitch	0.9504	0.2172	0.5608	0.2168
		switch	0.9224	0.2676	0.6191	0.2447
	incongruent	buffer	0.5804	0.4957	0.7660	0.2922
		noswitch	0.8837	0.3206	0.5919	0.2421
		switch	0.7820	0.4130	0.6646	0.2649
standing	congruent	buffer	0.8482	0.3604	0.7611	0.2756
		noswitch	0.9427	0.2325	0.5574	0.2234
		switch	0.9211	0.2696	0.6196	0.2477
	incongruent	buffer	0.7155	0.4531	0.7793	0.2736
		noswitch	0.8630	0.3440	0.5896	0.2390
		switch	0.7806	0.4139	0.6639	0.2610

Figures

Figure 1: Accuracy from Experiment (replication of task switching). The results show proportion of correct responses (or accuracy) broken down by experiment conditions (congruent vs. incongruent trials, switch vs. no switch trials, in the standing or sitting posture). Error bars represent 95% confidence interval.
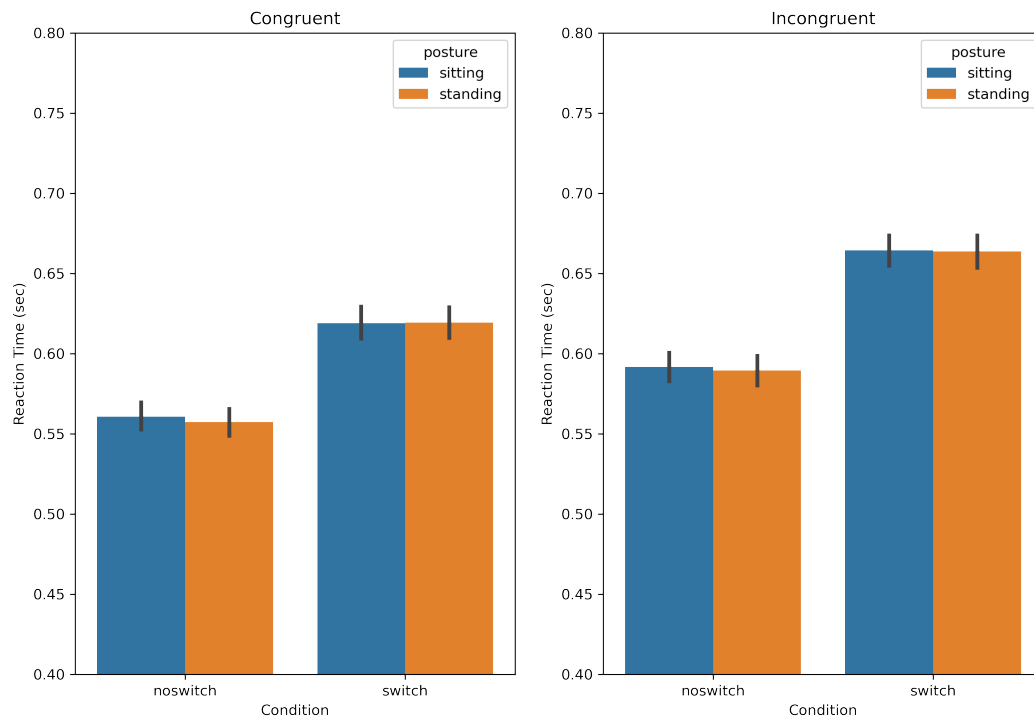
Figure 2: Reaction time from Experiment (replication of task switching). The results show average reaction times broken down by experiment conditions (congruent vs. incongruent, switch vs. no switch trials, in the standing or sitting posture). Error bars represent 95% confidence interval.