

## Dataset 1

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Table S1. Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison													
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni	
Control	-0.1	Large	Female	-	Control	-0.1	Large	Male	-3.0833	5.19	-0.59395	554	1.000
Control	-0.1	Large	Female	-	Control	-0.1	Small	Female	4.5000	5.20	0.86593	543	1.000
Control	-0.1	Large	Female	-	Control	-0.1	Small	Male	-5.3333	5.20	-1.02629	543	1.000
Control	-0.1	Large	Female	-	Control	0.1	Large	Female	-5.0000	5.19	-0.96316	554	1.000
Control	-0.1	Large	Female	-	Control	0.1	Large	Male	-4.2500	5.19	-0.81869	554	1.000
Control	-0.1	Large	Female	-	Control	0.1	Small	Female	1.8333	5.20	0.35279	543	1.000
Control	-0.1	Large	Female	-	Control	0.1	Small	Male	-11.9167	5.20	-2.29312	543	1.000
Control	-0.1	Large	Female	-	Control	24	Large	Female	-2.0833	5.19	-0.40132	554	1.000
Control	-0.1	Large	Female	-	Control	24	Large	Male	-0.5000	5.19	-0.09632	554	1.000
Control	-0.1	Large	Female	-	Control	24	Small	Female	3.7500	5.20	0.72161	543	1.000
Control	-0.1	Large	Female	-	Control	24	Small	Male	-6.6667	5.20	-1.28287	543	1.000
Control	-0.1	Large	Female	-	Control	4	Large	Female	-1.2500	5.19	-0.24079	554	1.000
Control	-0.1	Large	Female	-	Control	4	Large	Male	-0.5833	5.19	-0.11237	554	1.000
Control	-0.1	Large	Female	-	Control	4	Small	Female	3.6667	5.20	0.70558	543	1.000
Control	-0.1	Large	Female	-	Control	4	Small	Male	-5.1667	5.20	-0.99422	543	1.000
Control	-0.1	Large	Female	-	Treatment	-0.1	Large	Female	-3.8333	4.86	-0.78858	543	1.000
Control	-0.1	Large	Female	-	Treatment	-0.1	Large	Male	-9.3958	4.86	-1.93287	543	1.000
Control	-0.1	Large	Female	-	Treatment	-0.1	Small	Female	5.0833	5.20	0.97818	543	1.000
Control	-0.1	Large	Female	-	Treatment	-0.1	Small	Male	-1.3333	5.20	-0.25657	543	1.000
Control	-0.1	Large	Female	-	Treatment	0.1	Large	Female	-3.5833	4.86	-0.73715	543	1.000
Control	-0.1	Large	Female	-	Treatment	0.1	Large	Male	-12.8333	4.86	-2.64002	543	1.000
Control	-0.1	Large	Female	-	Treatment	0.1	Small	Female	16.8333	5.20	3.23924	543	1.000
Control	-0.1	Large	Female	-	Treatment	0.1	Small	Male	-35.2500	5.20	-6.78315	543	< .001
Control	-0.1	Large	Female	-	Treatment	24	Large	Female	-0.8333	4.86	-0.17143	543	1.000
Control	-0.1	Large	Female	-	Treatment	24	Large	Male	-28.8958	4.86	-5.94434	543	< .001
Control	-0.1	Large	Female	-	Treatment	24	Small	Female	7.9167	5.20	1.52340	543	1.000
Control	-0.1	Large	Female	-	Treatment	24	Small	Male	-14.5000	5.20	-2.79023	543	1.000
Control	-0.1	Large	Female	-	Treatment	4	Large	Female	12.2292	4.86	2.51574	543	1.000
Control	-0.1	Large	Female	-	Treatment	4	Large	Male	-33.0833	4.86	-6.80578	543	< .001
Control	-0.1	Large	Female	-	Treatment	4	Small	Female	9.5833	5.20	1.84412	543	1.000
Control	-0.1	Large	Female	-	Treatment	4	Small	Male	-12.3333	5.20	-2.37330	543	1.000
Control	-0.1	Large	Helpers	-	Control	-0.1	Large	Female	-7.5211	5.19	-1.44881	554	1.000
Control	-0.1	Large	Helpers	-	Control	-0.1	Large	Male	-10.6045	5.19	-2.04276	554	1.000
Control	-0.1	Large	Helpers	-	Control	-0.1	Small	Female	-3.0211	5.20	-0.58136	543	1.000
Control	-0.1	Large	Helpers	-	Control	-0.1	Small	Helpers	1.0483	5.20	0.20173	543	1.000
Control	-0.1	Large	Helpers	-	Control	-0.1	Small	Male	-12.8545	5.20	-2.47358	543	1.000
Control	-0.1	Large	Helpers	-	Control	0.1	Large	Female	-12.5211	5.19	-2.41198	554	1.000
Control	-0.1	Large	Helpers	-	Control	0.1	Large	Helpers	0.9842	5.19	0.18959	554	1.000
Control	-0.1	Large	Helpers	-	Control	0.1	Large	Male	-11.7711	5.19	-2.26750	554	1.000
Control	-0.1	Large	Helpers	-	Control	0.1	Small	Female	-5.6878	5.20	-1.09450	543	1.000
Control	-0.1	Large	Helpers	-	Control	0.1	Small	Helpers	3.5414	5.20	0.68147	543	1.000
Control	-0.1	Large	Helpers	-	Control	0.1	Small	Male	-19.4378	5.20	-3.74041	543	0.229
Control	-0.1	Large	Helpers	-	Control	24	Large	Female	-9.6045	5.19	-1.85013	554	1.000
Control	-0.1	Large	Helpers	-	Control	24	Large	Helpers	-0.1765	5.19	-0.03400	554	1.000
Control	-0.1	Large	Helpers	-	Control	24	Large	Male	-8.0211	5.19	-1.54513	554	1.000
Control	-0.1	Large	Helpers	-	Control	24	Small	Female	-3.7711	5.20	-0.72568	543	1.000
Control	-0.1	Large	Helpers	-	Control	24	Small	Helpers	1.6108	5.20	0.30997	543	1.000
Control	-0.1	Large	Helpers	-	Control	24	Small	Male	-14.1878	5.20	-2.73016	543	1.000
Control	-0.1	Large	Helpers	-	Control	4	Large	Female	-8.7711	5.19	-1.68960	554	1.000
Control	-0.1	Large	Helpers	-	Control	4	Large	Helpers	-0.2560	5.19	-0.04930	554	1.000
Control	-0.1	Large	Helpers	-	Control	4	Large	Male	-8.1045	5.19	-1.56118	554	1.000
Control	-0.1	Large	Helpers	-	Control	4	Small	Female	-3.8545	5.20	-0.74171	543	1.000
Control	-0.1	Large	Helpers	-	Control	4	Small	Helpers	1.2358	5.20	0.23781	543	1.000
Control	-0.1	Large	Helpers	-	Control	4	Small	Male	-12.6878	5.20	-2.44151	543	1.000
Control	-0.1	Large	Helpers	-	Treatment	-0.1	Large	Female	-11.3545	4.86	-2.33580	543	1.000
Control	-0.1	Large	Helpers	-	Treatment	-0.1	Large	Helpers	1.0228	4.86	0.21040	543	1.000
Control	-0.1	Large	Helpers	-	Treatment	-0.1	Large	Male	-16.9170	4.86	-3.48009	543	0.611
Control	-0.1	Large	Helpers	-	Treatment	-0.1	Small	Female	-2.4378	5.20	-0.46910	543	1.000
Control	-0.1	Large	Helpers	-	Treatment	-0.1	Small	Helpers	0.1664	5.20	0.03201	543	1.000

Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Control	-0.1	Large	Helpers	- Treatment	-0.1	Small	Male	-8.8545	5.20	-1.70386	543	1.000
Control	-0.1	Large	Helpers	- Treatment	0.1	Large	Female	-11.1045	4.86	-2.28437	543	1.000
Control	-0.1	Large	Helpers	- Treatment	0.1	Large	Helpers	1.5213	4.86	0.31295	543	1.000
Control	-0.1	Large	Helpers	- Treatment	0.1	Large	Male	-20.3545	4.86	-4.18724	543	0.037
Control	-0.1	Large	Helpers	- Treatment	0.1	Small	Female	9.3122	5.20	1.79195	543	1.000
Control	-0.1	Large	Helpers	- Treatment	0.1	Small	Helpers	7.0205	5.20	1.35096	543	1.000
Control	-0.1	Large	Helpers	- Treatment	0.1	Small	Male	-42.7711	5.20	-8.23044	543	< .001
Control	-0.1	Large	Helpers	- Treatment	24	Large	Female	-8.3545	4.86	-1.71865	543	1.000
Control	-0.1	Large	Helpers	- Treatment	24	Large	Helpers	3.1169	4.86	0.64119	543	1.000
Control	-0.1	Large	Helpers	- Treatment	24	Large	Male	-36.4170	4.86	-7.49156	543	< .001
Control	-0.1	Large	Helpers	- Treatment	24	Small	Female	0.3955	5.20	0.07611	543	1.000
Control	-0.1	Large	Helpers	- Treatment	24	Small	Helpers	4.3955	5.20	0.84583	543	1.000
Control	-0.1	Large	Helpers	- Treatment	24	Small	Male	-22.0211	5.20	-4.23752	543	0.030
Control	-0.1	Large	Helpers	- Treatment	4	Large	Female	4.7080	4.86	0.96852	543	1.000
Control	-0.1	Large	Helpers	- Treatment	4	Large	Helpers	2.0324	4.86	0.41811	543	1.000
Control	-0.1	Large	Helpers	- Treatment	4	Large	Male	-40.6045	4.86	-8.35299	543	< .001
Control	-0.1	Large	Helpers	- Treatment	4	Small	Female	2.0622	5.20	0.39683	543	1.000
Control	-0.1	Large	Helpers	- Treatment	4	Small	Helpers	2.7080	5.20	0.52111	543	1.000
Control	-0.1	Large	Helpers	- Treatment	4	Small	Male	-19.8545	5.20	-3.82059	543	0.168
Control	-0.1	Large	Male	- Control	-0.1	Small	Male	-2.2500	5.20	-0.43297	543	1.000
Control	-0.1	Large	Male	- Control	0.1	Large	Male	-1.1667	5.19	-0.22474	554	1.000
Control	-0.1	Large	Male	- Control	0.1	Small	Male	-8.8333	5.20	-1.69980	543	1.000
Control	-0.1	Large	Male	- Control	24	Large	Male	2.5833	5.19	0.49763	554	1.000
Control	-0.1	Large	Male	- Control	24	Small	Male	-3.5833	5.20	-0.68954	543	1.000
Control	-0.1	Large	Male	- Control	4	Large	Male	2.5000	5.19	0.48158	554	1.000
Control	-0.1	Large	Male	- Control	4	Small	Male	-2.0833	5.20	-0.40090	543	1.000
Control	-0.1	Large	Male	- Treatment	-0.1	Large	Male	-6.3125	4.86	-1.29858	543	1.000
Control	-0.1	Large	Male	- Treatment	-0.1	Small	Male	1.7500	5.20	0.33675	543	1.000
Control	-0.1	Large	Male	- Treatment	0.1	Large	Male	-9.7500	4.86	-2.00573	543	1.000
Control	-0.1	Large	Male	- Treatment	0.1	Small	Male	-32.1667	5.20	-6.18983	543	< .001
Control	-0.1	Large	Male	- Treatment	24	Large	Male	-25.8125	4.86	-5.31005	543	< .001
Control	-0.1	Large	Male	- Treatment	24	Small	Male	-11.4167	5.20	-2.19691	543	1.000
Control	-0.1	Large	Male	- Treatment	4	Large	Male	-30.0000	4.86	-6.17148	543	< .001
Control	-0.1	Large	Male	- Treatment	4	Small	Male	-9.2500	5.20	-1.77998	543	1.000
Control	-0.1	Small	Female	- Control	-0.1	Large	Male	-7.5833	5.20	-1.45926	543	1.000
Control	-0.1	Small	Female	- Control	-0.1	Small	Male	-9.8333	5.19	-1.89422	554	1.000
Control	-0.1	Small	Female	- Control	0.1	Large	Male	-8.7500	5.20	-1.68376	543	1.000
Control	-0.1	Small	Female	- Control	0.1	Small	Female	-2.6667	5.19	-0.51369	554	1.000
Control	-0.1	Small	Female	- Control	0.1	Small	Male	-16.4167	5.19	-3.16238	554	1.000
Control	-0.1	Small	Female	- Control	24	Large	Male	-5.0000	5.20	-0.96215	543	1.000
Control	-0.1	Small	Female	- Control	24	Small	Female	-0.7500	5.19	-0.14447	554	1.000
Control	-0.1	Small	Female	- Control	24	Small	Male	-11.1667	5.19	-2.15106	554	1.000
Control	-0.1	Small	Female	- Control	4	Large	Male	-5.0833	5.20	-0.97818	543	1.000
Control	-0.1	Small	Female	- Control	4	Small	Female	-0.8333	5.19	-0.16053	554	1.000
Control	-0.1	Small	Female	- Control	4	Small	Male	-9.6667	5.19	-1.86211	554	1.000
Control	-0.1	Small	Female	- Treatment	-0.1	Large	Male	-13.8958	4.86	-2.85860	543	1.000
Control	-0.1	Small	Female	- Treatment	-0.1	Small	Female	0.5833	5.20	0.11225	543	1.000
Control	-0.1	Small	Female	- Treatment	-0.1	Small	Male	-5.8333	5.20	-1.12251	543	1.000
Control	-0.1	Small	Female	- Treatment	0.1	Large	Male	-17.3333	4.86	-3.56575	543	0.445
Control	-0.1	Small	Female	- Treatment	0.1	Small	Female	12.3333	5.20	2.37330	543	1.000
Control	-0.1	Small	Female	- Treatment	0.1	Small	Male	-39.7500	5.20	-7.64909	543	< .001
Control	-0.1	Small	Female	- Treatment	24	Large	Male	-33.3958	4.86	-6.87006	543	< .001
Control	-0.1	Small	Female	- Treatment	24	Small	Female	3.4167	5.20	0.65747	543	1.000
Control	-0.1	Small	Female	- Treatment	24	Small	Male	-19.0000	5.20	-3.65617	543	0.317
Control	-0.1	Small	Female	- Treatment	4	Large	Male	-37.5833	4.86	-7.73150	543	< .001
Control	-0.1	Small	Female	- Treatment	4	Small	Female	5.0833	5.20	0.97818	543	1.000
Control	-0.1	Small	Female	- Treatment	4	Small	Male	-16.8333	5.20	-3.23924	543	1.000
Control	-0.1	Small	Helpers	- Control	-0.1	Large	Female	-8.5694	5.20	-1.64902	543	1.000
Control	-0.1	Small	Helpers	- Control	-0.1	Large	Male	-11.6528	5.20	-2.24234	543	1.000
Control	-0.1	Small	Helpers	- Control	-0.1	Small	Female	-4.0694	5.19	-0.78391	554	1.000

## Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Control	-0.1	Small	Helpers	- Control	-0.1	Small	Male	-13.9028	5.19	-2.67813	554	1.000
Control	-0.1	Small	Helpers	- Control	0.1	Large	Female	-13.5694	5.20	-2.61117	543	1.000
Control	-0.1	Small	Helpers	- Control	0.1	Large	Male	-12.8194	5.20	-2.46684	543	1.000
Control	-0.1	Small	Helpers	- Control	0.1	Small	Female	-6.7361	5.19	-1.29759	554	1.000
Control	-0.1	Small	Helpers	- Control	0.1	Small	Helpers	2.4931	5.19	0.48024	554	1.000
Control	-0.1	Small	Helpers	- Control	0.1	Small	Male	-20.4861	5.19	-3.94629	554	0.101
Control	-0.1	Small	Helpers	- Control	24	Large	Female	-10.6528	5.20	-2.04991	543	1.000
Control	-0.1	Small	Helpers	- Control	24	Large	Male	-9.0694	5.20	-1.74523	543	1.000
Control	-0.1	Small	Helpers	- Control	24	Small	Female	-4.8194	5.19	-0.92838	554	1.000
Control	-0.1	Small	Helpers	- Control	24	Small	Helpers	0.5625	5.19	0.10836	554	1.000
Control	-0.1	Small	Helpers	- Control	24	Small	Male	-15.2361	5.19	-2.93497	554	1.000
Control	-0.1	Small	Helpers	- Control	4	Large	Female	-9.8194	5.20	-1.88955	543	1.000
Control	-0.1	Small	Helpers	- Control	4	Large	Male	-9.1528	5.20	-1.76127	543	1.000
Control	-0.1	Small	Helpers	- Control	4	Small	Female	-4.9028	5.19	-0.94443	554	1.000
Control	-0.1	Small	Helpers	- Control	4	Small	Helpers	0.1875	5.19	0.03612	554	1.000
Control	-0.1	Small	Helpers	- Control	4	Small	Male	-13.7361	5.19	-2.64602	554	1.000
Control	-0.1	Small	Helpers	- Treatment	-0.1	Large	Female	-12.4028	4.86	-2.55145	543	1.000
Control	-0.1	Small	Helpers	- Treatment	-0.1	Large	Male	-17.9653	4.86	-3.69575	543	0.272
Control	-0.1	Small	Helpers	- Treatment	-0.1	Small	Female	-3.4861	5.20	-0.67083	543	1.000
Control	-0.1	Small	Helpers	- Treatment	-0.1	Small	Helpers	-0.8819	5.20	-0.16971	543	1.000
Control	-0.1	Small	Helpers	- Treatment	-0.1	Small	Male	-9.9028	5.20	-1.90559	543	1.000
Control	-0.1	Small	Helpers	- Treatment	0.1	Large	Female	-12.1528	4.86	-2.50002	543	1.000
Control	-0.1	Small	Helpers	- Treatment	0.1	Large	Male	-21.4028	4.86	-4.40290	543	0.015
Control	-0.1	Small	Helpers	- Treatment	0.1	Small	Female	8.2639	5.20	1.59022	543	1.000
Control	-0.1	Small	Helpers	- Treatment	0.1	Small	Helpers	5.9722	5.20	1.14923	543	1.000
Control	-0.1	Small	Helpers	- Treatment	0.1	Small	Male	-43.8194	5.20	-8.43217	543	< .001
Control	-0.1	Small	Helpers	- Treatment	24	Large	Female	-9.4028	4.86	-1.93430	543	1.000
Control	-0.1	Small	Helpers	- Treatment	24	Large	Male	-37.4653	4.86	-7.70721	543	< .001
Control	-0.1	Small	Helpers	- Treatment	24	Small	Female	-0.6528	5.20	-0.12561	543	1.000
Control	-0.1	Small	Helpers	- Treatment	24	Small	Helpers	3.3472	5.20	0.64411	543	1.000
Control	-0.1	Small	Helpers	- Treatment	24	Small	Male	-23.0694	5.20	-4.43925	543	0.012
Control	-0.1	Small	Helpers	- Treatment	4	Large	Female	3.6597	4.86	0.75286	543	1.000
Control	-0.1	Small	Helpers	- Treatment	4	Large	Male	-41.6528	4.86	-8.56865	543	< .001
Control	-0.1	Small	Helpers	- Treatment	4	Small	Female	1.0139	5.20	0.19510	543	1.000
Control	-0.1	Small	Helpers	- Treatment	4	Small	Helpers	1.6597	5.20	0.31938	543	1.000
Control	-0.1	Small	Helpers	- Treatment	4	Small	Male	-20.9028	5.20	-4.02232	543	0.074
Control	-0.1	Small	Male	- Control	0.1	Small	Male	-6.5833	5.19	-1.26816	554	1.000
Control	-0.1	Small	Male	- Control	24	Small	Male	-1.3333	5.19	-0.25684	554	1.000
Control	-0.1	Small	Male	- Control	4	Small	Male	0.1667	5.19	0.03211	554	1.000
Control	-0.1	Small	Male	- Treatment	-0.1	Small	Male	4.0000	5.20	0.76972	543	1.000
Control	-0.1	Small	Male	- Treatment	0.1	Small	Male	-29.9167	5.20	-5.75686	543	< .001
Control	-0.1	Small	Male	- Treatment	24	Small	Male	-9.1667	5.20	-1.76394	543	1.000
Control	-0.1	Small	Male	- Treatment	4	Small	Male	-7.0000	5.20	-1.34701	543	1.000
Control	0.1	Large	Female	- Control	-0.1	Large	Male	1.9167	5.19	0.36921	554	1.000
Control	0.1	Large	Female	- Control	-0.1	Small	Female	9.5000	5.20	1.82808	543	1.000
Control	0.1	Large	Female	- Control	-0.1	Small	Male	-0.3333	5.20	-0.06414	543	1.000
Control	0.1	Large	Female	- Control	0.1	Large	Male	0.7500	5.19	0.14447	554	1.000
Control	0.1	Large	Female	- Control	0.1	Small	Female	6.8333	5.20	1.31494	543	1.000
Control	0.1	Large	Female	- Control	0.1	Small	Male	-6.9167	5.20	-1.33097	543	1.000
Control	0.1	Large	Female	- Control	24	Large	Female	2.9167	5.19	0.56184	554	1.000
Control	0.1	Large	Female	- Control	24	Large	Male	4.5000	5.19	0.86685	554	1.000
Control	0.1	Large	Female	- Control	24	Small	Female	8.7500	5.20	1.68376	543	1.000
Control	0.1	Large	Female	- Control	24	Small	Male	-1.6667	5.20	-0.32072	543	1.000
Control	0.1	Large	Female	- Control	4	Large	Female	3.7500	5.19	0.72237	554	1.000
Control	0.1	Large	Female	- Control	4	Large	Male	4.4167	5.19	0.85079	554	1.000
Control	0.1	Large	Female	- Control	4	Small	Female	8.6667	5.20	1.66773	543	1.000
Control	0.1	Large	Female	- Control	4	Small	Male	-0.1667	5.20	-0.03207	543	1.000
Control	0.1	Large	Female	- Treatment	-0.1	Large	Male	-4.3958	4.86	-0.90429	543	1.000
Control	0.1	Large	Female	- Treatment	-0.1	Small	Female	10.0833	5.20	1.94033	543	1.000
Control	0.1	Large	Female	- Treatment	-0.1	Small	Male	3.6667	5.20	0.70558	543	1.000

Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Control	0.1	Large	Female	- Treatment	0.1	Large	Female	1.4167	4.86	0.29143	543	1.000
Control	0.1	Large	Female	- Treatment	0.1	Large	Male	-7.8333	4.86	-1.61144	543	1.000
Control	0.1	Large	Female	- Treatment	0.1	Small	Female	21.8333	5.20	4.20138	543	0.035
Control	0.1	Large	Female	- Treatment	0.1	Small	Male	-30.2500	5.20	-5.82100	543	< .001
Control	0.1	Large	Female	- Treatment	24	Large	Female	4.1667	4.86	0.85715	543	1.000
Control	0.1	Large	Female	- Treatment	24	Large	Male	-23.8958	4.86	-4.91576	543	0.001
Control	0.1	Large	Female	- Treatment	24	Small	Female	12.9167	5.20	2.48555	543	1.000
Control	0.1	Large	Female	- Treatment	24	Small	Male	-9.5000	5.20	-1.82808	543	1.000
Control	0.1	Large	Female	- Treatment	4	Large	Female	17.2292	4.86	3.54432	543	0.482
Control	0.1	Large	Female	- Treatment	4	Large	Male	-28.0833	4.86	-5.77719	543	< .001
Control	0.1	Large	Female	- Treatment	4	Small	Female	14.5833	5.20	2.80627	543	1.000
Control	0.1	Large	Female	- Treatment	4	Small	Male	-7.3333	5.20	-1.41115	543	1.000
Control	0.1	Large	Helpers	- Control	-0.1	Large	Female	-8.5054	5.19	-1.63841	554	1.000
Control	0.1	Large	Helpers	- Control	-0.1	Large	Male	-11.5887	5.19	-2.23236	554	1.000
Control	0.1	Large	Helpers	- Control	-0.1	Small	Female	-4.0054	5.20	-0.77075	543	1.000
Control	0.1	Large	Helpers	- Control	-0.1	Small	Helpers	0.0641	5.20	0.01233	543	1.000
Control	0.1	Large	Helpers	- Control	-0.1	Small	Male	-13.8387	5.20	-2.66298	543	1.000
Control	0.1	Large	Helpers	- Control	0.1	Large	Female	-13.5054	5.19	-2.60157	554	1.000
Control	0.1	Large	Helpers	- Control	0.1	Large	Male	-12.7554	5.19	-2.45709	554	1.000
Control	0.1	Large	Helpers	- Control	0.1	Small	Female	-6.6720	5.20	-1.28390	543	1.000
Control	0.1	Large	Helpers	- Control	0.1	Small	Helpers	2.5571	5.20	0.49207	543	1.000
Control	0.1	Large	Helpers	- Control	0.1	Small	Male	-20.4220	5.20	-3.92981	543	0.108
Control	0.1	Large	Helpers	- Control	24	Large	Female	-10.5887	5.19	-2.03972	554	1.000
Control	0.1	Large	Helpers	- Control	24	Large	Helpers	-1.1607	5.19	-0.22359	554	1.000
Control	0.1	Large	Helpers	- Control	24	Large	Male	-9.0054	5.19	-1.73472	554	1.000
Control	0.1	Large	Helpers	- Control	24	Small	Female	-4.7554	5.20	-0.91507	543	1.000
Control	0.1	Large	Helpers	- Control	24	Small	Helpers	0.6266	5.20	0.12057	543	1.000
Control	0.1	Large	Helpers	- Control	24	Small	Male	-15.1720	5.20	-2.91955	543	1.000
Control	0.1	Large	Helpers	- Control	4	Large	Female	-9.7554	5.19	-1.87920	554	1.000
Control	0.1	Large	Helpers	- Control	4	Large	Helpers	-1.2402	5.19	-0.23890	554	1.000
Control	0.1	Large	Helpers	- Control	4	Large	Male	-9.0887	5.19	-1.75078	554	1.000
Control	0.1	Large	Helpers	- Control	4	Small	Female	-4.8387	5.20	-0.93111	543	1.000
Control	0.1	Large	Helpers	- Control	4	Small	Helpers	0.2516	5.20	0.04841	543	1.000
Control	0.1	Large	Helpers	- Control	4	Small	Male	-13.6720	5.20	-2.63091	543	1.000
Control	0.1	Large	Helpers	- Treatment	-0.1	Large	Female	-12.3387	4.86	-2.53827	543	1.000
Control	0.1	Large	Helpers	- Treatment	-0.1	Large	Male	-17.9012	4.86	-3.68256	543	0.286
Control	0.1	Large	Helpers	- Treatment	-0.1	Small	Female	-3.4220	5.20	-0.65850	543	1.000
Control	0.1	Large	Helpers	- Treatment	-0.1	Small	Helpers	-0.8179	5.20	-0.15738	543	1.000
Control	0.1	Large	Helpers	- Treatment	-0.1	Small	Male	-9.8387	5.20	-1.89326	543	1.000
Control	0.1	Large	Helpers	- Treatment	0.1	Large	Female	-12.0887	4.86	-2.48684	543	1.000
Control	0.1	Large	Helpers	- Treatment	0.1	Large	Helpers	0.5371	4.86	0.11048	543	1.000
Control	0.1	Large	Helpers	- Treatment	0.1	Large	Male	-21.3387	4.86	-4.38971	543	0.015
Control	0.1	Large	Helpers	- Treatment	0.1	Small	Female	8.3280	5.20	1.60255	543	1.000
Control	0.1	Large	Helpers	- Treatment	0.1	Small	Helpers	6.0363	5.20	1.16157	543	1.000
Control	0.1	Large	Helpers	- Treatment	0.1	Small	Male	-43.7554	5.20	-8.41984	543	< .001
Control	0.1	Large	Helpers	- Treatment	24	Large	Female	-9.3387	4.86	-1.92112	543	1.000
Control	0.1	Large	Helpers	- Treatment	24	Large	Helpers	2.1327	4.86	0.43872	543	1.000
Control	0.1	Large	Helpers	- Treatment	24	Large	Male	-37.4012	4.86	-7.69403	543	< .001
Control	0.1	Large	Helpers	- Treatment	24	Small	Female	-0.5887	5.20	-0.11328	543	1.000
Control	0.1	Large	Helpers	- Treatment	24	Small	Helpers	3.4113	5.20	0.65644	543	1.000
Control	0.1	Large	Helpers	- Treatment	24	Small	Male	-23.0054	5.20	-4.42692	543	0.013
Control	0.1	Large	Helpers	- Treatment	4	Large	Female	3.7238	4.86	0.76605	543	1.000
Control	0.1	Large	Helpers	- Treatment	4	Large	Helpers	1.0482	4.86	0.21563	543	1.000
Control	0.1	Large	Helpers	- Treatment	4	Large	Male	-41.5887	4.86	-8.55546	543	< .001
Control	0.1	Large	Helpers	- Treatment	4	Small	Female	1.0780	5.20	0.20743	543	1.000
Control	0.1	Large	Helpers	- Treatment	4	Small	Helpers	1.7238	5.20	0.33171	543	1.000
Control	0.1	Large	Helpers	- Treatment	4	Small	Male	-20.8387	5.20	-4.00999	543	0.078
Control	0.1	Large	Male	- Control	-0.1	Small	Male	-1.0833	5.20	-0.20847	543	1.000
Control	0.1	Large	Male	- Control	0.1	Small	Male	-7.6667	5.20	-1.47530	543	1.000
Control	0.1	Large	Male	- Control	24	Large	Male	3.7500	5.19	0.72237	554	1.000

Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Control	0.1	Large	Male	- Control	24	Small	Male	-2.4167	5.20	-0.46504	543	1.000
Control	0.1	Large	Male	- Control	4	Large	Male	3.6667	5.19	0.70632	554	1.000
Control	0.1	Large	Male	- Control	4	Small	Male	-0.9167	5.20	-0.17639	543	1.000
Control	0.1	Large	Male	- Treatment	-0.1	Small	Male	2.9167	5.20	0.56125	543	1.000
Control	0.1	Large	Male	- Treatment	0.1	Large	Male	-8.5833	4.86	-1.76573	543	1.000
Control	0.1	Large	Male	- Treatment	0.1	Small	Male	-31.0000	5.20	-5.96532	543	< .001
Control	0.1	Large	Male	- Treatment	24	Large	Male	-24.6458	4.86	-5.07005	543	< .001
Control	0.1	Large	Male	- Treatment	24	Small	Male	-10.2500	5.20	-1.97241	543	1.000
Control	0.1	Large	Male	- Treatment	4	Large	Male	-28.8333	4.86	-5.93148	543	< .001
Control	0.1	Large	Male	- Treatment	4	Small	Male	-8.0833	5.20	-1.55547	543	1.000
Control	0.1	Small	Female	- Control	-0.1	Large	Male	-4.9167	5.20	-0.94611	543	1.000
Control	0.1	Small	Female	- Control	-0.1	Small	Male	-7.1667	5.19	-1.38053	554	1.000
Control	0.1	Small	Female	- Control	0.1	Large	Male	-6.0833	5.20	-1.17061	543	1.000
Control	0.1	Small	Female	- Control	0.1	Small	Male	-13.7500	5.19	-2.64870	554	1.000
Control	0.1	Small	Female	- Control	24	Large	Male	-2.3333	5.20	-0.44900	543	1.000
Control	0.1	Small	Female	- Control	24	Small	Female	1.9167	5.19	0.36921	554	1.000
Control	0.1	Small	Female	- Control	24	Small	Male	-8.5000	5.19	-1.63738	554	1.000
Control	0.1	Small	Female	- Control	4	Large	Male	-2.4167	5.20	-0.46504	543	1.000
Control	0.1	Small	Female	- Control	4	Small	Female	1.8333	5.19	0.35316	554	1.000
Control	0.1	Small	Female	- Control	4	Small	Male	-7.0000	5.19	-1.34843	554	1.000
Control	0.1	Small	Female	- Treatment	-0.1	Large	Male	-11.2292	4.86	-2.31002	543	1.000
Control	0.1	Small	Female	- Treatment	-0.1	Small	Male	-3.1667	5.20	-0.60936	543	1.000
Control	0.1	Small	Female	- Treatment	0.1	Large	Male	-14.6667	4.86	-3.01717	543	1.000
Control	0.1	Small	Female	- Treatment	0.1	Small	Female	15.0000	5.20	2.88645	543	1.000
Control	0.1	Small	Female	- Treatment	0.1	Small	Male	-37.0833	5.20	-7.13594	543	< .001
Control	0.1	Small	Female	- Treatment	24	Large	Male	-30.7292	4.86	-6.32149	543	< .001
Control	0.1	Small	Female	- Treatment	24	Small	Female	6.0833	5.20	1.17061	543	1.000
Control	0.1	Small	Female	- Treatment	24	Small	Male	-16.3333	5.20	-3.14302	543	1.000
Control	0.1	Small	Female	- Treatment	4	Large	Male	-34.9167	4.86	-7.18292	543	< .001
Control	0.1	Small	Female	- Treatment	4	Small	Female	7.7500	5.20	1.49133	543	1.000
Control	0.1	Small	Female	- Treatment	4	Small	Male	-14.1667	5.20	-2.72609	543	1.000
Control	0.1	Small	Helpers	- Control	-0.1	Large	Female	-11.0625	5.20	-2.12875	543	1.000
Control	0.1	Small	Helpers	- Control	-0.1	Large	Male	-14.1458	5.20	-2.72208	543	1.000
Control	0.1	Small	Helpers	- Control	-0.1	Small	Female	-6.5625	5.19	-1.26415	554	1.000
Control	0.1	Small	Helpers	- Control	-0.1	Small	Male	-16.3958	5.19	-3.15837	554	1.000
Control	0.1	Small	Helpers	- Control	0.1	Large	Female	-16.0625	5.20	-3.09090	543	1.000
Control	0.1	Small	Helpers	- Control	0.1	Large	Male	-15.3125	5.20	-2.94658	543	1.000
Control	0.1	Small	Helpers	- Control	0.1	Small	Female	-9.2292	5.19	-1.77784	554	1.000
Control	0.1	Small	Helpers	- Control	0.1	Small	Male	-22.9792	5.19	-4.42653	554	0.013
Control	0.1	Small	Helpers	- Control	24	Large	Female	-13.1458	5.20	-2.52965	543	1.000
Control	0.1	Small	Helpers	- Control	24	Large	Male	-11.5625	5.20	-2.22497	543	1.000
Control	0.1	Small	Helpers	- Control	24	Small	Female	-7.3125	5.19	-1.40862	554	1.000
Control	0.1	Small	Helpers	- Control	24	Small	Helpers	-1.9306	5.19	-0.37189	554	1.000
Control	0.1	Small	Helpers	- Control	24	Small	Male	-17.7292	5.19	-3.41521	554	0.772
Control	0.1	Small	Helpers	- Control	4	Large	Female	-12.3125	5.20	-2.36929	543	1.000
Control	0.1	Small	Helpers	- Control	4	Large	Male	-11.6458	5.20	-2.24101	543	1.000
Control	0.1	Small	Helpers	- Control	4	Small	Female	-7.3958	5.19	-1.42468	554	1.000
Control	0.1	Small	Helpers	- Control	4	Small	Helpers	-2.3056	5.19	-0.44412	554	1.000
Control	0.1	Small	Helpers	- Control	4	Small	Male	-16.2292	5.19	-3.12626	554	1.000
Control	0.1	Small	Helpers	- Treatment	-0.1	Large	Female	-14.8958	4.86	-3.06431	543	1.000
Control	0.1	Small	Helpers	- Treatment	-0.1	Large	Male	-20.4583	4.86	-4.20861	543	0.034
Control	0.1	Small	Helpers	- Treatment	-0.1	Small	Female	-5.9792	5.20	-1.15057	543	1.000
Control	0.1	Small	Helpers	- Treatment	-0.1	Small	Male	-12.3958	5.20	-2.38533	543	1.000
Control	0.1	Small	Helpers	- Treatment	0.1	Large	Female	-14.6458	4.86	-3.01288	543	1.000
Control	0.1	Small	Helpers	- Treatment	0.1	Large	Male	-23.8958	4.86	-4.91576	543	0.001
Control	0.1	Small	Helpers	- Treatment	0.1	Small	Female	5.7708	5.20	1.11048	543	1.000
Control	0.1	Small	Helpers	- Treatment	0.1	Small	Helpers	3.4792	5.20	0.66950	543	1.000
Control	0.1	Small	Helpers	- Treatment	0.1	Small	Male	-46.3125	5.20	-8.91191	543	< .001
Control	0.1	Small	Helpers	- Treatment	24	Large	Female	-11.8958	4.86	-2.44716	543	1.000
Control	0.1	Small	Helpers	- Treatment	24	Large	Male	-39.9583	4.86	-8.22007	543	< .001

Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Control	0.1	Small	Helpers	- Treatment	24	Small	Female	-3.1458	5.20	-0.60535	543	1.000
Control	0.1	Small	Helpers	- Treatment	24	Small	Helpers	0.8542	5.20	0.16437	543	1.000
Control	0.1	Small	Helpers	- Treatment	24	Small	Male	-25.5625	5.20	-4.91899	543	0.001
Control	0.1	Small	Helpers	- Treatment	4	Large	Female	1.1667	4.86	0.24000	543	1.000
Control	0.1	Small	Helpers	- Treatment	4	Large	Male	-44.1458	4.86	-9.08151	543	< .001
Control	0.1	Small	Helpers	- Treatment	4	Small	Female	-1.4792	5.20	-0.28464	543	1.000
Control	0.1	Small	Helpers	- Treatment	4	Small	Helpers	-0.8333	5.20	-0.16036	543	1.000
Control	0.1	Small	Helpers	- Treatment	4	Small	Male	-23.3958	5.20	-4.50206	543	0.009
Control	0.1	Small	Male	- Control	24	Small	Male	5.2500	5.19	1.01132	554	1.000
Control	0.1	Small	Male	- Control	4	Small	Male	6.7500	5.19	1.30027	554	1.000
Control	0.1	Small	Male	- Treatment	0.1	Small	Male	-23.3333	5.20	-4.49003	543	0.010
Control	0.1	Small	Male	- Treatment	24	Small	Male	-2.5833	5.20	-0.49711	543	1.000
Control	0.1	Small	Male	- Treatment	4	Small	Male	-0.4167	5.20	-0.08018	543	1.000
Control	24	Large	Female	- Control	-0.1	Large	Male	-1.0000	5.19	-0.19263	554	1.000
Control	24	Large	Female	- Control	-0.1	Small	Female	6.5833	5.20	1.26683	543	1.000
Control	24	Large	Female	- Control	-0.1	Small	Male	-3.2500	5.20	-0.62540	543	1.000
Control	24	Large	Female	- Control	0.1	Large	Male	-2.1667	5.19	-0.41737	554	1.000
Control	24	Large	Female	- Control	0.1	Small	Female	3.9167	5.20	0.75368	543	1.000
Control	24	Large	Female	- Control	0.1	Small	Male	-9.8333	5.20	-1.89223	543	1.000
Control	24	Large	Female	- Control	24	Large	Male	1.5833	5.19	0.30500	554	1.000
Control	24	Large	Female	- Control	24	Small	Female	5.8333	5.20	1.12251	543	1.000
Control	24	Large	Female	- Control	24	Small	Male	-4.5833	5.20	-0.88197	543	1.000
Control	24	Large	Female	- Control	4	Large	Male	1.5000	5.19	0.28895	554	1.000
Control	24	Large	Female	- Control	4	Small	Female	5.7500	5.20	1.10647	543	1.000
Control	24	Large	Female	- Control	4	Small	Male	-3.0833	5.20	-0.59333	543	1.000
Control	24	Large	Female	- Treatment	-0.1	Large	Male	-7.3125	4.86	-1.50430	543	1.000
Control	24	Large	Female	- Treatment	-0.1	Small	Female	7.1667	5.20	1.37908	543	1.000
Control	24	Large	Female	- Treatment	-0.1	Small	Male	0.7500	5.20	0.14432	543	1.000
Control	24	Large	Female	- Treatment	0.1	Large	Male	-10.7500	4.86	-2.21145	543	1.000
Control	24	Large	Female	- Treatment	0.1	Small	Female	18.9167	5.20	3.64013	543	0.337
Control	24	Large	Female	- Treatment	0.1	Small	Male	-33.1667	5.20	-6.38226	543	< .001
Control	24	Large	Female	- Treatment	24	Large	Female	1.2500	4.86	0.25715	543	1.000
Control	24	Large	Female	- Treatment	24	Large	Male	-26.8125	4.86	-5.51576	543	< .001
Control	24	Large	Female	- Treatment	24	Small	Female	10.0000	5.20	1.92430	543	1.000
Control	24	Large	Female	- Treatment	24	Small	Male	-12.4167	5.20	-2.38934	543	1.000
Control	24	Large	Female	- Treatment	4	Large	Male	-31.0000	4.86	-6.37720	543	< .001
Control	24	Large	Female	- Treatment	4	Small	Female	11.6667	5.20	2.24501	543	1.000
Control	24	Large	Female	- Treatment	4	Small	Male	-10.2500	5.20	-1.97241	543	1.000
Control	24	Large	Helpers	- Control	-0.1	Large	Female	-7.3446	5.19	-1.41482	554	1.000
Control	24	Large	Helpers	- Control	-0.1	Large	Male	-10.4280	5.19	-2.00877	554	1.000
Control	24	Large	Helpers	- Control	-0.1	Small	Female	-2.8446	5.20	-0.54739	543	1.000
Control	24	Large	Helpers	- Control	-0.1	Small	Helpers	1.2248	5.20	0.23569	543	1.000
Control	24	Large	Helpers	- Control	-0.1	Small	Male	-12.6780	5.20	-2.43962	543	1.000
Control	24	Large	Helpers	- Control	0.1	Large	Female	-12.3446	5.19	-2.37798	554	1.000
Control	24	Large	Helpers	- Control	0.1	Large	Male	-11.5946	5.19	-2.23350	554	1.000
Control	24	Large	Helpers	- Control	0.1	Small	Female	-5.5113	5.20	-1.06054	543	1.000
Control	24	Large	Helpers	- Control	0.1	Small	Helpers	3.7179	5.20	0.71543	543	1.000
Control	24	Large	Helpers	- Control	0.1	Small	Male	-19.2613	5.20	-3.70645	543	0.261
Control	24	Large	Helpers	- Control	24	Large	Female	-9.4280	5.19	-1.81613	554	1.000
Control	24	Large	Helpers	- Control	24	Large	Male	-7.8446	5.19	-1.51113	554	1.000
Control	24	Large	Helpers	- Control	24	Small	Female	-3.5946	5.20	-0.69172	543	1.000
Control	24	Large	Helpers	- Control	24	Small	Helpers	1.7873	5.20	0.34393	543	1.000
Control	24	Large	Helpers	- Control	24	Small	Male	-14.0113	5.20	-2.69619	543	1.000
Control	24	Large	Helpers	- Control	4	Large	Female	-8.5946	5.19	-1.65561	554	1.000
Control	24	Large	Helpers	- Control	4	Large	Male	-7.9280	5.19	-1.52719	554	1.000
Control	24	Large	Helpers	- Control	4	Small	Female	-3.6780	5.20	-0.70775	543	1.000
Control	24	Large	Helpers	- Control	4	Small	Helpers	1.4123	5.20	0.27177	543	1.000
Control	24	Large	Helpers	- Control	4	Small	Male	-12.5113	5.20	-2.40755	543	1.000
Control	24	Large	Helpers	- Treatment	-0.1	Large	Female	-11.1780	4.86	-2.29949	543	1.000
Control	24	Large	Helpers	- Treatment	-0.1	Large	Male	-16.7405	4.86	-3.44379	543	0.697

## Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Control	24	Large	Helpers	- Treatment	-0.1	Small	Female	-2.2613	5.20	-0.43514	543	1.000
Control	24	Large	Helpers	- Treatment	-0.1	Small	Helpers	0.3429	5.20	0.06598	543	1.000
Control	24	Large	Helpers	- Treatment	-0.1	Small	Male	-8.6780	5.20	-1.66990	543	1.000
Control	24	Large	Helpers	- Treatment	0.1	Large	Female	-10.9280	4.86	-2.24806	543	1.000
Control	24	Large	Helpers	- Treatment	0.1	Large	Male	-20.1780	4.86	-4.15094	543	0.043
Control	24	Large	Helpers	- Treatment	0.1	Small	Female	9.4887	5.20	1.82591	543	1.000
Control	24	Large	Helpers	- Treatment	0.1	Small	Helpers	7.1970	5.20	1.38492	543	1.000
Control	24	Large	Helpers	- Treatment	0.1	Small	Male	-42.5946	5.20	-8.19648	543	< .001
Control	24	Large	Helpers	- Treatment	24	Large	Female	-8.1780	4.86	-1.68234	543	1.000
Control	24	Large	Helpers	- Treatment	24	Large	Helpers	3.2934	4.86	0.67750	543	1.000
Control	24	Large	Helpers	- Treatment	24	Large	Male	-36.2405	4.86	-7.45525	543	< .001
Control	24	Large	Helpers	- Treatment	24	Small	Female	0.5720	5.20	0.11007	543	1.000
Control	24	Large	Helpers	- Treatment	24	Small	Helpers	4.5720	5.20	0.87979	543	1.000
Control	24	Large	Helpers	- Treatment	24	Small	Male	-21.8446	5.20	-4.20356	543	0.035
Control	24	Large	Helpers	- Treatment	4	Large	Female	4.8845	4.86	1.00483	543	1.000
Control	24	Large	Helpers	- Treatment	4	Large	Male	-40.4280	4.86	-8.31669	543	< .001
Control	24	Large	Helpers	- Treatment	4	Small	Female	2.2387	5.20	0.43079	543	1.000
Control	24	Large	Helpers	- Treatment	4	Small	Helpers	2.8845	5.20	0.55507	543	1.000
Control	24	Large	Helpers	- Treatment	4	Small	Male	-19.6780	5.20	-3.78663	543	0.191
Control	24	Large	Male	- Control	-0.1	Small	Male	-4.8333	5.20	-0.93008	543	1.000
Control	24	Large	Male	- Control	0.1	Small	Male	-11.4167	5.20	-2.19691	543	1.000
Control	24	Large	Male	- Control	24	Small	Male	-6.1667	5.20	-1.18665	543	1.000
Control	24	Large	Male	- Control	4	Small	Male	-4.6667	5.20	-0.89801	543	1.000
Control	24	Large	Male	- Treatment	-0.1	Small	Male	-0.8333	5.20	-0.16036	543	1.000
Control	24	Large	Male	- Treatment	0.1	Small	Male	-34.7500	5.20	-6.68694	543	< .001
Control	24	Large	Male	- Treatment	24	Large	Male	-28.3958	4.86	-5.84148	543	< .001
Control	24	Large	Male	- Treatment	24	Small	Male	-14.0000	5.20	-2.69402	543	1.000
Control	24	Large	Male	- Treatment	4	Small	Male	-11.8333	5.20	-2.27709	543	1.000
Control	24	Small	Female	- Control	-0.1	Large	Male	-6.8333	5.20	-1.31494	543	1.000
Control	24	Small	Female	- Control	-0.1	Small	Male	-9.0833	5.19	-1.74974	554	1.000
Control	24	Small	Female	- Control	0.1	Large	Male	-8.0000	5.20	-1.53944	543	1.000
Control	24	Small	Female	- Control	0.1	Small	Male	-15.6667	5.19	-3.01791	554	1.000
Control	24	Small	Female	- Control	24	Large	Male	-4.2500	5.20	-0.81783	543	1.000
Control	24	Small	Female	- Control	24	Small	Male	-10.4167	5.19	-2.00659	554	1.000
Control	24	Small	Female	- Control	4	Large	Male	-4.3333	5.20	-0.83386	543	1.000
Control	24	Small	Female	- Control	4	Small	Male	-8.9167	5.19	-1.71764	554	1.000
Control	24	Small	Female	- Treatment	-0.1	Large	Male	-13.1458	4.86	-2.70431	543	1.000
Control	24	Small	Female	- Treatment	-0.1	Small	Male	-5.0833	5.20	-0.97818	543	1.000
Control	24	Small	Female	- Treatment	0.1	Large	Male	-16.5833	4.86	-3.41146	543	0.783
Control	24	Small	Female	- Treatment	0.1	Small	Male	-39.0000	5.20	-7.50476	543	< .001
Control	24	Small	Female	- Treatment	24	Large	Male	-32.6458	4.86	-6.71577	543	< .001
Control	24	Small	Female	- Treatment	24	Small	Female	4.1667	5.20	0.80179	543	1.000
Control	24	Small	Female	- Treatment	24	Small	Male	-18.2500	5.20	-3.51184	543	0.544
Control	24	Small	Female	- Treatment	4	Large	Male	-36.8333	4.86	-7.57721	543	< .001
Control	24	Small	Female	- Treatment	4	Small	Male	-16.0833	5.20	-3.09491	543	1.000
Control	24	Small	Helpers	- Control	-0.1	Large	Female	-9.1319	5.20	-1.75726	543	1.000
Control	24	Small	Helpers	- Control	-0.1	Large	Male	-12.2153	5.20	-2.35058	543	1.000
Control	24	Small	Helpers	- Control	-0.1	Small	Female	-4.6319	5.19	-0.89226	554	1.000
Control	24	Small	Helpers	- Control	-0.1	Small	Male	-14.4653	5.19	-2.78648	554	1.000
Control	24	Small	Helpers	- Control	0.1	Large	Female	-14.1319	5.20	-2.71941	543	1.000
Control	24	Small	Helpers	- Control	0.1	Large	Male	-13.3819	5.20	-2.57509	543	1.000
Control	24	Small	Helpers	- Control	0.1	Small	Female	-7.2986	5.19	-1.40595	554	1.000
Control	24	Small	Helpers	- Control	0.1	Small	Male	-21.0486	5.19	-4.05464	554	0.065
Control	24	Small	Helpers	- Control	24	Large	Female	-11.2153	5.20	-2.15815	543	1.000
Control	24	Small	Helpers	- Control	24	Large	Male	-9.6319	5.20	-1.85347	543	1.000
Control	24	Small	Helpers	- Control	24	Small	Female	-5.3819	5.19	-1.03674	554	1.000
Control	24	Small	Helpers	- Control	24	Small	Male	-15.7986	5.19	-3.04332	554	1.000
Control	24	Small	Helpers	- Control	4	Large	Female	-10.3819	5.20	-1.99780	543	1.000
Control	24	Small	Helpers	- Control	4	Large	Male	-9.7153	5.20	-1.86951	543	1.000
Control	24	Small	Helpers	- Control	4	Small	Female	-5.4653	5.19	-1.05279	554	1.000



## Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Control	24	Small	Helpers	- Control	4	Small	Male	-14.2986	5.19	-2.75438	554	1.000
Control	24	Small	Helpers	- Treatment	-0.1	Large	Female	-12.9653	4.86	-2.66717	543	1.000
Control	24	Small	Helpers	- Treatment	-0.1	Large	Male	-18.5278	4.86	-3.81146	543	0.174
Control	24	Small	Helpers	- Treatment	-0.1	Small	Female	-4.0486	5.20	-0.77907	543	1.000
Control	24	Small	Helpers	- Treatment	-0.1	Small	Male	-10.4653	5.20	-2.01383	543	1.000
Control	24	Small	Helpers	- Treatment	0.1	Large	Female	-12.7153	4.86	-2.61574	543	1.000
Control	24	Small	Helpers	- Treatment	0.1	Large	Male	-21.9653	4.86	-4.51861	543	0.009
Control	24	Small	Helpers	- Treatment	0.1	Small	Female	7.7014	5.20	1.48198	543	1.000
Control	24	Small	Helpers	- Treatment	0.1	Small	Male	-44.3819	5.20	-8.54041	543	< .001
Control	24	Small	Helpers	- Treatment	24	Large	Female	-9.9653	4.86	-2.05002	543	1.000
Control	24	Small	Helpers	- Treatment	24	Large	Male	-38.0278	4.86	-7.82293	543	< .001
Control	24	Small	Helpers	- Treatment	24	Small	Female	-1.2153	5.20	-0.23386	543	1.000
Control	24	Small	Helpers	- Treatment	24	Small	Helpers	2.7847	5.20	0.53586	543	1.000
Control	24	Small	Helpers	- Treatment	24	Small	Male	-23.6319	5.20	-4.54749	543	0.008
Control	24	Small	Helpers	- Treatment	4	Large	Female	3.0972	4.86	0.63715	543	1.000
Control	24	Small	Helpers	- Treatment	4	Large	Male	-42.2153	4.86	-8.68436	543	< .001
Control	24	Small	Helpers	- Treatment	4	Small	Female	0.4514	5.20	0.08686	543	1.000
Control	24	Small	Helpers	- Treatment	4	Small	Male	-21.4653	5.20	-4.13056	543	0.047
Control	24	Small	Male	- Treatment	24	Small	Male	-7.8333	5.20	-1.50737	543	1.000
Control	4	Large	Female	- Control	-0.1	Large	Male	-1.8333	5.19	-0.35316	554	1.000
Control	4	Large	Female	- Control	-0.1	Small	Female	5.7500	5.20	1.10647	543	1.000
Control	4	Large	Female	- Control	-0.1	Small	Male	-4.0833	5.20	-0.78576	543	1.000
Control	4	Large	Female	- Control	0.1	Large	Male	-3.0000	5.19	-0.57790	554	1.000
Control	4	Large	Female	- Control	0.1	Small	Female	3.0833	5.20	0.59333	543	1.000
Control	4	Large	Female	- Control	0.1	Small	Male	-10.6667	5.20	-2.05258	543	1.000
Control	4	Large	Female	- Control	24	Large	Female	-0.8333	5.19	-0.16053	554	1.000
Control	4	Large	Female	- Control	24	Large	Male	0.7500	5.19	0.14447	554	1.000
Control	4	Large	Female	- Control	24	Small	Female	5.0000	5.20	0.96215	543	1.000
Control	4	Large	Female	- Control	24	Small	Male	-5.4167	5.20	-1.04233	543	1.000
Control	4	Large	Female	- Control	4	Large	Male	0.6667	5.19	0.12842	554	1.000
Control	4	Large	Female	- Control	4	Small	Female	4.9167	5.20	0.94611	543	1.000
Control	4	Large	Female	- Control	4	Small	Male	-3.9167	5.20	-0.75368	543	1.000
Control	4	Large	Female	- Treatment	-0.1	Large	Male	-8.1458	4.86	-1.67573	543	1.000
Control	4	Large	Female	- Treatment	-0.1	Small	Female	6.3333	5.20	1.21872	543	1.000
Control	4	Large	Female	- Treatment	-0.1	Small	Male	-0.0833	5.20	-0.01604	543	1.000
Control	4	Large	Female	- Treatment	0.1	Large	Male	-11.5833	4.86	-2.38288	543	1.000
Control	4	Large	Female	- Treatment	0.1	Small	Female	18.0833	5.20	3.47977	543	0.612
Control	4	Large	Female	- Treatment	0.1	Small	Male	-34.0000	5.20	-6.54261	543	< .001
Control	4	Large	Female	- Treatment	24	Large	Female	0.4167	4.86	0.08572	543	1.000
Control	4	Large	Female	- Treatment	24	Large	Male	-27.6458	4.86	-5.68719	543	< .001
Control	4	Large	Female	- Treatment	24	Small	Female	9.1667	5.20	1.76394	543	1.000
Control	4	Large	Female	- Treatment	24	Small	Male	-13.2500	5.20	-2.54970	543	1.000
Control	4	Large	Female	- Treatment	4	Large	Female	13.4792	4.86	2.77288	543	1.000
Control	4	Large	Female	- Treatment	4	Large	Male	-31.8333	4.86	-6.54863	543	< .001
Control	4	Large	Female	- Treatment	4	Small	Female	10.8333	5.20	2.08466	543	1.000
Control	4	Large	Female	- Treatment	4	Small	Male	-11.0833	5.20	-2.13276	543	1.000
Control	4	Large	Helpers	- Control	-0.1	Large	Female	-7.2652	5.19	-1.39951	554	1.000
Control	4	Large	Helpers	- Control	-0.1	Large	Male	-10.3485	5.19	-1.99346	554	1.000
Control	4	Large	Helpers	- Control	-0.1	Small	Female	-2.7652	5.20	-0.53210	543	1.000
Control	4	Large	Helpers	- Control	-0.1	Small	Helpers	1.3043	5.20	0.25098	543	1.000
Control	4	Large	Helpers	- Control	-0.1	Small	Male	-12.5985	5.20	-2.42433	543	1.000
Control	4	Large	Helpers	- Control	0.1	Large	Female	-12.2652	5.19	-2.36267	554	1.000
Control	4	Large	Helpers	- Control	0.1	Large	Male	-11.5152	5.19	-2.21820	554	1.000
Control	4	Large	Helpers	- Control	0.1	Small	Female	-5.4318	5.20	-1.04525	543	1.000
Control	4	Large	Helpers	- Control	0.1	Small	Helpers	3.7973	5.20	0.73072	543	1.000
Control	4	Large	Helpers	- Control	0.1	Small	Male	-19.1818	5.20	-3.69116	543	0.277
Control	4	Large	Helpers	- Control	24	Large	Female	-9.3485	5.19	-1.80083	554	1.000
Control	4	Large	Helpers	- Control	24	Large	Helpers	0.0795	5.19	0.01531	554	1.000
Control	4	Large	Helpers	- Control	24	Large	Male	-7.7652	5.19	-1.49582	554	1.000
Control	4	Large	Helpers	- Control	24	Small	Female	-3.5152	5.20	-0.67643	543	1.000

## Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Control	4	Large	Helpers	- Control	24	Small	Helpers	1.8668	5.20	0.35922	543	1.000
Control	4	Large	Helpers	- Control	24	Small	Male	-13.9318	5.20	-2.68090	543	1.000
Control	4	Large	Helpers	- Control	4	Large	Female	-8.5152	5.19	-1.64030	554	1.000
Control	4	Large	Helpers	- Control	4	Large	Male	-7.8485	5.19	-1.51188	554	1.000
Control	4	Large	Helpers	- Control	4	Small	Female	-3.5985	5.20	-0.69246	543	1.000
Control	4	Large	Helpers	- Control	4	Small	Helpers	1.4918	5.20	0.28706	543	1.000
Control	4	Large	Helpers	- Control	4	Small	Male	-12.4318	5.20	-2.39226	543	1.000
Control	4	Large	Helpers	- Treatment	-0.1	Large	Female	-11.0985	4.86	-2.28314	543	1.000
Control	4	Large	Helpers	- Treatment	-0.1	Large	Male	-16.6610	4.86	-3.42744	543	0.739
Control	4	Large	Helpers	- Treatment	-0.1	Small	Female	-2.1818	5.20	-0.41985	543	1.000
Control	4	Large	Helpers	- Treatment	-0.1	Small	Helpers	0.4223	5.20	0.08127	543	1.000
Control	4	Large	Helpers	- Treatment	-0.1	Small	Male	-8.5985	5.20	-1.65461	543	1.000
Control	4	Large	Helpers	- Treatment	0.1	Large	Female	-10.8485	4.86	-2.23171	543	1.000
Control	4	Large	Helpers	- Treatment	0.1	Large	Male	-20.0985	4.86	-4.13459	543	0.046
Control	4	Large	Helpers	- Treatment	0.1	Small	Female	9.5682	5.20	1.84120	543	1.000
Control	4	Large	Helpers	- Treatment	0.1	Small	Helpers	7.2765	5.20	1.40021	543	1.000
Control	4	Large	Helpers	- Treatment	0.1	Small	Male	-42.5152	5.20	-8.18119	543	< .001
Control	4	Large	Helpers	- Treatment	24	Large	Female	-8.0985	4.86	-1.66599	543	1.000
Control	4	Large	Helpers	- Treatment	24	Large	Helpers	3.3728	4.86	0.69385	543	1.000
Control	4	Large	Helpers	- Treatment	24	Large	Male	-36.1610	4.86	-7.43890	543	< .001
Control	4	Large	Helpers	- Treatment	24	Small	Female	0.6515	5.20	0.12537	543	1.000
Control	4	Large	Helpers	- Treatment	24	Small	Helpers	4.6515	5.20	0.89509	543	1.000
Control	4	Large	Helpers	- Treatment	24	Small	Male	-21.7652	5.20	-4.18827	543	0.037
Control	4	Large	Helpers	- Treatment	4	Large	Female	4.9640	4.86	1.02117	543	1.000
Control	4	Large	Helpers	- Treatment	4	Large	Helpers	2.2884	4.86	0.47076	543	1.000
Control	4	Large	Helpers	- Treatment	4	Large	Male	-40.3485	4.86	-8.30034	543	< .001
Control	4	Large	Helpers	- Treatment	4	Small	Female	2.3182	5.20	0.44608	543	1.000
Control	4	Large	Helpers	- Treatment	4	Small	Helpers	2.9640	5.20	0.57036	543	1.000
Control	4	Large	Helpers	- Treatment	4	Small	Male	-19.5985	5.20	-3.77134	543	0.203
Control	4	Large	Male	- Control	-0.1	Small	Male	-4.7500	5.20	-0.91404	543	1.000
Control	4	Large	Male	- Control	0.1	Small	Male	-11.3333	5.20	-2.18087	543	1.000
Control	4	Large	Male	- Control	24	Large	Male	0.0833	5.19	0.01605	554	1.000
Control	4	Large	Male	- Control	24	Small	Male	-6.0833	5.20	-1.17061	543	1.000
Control	4	Large	Male	- Control	4	Small	Male	-4.5833	5.20	-0.88197	543	1.000
Control	4	Large	Male	- Treatment	-0.1	Small	Male	-0.7500	5.20	-0.14432	543	1.000
Control	4	Large	Male	- Treatment	0.1	Small	Male	-34.6667	5.20	-6.67090	543	< .001
Control	4	Large	Male	- Treatment	24	Large	Male	-28.3125	4.86	-5.82434	543	< .001
Control	4	Large	Male	- Treatment	24	Small	Male	-13.9167	5.20	-2.67798	543	1.000
Control	4	Large	Male	- Treatment	4	Large	Male	-32.5000	4.86	-6.68577	543	< .001
Control	4	Large	Male	- Treatment	4	Small	Male	-11.7500	5.20	-2.26105	543	1.000
Control	4	Small	Female	- Control	-0.1	Large	Male	-6.7500	5.20	-1.29890	543	1.000
Control	4	Small	Female	- Control	-0.1	Small	Male	-9.0000	5.19	-1.73369	554	1.000
Control	4	Small	Female	- Control	0.1	Large	Male	-7.9167	5.20	-1.52340	543	1.000
Control	4	Small	Female	- Control	0.1	Small	Male	-15.5833	5.19	-3.00185	554	1.000
Control	4	Small	Female	- Control	24	Large	Male	-4.1667	5.20	-0.80179	543	1.000
Control	4	Small	Female	- Control	24	Small	Female	0.0833	5.19	0.01605	554	1.000
Control	4	Small	Female	- Control	24	Small	Male	-10.3333	5.19	-1.99053	554	1.000
Control	4	Small	Female	- Control	4	Large	Male	-4.2500	5.20	-0.81783	543	1.000
Control	4	Small	Female	- Control	4	Small	Male	-8.8333	5.19	-1.70159	554	1.000
Control	4	Small	Female	- Treatment	-0.1	Large	Male	-13.0625	4.86	-2.68717	543	1.000
Control	4	Small	Female	- Treatment	-0.1	Small	Male	-5.0000	5.20	-0.96215	543	1.000
Control	4	Small	Female	- Treatment	0.1	Large	Male	-16.5000	4.86	-3.39432	543	0.833
Control	4	Small	Female	- Treatment	0.1	Small	Male	-38.9167	5.20	-7.48873	543	< .001
Control	4	Small	Female	- Treatment	24	Large	Male	-32.5625	4.86	-6.69863	543	< .001
Control	4	Small	Female	- Treatment	24	Small	Female	4.2500	5.20	0.81783	543	1.000
Control	4	Small	Female	- Treatment	24	Small	Male	-18.1667	5.20	-3.49581	543	0.577
Control	4	Small	Female	- Treatment	4	Large	Male	-36.7500	4.86	-7.56007	543	< .001
Control	4	Small	Female	- Treatment	4	Small	Female	5.9167	5.20	1.13854	543	1.000
Control	4	Small	Female	- Treatment	4	Small	Male	-16.0000	5.20	-3.07888	543	1.000
Control	4	Small	Helpers	- Control	-0.1	Large	Female	-8.7569	5.20	-1.68510	543	1.000

## Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Control	4	Small	Helpers	- Control	-0.1	Large	Male	-11.8403	5.20	-2.27842	543	1.000
Control	4	Small	Helpers	- Control	-0.1	Small	Female	-4.2569	5.19	-0.82003	554	1.000
Control	4	Small	Helpers	- Control	-0.1	Small	Male	-14.0903	5.19	-2.71424	554	1.000
Control	4	Small	Helpers	- Control	0.1	Large	Female	-13.7569	5.20	-2.64725	543	1.000
Control	4	Small	Helpers	- Control	0.1	Large	Male	-13.0069	5.20	-2.50292	543	1.000
Control	4	Small	Helpers	- Control	0.1	Small	Female	-6.9236	5.19	-1.33371	554	1.000
Control	4	Small	Helpers	- Control	0.1	Small	Male	-20.6736	5.19	-3.98241	554	0.087
Control	4	Small	Helpers	- Control	24	Large	Female	-10.8403	5.20	-2.08599	543	1.000
Control	4	Small	Helpers	- Control	24	Large	Male	-9.2569	5.20	-1.78131	543	1.000
Control	4	Small	Helpers	- Control	24	Small	Female	-5.0069	5.19	-0.96450	554	1.000
Control	4	Small	Helpers	- Control	24	Small	Helpers	0.3750	5.19	0.07224	554	1.000
Control	4	Small	Helpers	- Control	24	Small	Male	-15.4236	5.19	-2.97109	554	1.000
Control	4	Small	Helpers	- Control	4	Large	Female	-10.0069	5.20	-1.92563	543	1.000
Control	4	Small	Helpers	- Control	4	Large	Male	-9.3403	5.20	-1.79735	543	1.000
Control	4	Small	Helpers	- Control	4	Small	Female	-5.0903	5.19	-0.98055	554	1.000
Control	4	Small	Helpers	- Control	4	Small	Male	-13.9236	5.19	-2.68214	554	1.000
Control	4	Small	Helpers	- Treatment	-0.1	Large	Female	-12.5903	4.86	-2.59002	543	1.000
Control	4	Small	Helpers	- Treatment	-0.1	Large	Male	-18.1528	4.86	-3.73432	543	0.235
Control	4	Small	Helpers	- Treatment	-0.1	Small	Female	-3.6736	5.20	-0.70691	543	1.000
Control	4	Small	Helpers	- Treatment	-0.1	Small	Male	-10.0903	5.20	-1.94167	543	1.000
Control	4	Small	Helpers	- Treatment	0.1	Large	Female	-12.3403	4.86	-2.53859	543	1.000
Control	4	Small	Helpers	- Treatment	0.1	Large	Male	-21.5903	4.86	-4.44147	543	0.012
Control	4	Small	Helpers	- Treatment	0.1	Small	Female	8.0764	5.20	1.55414	543	1.000
Control	4	Small	Helpers	- Treatment	0.1	Small	Male	-44.0069	5.20	-8.46825	543	< .001
Control	4	Small	Helpers	- Treatment	24	Large	Female	-9.5903	4.86	-1.97287	543	1.000
Control	4	Small	Helpers	- Treatment	24	Large	Male	-37.6528	4.86	-7.74578	543	< .001
Control	4	Small	Helpers	- Treatment	24	Small	Female	-0.8403	5.20	-0.16169	543	1.000
Control	4	Small	Helpers	- Treatment	24	Small	Helpers	3.1597	5.20	0.60802	543	1.000
Control	4	Small	Helpers	- Treatment	24	Small	Male	-23.2569	5.20	-4.47533	543	0.010
Control	4	Small	Helpers	- Treatment	4	Large	Female	3.4722	4.86	0.71429	543	1.000
Control	4	Small	Helpers	- Treatment	4	Large	Male	-41.8403	4.86	-8.60722	543	< .001
Control	4	Small	Helpers	- Treatment	4	Small	Female	0.8264	5.20	0.15902	543	1.000
Control	4	Small	Helpers	- Treatment	4	Small	Helpers	1.4722	5.20	0.28330	543	1.000
Control	4	Small	Helpers	- Treatment	4	Small	Male	-21.0903	5.20	-4.05840	543	0.064
Control	4	Small	Male	- Control	24	Small	Male	-1.5000	5.19	-0.28895	554	1.000
Control	4	Small	Male	- Treatment	24	Small	Male	-9.3333	5.20	-1.79601	543	1.000
Control	4	Small	Male	- Treatment	4	Small	Male	-7.1667	5.20	-1.37908	543	1.000
Treatment	-0.1	Large	Female	- Control	-0.1	Large	Male	0.7500	4.86	0.15429	543	1.000
Treatment	-0.1	Large	Female	- Control	-0.1	Small	Female	8.3333	4.86	1.71430	543	1.000
Treatment	-0.1	Large	Female	- Control	-0.1	Small	Male	-1.5000	4.86	-0.30857	543	1.000
Treatment	-0.1	Large	Female	- Control	0.1	Large	Female	-1.1667	4.86	-0.24000	543	1.000
Treatment	-0.1	Large	Female	- Control	0.1	Large	Male	-0.4167	4.86	-0.08572	543	1.000
Treatment	-0.1	Large	Female	- Control	0.1	Small	Female	5.6667	4.86	1.16572	543	1.000
Treatment	-0.1	Large	Female	- Control	0.1	Small	Male	-8.0833	4.86	-1.66287	543	1.000
Treatment	-0.1	Large	Female	- Control	24	Large	Female	1.7500	4.86	0.36000	543	1.000
Treatment	-0.1	Large	Female	- Control	24	Large	Male	3.3333	4.86	0.68572	543	1.000
Treatment	-0.1	Large	Female	- Control	24	Small	Female	7.5833	4.86	1.56001	543	1.000
Treatment	-0.1	Large	Female	- Control	24	Small	Male	-2.8333	4.86	-0.58286	543	1.000
Treatment	-0.1	Large	Female	- Control	4	Large	Female	2.5833	4.86	0.53143	543	1.000
Treatment	-0.1	Large	Female	- Control	4	Large	Male	3.2500	4.86	0.66858	543	1.000
Treatment	-0.1	Large	Female	- Control	4	Small	Female	7.5000	4.86	1.54287	543	1.000
Treatment	-0.1	Large	Female	- Control	4	Small	Male	-1.3333	4.86	-0.27429	543	1.000
Treatment	-0.1	Large	Female	- Treatment	-0.1	Large	Male	-5.5625	4.50	-1.23728	554	1.000
Treatment	-0.1	Large	Female	- Treatment	-0.1	Small	Female	8.9167	4.86	1.83430	543	1.000
Treatment	-0.1	Large	Female	- Treatment	-0.1	Small	Male	2.5000	4.86	0.51429	543	1.000
Treatment	-0.1	Large	Female	- Treatment	0.1	Large	Female	0.2500	4.50	0.05561	554	1.000
Treatment	-0.1	Large	Female	- Treatment	0.1	Large	Male	-9.0000	4.50	-2.00189	554	1.000
Treatment	-0.1	Large	Female	- Treatment	0.1	Small	Female	20.6667	4.86	4.25147	543	0.028
Treatment	-0.1	Large	Female	- Treatment	0.1	Small	Male	-31.4167	4.86	-6.46292	543	< .001
Treatment	-0.1	Large	Female	- Treatment	24	Large	Female	3.0000	4.50	0.66730	554	1.000

Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison													
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni	
Treatment	-0.1	Large	Female	-	Treatment	24	Large	Male	-25.0625	4.50	-5.57472	554	< .001
Treatment	-0.1	Large	Female	-	Treatment	24	Small	Female	11.7500	4.86	2.41716	543	1.000
Treatment	-0.1	Large	Female	-	Treatment	24	Small	Male	-10.6667	4.86	-2.19431	543	1.000
Treatment	-0.1	Large	Female	-	Treatment	4	Large	Female	16.0625	4.50	3.57283	554	0.433
Treatment	-0.1	Large	Female	-	Treatment	4	Large	Male	-29.2500	4.50	-6.50616	554	< .001
Treatment	-0.1	Large	Female	-	Treatment	4	Small	Female	13.4167	4.86	2.76002	543	1.000
Treatment	-0.1	Large	Female	-	Treatment	4	Small	Male	-8.5000	4.86	-1.74859	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	-0.1	Large	Female	-8.5439	4.86	-1.75762	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	-0.1	Large	Male	-11.6272	4.86	-2.39191	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	-0.1	Small	Female	-4.0439	4.86	-0.83190	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	-0.1	Small	Helpers	0.0255	4.86	0.00526	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	-0.1	Small	Male	-13.8772	4.86	-2.85477	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	0.1	Large	Female	-13.5439	4.86	-2.78620	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	0.1	Large	Helpers	-0.0385	4.86	-0.00793	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	0.1	Large	Male	-12.7939	4.86	-2.63191	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	0.1	Small	Female	-6.7106	4.86	-1.38047	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	0.1	Small	Helpers	2.5186	4.86	0.51812	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	0.1	Small	Male	-20.4606	4.86	-4.20907	543	0.034
Treatment	-0.1	Large	Helpers	-	Control	24	Large	Female	-10.6272	4.86	-2.18619	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	24	Large	Helpers	-1.1993	4.86	-0.24671	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	24	Large	Male	-9.0439	4.86	-1.86048	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	24	Small	Female	-4.7939	4.86	-0.98618	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	24	Small	Helpers	0.5880	4.86	0.12097	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	24	Small	Male	-15.2106	4.86	-3.12906	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	4	Large	Female	-9.7939	4.86	-2.01476	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	4	Large	Helpers	-1.2787	4.86	-0.26305	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	4	Large	Male	-9.1272	4.86	-1.87762	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	4	Small	Female	-4.8772	4.86	-1.00333	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	4	Small	Helpers	0.2130	4.86	0.04383	543	1.000
Treatment	-0.1	Large	Helpers	-	Control	4	Small	Male	-13.7106	4.86	-2.82048	543	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	-0.1	Large	Female	-12.3772	4.50	-2.75310	554	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	-0.1	Large	Male	-17.9397	4.50	-3.99038	554	0.084
Treatment	-0.1	Large	Helpers	-	Treatment	-0.1	Small	Female	-3.4606	4.86	-0.71189	543	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	-0.1	Small	Helpers	-0.8564	4.86	-0.17618	543	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	-0.1	Small	Male	-9.8772	4.86	-2.03191	543	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	0.1	Large	Female	-12.1272	4.50	-2.69749	554	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	0.1	Large	Helpers	0.4985	4.50	0.11089	554	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	0.1	Large	Male	-21.3772	4.50	-4.75500	554	0.003
Treatment	-0.1	Large	Helpers	-	Treatment	0.1	Small	Female	8.2894	4.86	1.70527	543	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	0.1	Small	Helpers	5.9978	4.86	1.23384	543	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	0.1	Small	Male	-43.7939	4.86	-9.00911	543	< .001
Treatment	-0.1	Large	Helpers	-	Treatment	24	Large	Female	-9.3772	4.50	-2.08580	554	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	24	Large	Helpers	2.0941	4.50	0.46580	554	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	24	Large	Male	-37.4397	4.50	-8.32782	554	< .001
Treatment	-0.1	Large	Helpers	-	Treatment	24	Small	Female	-0.6272	4.86	-0.12903	543	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	24	Small	Helpers	3.3728	4.86	0.69383	543	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	24	Small	Male	-23.0439	4.86	-4.74050	543	0.003
Treatment	-0.1	Large	Helpers	-	Treatment	4	Large	Female	3.6853	4.50	0.81972	554	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	4	Large	Helpers	1.0097	4.50	0.22458	554	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	4	Large	Male	-41.6272	4.50	-9.25926	554	< .001
Treatment	-0.1	Large	Helpers	-	Treatment	4	Small	Female	1.0394	4.86	0.21383	543	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	4	Small	Helpers	1.6853	4.86	0.34669	543	1.000
Treatment	-0.1	Large	Helpers	-	Treatment	4	Small	Male	-20.8772	4.86	-4.29478	543	0.023
Treatment	-0.1	Large	Male	-	Control	-0.1	Small	Male	4.0625	4.86	0.83572	543	1.000
Treatment	-0.1	Large	Male	-	Control	0.1	Large	Male	5.1458	4.86	1.05858	543	1.000
Treatment	-0.1	Large	Male	-	Control	0.1	Small	Male	-2.5208	4.86	-0.51858	543	1.000
Treatment	-0.1	Large	Male	-	Control	24	Large	Male	8.8958	4.86	1.83002	543	1.000
Treatment	-0.1	Large	Male	-	Control	24	Small	Male	2.7292	4.86	0.56143	543	1.000
Treatment	-0.1	Large	Male	-	Control	4	Large	Male	8.8125	4.86	1.81287	543	1.000
Treatment	-0.1	Large	Male	-	Control	4	Small	Male	4.2292	4.86	0.87001	543	1.000

Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison													
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni	
Treatment	-0.1	Large	Male	-	Treatment	-0.1	Small	Male	8.0625	4.86	1.65859	543	1.000
Treatment	-0.1	Large	Male	-	Treatment	0.1	Large	Male	-3.4375	4.50	-0.76461	554	1.000
Treatment	-0.1	Large	Male	-	Treatment	0.1	Small	Male	-25.8542	4.86	-5.31862	543	< .001
Treatment	-0.1	Large	Male	-	Treatment	24	Large	Male	-19.5000	4.50	-4.33744	554	0.019
Treatment	-0.1	Large	Male	-	Treatment	24	Small	Male	-5.1042	4.86	-1.05001	543	1.000
Treatment	-0.1	Large	Male	-	Treatment	4	Large	Male	-23.6875	4.50	-5.26888	554	< .001
Treatment	-0.1	Large	Male	-	Treatment	4	Small	Male	-2.9375	4.86	-0.60429	543	1.000
Treatment	-0.1	Small	Female	-	Control	-0.1	Large	Male	-8.1667	5.20	-1.57151	543	1.000
Treatment	-0.1	Small	Female	-	Control	-0.1	Small	Male	-10.4167	5.20	-2.00448	543	1.000
Treatment	-0.1	Small	Female	-	Control	0.1	Large	Male	-9.3333	5.20	-1.79601	543	1.000
Treatment	-0.1	Small	Female	-	Control	0.1	Small	Female	-3.2500	5.20	-0.62540	543	1.000
Treatment	-0.1	Small	Female	-	Control	0.1	Small	Male	-17.0000	5.20	-3.27131	543	1.000
Treatment	-0.1	Small	Female	-	Control	24	Large	Male	-5.5833	5.20	-1.07440	543	1.000
Treatment	-0.1	Small	Female	-	Control	24	Small	Female	-1.3333	5.20	-0.25657	543	1.000
Treatment	-0.1	Small	Female	-	Control	24	Small	Male	-11.7500	5.20	-2.26105	543	1.000
Treatment	-0.1	Small	Female	-	Control	4	Large	Male	-5.6667	5.20	-1.09044	543	1.000
Treatment	-0.1	Small	Female	-	Control	4	Small	Female	-1.4167	5.20	-0.27261	543	1.000
Treatment	-0.1	Small	Female	-	Control	4	Small	Male	-10.2500	5.20	-1.97241	543	1.000
Treatment	-0.1	Small	Female	-	Treatment	-0.1	Large	Male	-14.4792	4.86	-2.97860	543	1.000
Treatment	-0.1	Small	Female	-	Treatment	-0.1	Small	Male	-6.4167	5.19	-1.23606	554	1.000
Treatment	-0.1	Small	Female	-	Treatment	0.1	Large	Male	-17.9167	4.86	-3.68575	543	0.283
Treatment	-0.1	Small	Female	-	Treatment	0.1	Small	Female	11.7500	5.19	2.26343	554	1.000
Treatment	-0.1	Small	Female	-	Treatment	0.1	Small	Male	-40.3333	5.19	-7.76951	554	< .001
Treatment	-0.1	Small	Female	-	Treatment	24	Large	Male	-33.9792	4.86	-6.99006	543	< .001
Treatment	-0.1	Small	Female	-	Treatment	24	Small	Female	2.8333	5.19	0.54579	554	1.000
Treatment	-0.1	Small	Female	-	Treatment	24	Small	Male	-19.5833	5.19	-3.77238	554	0.202
Treatment	-0.1	Small	Female	-	Treatment	4	Large	Male	-38.1667	4.86	-7.85150	543	< .001
Treatment	-0.1	Small	Female	-	Treatment	4	Small	Female	4.5000	5.19	0.86685	554	1.000
Treatment	-0.1	Small	Female	-	Treatment	4	Small	Male	-17.4167	5.19	-3.35501	554	0.956
Treatment	-0.1	Small	Helpers	-	Control	-0.1	Large	Female	-7.6875	5.20	-1.47930	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	-0.1	Large	Male	-10.7708	5.20	-2.07263	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	-0.1	Small	Female	-3.1875	5.20	-0.61337	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	-0.1	Small	Male	-13.0208	5.20	-2.50560	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	0.1	Large	Female	-12.6875	5.20	-2.44145	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	0.1	Large	Male	-11.9375	5.20	-2.29713	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	0.1	Small	Female	-5.8542	5.20	-1.12652	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	0.1	Small	Helpers	3.3750	5.20	0.64945	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	0.1	Small	Male	-19.6042	5.20	-3.77243	543	0.202
Treatment	-0.1	Small	Helpers	-	Control	24	Large	Female	-9.7708	5.20	-1.88020	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	24	Large	Male	-8.1875	5.20	-1.57552	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	24	Small	Female	-3.9375	5.20	-0.75769	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	24	Small	Helpers	1.4444	5.20	0.27795	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	24	Small	Male	-14.3542	5.20	-2.76217	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	4	Large	Female	-8.9375	5.20	-1.71984	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	4	Large	Male	-8.2708	5.20	-1.59155	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	4	Small	Female	-4.0208	5.20	-0.77373	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	4	Small	Helpers	1.0694	5.20	0.20579	543	1.000
Treatment	-0.1	Small	Helpers	-	Control	4	Small	Male	-12.8542	5.20	-2.47353	543	1.000
Treatment	-0.1	Small	Helpers	-	Treatment	-0.1	Large	Female	-11.5208	4.86	-2.37002	543	1.000
Treatment	-0.1	Small	Helpers	-	Treatment	-0.1	Large	Male	-17.0833	4.86	-3.51432	543	0.539
Treatment	-0.1	Small	Helpers	-	Treatment	-0.1	Small	Female	-2.6042	5.19	-0.50165	554	1.000
Treatment	-0.1	Small	Helpers	-	Treatment	-0.1	Small	Male	-9.0208	5.19	-1.73770	554	1.000
Treatment	-0.1	Small	Helpers	-	Treatment	0.1	Large	Female	-11.2708	4.86	-2.31859	543	1.000
Treatment	-0.1	Small	Helpers	-	Treatment	0.1	Large	Male	-20.5208	4.86	-4.22147	543	0.032
Treatment	-0.1	Small	Helpers	-	Treatment	0.1	Small	Female	9.1458	5.19	1.76178	554	1.000
Treatment	-0.1	Small	Helpers	-	Treatment	0.1	Small	Helpers	6.8542	5.19	1.32033	554	1.000
Treatment	-0.1	Small	Helpers	-	Treatment	0.1	Small	Male	-42.9375	5.19	-8.27115	554	< .001
Treatment	-0.1	Small	Helpers	-	Treatment	24	Large	Female	-8.5208	4.86	-1.75287	543	1.000
Treatment	-0.1	Small	Helpers	-	Treatment	24	Large	Male	-36.5833	4.86	-7.52578	543	< .001
Treatment	-0.1	Small	Helpers	-	Treatment	24	Small	Female	0.2292	5.19	0.04414	554	1.000

Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Treatment	-0.1	Small	Helpers	- Treatment	24	Small	Helpers	4.2292	5.19	0.81467	554	1.000
Treatment	-0.1	Small	Helpers	- Treatment	24	Small	Male	-22.1875	5.19	-4.27403	554	0.025
Treatment	-0.1	Small	Helpers	- Treatment	4	Large	Female	4.5417	4.86	0.93429	543	1.000
Treatment	-0.1	Small	Helpers	- Treatment	4	Large	Male	-40.7708	4.86	-8.38722	543	< .001
Treatment	-0.1	Small	Helpers	- Treatment	4	Small	Female	1.8958	5.19	0.36520	554	1.000
Treatment	-0.1	Small	Helpers	- Treatment	4	Small	Helpers	2.5417	5.19	0.48961	554	1.000
Treatment	-0.1	Small	Helpers	- Treatment	4	Small	Male	-20.0208	5.19	-3.85666	554	0.145
Treatment	-0.1	Small	Male	- Control	0.1	Small	Male	-10.5833	5.20	-2.03655	543	1.000
Treatment	-0.1	Small	Male	- Control	24	Small	Male	-5.3333	5.20	-1.02629	543	1.000
Treatment	-0.1	Small	Male	- Control	4	Small	Male	-3.8333	5.20	-0.73765	543	1.000
Treatment	-0.1	Small	Male	- Treatment	0.1	Small	Male	-33.9167	5.19	-6.53345	554	< .001
Treatment	-0.1	Small	Male	- Treatment	24	Small	Male	-13.1667	5.19	-2.53633	554	1.000
Treatment	-0.1	Small	Male	- Treatment	4	Small	Male	-11.0000	5.19	-2.11896	554	1.000
Treatment	0.1	Large	Female	- Control	-0.1	Large	Male	0.5000	4.86	0.10286	543	1.000
Treatment	0.1	Large	Female	- Control	-0.1	Small	Female	8.0833	4.86	1.66287	543	1.000
Treatment	0.1	Large	Female	- Control	-0.1	Small	Male	-1.7500	4.86	-0.36000	543	1.000
Treatment	0.1	Large	Female	- Control	0.1	Large	Male	-0.6667	4.86	-0.13714	543	1.000
Treatment	0.1	Large	Female	- Control	0.1	Small	Female	5.4167	4.86	1.11430	543	1.000
Treatment	0.1	Large	Female	- Control	0.1	Small	Male	-8.3333	4.86	-1.71430	543	1.000
Treatment	0.1	Large	Female	- Control	24	Large	Female	1.5000	4.86	0.30857	543	1.000
Treatment	0.1	Large	Female	- Control	24	Large	Male	3.0833	4.86	0.63429	543	1.000
Treatment	0.1	Large	Female	- Control	24	Small	Female	7.3333	4.86	1.50858	543	1.000
Treatment	0.1	Large	Female	- Control	24	Small	Male	-3.0833	4.86	-0.63429	543	1.000
Treatment	0.1	Large	Female	- Control	4	Large	Female	2.3333	4.86	0.48000	543	1.000
Treatment	0.1	Large	Female	- Control	4	Large	Male	3.0000	4.86	0.61715	543	1.000
Treatment	0.1	Large	Female	- Control	4	Small	Female	7.2500	4.86	1.49144	543	1.000
Treatment	0.1	Large	Female	- Control	4	Small	Male	-1.5833	4.86	-0.32572	543	1.000
Treatment	0.1	Large	Female	- Treatment	-0.1	Large	Male	-5.8125	4.50	-1.29289	554	1.000
Treatment	0.1	Large	Female	- Treatment	-0.1	Small	Female	8.6667	4.86	1.78287	543	1.000
Treatment	0.1	Large	Female	- Treatment	-0.1	Small	Male	2.2500	4.86	0.46286	543	1.000
Treatment	0.1	Large	Female	- Treatment	0.1	Large	Male	-9.2500	4.50	-2.05750	554	1.000
Treatment	0.1	Large	Female	- Treatment	0.1	Small	Female	20.4167	4.86	4.20004	543	0.035
Treatment	0.1	Large	Female	- Treatment	0.1	Small	Male	-31.6667	4.86	-6.51434	543	< .001
Treatment	0.1	Large	Female	- Treatment	24	Large	Female	2.7500	4.50	0.61169	554	1.000
Treatment	0.1	Large	Female	- Treatment	24	Large	Male	-25.3125	4.50	-5.63033	554	< .001
Treatment	0.1	Large	Female	- Treatment	24	Small	Female	11.5000	4.86	2.36574	543	1.000
Treatment	0.1	Large	Female	- Treatment	24	Small	Male	-10.9167	4.86	-2.24573	543	1.000
Treatment	0.1	Large	Female	- Treatment	4	Large	Female	15.8125	4.50	3.51722	554	0.532
Treatment	0.1	Large	Female	- Treatment	4	Large	Male	-29.5000	4.50	-6.56177	554	< .001
Treatment	0.1	Large	Female	- Treatment	4	Small	Female	13.1667	4.86	2.70860	543	1.000
Treatment	0.1	Large	Female	- Treatment	4	Small	Male	-8.7500	4.86	-1.80002	543	1.000
Treatment	0.1	Large	Helpers	- Control	-0.1	Large	Female	-9.0424	4.86	-1.86017	543	1.000
Treatment	0.1	Large	Helpers	- Control	-0.1	Large	Male	-12.1257	4.86	-2.49446	543	1.000
Treatment	0.1	Large	Helpers	- Control	-0.1	Small	Female	-4.5424	4.86	-0.93445	543	1.000
Treatment	0.1	Large	Helpers	- Control	-0.1	Small	Helpers	-0.4730	4.86	-0.09730	543	1.000
Treatment	0.1	Large	Helpers	- Control	-0.1	Small	Male	-14.3757	4.86	-2.95732	543	1.000
Treatment	0.1	Large	Helpers	- Control	0.1	Large	Female	-14.0424	4.86	-2.88875	543	1.000
Treatment	0.1	Large	Helpers	- Control	0.1	Large	Male	-13.2924	4.86	-2.73446	543	1.000
Treatment	0.1	Large	Helpers	- Control	0.1	Small	Female	-7.2091	4.86	-1.48302	543	1.000
Treatment	0.1	Large	Helpers	- Control	0.1	Small	Helpers	2.0201	4.86	0.41556	543	1.000
Treatment	0.1	Large	Helpers	- Control	0.1	Small	Male	-20.9591	4.86	-4.31162	543	0.022
Treatment	0.1	Large	Helpers	- Control	24	Large	Female	-11.1257	4.86	-2.28875	543	1.000
Treatment	0.1	Large	Helpers	- Control	24	Large	Helpers	-1.6978	4.86	-0.34926	543	1.000
Treatment	0.1	Large	Helpers	- Control	24	Large	Male	-9.5424	4.86	-1.96303	543	1.000
Treatment	0.1	Large	Helpers	- Control	24	Small	Female	-5.2924	4.86	-1.08873	543	1.000
Treatment	0.1	Large	Helpers	- Control	24	Small	Helpers	0.0895	4.86	0.01842	543	1.000
Treatment	0.1	Large	Helpers	- Control	24	Small	Male	-15.7091	4.86	-3.23161	543	1.000
Treatment	0.1	Large	Helpers	- Control	4	Large	Female	-10.2924	4.86	-2.11731	543	1.000
Treatment	0.1	Large	Helpers	- Control	4	Large	Helpers	-1.7772	4.86	-0.36561	543	1.000
Treatment	0.1	Large	Helpers	- Control	4	Large	Male	-9.6257	4.86	-1.98017	543	1.000

## Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Treatment	0.1	Large	Helpers	- Control	4	Small	Female	-5.3757	4.86	-1.10588	543	1.000
Treatment	0.1	Large	Helpers	- Control	4	Small	Helpers	-0.2855	4.86	-0.05873	543	1.000
Treatment	0.1	Large	Helpers	- Control	4	Small	Male	-14.2091	4.86	-2.92304	543	1.000
Treatment	0.1	Large	Helpers	- Treatment	-0.1	Large	Female	-12.8757	4.50	-2.86399	554	1.000
Treatment	0.1	Large	Helpers	- Treatment	-0.1	Large	Male	-18.4382	4.50	-4.10127	554	0.053
Treatment	0.1	Large	Helpers	- Treatment	-0.1	Small	Female	-3.9591	4.86	-0.81445	543	1.000
Treatment	0.1	Large	Helpers	- Treatment	-0.1	Small	Helpers	-1.3549	4.86	-0.27873	543	1.000
Treatment	0.1	Large	Helpers	- Treatment	-0.1	Small	Male	-10.3757	4.86	-2.13446	543	1.000
Treatment	0.1	Large	Helpers	- Treatment	0.1	Large	Female	-12.6257	4.50	-2.80838	554	1.000
Treatment	0.1	Large	Helpers	- Treatment	0.1	Large	Male	-21.8757	4.50	-4.86588	554	0.002
Treatment	0.1	Large	Helpers	- Treatment	0.1	Small	Female	7.7909	4.86	1.60272	543	1.000
Treatment	0.1	Large	Helpers	- Treatment	0.1	Small	Helpers	5.4993	4.86	1.13129	543	1.000
Treatment	0.1	Large	Helpers	- Treatment	0.1	Small	Male	-44.2924	4.86	-9.11166	543	< .001
Treatment	0.1	Large	Helpers	- Treatment	24	Large	Female	-9.8757	4.50	-2.19669	554	1.000
Treatment	0.1	Large	Helpers	- Treatment	24	Large	Helpers	1.5956	4.50	0.35492	554	1.000
Treatment	0.1	Large	Helpers	- Treatment	24	Large	Male	-37.9382	4.50	-8.43871	554	< .001
Treatment	0.1	Large	Helpers	- Treatment	24	Small	Female	-1.1257	4.86	-0.23158	543	1.000
Treatment	0.1	Large	Helpers	- Treatment	24	Small	Helpers	2.8743	4.86	0.59128	543	1.000
Treatment	0.1	Large	Helpers	- Treatment	24	Small	Male	-23.5424	4.86	-4.84305	543	0.002
Treatment	0.1	Large	Helpers	- Treatment	4	Large	Female	3.1868	4.50	0.70884	554	1.000
Treatment	0.1	Large	Helpers	- Treatment	4	Large	Helpers	0.5112	4.50	0.11370	554	1.000
Treatment	0.1	Large	Helpers	- Treatment	4	Large	Male	-42.1257	4.50	-9.37014	554	< .001
Treatment	0.1	Large	Helpers	- Treatment	4	Small	Female	0.5409	4.86	0.11128	543	1.000
Treatment	0.1	Large	Helpers	- Treatment	4	Small	Helpers	1.1868	4.86	0.24413	543	1.000
Treatment	0.1	Large	Helpers	- Treatment	4	Small	Male	-21.3757	4.86	-4.39734	543	0.015
Treatment	0.1	Large	Male	- Control	-0.1	Small	Male	7.5000	4.86	1.54287	543	1.000
Treatment	0.1	Large	Male	- Control	0.1	Small	Male	0.9167	4.86	0.18857	543	1.000
Treatment	0.1	Large	Male	- Control	24	Large	Male	12.3333	4.86	2.53717	543	1.000
Treatment	0.1	Large	Male	- Control	24	Small	Male	6.1667	4.86	1.26858	543	1.000
Treatment	0.1	Large	Male	- Control	4	Large	Male	12.2500	4.86	2.52002	543	1.000
Treatment	0.1	Large	Male	- Control	4	Small	Male	7.6667	4.86	1.57716	543	1.000
Treatment	0.1	Large	Male	- Treatment	-0.1	Small	Male	11.5000	4.86	2.36574	543	1.000
Treatment	0.1	Large	Male	- Treatment	0.1	Small	Male	-22.4167	4.86	-4.61147	543	0.006
Treatment	0.1	Large	Male	- Treatment	24	Large	Male	-16.0625	4.50	-3.57283	554	0.433
Treatment	0.1	Large	Male	- Treatment	24	Small	Male	-1.6667	4.86	-0.34286	543	1.000
Treatment	0.1	Large	Male	- Treatment	4	Large	Male	-20.2500	4.50	-4.50426	554	0.009
Treatment	0.1	Large	Male	- Treatment	4	Small	Male	0.5000	4.86	0.10286	543	1.000
Treatment	0.1	Small	Female	- Control	-0.1	Large	Male	-19.9167	5.20	-3.83256	543	0.160
Treatment	0.1	Small	Female	- Control	-0.1	Small	Male	-22.1667	5.20	-4.26553	543	0.027
Treatment	0.1	Small	Female	- Control	0.1	Large	Male	-21.0833	5.20	-4.05706	543	0.064
Treatment	0.1	Small	Female	- Control	0.1	Small	Male	-28.7500	5.20	-5.53236	543	< .001
Treatment	0.1	Small	Female	- Control	24	Large	Male	-17.3333	5.20	-3.33545	543	1.000
Treatment	0.1	Small	Female	- Control	24	Small	Female	-13.0833	5.20	-2.51762	543	1.000
Treatment	0.1	Small	Female	- Control	24	Small	Male	-23.5000	5.20	-4.52210	543	0.008
Treatment	0.1	Small	Female	- Control	4	Large	Male	-17.4167	5.20	-3.35149	543	0.970
Treatment	0.1	Small	Female	- Control	4	Small	Female	-13.1667	5.20	-2.53366	543	1.000
Treatment	0.1	Small	Female	- Control	4	Small	Male	-22.0000	5.20	-4.23346	543	0.030
Treatment	0.1	Small	Female	- Treatment	-0.1	Large	Male	-26.2292	4.86	-5.39576	543	< .001
Treatment	0.1	Small	Female	- Treatment	-0.1	Small	Male	-18.1667	5.19	-3.49949	554	0.568
Treatment	0.1	Small	Female	- Treatment	0.1	Large	Male	-29.6667	4.86	-6.10291	543	< .001
Treatment	0.1	Small	Female	- Treatment	0.1	Small	Male	-52.0833	5.19	-10.03294	554	< .001
Treatment	0.1	Small	Female	- Treatment	24	Large	Male	-45.7292	4.86	-9.40723	543	< .001
Treatment	0.1	Small	Female	- Treatment	24	Small	Female	-8.9167	5.19	-1.71764	554	1.000
Treatment	0.1	Small	Female	- Treatment	24	Small	Male	-31.3333	5.19	-6.03581	554	< .001
Treatment	0.1	Small	Female	- Treatment	4	Large	Male	-49.9167	4.86	-10.26866	543	< .001
Treatment	0.1	Small	Female	- Treatment	4	Small	Female	-7.2500	5.19	-1.39658	554	1.000
Treatment	0.1	Small	Female	- Treatment	4	Small	Male	-29.1667	5.19	-5.61844	554	< .001
Treatment	0.1	Small	Helpers	- Control	-0.1	Large	Female	-14.5417	5.20	-2.79825	543	1.000
Treatment	0.1	Small	Helpers	- Control	-0.1	Large	Male	-17.6250	5.20	-3.39158	543	0.841
Treatment	0.1	Small	Helpers	- Control	-0.1	Small	Female	-10.0417	5.20	-1.93232	543	1.000

## Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Treatment	0.1	Small	Helpers	- Control	-0.1	Small	Male	-19.8750	5.20	-3.82454	543	0.165
Treatment	0.1	Small	Helpers	- Control	0.1	Large	Female	-19.5417	5.20	-3.76040	543	0.212
Treatment	0.1	Small	Helpers	- Control	0.1	Large	Male	-18.7917	5.20	-3.61608	543	0.369
Treatment	0.1	Small	Helpers	- Control	0.1	Small	Female	-12.7083	5.20	-2.44546	543	1.000
Treatment	0.1	Small	Helpers	- Control	0.1	Small	Male	-26.4583	5.20	-5.09137	543	< .001
Treatment	0.1	Small	Helpers	- Control	24	Large	Female	-16.6250	5.20	-3.19915	543	1.000
Treatment	0.1	Small	Helpers	- Control	24	Large	Male	-15.0417	5.20	-2.89447	543	1.000
Treatment	0.1	Small	Helpers	- Control	24	Small	Female	-10.7917	5.20	-2.07664	543	1.000
Treatment	0.1	Small	Helpers	- Control	24	Small	Helpers	-5.4097	5.20	-1.04099	543	1.000
Treatment	0.1	Small	Helpers	- Control	24	Small	Male	-21.2083	5.20	-4.08112	543	0.058
Treatment	0.1	Small	Helpers	- Control	4	Large	Female	-15.7917	5.20	-3.03879	543	1.000
Treatment	0.1	Small	Helpers	- Control	4	Large	Male	-15.1250	5.20	-2.91050	543	1.000
Treatment	0.1	Small	Helpers	- Control	4	Small	Female	-10.8750	5.20	-2.09267	543	1.000
Treatment	0.1	Small	Helpers	- Control	4	Small	Helpers	-5.7847	5.20	-1.11315	543	1.000
Treatment	0.1	Small	Helpers	- Control	4	Small	Male	-19.7083	5.20	-3.79247	543	0.187
Treatment	0.1	Small	Helpers	- Treatment	-0.1	Large	Female	-18.3750	4.86	-3.78003	543	0.196
Treatment	0.1	Small	Helpers	- Treatment	-0.1	Large	Male	-23.9375	4.86	-4.92433	543	0.001
Treatment	0.1	Small	Helpers	- Treatment	-0.1	Small	Female	-9.4583	5.19	-1.82198	554	1.000
Treatment	0.1	Small	Helpers	- Treatment	-0.1	Small	Male	-15.8750	5.19	-3.05804	554	1.000
Treatment	0.1	Small	Helpers	- Treatment	0.1	Large	Female	-18.1250	4.86	-3.72860	543	0.240
Treatment	0.1	Small	Helpers	- Treatment	0.1	Large	Male	-27.3750	4.86	-5.63148	543	< .001
Treatment	0.1	Small	Helpers	- Treatment	0.1	Small	Female	2.2917	5.19	0.44145	554	1.000
Treatment	0.1	Small	Helpers	- Treatment	0.1	Small	Male	-49.7917	5.19	-9.59149	554	< .001
Treatment	0.1	Small	Helpers	- Treatment	24	Large	Female	-15.3750	4.86	-3.16289	543	1.000
Treatment	0.1	Small	Helpers	- Treatment	24	Large	Male	-43.4375	4.86	-8.93579	543	< .001
Treatment	0.1	Small	Helpers	- Treatment	24	Small	Female	-6.6250	5.19	-1.27619	554	1.000
Treatment	0.1	Small	Helpers	- Treatment	24	Small	Helpers	-2.6250	5.19	-0.50566	554	1.000
Treatment	0.1	Small	Helpers	- Treatment	24	Small	Male	-29.0417	5.19	-5.59437	554	< .001
Treatment	0.1	Small	Helpers	- Treatment	4	Large	Female	-2.3125	4.86	-0.47572	543	1.000
Treatment	0.1	Small	Helpers	- Treatment	4	Large	Male	-47.6250	4.86	-9.79723	543	< .001
Treatment	0.1	Small	Helpers	- Treatment	4	Small	Female	-4.9583	5.19	-0.95514	554	1.000
Treatment	0.1	Small	Helpers	- Treatment	4	Small	Helpers	-4.3125	5.19	-0.83073	554	1.000
Treatment	0.1	Small	Helpers	- Treatment	4	Small	Male	-26.8750	5.19	-5.17700	554	< .001
Treatment	0.1	Small	Male	- Control	24	Small	Male	28.5833	5.20	5.50029	543	< .001
Treatment	0.1	Small	Male	- Control	4	Small	Male	30.0833	5.20	5.78893	543	< .001
Treatment	0.1	Small	Male	- Treatment	24	Small	Male	20.7500	5.19	3.99712	554	0.082
Treatment	0.1	Small	Male	- Treatment	4	Small	Male	22.9167	5.19	4.41449	554	0.014
Treatment	24	Large	Female	- Control	-0.1	Large	Male	-2.2500	4.86	-0.46286	543	1.000
Treatment	24	Large	Female	- Control	-0.1	Small	Female	5.3333	4.86	1.09715	543	1.000
Treatment	24	Large	Female	- Control	-0.1	Small	Male	-4.5000	4.86	-0.92572	543	1.000
Treatment	24	Large	Female	- Control	0.1	Large	Male	-3.4167	4.86	-0.70286	543	1.000
Treatment	24	Large	Female	- Control	0.1	Small	Female	2.6667	4.86	0.54858	543	1.000
Treatment	24	Large	Female	- Control	0.1	Small	Male	-11.0833	4.86	-2.28002	543	1.000
Treatment	24	Large	Female	- Control	24	Large	Male	0.3333	4.86	0.06857	543	1.000
Treatment	24	Large	Female	- Control	24	Small	Female	4.5833	4.86	0.94287	543	1.000
Treatment	24	Large	Female	- Control	24	Small	Male	-5.8333	4.86	-1.20001	543	1.000
Treatment	24	Large	Female	- Control	4	Large	Male	0.2500	4.86	0.05143	543	1.000
Treatment	24	Large	Female	- Control	4	Small	Female	4.5000	4.86	0.92572	543	1.000
Treatment	24	Large	Female	- Control	4	Small	Male	-4.3333	4.86	-0.89144	543	1.000
Treatment	24	Large	Female	- Treatment	-0.1	Large	Male	-8.5625	4.50	-1.90458	554	1.000
Treatment	24	Large	Female	- Treatment	-0.1	Small	Female	5.9167	4.86	1.21715	543	1.000
Treatment	24	Large	Female	- Treatment	-0.1	Small	Male	-0.5000	4.86	-0.10286	543	1.000
Treatment	24	Large	Female	- Treatment	0.1	Large	Male	-12.0000	4.50	-2.66919	554	1.000
Treatment	24	Large	Female	- Treatment	0.1	Small	Female	17.6667	4.86	3.63432	543	0.344
Treatment	24	Large	Female	- Treatment	0.1	Small	Male	-34.4167	4.86	-7.08006	543	< .001
Treatment	24	Large	Female	- Treatment	24	Large	Male	-28.0625	4.50	-6.24202	554	< .001
Treatment	24	Large	Female	- Treatment	24	Small	Female	8.7500	4.86	1.80002	543	1.000
Treatment	24	Large	Female	- Treatment	24	Small	Male	-13.6667	4.86	-2.81145	543	1.000
Treatment	24	Large	Female	- Treatment	4	Large	Male	-32.2500	4.50	-7.17346	554	< .001
Treatment	24	Large	Female	- Treatment	4	Small	Female	10.4167	4.86	2.14288	543	1.000



Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Treatment	24	Large	Female	- Treatment	4	Small	Male	-11.5000	4.86	-2.36574	543	1.000
Treatment	24	Large	Helpers	- Control	-0.1	Large	Female	-10.6380	4.86	-2.18841	543	1.000
Treatment	24	Large	Helpers	- Control	-0.1	Large	Male	-13.7214	4.86	-2.82270	543	1.000
Treatment	24	Large	Helpers	- Control	-0.1	Small	Female	-6.1380	4.86	-1.26269	543	1.000
Treatment	24	Large	Helpers	- Control	-0.1	Small	Helpers	-2.0686	4.86	-0.42554	543	1.000
Treatment	24	Large	Helpers	- Control	-0.1	Small	Male	-15.9714	4.86	-3.28557	543	1.000
Treatment	24	Large	Helpers	- Control	0.1	Large	Female	-15.6380	4.86	-3.21699	543	1.000
Treatment	24	Large	Helpers	- Control	0.1	Large	Male	-14.8880	4.86	-3.06271	543	1.000
Treatment	24	Large	Helpers	- Control	0.1	Small	Female	-8.8047	4.86	-1.81127	543	1.000
Treatment	24	Large	Helpers	- Control	0.1	Small	Helpers	0.4245	4.86	0.08732	543	1.000
Treatment	24	Large	Helpers	- Control	0.1	Small	Male	-22.5547	4.86	-4.63986	543	0.005
Treatment	24	Large	Helpers	- Control	24	Large	Female	-12.7214	4.86	-2.61699	543	1.000
Treatment	24	Large	Helpers	- Control	24	Large	Male	-11.1380	4.86	-2.29127	543	1.000
Treatment	24	Large	Helpers	- Control	24	Small	Female	-6.8880	4.86	-1.41698	543	1.000
Treatment	24	Large	Helpers	- Control	24	Small	Helpers	-1.5061	4.86	-0.30982	543	1.000
Treatment	24	Large	Helpers	- Control	24	Small	Male	-17.3047	4.86	-3.55985	543	0.455
Treatment	24	Large	Helpers	- Control	4	Large	Female	-11.8880	4.86	-2.44556	543	1.000
Treatment	24	Large	Helpers	- Control	4	Large	Male	-11.2214	4.86	-2.30841	543	1.000
Treatment	24	Large	Helpers	- Control	4	Small	Female	-6.9714	4.86	-1.43412	543	1.000
Treatment	24	Large	Helpers	- Control	4	Small	Helpers	-1.8811	4.86	-0.38697	543	1.000
Treatment	24	Large	Helpers	- Control	4	Small	Male	-15.8047	4.86	-3.25128	543	1.000
Treatment	24	Large	Helpers	- Treatment	-0.1	Large	Female	-14.4714	4.50	-3.21890	554	1.000
Treatment	24	Large	Helpers	- Treatment	-0.1	Large	Male	-20.0339	4.50	-4.45618	554	0.011
Treatment	24	Large	Helpers	- Treatment	-0.1	Small	Female	-5.5547	4.86	-1.14269	543	1.000
Treatment	24	Large	Helpers	- Treatment	-0.1	Small	Helpers	-2.9505	4.86	-0.60697	543	1.000
Treatment	24	Large	Helpers	- Treatment	-0.1	Small	Male	-11.9714	4.86	-2.46270	543	1.000
Treatment	24	Large	Helpers	- Treatment	0.1	Large	Female	-14.2214	4.50	-3.16329	554	1.000
Treatment	24	Large	Helpers	- Treatment	0.1	Large	Male	-23.4714	4.50	-5.22080	554	< .001
Treatment	24	Large	Helpers	- Treatment	0.1	Small	Female	6.1953	4.86	1.27448	543	1.000
Treatment	24	Large	Helpers	- Treatment	0.1	Small	Helpers	3.9036	4.86	0.80304	543	1.000
Treatment	24	Large	Helpers	- Treatment	0.1	Small	Male	-45.8880	4.86	-9.43991	543	< .001
Treatment	24	Large	Helpers	- Treatment	24	Large	Female	-11.4714	4.50	-2.55160	554	1.000
Treatment	24	Large	Helpers	- Treatment	24	Large	Male	-39.5339	4.50	-8.79362	554	< .001
Treatment	24	Large	Helpers	- Treatment	24	Small	Female	-2.7214	4.86	-0.55983	543	1.000
Treatment	24	Large	Helpers	- Treatment	24	Small	Helpers	1.2786	4.86	0.26304	543	1.000
Treatment	24	Large	Helpers	- Treatment	24	Small	Male	-25.1380	4.86	-5.17130	543	< .001
Treatment	24	Large	Helpers	- Treatment	4	Large	Female	1.5911	4.50	0.35392	554	1.000
Treatment	24	Large	Helpers	- Treatment	4	Large	Male	-43.7214	4.50	-9.72506	554	< .001
Treatment	24	Large	Helpers	- Treatment	4	Small	Female	-1.0547	4.86	-0.21697	543	1.000
Treatment	24	Large	Helpers	- Treatment	4	Small	Helpers	-0.4089	4.86	-0.08411	543	1.000
Treatment	24	Large	Helpers	- Treatment	4	Small	Male	-22.9714	4.86	-4.72558	543	0.003
Treatment	24	Large	Male	- Control	-0.1	Small	Male	23.5625	4.86	4.84719	543	0.002
Treatment	24	Large	Male	- Control	0.1	Small	Male	16.9792	4.86	3.49289	543	0.583
Treatment	24	Large	Male	- Control	24	Small	Male	22.2292	4.86	4.57290	543	0.007
Treatment	24	Large	Male	- Control	4	Small	Male	23.7292	4.86	4.88147	543	0.002
Treatment	24	Large	Male	- Treatment	-0.1	Small	Male	27.5625	4.86	5.67005	543	< .001
Treatment	24	Large	Male	- Treatment	0.1	Small	Male	-6.3542	4.86	-1.30715	543	1.000
Treatment	24	Large	Male	- Treatment	24	Small	Male	14.3958	4.86	2.96146	543	1.000
Treatment	24	Large	Male	- Treatment	4	Small	Male	16.5625	4.86	3.40717	543	0.795
Treatment	24	Small	Female	- Control	-0.1	Large	Male	-11.0000	5.20	-2.11673	543	1.000
Treatment	24	Small	Female	- Control	-0.1	Small	Male	-13.2500	5.20	-2.54970	543	1.000
Treatment	24	Small	Female	- Control	0.1	Large	Male	-12.1667	5.20	-2.34123	543	1.000
Treatment	24	Small	Female	- Control	0.1	Small	Male	-19.8333	5.20	-3.81652	543	0.170
Treatment	24	Small	Female	- Control	24	Large	Male	-8.4167	5.20	-1.61962	543	1.000
Treatment	24	Small	Female	- Control	24	Small	Male	-14.5833	5.20	-2.80627	543	1.000
Treatment	24	Small	Female	- Control	4	Large	Male	-8.5000	5.20	-1.63565	543	1.000
Treatment	24	Small	Female	- Control	4	Small	Male	-13.0833	5.20	-2.51762	543	1.000
Treatment	24	Small	Female	- Treatment	-0.1	Large	Male	-17.3125	4.86	-3.56146	543	0.453
Treatment	24	Small	Female	- Treatment	-0.1	Small	Male	-9.2500	5.19	-1.78185	554	1.000
Treatment	24	Small	Female	- Treatment	0.1	Large	Male	-20.7500	4.86	-4.26861	543	0.026

Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Treatment	24	Small	Female	- Treatment	0.1	Small	Male	-43.1667	5.19	-8.31530	554	< .001
Treatment	24	Small	Female	- Treatment	24	Large	Male	-36.8125	4.86	-7.57293	543	< .001
Treatment	24	Small	Female	- Treatment	24	Small	Male	-22.4167	5.19	-4.31818	554	0.021
Treatment	24	Small	Female	- Treatment	4	Large	Male	-41.0000	4.86	-8.43436	543	< .001
Treatment	24	Small	Female	- Treatment	4	Small	Male	-20.2500	5.19	-3.90081	554	0.121
Treatment	24	Small	Helpers	- Control	-0.1	Large	Female	-11.9167	5.20	-2.29312	543	1.000
Treatment	24	Small	Helpers	- Control	-0.1	Large	Male	-15.0000	5.20	-2.88645	543	1.000
Treatment	24	Small	Helpers	- Control	-0.1	Small	Female	-7.4167	5.20	-1.42719	543	1.000
Treatment	24	Small	Helpers	- Control	-0.1	Small	Male	-17.2500	5.20	-3.31941	543	1.000
Treatment	24	Small	Helpers	- Control	0.1	Large	Female	-16.9167	5.20	-3.25527	543	1.000
Treatment	24	Small	Helpers	- Control	0.1	Large	Male	-16.1667	5.20	-3.11095	543	1.000
Treatment	24	Small	Helpers	- Control	0.1	Small	Female	-10.0833	5.20	-1.94033	543	1.000
Treatment	24	Small	Helpers	- Control	0.1	Small	Male	-23.8333	5.20	-4.58624	543	0.006
Treatment	24	Small	Helpers	- Control	24	Large	Female	-14.0000	5.20	-2.69402	543	1.000
Treatment	24	Small	Helpers	- Control	24	Large	Male	-12.4167	5.20	-2.38934	543	1.000
Treatment	24	Small	Helpers	- Control	24	Small	Female	-8.1667	5.20	-1.57151	543	1.000
Treatment	24	Small	Helpers	- Control	24	Small	Male	-18.5833	5.20	-3.57599	543	0.429
Treatment	24	Small	Helpers	- Control	4	Large	Female	-13.1667	5.20	-2.53366	543	1.000
Treatment	24	Small	Helpers	- Control	4	Large	Male	-12.5000	5.20	-2.40537	543	1.000
Treatment	24	Small	Helpers	- Control	4	Small	Female	-8.2500	5.20	-1.58755	543	1.000
Treatment	24	Small	Helpers	- Control	4	Small	Male	-17.0833	5.20	-3.28734	543	1.000
Treatment	24	Small	Helpers	- Treatment	-0.1	Large	Female	-15.7500	4.86	-3.24003	543	1.000
Treatment	24	Small	Helpers	- Treatment	-0.1	Large	Male	-21.3125	4.86	-4.38433	543	0.016
Treatment	24	Small	Helpers	- Treatment	-0.1	Small	Female	-6.8333	5.19	-1.31632	554	1.000
Treatment	24	Small	Helpers	- Treatment	-0.1	Small	Male	-13.2500	5.19	-2.55238	554	1.000
Treatment	24	Small	Helpers	- Treatment	0.1	Large	Female	-15.5000	4.86	-3.18860	543	1.000
Treatment	24	Small	Helpers	- Treatment	0.1	Large	Male	-24.7500	4.86	-5.09147	543	< .001
Treatment	24	Small	Helpers	- Treatment	0.1	Small	Female	4.9167	5.19	0.94711	554	1.000
Treatment	24	Small	Helpers	- Treatment	0.1	Small	Male	-47.1667	5.19	-9.08583	554	< .001
Treatment	24	Small	Helpers	- Treatment	24	Large	Female	-12.7500	4.86	-2.62288	543	1.000
Treatment	24	Small	Helpers	- Treatment	24	Large	Male	-40.8125	4.86	-8.39579	543	< .001
Treatment	24	Small	Helpers	- Treatment	24	Small	Female	-4.0000	5.19	-0.77053	554	1.000
Treatment	24	Small	Helpers	- Treatment	24	Small	Male	-26.4167	5.19	-5.08871	554	< .001
Treatment	24	Small	Helpers	- Treatment	4	Large	Female	0.3125	4.86	0.06429	543	1.000
Treatment	24	Small	Helpers	- Treatment	4	Large	Male	-45.0000	4.86	-9.25723	543	< .001
Treatment	24	Small	Helpers	- Treatment	4	Small	Female	-2.3333	5.19	-0.44948	554	1.000
Treatment	24	Small	Helpers	- Treatment	4	Small	Male	-24.2500	5.19	-4.67134	554	0.004
Treatment	4	Large	Female	- Control	-0.1	Large	Male	-15.3125	4.86	-3.15003	543	1.000
Treatment	4	Large	Female	- Control	-0.1	Small	Female	-7.7292	4.86	-1.59001	543	1.000
Treatment	4	Large	Female	- Control	-0.1	Small	Male	-17.5625	4.86	-3.61289	543	0.373
Treatment	4	Large	Female	- Control	0.1	Large	Male	-16.4792	4.86	-3.39003	543	0.846
Treatment	4	Large	Female	- Control	0.1	Small	Female	-10.3958	4.86	-2.13859	543	1.000
Treatment	4	Large	Female	- Control	0.1	Small	Male	-24.1458	4.86	-4.96719	543	0.001
Treatment	4	Large	Female	- Control	24	Large	Female	-14.3125	4.86	-2.94431	543	1.000
Treatment	4	Large	Female	- Control	24	Large	Male	-12.7292	4.86	-2.61859	543	1.000
Treatment	4	Large	Female	- Control	24	Small	Female	-8.4792	4.86	-1.74430	543	1.000
Treatment	4	Large	Female	- Control	24	Small	Male	-18.8958	4.86	-3.88718	543	0.129
Treatment	4	Large	Female	- Control	4	Large	Male	-12.8125	4.86	-2.63574	543	1.000
Treatment	4	Large	Female	- Control	4	Small	Female	-8.5625	4.86	-1.76144	543	1.000
Treatment	4	Large	Female	- Control	4	Small	Male	-17.3958	4.86	-3.57860	543	0.425
Treatment	4	Large	Female	- Treatment	-0.1	Large	Male	-21.6250	4.50	-4.81011	554	0.002
Treatment	4	Large	Female	- Treatment	-0.1	Small	Female	-7.1458	4.86	-1.47001	543	1.000
Treatment	4	Large	Female	- Treatment	-0.1	Small	Male	-13.5625	4.86	-2.79003	543	1.000
Treatment	4	Large	Female	- Treatment	0.1	Large	Male	-25.0625	4.50	-5.57472	554	< .001
Treatment	4	Large	Female	- Treatment	0.1	Small	Female	4.6042	4.86	0.94715	543	1.000
Treatment	4	Large	Female	- Treatment	0.1	Small	Male	-47.4792	4.86	-9.76723	543	< .001
Treatment	4	Large	Female	- Treatment	24	Large	Female	-13.0625	4.50	-2.90553	554	1.000
Treatment	4	Large	Female	- Treatment	24	Large	Male	-41.1250	4.50	-9.14755	554	< .001
Treatment	4	Large	Female	- Treatment	24	Small	Female	-4.3125	4.86	-0.88715	543	1.000
Treatment	4	Large	Female	- Treatment	24	Small	Male	-26.7292	4.86	-5.49862	543	< .001

Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Treatment	4	Large	Female	- Treatment	4	Large	Male	-45.3125	4.50	-10.07898	554	< .001
Treatment	4	Large	Female	- Treatment	4	Small	Female	-2.6458	4.86	-0.54429	543	1.000
Treatment	4	Large	Female	- Treatment	4	Small	Male	-24.5625	4.86	-5.05290	543	< .001
Treatment	4	Large	Helpers	- Control	-0.1	Large	Female	-9.5536	4.86	-1.96532	543	1.000
Treatment	4	Large	Helpers	- Control	-0.1	Large	Male	-12.6369	4.86	-2.59962	543	1.000
Treatment	4	Large	Helpers	- Control	-0.1	Small	Female	-5.0536	4.86	-1.03960	543	1.000
Treatment	4	Large	Helpers	- Control	-0.1	Small	Helpers	-0.9841	4.86	-0.20245	543	1.000
Treatment	4	Large	Helpers	- Control	-0.1	Small	Male	-14.8869	4.86	-3.06248	543	1.000
Treatment	4	Large	Helpers	- Control	0.1	Large	Female	-14.5536	4.86	-2.99390	543	1.000
Treatment	4	Large	Helpers	- Control	0.1	Large	Male	-13.8036	4.86	-2.83962	543	1.000
Treatment	4	Large	Helpers	- Control	0.1	Small	Female	-7.7202	4.86	-1.58818	543	1.000
Treatment	4	Large	Helpers	- Control	0.1	Small	Helpers	1.5089	4.86	0.31041	543	1.000
Treatment	4	Large	Helpers	- Control	0.1	Small	Male	-21.4702	4.86	-4.41677	543	0.014
Treatment	4	Large	Helpers	- Control	24	Large	Female	-11.6369	4.86	-2.39390	543	1.000
Treatment	4	Large	Helpers	- Control	24	Large	Helpers	-2.2089	4.86	-0.45441	543	1.000
Treatment	4	Large	Helpers	- Control	24	Large	Male	-10.0536	4.86	-2.06818	543	1.000
Treatment	4	Large	Helpers	- Control	24	Small	Female	-5.8036	4.86	-1.19389	543	1.000
Treatment	4	Large	Helpers	- Control	24	Small	Helpers	-0.4216	4.86	-0.08674	543	1.000
Treatment	4	Large	Helpers	- Control	24	Small	Male	-16.2202	4.86	-3.33676	543	1.000
Treatment	4	Large	Helpers	- Control	4	Large	Female	-10.8036	4.86	-2.22247	543	1.000
Treatment	4	Large	Helpers	- Control	4	Large	Male	-10.1369	4.86	-2.08532	543	1.000
Treatment	4	Large	Helpers	- Control	4	Small	Female	-5.8869	4.86	-1.21103	543	1.000
Treatment	4	Large	Helpers	- Control	4	Small	Helpers	-0.7966	4.86	-0.16388	543	1.000
Treatment	4	Large	Helpers	- Control	4	Small	Male	-14.7202	4.86	-3.02819	543	1.000
Treatment	4	Large	Helpers	- Treatment	-0.1	Large	Female	-13.3869	4.50	-2.97769	554	1.000
Treatment	4	Large	Helpers	- Treatment	-0.1	Large	Male	-18.9494	4.50	-4.21497	554	0.033
Treatment	4	Large	Helpers	- Treatment	-0.1	Small	Female	-4.4702	4.86	-0.91960	543	1.000
Treatment	4	Large	Helpers	- Treatment	-0.1	Small	Helpers	-1.8661	4.86	-0.38388	543	1.000
Treatment	4	Large	Helpers	- Treatment	-0.1	Small	Male	-10.8869	4.86	-2.23961	543	1.000
Treatment	4	Large	Helpers	- Treatment	0.1	Large	Female	-13.1369	4.50	-2.92208	554	1.000
Treatment	4	Large	Helpers	- Treatment	0.1	Large	Male	-22.3869	4.50	-4.97958	554	< .001
Treatment	4	Large	Helpers	- Treatment	0.1	Small	Female	7.2798	4.86	1.49756	543	1.000
Treatment	4	Large	Helpers	- Treatment	0.1	Small	Helpers	4.9881	4.86	1.02613	543	1.000
Treatment	4	Large	Helpers	- Treatment	0.1	Small	Male	-44.8036	4.86	-9.21682	543	< .001
Treatment	4	Large	Helpers	- Treatment	24	Large	Female	-10.3869	4.50	-2.31039	554	1.000
Treatment	4	Large	Helpers	- Treatment	24	Large	Helpers	1.0844	4.50	0.24122	554	1.000
Treatment	4	Large	Helpers	- Treatment	24	Large	Male	-38.4494	4.50	-8.55241	554	< .001
Treatment	4	Large	Helpers	- Treatment	24	Small	Female	-1.6369	4.86	-0.33674	543	1.000
Treatment	4	Large	Helpers	- Treatment	24	Small	Helpers	2.3631	4.86	0.48613	543	1.000
Treatment	4	Large	Helpers	- Treatment	24	Small	Male	-24.0536	4.86	-4.94821	543	0.001
Treatment	4	Large	Helpers	- Treatment	4	Large	Female	2.6756	4.50	0.59514	554	1.000
Treatment	4	Large	Helpers	- Treatment	4	Large	Male	-42.6369	4.50	-9.48384	554	< .001
Treatment	4	Large	Helpers	- Treatment	4	Small	Female	0.0298	4.86	0.00612	543	1.000
Treatment	4	Large	Helpers	- Treatment	4	Small	Helpers	0.6756	4.86	0.13898	543	1.000
Treatment	4	Large	Helpers	- Treatment	4	Small	Male	-21.8869	4.86	-4.50249	543	0.009
Treatment	4	Large	Male	- Control	-0.1	Small	Male	27.7500	4.86	5.70862	543	< .001
Treatment	4	Large	Male	- Control	0.1	Small	Male	21.1667	4.86	4.35432	543	0.018
Treatment	4	Large	Male	- Control	24	Large	Male	32.5833	4.86	6.70292	543	< .001
Treatment	4	Large	Male	- Control	24	Small	Male	26.4167	4.86	5.43433	543	< .001
Treatment	4	Large	Male	- Control	4	Small	Male	27.9167	4.86	5.74291	543	< .001
Treatment	4	Large	Male	- Treatment	-0.1	Small	Male	31.7500	4.86	6.53149	543	< .001
Treatment	4	Large	Male	- Treatment	0.1	Small	Male	-2.1667	4.86	-0.44572	543	1.000
Treatment	4	Large	Male	- Treatment	24	Large	Male	4.1875	4.50	0.93144	554	1.000
Treatment	4	Large	Male	- Treatment	24	Small	Male	18.5833	4.86	3.82289	543	0.166
Treatment	4	Large	Male	- Treatment	4	Small	Male	20.7500	4.86	4.26861	543	0.026
Treatment	4	Small	Female	- Control	-0.1	Large	Male	-12.6667	5.20	-2.43744	543	1.000
Treatment	4	Small	Female	- Control	-0.1	Small	Male	-14.9167	5.20	-2.87041	543	1.000
Treatment	4	Small	Female	- Control	0.1	Large	Male	-13.8333	5.20	-2.66195	543	1.000
Treatment	4	Small	Female	- Control	0.1	Small	Male	-21.5000	5.20	-4.13724	543	0.046
Treatment	4	Small	Female	- Control	24	Large	Male	-10.0833	5.20	-1.94033	543	1.000

Post Hoc Comparisons - Treatment \* Hours \* Group Size \* Subject

Comparison												
Treatment	Hours	Group Size	Subject	Treatment	Hours	Group Size	Subject	Difference	SE	t	df	Pbonferroni
Treatment	4	Small	Female	- Control	24	Small	Female	-5.8333	5.20	-1.12251	543	1.000
Treatment	4	Small	Female	- Control	24	Small	Male	-16.2500	5.20	-3.12698	543	1.000
Treatment	4	Small	Female	- Control	4	Large	Male	-10.1667	5.20	-1.95637	543	1.000
Treatment	4	Small	Female	- Control	4	Small	Male	-14.7500	5.20	-2.83834	543	1.000
Treatment	4	Small	Female	- Treatment	-0.1	Large	Male	-18.9792	4.86	-3.90432	543	0.120
Treatment	4	Small	Female	- Treatment	-0.1	Small	Male	-10.9167	5.19	-2.10290	554	1.000
Treatment	4	Small	Female	- Treatment	0.1	Large	Male	-22.4167	4.86	-4.61147	543	0.006
Treatment	4	Small	Female	- Treatment	0.1	Small	Male	-44.8333	5.19	-8.63635	554	< .001
Treatment	4	Small	Female	- Treatment	24	Large	Male	-38.4792	4.86	-7.91579	543	< .001
Treatment	4	Small	Female	- Treatment	24	Small	Female	-1.6667	5.19	-0.32105	554	1.000
Treatment	4	Small	Female	- Treatment	24	Small	Male	-24.0833	5.19	-4.63923	554	0.005
Treatment	4	Small	Female	- Treatment	4	Large	Male	-42.6667	4.86	-8.77722	543	< .001
Treatment	4	Small	Female	- Treatment	4	Small	Male	-21.9167	5.19	-4.22186	554	0.032
Treatment	4	Small	Helpers	- Control	-0.1	Large	Female	-10.2292	5.20	-1.96840	543	1.000
Treatment	4	Small	Helpers	- Control	-0.1	Large	Male	-13.3125	5.20	-2.56172	543	1.000
Treatment	4	Small	Helpers	- Control	-0.1	Small	Female	-5.7292	5.20	-1.10246	543	1.000
Treatment	4	Small	Helpers	- Control	-0.1	Small	Male	-15.5625	5.20	-2.99469	543	1.000
Treatment	4	Small	Helpers	- Control	0.1	Large	Female	-15.2292	5.20	-2.93055	543	1.000
Treatment	4	Small	Helpers	- Control	0.1	Large	Male	-14.4792	5.20	-2.78622	543	1.000
Treatment	4	Small	Helpers	- Control	0.1	Small	Female	-8.3958	5.20	-1.61561	543	1.000
Treatment	4	Small	Helpers	- Control	0.1	Small	Male	-22.1458	5.20	-4.26152	543	0.027
Treatment	4	Small	Helpers	- Control	24	Large	Female	-12.3125	5.20	-2.36929	543	1.000
Treatment	4	Small	Helpers	- Control	24	Large	Male	-10.7292	5.20	-2.06461	543	1.000
Treatment	4	Small	Helpers	- Control	24	Small	Female	-6.4792	5.20	-1.24678	543	1.000
Treatment	4	Small	Helpers	- Control	24	Small	Helpers	-1.0972	5.20	-0.21114	543	1.000
Treatment	4	Small	Helpers	- Control	24	Small	Male	-16.8958	5.20	-3.25126	543	1.000
Treatment	4	Small	Helpers	- Control	4	Large	Female	-11.4792	5.20	-2.20893	543	1.000
Treatment	4	Small	Helpers	- Control	4	Large	Male	-10.8125	5.20	-2.08065	543	1.000
Treatment	4	Small	Helpers	- Control	4	Small	Female	-6.5625	5.20	-1.26282	543	1.000
Treatment	4	Small	Helpers	- Control	4	Small	Male	-15.3958	5.20	-2.96262	543	1.000
Treatment	4	Small	Helpers	- Treatment	-0.1	Large	Female	-14.0625	4.86	-2.89288	543	1.000
Treatment	4	Small	Helpers	- Treatment	-0.1	Large	Male	-19.6250	4.86	-4.03718	543	0.070
Treatment	4	Small	Helpers	- Treatment	-0.1	Small	Female	-5.1458	5.19	-0.99125	554	1.000
Treatment	4	Small	Helpers	- Treatment	-0.1	Small	Male	-11.5625	5.19	-2.22731	554	1.000
Treatment	4	Small	Helpers	- Treatment	0.1	Large	Female	-13.8125	4.86	-2.84145	543	1.000
Treatment	4	Small	Helpers	- Treatment	0.1	Large	Male	-23.0625	4.86	-4.74433	543	0.003
Treatment	4	Small	Helpers	- Treatment	0.1	Small	Female	6.6042	5.19	1.27218	554	1.000
Treatment	4	Small	Helpers	- Treatment	0.1	Small	Male	-45.4792	5.19	-8.76076	554	< .001
Treatment	4	Small	Helpers	- Treatment	24	Large	Female	-11.0625	4.86	-2.27573	543	1.000
Treatment	4	Small	Helpers	- Treatment	24	Large	Male	-39.1250	4.86	-8.04864	543	< .001
Treatment	4	Small	Helpers	- Treatment	24	Small	Female	-2.3125	5.19	-0.44546	554	1.000
Treatment	4	Small	Helpers	- Treatment	24	Small	Helpers	1.6875	5.19	0.32507	554	1.000
Treatment	4	Small	Helpers	- Treatment	24	Small	Male	-24.7292	5.19	-4.76364	554	0.003
Treatment	4	Small	Helpers	- Treatment	4	Large	Female	2.0000	4.86	0.41143	543	1.000
Treatment	4	Small	Helpers	- Treatment	4	Large	Male	-43.3125	4.86	-8.91008	543	< .001
Treatment	4	Small	Helpers	- Treatment	4	Small	Female	-0.6458	5.19	-0.12441	554	1.000
Treatment	4	Small	Helpers	- Treatment	4	Small	Male	-22.5625	5.19	-4.34627	554	0.019
Treatment	4	Small	Male	- Control	24	Small	Male	5.6667	5.20	1.09044	543	1.000
Treatment	4	Small	Male	- Treatment	24	Small	Male	-2.1667	5.19	-0.41737	554	1.000

