

**Supplemental Table 2: Mediation: total cooling time at ASO in d-TGA group**

variable	Global Efficiency			Modularity			Transitivity			small world		
	indirect p value	a p	b p	indirect p value	a p	b p	indirect p value	a p	b p	indirect p value	a p	b p
Full-Scale IQ (TGA: 8 yr; Referent: 16 yr)	**0.0002	0.0553	0.0602	**0.0000	-0.1190	-0.0106	0.0922	0.1447	0.2164	0.3381	-0.9098	-0.0201
<b>WIAT</b>												
Word reading	**0.0176	0.0553	0.2906	**0.0000	-0.1190	-0.0600	0.1476	0.1447	0.4838	0.2910	-0.9098	-0.0392
Reading comprehension	**0.0000	0.0553	0.1694	**0.0004	-0.1190	-0.0934	0.0398	0.1447	0.2410	0.0937	-0.9098	-0.1111
Pseudoword decoding	**0.0000	0.0553	0.0479	**0.0000	-0.1190	-0.0544	0.0121	0.1447	0.1251	0.0564	-0.9098	-0.2813
Reading composite	**0.0000	0.0553	0.1016	**0.0000	-0.1190	-0.0458	0.0151	0.1447	0.1982	0.1216	-0.9098	-0.0900
Numerical operations	**0.0048	0.0553	0.2195	**0.0000	-0.1190	-0.0078	0.0270	0.1447	0.2762	0.3011	-0.9098	-0.0261
Math reasoning	0.0658	0.0553	0.3554	**0.0000	-0.1190	-0.0295	0.1943	0.1447	0.4913	0.2034	-0.9098	-0.0938
Math composite	**0.0132	0.0553	0.2526	**0.0000	-0.1190	-0.0122	0.0728	0.1447	0.3520	0.2135	-0.9098	-0.0344
Spelling (Written Language)	**0.0000	0.0553	0.0956	**0.0000	-0.1190	-0.0564	0.0691	0.1447	0.3045	0.3671	-0.9098	-0.0218
Listening comprehension	**0.0040	0.0553	0.2245	**0.0000	-0.1190	-0.0109	0.2819	0.1447	0.4981	0.3261	-0.9098	-0.0035
<b>CMS</b>												
Dot locations: learning	**0.0025	0.0553	0.0993	**0.0056	-0.1190	-0.1131	0.0764	0.1447	0.0347	-0.1044	-0.9098	0.5260
Dot locations: total	**0.0002	0.0553	0.0992	**0.0438	-0.1190	-0.1960	0.0453	0.1447	0.0212	-0.1998	-0.9098	0.4879
Dot locations: long delay	**0.0001	0.0624	0.1993	0.5619	-0.1328	-0.7809	0.0288	0.1585	0.0260	-0.5445	-0.9892	0.2346
Stories: Stories: delayed	0.5419	0.0553	0.8087	0.2882	-0.1190	-0.7431	0.7099	0.1447	0.9216	0.1197	-0.9098	-0.3503
	0.8713	0.0624	0.9631	-0.7718	-0.1328	0.8043	0.7414	0.1585	0.8521	-0.4827	-0.9892	0.9707
Stories: delayed recognition	-0.1568	0.0624	-0.3370	0.9219	-0.1328	-0.9902	-0.3854	0.1585	-0.5424	0.4557	-0.9892	-0.6414
Faces: immediate	**0.0086	0.0553	0.1366	**0.0000	-0.1190	-0.0589	0.0541	0.1447	0.0467	**0.0000	-0.9098	-0.9240

