

**Appendix D*****Generalized Linear Mixed Model Comparison of Measures of Attentional Control and Executive Functioning***

Task	Model	AIC	BIC	logLik	deviance	df	LRT Test against final		
							Chi df	X2	p
CPT	Interaction (final)	536187	536389	-268071	536141	23	-	-	-
	Main Effects	536273	536370	-268126	536251	11	12	110.13	< 0.001
	Random Effects	539286	539330	-269638	539276	5	18	3134.60	< 0.001
N-Back	Interaction (final)	532890	533106	-266420	532840	25	-	-	-
	Main Effects	532952	533064	-266463	532926	13	12	85.76	<0.001
	Random Effects	535108	535151	-267549	535098	5	20	2257.90	<0.001
Number-Letter	Interaction (final)	293694	293837	-146829	293658	18	-	-	-
	Main Effects	293727	293814	-146853	293705	11	7	46.95	<0.001
	Random Effects	294254	294293	-147122	294244	5	13	585.47	<0.001
ANT Executive Network	Interaction (final)	558334	558518	-279146	558292	21	-	-	-
	Main Effects	558532	558654	-279252	558504	14	7	212.05	< 0.001
	Random Effects	570127	570170	-285058	570117	5	16	11825	< 0.001
ANT Alerting & Orienting Network	Interaction (final)	558538	558809	-279238	558476	31	-	-	-
	Main Effects	558532	558654	-279252	558504	14	17	27.75	0.048
	Random Effects	570127	570170	-285058	570117	5	26	11641	< 0.001

*Note* . LTR = Likelihood ratio tests. Comparisons against models with main effects only and random effects only