

Parameter and Posterior Inference Tables for ATC Experiment E1

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Nondecision Time

Parameter Table: Nondecision Time

	M	SD
t0	0.35	0.00795

SDV

Parameter Table: sdv

	M	SD
sdv.ccC	0.366	0.00782
sdv.nnC	0.551	0.0144
sdv.pcC	0.542	0.0239
sdv.pnC	0.591	0.0301
sdv.ccN	0.532	0.011
sdv.nnN	0.461	0.0084
sdv.pcN	0.54	0.0301
sdv.pnN	0.625	0.0243
sdv.ppP	1.15	0.0291

Capacity Sharing

Posterior Inference Z Table: Capacity Sharing

Table 3: Table continues below

	Conflict	Nonconflict	Conflict (Error)
A.PM.minus.Control	7.25(0)	6.94(0)	4.98(0)
B.PM.minus.Control	10.16(0)	8.37(0)	8.09(0)
C.PM.minus.Control	7.36(0)	2.88(0.003)	4.51(0)
D.PM.minus.Control	0.53(0.298)	2.17(0.015)	5.24(0)

	Nonconflict (Error)
A.PM.minus.Control	6.7(0)
B.PM.minus.Control	9.85(0)
C.PM.minus.Control	8.68(0)

	Nonconflict (Error)
D.PM.minus.Control	7.01(0)

Parameter Table: Drift Rates by PM Block

	PM_Block	M	SD
V.cor2_Ongoing	Control	1.39	0.017
V.cor3_Ongoing	PM	1.54	0.0165
V.err2_Ongoing	Control	0.418	0.0234
V.err3_Ongoing	PM	0.768	0.0181
V.cc2_Conflict	Control	1.26	0.0182
V.cc3_Conflict	PM	1.42	0.0176
V.pc3_Conflict_RC	PM	0.867	0.0415
V.nn2_Conflict	Control	0.231	0.0368
V.nn3_Conflict	PM	0.606	0.0287
V.pn3_Conflict_RC	PM	-0.168	0.069
V.nn2_Nonconflict	Control	1.53	0.0208
V.nn3_Nonconflict	PM	1.67	0.0199
V.pn3_Nonconflict_RC	PM	1.19	0.0383
V.cc2_Nonconflict	Control	0.605	0.0258
V.cc3_Nonconflict	PM	0.929	0.0194
V.pc3_Nonconflict_RC	PM	0.198	0.0611
V.pp3_PM	PM	2.09	0.0363

Proactive Control

Posterior Inference Z Table: Proactive Control

	Conflict	Nonconflict
A.PM.minus.Control	21.19(0)	26.24(0)
B.PM.minus.Control	19.76(0)	26.53(0)
C.PM.minus.Control	21.06(0)	26.12(0)
D.PM.minus.Control	13.74(0)	17.49(0)

Parameter Table: Thresholds by PM Block

	PM_Block	M	SD
B.2_Ongoing	Control	1.55	0.0189
B.3_Ongoing	PM	2.52	0.024
B.2_Conflict	Control	1.6	0.0244
B.3_Conflict	PM	2.51	0.0314
B.2_Nonconflict	Control	1.49	0.0238
B.3_Nonconflict	PM	2.54	0.0303
B.3_PM	PM	1.95	0.0345

Reactive Control

Posterior Inference Z Table: Reactive Inhibition

Table 8: Table continues below

	Conflict	Nonconflict	Conflict (Error)
A.NonPM.minus.PM	8.57(0)	8.53(0)	5.43(0)
B.NonPM.minus.PM	8.04(0)	8.27(0)	8.07(0)
C.NonPM.minus.PM	7.56(0)	7.49(0)	4.42(0)
D.NonPM.minus.PM	7.34(0)	7(0)	7.59(0)

	Nonconflict (Error)
A.NonPM.minus.PM	7.43(0)
B.NonPM.minus.PM	6.93(0)
C.NonPM.minus.PM	6.9(0)
D.NonPM.minus.PM	6.75(0)