Faces: delayed	**0.0000	0.0624	0.0820	**0.0000	-0.1328	-0.0008	0.1044	0.1585	0.0969	0.0561	-0.9892	-0.3318	
Word Pairs: learning	0.4202	0.0624	0.8381	0.6862	-0.1328	0.9845	0.1764	0.1585	0.3646	0.0335	-0.9892	-0.9564	
Word Pairs: total score	0.2784	0.0624	0.7047	0.2436	-0.1328	-0.6309	0.1835	0.1585	0.3718	0.0047	-0.9892	-0.4877	
Word Pairs: long delay	0.6171	0.0624	0.7796	0.8745	-0.1328	-0.8935	0.2722	0.1585	0.4592	0.0250	-0.9892	-0.5346	
Word Paired: delayed recognition	**0.0327	0.0624	0.3047	**0.0406	-0.1328	-0.1827	0.6284	0.1585	0.7917	0.2846	-0.9892	-0.1478	
Numbers: total score	0.0735	0.0553	0.4192	0.0985	-0.1190	-0.3293	0.1027	0.1447	0.4586	0.0670	-0.9098	-0.2268	
Sequences: total score	0.1188	0.0624	0.5381	**0.0097	-0.1328	-0.1999	0.0561	0.1585	0.2857	0.1114	-0.9892	-0.2683	
Visual memory immediate	**0.0000	0.0553	0.0370	**0.0000	-0.1190	-0.0362	0.0588	0.1447	0.0035	0.6995	-0.9098	0.6782	
Visual memory delayed	**0.0000	0.0624	0.0690	**0.0000	-0.1328	-0.0287	0.0615	0.1585	0.0214	0.2543	-0.9892	0.9566	
Verbal memory immediate	0.6171	0.0624	0.9236	0.4401	-0.1328	-0.8733	0.4852	0.1585	0.6777	0.1909	-0.9892	-0.6254	
Verbal memory delayed	0.5878	0.0624	0.8251	-0.8760	-0.1328	0.9583	0.2757	0.1585	0.5392	0.3320	-0.9892	-0.7045	
Attention/Concentration	0.1100	0.0624	0.5677	0.0667	-0.1328	-0.3377	0.0847	0.1585	0.3994	0.1006	-0.9892	-0.3120	
Learning Delayed recognition	**0.0000	0.0624	0.1942	**0.0274	-0.1328	-0.2501	0.0284	0.1585	0.0461	-0.8823	-0.9892	0.7802	
General Memory	**0.0001	0.0624	0.2113	**0.0039	-0.1328	-0.1927	0.0296	0.1585	0.0643	0.3021	-0.9892	-0.9725	
<b>DKEFS</b>													
Trail Making Test - Number sequencing	**0.001	0.0553	0.0706	**0.0027	-0.1190	-0.0581	0.1556	0.1447	0.1932	0.3340	-0.9098	-0.1340	
Trail Making Test - Letter sequencing	**0.0000	0.0553	0.0324	**0.0000	-0.1190	-0.0108	0.0305	0.1447	0.0504	0.2348	-0.9098	-0.3637	
Trail Making Test - Number-letter sequencing	**0.0502	0.0553	0.3164	**0.0014	-0.1190	-0.1321	0.1585	0.1447	0.3892	0.2722	-0.9098	-0.1316	

Trail Making Test - Number-letter switching vs. visual scanning	-0.5366	0.0553	-0.6931	-0.9251	-0.1190	0.8714	-0.5379	0.1447	-0.7473	0.1127	-0.9098	-0.1364
Trail Making Test - Number-letter switching vs. number sequencing	-0.2255	0.0553	-0.3436	-0.3011	-0.1190	0.5440	-0.5989	0.1447	-0.5679	-0.8337	-0.9098	0.8235
Trail Making Test - Number-letter switching vs. letter sequencing	**-0.0165	0.0553	-0.1293	**-0.0025	-0.1190	0.1469	-0.1096	0.1447	-0.1460	0.3049	-0.9098	-0.6426
Trail Making Test - Number-letter switching vs. combined number sequencing and letter sequencing	**-0.0179	0.0553	-0.1558	-0.1002	-0.1190	0.3781	-0.3597	0.1447	-0.4368	0.5961	-0.9098	-0.9035
Trail Making Test - Number-letter switching vs. motor speed	**-0.0338	0.0553	-0.2232	**-0.0093	-0.1190	0.2623	-0.1459	0.1447	-0.3715	-0.7025	-0.9098	0.9447
Verbal Fluency - Letter fluency: total correct	**0.0000	0.0553	0.0801	**0.0014	-0.1190	-0.0829	0.0231	0.1447	0.0997	0.0059	-0.9098	-0.2409
Verbal Fluency - Category fluency: total correct	0.1255	0.0553	0.5178	**0.0001	-0.1190	-0.0551	0.1136	0.1447	0.3732	0.0539	-0.9098	-0.1544
Verbal Fluency - Letter vs. category fluency	**0.0000	0.0553	0.0229	0.3843	-0.1190	-0.3494	0.0482	0.1447	0.1416	0.6556	-0.9098	-0.5485