Table S2. Post Hoc Comparisons- Group Size \* Treatment \* Hours

		Comparison					Difference	SE	t	df	Pbonferroni
Group Size	Treatment	Hours	Group Size	Treatment	Hours						
Large	Control	-0.1	-	Large	Control	0.1	0.17470	0.255	0.68563	580.0	1.000
Large	Control	-0.1	-	Large	Control	24	0.04851	0.255	0.19039	580.0	1.000
Large	Control	-0.1	-	Large	Control	4	-0.01349	0.255	-0.05295	580.0	1.000
Large	Control	-0.1	-	Large	Treatment	0.1	-0.59720	0.288	-2.07492	89.5	1.000
Large	Control	-0.1	-	Large	Treatment	24	-0.70942	0.288	-2.46485	89.5	1.000
Large	Control	-0.1	-	Large	Treatment	4	-0.32488	0.288	-1.12876	89.5	1.000
Large	Control	-0.1	-	Small	Control	0.1	-0.09683	0.308	-0.31469	89.5	1.000
Large	Control	-0.1	-	Small	Control	24	-0.08757	0.308	-0.28459	89.5	1.000
Large	Control	-0.1	-	Small	Control	4	-0.20099	0.308	-0.65323	89.5	1.000
Large	Control	-0.1	-	Small	Treatment	0.1	0.17401	0.308	0.56553	89.5	1.000
Large	Control	-0.1	-	Small	Treatment	24	-0.49266	0.308	-1.60116	89.5	1.000
Large	Control	-0.1	-	Small	Treatment	4	-0.22183	0.308	-0.72094	89.5	1.000
Large	Control	0.1	-	Large	Control	24	-0.12619	0.255	-0.49524	580.0	1.000
Large	Control	0.1	-	Large	Control	4	-0.18819	0.255	-0.73858	580.0	1.000
Large	Control	0.1	-	Large	Treatment	24	-0.88413	0.288	-3.07184	89.5	0.338
Large	Control	0.1	-	Large	Treatment	4	-0.49958	0.288	-1.73575	89.5	1.000
Large	Control	0.1	-	Small	Control	24	-0.26227	0.308	-0.85238	89.5	1.000
Large	Control	0.1	-	Small	Control	4	-0.37569	0.308	-1.22102	89.5	1.000
Large	Control	0.1	-	Small	Treatment	24	-0.66736	0.308	-2.16895	89.5	1.000
Large	Control	0.1	-	Small	Treatment	4	-0.39653	0.308	-1.28873	89.5	1.000
Large	Control	4	-	Large	Control	24	0.06200	0.255	0.24334	580.0	1.000
Large	Control	4	-	Large	Treatment	24	-0.69593	0.288	-2.41797	89.5	1.000
Large	Control	4	-	Small	Control	24	-0.07407	0.308	-0.24074	89.5	1.000
Large	Control	4	-	Small	Treatment	24	-0.47917	0.308	-1.55731	89.5	1.000
Large	Treatment	-0.1	-	Large	Control	-0.1	-0.14549	0.288	-0.50548	89.5	1.000
Large	Treatment	-0.1	-	Large	Control	0.1	0.02922	0.288	0.10151	89.5	1.000
Large	Treatment	-0.1	-	Large	Control	24	-0.09697	0.288	-0.33693	89.5	1.000
Large	Treatment	-0.1	-	Large	Control	4	-0.15898	0.288	-0.55236	89.5	1.000
Large	Treatment	-0.1	-	Large	Treatment	0.1	-0.74268	0.221	-3.36561	580.0	0.098
Large	Treatment	-0.1	-	Large	Treatment	24	-0.85491	0.221	-3.87419	580.0	0.014
Large	Treatment	-0.1	-	Large	Treatment	4	-0.47036	0.221	-2.13153	580.0	1.000
Large	Treatment	-0.1	-	Small	Control	-0.1	-0.16824	0.288	-0.58453	89.5	1.000
Large	Treatment	-0.1	-	Small	Control	0.1	-0.24231	0.288	-0.84190	89.5	1.000
Large	Treatment	-0.1	-	Small	Control	24	-0.23305	0.288	-0.80973	89.5	1.000
Large	Treatment	-0.1	-	Small	Control	4	-0.34648	0.288	-1.20382	89.5	1.000
Large	Treatment	-0.1	-	Small	Treatment	0.1	0.02852	0.288	0.09910	89.5	1.000
Large	Treatment	-0.1	-	Small	Treatment	24	-0.63814	0.288	-2.21719	89.5	1.000
Large	Treatment	-0.1	-	Small	Treatment	4	-0.36731	0.288	-1.27620	89.5	1.000
Large	Treatment	0.1	-	Large	Control	0.1	0.77190	0.288	2.68192	89.5	1.000
Large	Treatment	0.1	-	Large	Control	24	0.64571	0.288	2.24348	89.5	1.000
Large	Treatment	0.1	-	Large	Control	4	0.58371	0.288	2.02805	89.5	1.000
Large	Treatment	0.1	-	Large	Treatment	24	-0.11223	0.221	-0.50858	580.0	1.000
Large	Treatment	0.1	-	Large	Treatment	4	0.27232	0.221	1.23408	580.0	1.000
Large	Treatment	0.1	-	Small	Control	0.1	0.50037	0.288	1.73851	89.5	1.000
Large	Treatment	0.1	-	Small	Control	24	0.50963	0.288	1.77068	89.5	1.000
Large	Treatment	0.1	-	Small	Control	4	0.39621	0.288	1.37659	89.5	1.000
Large	Treatment	0.1	-	Small	Treatment	24	0.10454	0.288	0.36321	89.5	1.000
Large	Treatment	0.1	-	Small	Treatment	4	0.37537	0.288	1.30421	89.5	1.000
Large	Treatment	24	-	Large	Control	24	0.75794	0.288	2.63340	89.5	1.000
Large	Treatment	24	-	Small	Control	24	0.62186	0.288	2.16061	89.5	1.000

Post Hoc Comparisons - Group Size \* Treatment \* Hours

Comparison											
Group Size	Treatment	Hours		Group Size	Treatment	Hours	Difference	SE	t	df	Pbonferroni
Large	Treatment	4	-	Large	Control	24	0.37339	0.288	1.29731	89.5	1.000
Large	Treatment	4	-	Large	Control	4	0.31138	0.288	1.08188	89.5	1.000
Large	Treatment	4	-	Large	Treatment	24	-0.38455	0.221	-1.74265	580.0	1.000
Large	Treatment	4	-	Small	Control	24	0.23731	0.288	0.82452	89.5	1.000
Large	Treatment	4	-	Small	Control	4	0.12388	0.288	0.43043	89.5	1.000
Large	Treatment	4	-	Small	Treatment	24	-0.16778	0.288	-0.58295	89.5	1.000
Small	Control	-0.1	-	Large	Control	-0.1	0.02275	0.308	0.07394	89.5	1.000
Small	Control	-0.1	-	Large	Control	0.1	0.19745	0.308	0.64173	89.5	1.000
Small	Control	-0.1	-	Large	Control	24	0.07126	0.308	0.23161	89.5	1.000
Small	Control	-0.1	-	Large	Control	4	0.00926	0.308	0.03009	89.5	1.000
Small	Control	-0.1	-	Large	Treatment	0.1	-0.57445	0.288	-1.99588	89.5	1.000
Small	Control	-0.1	-	Large	Treatment	24	-0.68667	0.288	-2.38580	89.5	1.000
Small	Control	-0.1	-	Large	Treatment	4	-0.30212	0.288	-1.04971	89.5	1.000
Small	Control	-0.1	-	Small	Control	0.1	-0.07407	0.255	-0.29071	580.0	1.000
Small	Control	-0.1	-	Small	Control	24	-0.06481	0.255	-0.25437	580.0	1.000
Small	Control	-0.1	-	Small	Control	4	-0.17824	0.255	-0.69952	580.0	1.000
Small	Control	-0.1	-	Small	Treatment	0.1	0.19676	0.308	0.63948	89.5	1.000
Small	Control	-0.1	-	Small	Treatment	24	-0.46991	0.308	-1.52722	89.5	1.000
Small	Control	-0.1	-	Small	Treatment	4	-0.19907	0.308	-0.64700	89.5	1.000
Small	Control	0.1	-	Large	Control	0.1	0.27153	0.308	0.88248	89.5	1.000
Small	Control	0.1	-	Large	Control	24	0.14534	0.308	0.47235	89.5	1.000
Small	Control	0.1	-	Large	Control	4	0.08333	0.308	0.27084	89.5	1.000
Small	Control	0.1	-	Large	Treatment	24	-0.61260	0.288	-2.12844	89.5	1.000
Small	Control	0.1	-	Large	Treatment	4	-0.22805	0.288	-0.79235	89.5	1.000
Small	Control	0.1	-	Small	Control	24	0.00926	0.255	0.03634	580.0	1.000
Small	Control	0.1	-	Small	Control	4	-0.10417	0.255	-0.40881	580.0	1.000
Small	Control	0.1	-	Small	Treatment	24	-0.39583	0.308	-1.28647	89.5	1.000
Small	Control	0.1	-	Small	Treatment	4	-0.12500	0.308	-0.40625	89.5	1.000
Small	Control	24	-	Large	Control	24	0.13608	0.308	0.44226	89.5	1.000
Small	Control	4	-	Large	Control	24	0.24950	0.308	0.81090	89.5	1.000
Small	Control	4	-	Large	Control	4	0.18750	0.308	0.60938	89.5	1.000
Small	Control	4	-	Large	Treatment	24	-0.50843	0.288	-1.76652	89.5	1.000
Small	Control	4	-	Small	Control	24	0.11343	0.255	0.44515	580.0	1.000
Small	Control	4	-	Small	Treatment	24	-0.29167	0.308	-0.94793	89.5	1.000
Small	Treatment	-0.1	-	Large	Control	-0.1	0.24960	0.308	0.81122	89.5	1.000
Small	Treatment	-0.1	-	Large	Control	0.1	0.42431	0.308	1.37901	89.5	1.000
Small	Treatment	-0.1	-	Large	Control	24	0.29812	0.308	0.96889	89.5	1.000
Small	Treatment	-0.1	-	Large	Control	4	0.23611	0.308	0.76737	89.5	1.000
Small	Treatment	-0.1	-	Large	Treatment	-0.1	0.39509	0.288	1.37271	89.5	1.000
Small	Treatment	-0.1	-	Large	Treatment	0.1	-0.34759	0.288	-1.20769	89.5	1.000
Small	Treatment	-0.1	-	Large	Treatment	24	-0.45982	0.288	-1.59762	89.5	1.000
Small	Treatment	-0.1	-	Large	Treatment	4	-0.07527	0.288	-0.26153	89.5	1.000
Small	Treatment	-0.1	-	Small	Control	-0.1	0.22685	0.308	0.73728	89.5	1.000
Small	Treatment	-0.1	-	Small	Control	0.1	0.15278	0.308	0.49653	89.5	1.000
Small	Treatment	-0.1	-	Small	Control	24	0.16204	0.308	0.52663	89.5	1.000
Small	Treatment	-0.1	-	Small	Control	4	0.04861	0.308	0.15799	89.5	1.000
Small	Treatment	-0.1	-	Small	Treatment	0.1	0.42361	0.255	1.66248	580.0	1.000
Small	Treatment	-0.1	-	Small	Treatment	24	-0.24306	0.255	-0.95388	580.0	1.000
Small	Treatment	-0.1	-	Small	Treatment	4	0.02778	0.255	0.10902	580.0	1.000
Small	Treatment	0.1	-	Large	Control	0.1	6.94e-4	0.308	0.00226	89.5	1.000
Small	Treatment	0.1	-	Large	Control	24	-0.12550	0.308	-0.40787	89.5	1.000
Small	Treatment	0.1	-	Large	Control	4	-0.18750	0.308	-0.60938	89.5	1.000

Post Hoc Comparisons - Group Size \* Treatment \* Hours

Comparison											
Group Size	Treatment	Hours		Group Size	Treatment	Hours	Difference	SE	t	df	Pbonferroni
Small	Treatment	0.1	-	Large	Treatment	0.1	-0.77121	0.288	-2.67950	89.5	1.000
Small	Treatment	0.1	-	Large	Treatment	24	-0.88343	0.288	-3.06943	89.5	0.341
Small	Treatment	0.1	-	Large	Treatment	4	-0.49888	0.288	-1.73334	89.5	1.000
Small	Treatment	0.1	-	Small	Control	0.1	-0.27083	0.308	-0.88022	89.5	1.000
Small	Treatment	0.1	-	Small	Control	24	-0.26157	0.308	-0.85013	89.5	1.000
Small	Treatment	0.1	-	Small	Control	4	-0.37500	0.308	-1.21876	89.5	1.000
Small	Treatment	0.1	-	Small	Treatment	24	-0.66667	0.255	-2.61637	580.0	1.000
Small	Treatment	0.1	-	Small	Treatment	4	-0.39583	0.255	-1.55347	580.0	1.000
Small	Treatment	24	-	Large	Control	24	0.54117	0.308	1.75883	89.5	1.000
Small	Treatment	24	-	Large	Treatment	24	-0.21677	0.288	-0.75314	89.5	1.000
Small	Treatment	24	-	Small	Control	24	0.40509	0.308	1.31657	89.5	1.000
Small	Treatment	4	-	Large	Control	24	0.27034	0.308	0.87861	89.5	1.000
Small	Treatment	4	-	Large	Control	4	0.20833	0.308	0.67709	89.5	1.000
Small	Treatment	4	-	Large	Treatment	24	-0.48760	0.288	-1.69413	89.5	1.000
Small	Treatment	4	-	Large	Treatment	4	-0.10305	0.288	-0.35804	89.5	1.000
Small	Treatment	4	-	Small	Control	24	0.13426	0.308	0.43635	89.5	1.000
Small	Treatment	4	-	Small	Control	4	0.02083	0.308	0.06771	89.5	1.000
Small	Treatment	4	-	Small	Treatment	24	-0.27083	0.255	-1.06290	580.0	1.000

Table S3. Readme file. Behavioral data was collected in McMaster University's Animal Behaviour Ecology Laboratory (ABEL) from February 29, 2019 to March 2, 2020. Video recordings were scored from March 13, 2019 to June 6, 2019. Tissue samples were collected March 3, 2019 and assays were conducted from June 11, 2019 to June 20. All the data for this paper was analyzed from June 27, 2019 to September 16, 2019.

The dataset (Dataset 1) is contained in an Excel worksheet organized by columns. The column labels (variables of interest) and how this data was scored are as follows:

Labels	Factor Values	Meaning
Tank Number_n	1-2, 4-13, 15-16, 18-19, 22, 24-31, 34	Tank ID
Group Size	Small, Large	Binary categorization of group size, with groups either being Small (containing 4 or fewer Helper Fish) or Large (containing 5 or greater Helper Fish).
Treatment	Treatment, Control	Binary categorization of treatment type.
Subject	Breeding Male, Breeding Female, Helpers	Fish class, being Breeding Male (the dominant male of the group), Breeding Female (the dominant female of the group) or Helpers (all of the remaining fish, collectively).
Observation Type	Pre 1, Pre 2, Post 1, Post 2, 4 Hours Post 1, 4 Hours Post 2, 24 Hours Post 1, 24 Hours Post 2	The time step of the observation. The time steps listed are: Pre 1 (recording occurred immediately before the first social perturbation), Pre 2 (recording occurred immediately before the second social perturbation), Post 1 (recording occurred immediately after the first social perturbation), Post 2 (recording occurred immediately after the second social perturbation), 4 Hours Post 1 (recording occurred 4 hours following the first social perturbation), 4 Hours Post 2 (recording occurred 4 hours following the second social perturbation), 24 Hours Post 1 (recording occurred 24 hours following the first social perturbation) and 24 Hours Post 2 (recording occurred 24 hours following the second social perturbation).
Male_ID	A letter/integer combination	A unique combination of a letter and number that identifies each male. The



		number indicates the tank the male started in at the beginning of the experiment.
Helper #_n	Range: 1-8	The number of helpers within the group during experimental treatments.
Trial #_n	1, 2	The observation block, being either 1 (associated with the first social perturbation) or 2 (associated with the second social perturbation).
Hours	-0.1, 0.1, 4, 24	The number of hours before or after the social perturbation the observation occurred, being -0.1 (immediately before the perturbation), 0.1 (immediately after the perturbation), 4 (4 hours after the perturbation) or 24 (24 hours after the perturbation).
Agg_direct	Continuous integer	Aggressive acts by the focal fish toward another subject, including both other fish in the social group and its own reflection. Was not used in the calculation of Dominance Index.
Agg_direct_nomirror	Continuous integer	Aggressive acts by the focal fish toward another fish. Excludes aggressive acts toward reflections. Was used in the calculation of Dominance Index.
Social_direct	Continuous integer	Affiliative acts performed by the focal fish to another fish.
Sub_direct	Continuous integer	Submissive acts by the focal fish toward another subject, including both other fish and reflections.
Agg_rec	Continuous integer	Aggressive acts received by the focal fish from another fish.
Social_rec	Continuous integer	Affiliative acts received by the focal fish from another fish.
Sub_rec	Continuous integer	Submissive acts received by the focal fish from another fish.
Self_Maintenance	Continuous integer	Personal maintenance behaviors performed by the fish, including the initiation of swimming, remaining still, yawning etc. Not used in any of the analysis.
Territorial Maintenance_n	Continuous integer	Behaviors performed by the focal fish in the maintenance of the group's territory.
Still Duration (s)	Continuous	The duration of time (in seconds) that the focal fish was still (no active locomotion). Does not include time when the fish was not visible to the observer. Was not recorded for helpers.

Swim Duration (s)	Continuous	The duration of time (in seconds) that the focal fish was actively swimming. Does not include time when the fish was not visible to the observer. Was not recorded for helpers.
Activity	Continuous	Calculated by dividing the total time the focal fish was observed swimming in an observation over the total time the fish was observed swimming or still: Swim Duration / (Swim Duration + Still Duration) Not relevant for helpers.
Dominance_Index	Continuous Integer	(Sum of aggressive acts given + sum of submissive acts received) – (sum of aggressive acts received + sum of submissive acts given) (Aubin-Horth et al., 2007) Does not include acts toward reflections.
Dominance per capita for helpers	Continuous	Only relevant for helpers. The dominance index divided by the number of helpers in the group.
Co-op per capita for helpers		Only relevant for helpers. The territorial maintenance actions divided by the number of helpers in the group.
Affiliation per capita for helpers		Only relevant for helpers. The affiliation index divided by the number of helpers in the group.