Parameter Table: Drift Rates by PM Block

	PM_Block	M	SD
V.cor2_Ongoing	Control	1.39	0.017
V.cor3_Ongoing	PM	1.54	0.0165
V.err2_Ongoing	Control	0.418	0.0234
V.err3_Ongoing	PM	0.768	0.0181
V.cc2_Conflict	Control	1.26	0.0182
V.cc3_Conflict	PM	1.42	0.0176
V.pc3_Conflict_RC	PM	0.867	0.0415
V.nn2_Conflict	Control	0.231	0.0368
V.nn3_Conflict	PM	0.606	0.0287
V.pn3_Conflict_RC	PM	-0.168	0.069
V.nn2_Nonconflict	Control	1.53	0.0208
V.nn3_Nonconflict	PM	1.67	0.0199
V.pn3_Nonconflict_RC	PM	1.19	0.0383
V.cc2_Nonconflict	Control	0.605	0.0258
V.cc3_Nonconflict	PM	0.929	0.0194
V.pc3_Nonconflict_RC	PM	0.198	0.0611
V.pp3_PM	PM	2.09	0.0363

Proactive Control by Time Pressure

Posterior Inference Z Table: Proactive Control by Time Pressure

	Conflict	Nonconflict
PM.Cost.A.minus.B	4.07(0)	2.65(0.004)
PM.Cost.B.minus.C	-0.84(0.201)	1.19(0.118)
PM.Cost.C.minus.D	8.27(0)	8.22(0)

Parameter Table: Thresholds by Time Pressure

	Time_Pressure	M	SD
B.A_Ongoing	A	2.46	0.028
B.B_Ongoing	B	2.1	0.0242
B.C_Ongoing	C	2.02	0.0236
B.D_Ongoing	D	1.56	0.0207
B.A_PM	A	2.38	0.0522
B.B_PM	B	1.94	0.0481
B.C_PM	C	2.02	0.0485
B.D_PM	D	1.47	0.0438

Effort/Arousal by Time Pressure

Posterior Inference Z Table: Effort/Arousal by Time Pressure

Table 13: Table continues below

	A-B (Control)	B-C (Control)	C-D (Control)
Conflict	-4.59(0)	1.28(0.101)	-13.17(0)
Nonconflict	-4.02(0)	-0.03(0.488)	-11.49(0)
Conflict.FA	-5.35(0)	2.48(0.007)	-10.21(0)
Nonconflict.FA	-3.19(0.001)	2.8(0.003)	-13.25(0)
PM.to.PM	-	-	-
Conflict.to.PMC	-	-	-
Nonconflict.to.PMN	-	-	-
Conflict.to.PMN	-	-	-
Nonconflict.to.PMC	-	-	-

	A-B (PM)	B-C (PM)	C-D (PM)
Conflict	-8.56(0)	5.87(0)	-11.64(0)
Nonconflict	-7.36(0)	6.55(0)	-14.88(0)
Conflict.FA	-10.06(0)	6.18(0)	-13.69(0)
Nonconflict.FA	-8.51(0)	5.58(0)	-18.64(0)
PM.to.PM	4.26(0)	0.52(0.304)	4.81(0)
Conflict.to.PMC	-2.99(0.001)	-0.48(0.315)	-3.43(0)
Nonconflict.to.PMN	-2.41(0.008)	0.96(0.17)	-6.27(0)
Conflict.to.PMN	-1.54(0.059)	-0.98(0.164)	-3.83(0)
Nonconflict.to.PMC	-2.77(0.003)	1.29(0.098)	-6.16(0)

Parameter Table: Drift Rates by Time Pressure

	M	SD
V.corA_Ongoing	1.3	0.0167
V.corB_Ongoing	1.45	0.0175
V.corC_Ongoing	1.38	0.0173
V.corD_Ongoing	1.73	0.0209

	M	SD
V.errA_Ongoing	0.261	0.0296
V.errB_Ongoing	0.614	0.0226
V.errC_Ongoing	0.411	0.0271
V.errD_Ongoing	1.09	0.0215
V.ppA_PM	2.41	0.053
V.ppB_PM	2.13	0.0569
V.ppC_PM	2.09	0.0545
V.ppD_PM	1.73	0.0601