Design Fluency -	**0.0000	0.0553	0.0174	**0.0001	-0.1190	-0.0324	0.0290	0.1447	0.0544	0.0388	-0.9098	-0.4803
Total correct: composite scaled												
Color-Word Interference Test -												
Primary combined measure; completion times	**0.0000	0.0456	0.0169	0.0588	-0.0975	-0.3748	0.0777	0.1518	0.0111	-0.6980	-0.8107	0.6747
Sorting Test - Combined correct sorts	0.3106	0.0553	0.5361	**0.0000	-0.1190	-0.0241	0.7535	0.1447	0.9614	0.2937	-0.9098	-0.0062
Sorting Test - Combined conditions 1 & 2	**0.0285	0.0553	0.1929	**0.0024	-0.1190	-0.0625	0.0330	0.1447	0.0778	0.0149	-0.9098	-0.3602
Twenty Questions Test - Total weighted achievement score	**0.0248	0.0430	0.0696	**0.0028	-0.0962	-0.0652	0.1226	0.1537	0.0798	0.1316	-0.8291	-0.3140
Word Context Test - Total consecutively correct	**0.0001	0.0553	0.1353	**0.0002	-0.1190	-0.0517	0.0243	0.1447	0.2116	0.0981	-0.9098	-0.2230
Word Context Test - Consistently correct ratio	**0.0004	0.0553	0.0745	**0.0161	-0.1190	-0.1196	0.0744	0.1447	0.1729	0.2956	-0.9098	-0.5085
Tower Test - Total achievement score	0.2420	0.0553	0.6655	0.0744	-0.1190	-0.2213	0.0700	0.1447	0.4810	0.7248	-0.9098	-0.6514
Proverbs Test - Total achievement: free inquiry	**0.0436	0.0430	0.2787	**0.0001	-0.0962	-0.0434	0.0661	0.1537	0.2798	0.1789	-0.8291	-0.0388
Executive Function Summary	**0.0000	0.0553	0.0807	**0.0000	-0.1190	-0.0237	0.0098	0.1447	0.0825	**0.0000	-0.9098	-0.2403

TVPS

Visual discrimination	0.1173	0.0553	0.4577	0.3513	-0.1190	-0.5445	0.2793	0.1447	0.4247	0.0260	-0.9098	-0.4609
Visual memory	0.4284	0.0553	0.7479	-0.6965	-0.1190	0.9139	-0.9219	0.1447	-0.9049	0.3011	-0.9098	-0.1852
Visual spatial-relationships	**0.0000	0.0553	0.1056	**0.0381	-0.1190	-0.2212	0.0488	0.1447	0.3695	0.1078	-0.9098	-0.4450
Visual form-constancy	0.4740	0.0553	0.5828	0.6241	-0.1190	-0.6588	0.4191	0.1447	0.5583	0.2005	-0.9098	-0.1709
Visual sequential-memory	0.0973	0.0553	0.3855	0.3865	-0.1190	-0.4631	0.1010	0.1447	0.3148	0.1178	-0.9098	-0.2477
Visual figure-ground	0.2380	0.0553	0.5264	**0.0105	-0.1190	-0.2319	0.1971	0.1447	0.4880	0.0833	-0.9098	-0.1006
Visual closure	**0.0044	0.0553	0.1761	-0.7856	-0.1190	0.8322	0.0635	0.1447	0.3071	0.2946	-0.9098	-0.7500
Visual-Spatial Summary	**0.0577	0.0553	0.2391	0.2610	-0.1190	-0.4454	0.1459	0.1447	0.3326	0.0985	-0.9098	-0.1449
ROCF												
Organization	0.6185	0.0553	0.8238	0.8776	-0.1190	-0.8172	0.2469	0.1447	0.5899	0.3887	-0.9098	-0.6642
Structural element	**0.0000	0.0553	0.0974	0.1150	-0.1190	-0.0848	0.0095	0.1447	0.2344	0.5118	-0.9098	-0.6428
Incidental element	0.2993	0.0553	0.2887	0.1556	-0.1190	-0.0493	0.0412	0.1447	0.2216	0.6241	-0.9098	-0.7478
Organization	0.0906	0.0553	0.3156	0.0808	-0.1190	-0.2428	0.4054	0.1447	0.6965	0.3431	-0.9098	-0.0193
Structural element	**0.0000	0.0553	0.0917	**0.0000	-0.1190	-0.0329	0.0751	0.1447	0.3904	0.3778	-0.9098	-0.0136
Incidental element	0.0910	0.0553	0.3330	0.2179	-0.1190	-0.4238	0.3832	0.1447	0.5267	0.4827	-0.9098	-0.4999
Organization	**0.0432	0.0553	0.2172	0.2593	-0.1190	-0.4247	0.1664	0.1447	0.3617	0.0812	-0.9098	-0.1551
Structural element	**0.0093	0.0553	0.1825	**0.0406	-0.1190	-0.1038	0.1426	0.1447	0.4762	0.3039	-0.9098	-0.0366
Incidental element	0.0747	0.0553	0.2845	0.3212	-0.1190	-0.3922	0.1226	0.1447	0.4080	0.6398	-0.9098	-0.5849