

Supplement 1: Exploration of Sex, Proportion of artifact free trials, and IQ on dependent measures

1. Analytic models including Sex as a factor.

Table 1: Experiment 1: N170 Amplitude including Sex

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	65.000	7.228	0.001	0.000	0.971
Sex	1.000	65.000	7.228	1.933	0.029	0.169
DX:Sex	1.000	65.000	7.228	2.257	0.034	0.138
condition	1.000	65.000	1.020	19.519	0.231	0.000
DX:condition	1.000	65.000	1.020	1.232	0.019	0.271
Sex:condition	1.000	65.000	1.020	1.307	0.020	0.257
DX:Sex:condition	1.000	65.000	1.020	2.389	0.035	0.127

Experiment 1: N170 Amplitude including Sex

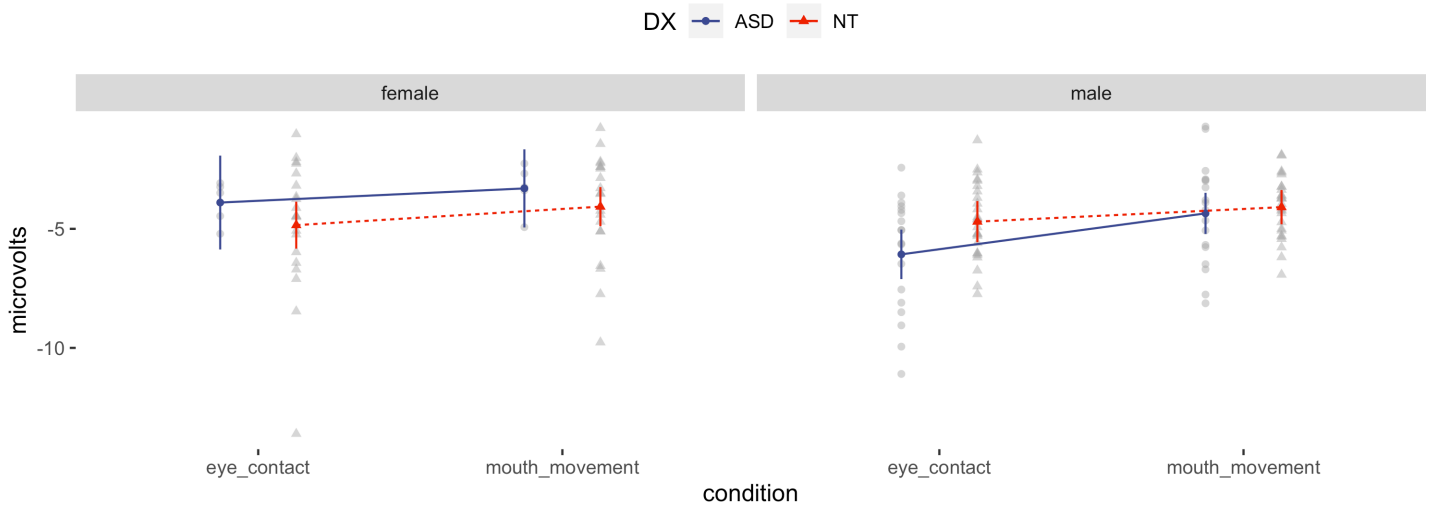


Table 2: Experiment 1: N170 Latency including Sex

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	65.000	542.801	0.407	0.006	0.526
Sex	1.000	65.000	542.801	2.321	0.034	0.132
DX:Sex	1.000	65.000	542.801	0.652	0.010	0.422
condition	1.000	65.000	123.084	6.902	0.096	0.011
DX:condition	1.000	65.000	123.084	2.094	0.031	0.153
Sex:condition	1.000	65.000	123.084	0.079	0.001	0.779
DX:Sex:condition	1.000	65.000	123.084	1.246	0.019	0.268

Experiment 1: N170 Latency including Sex

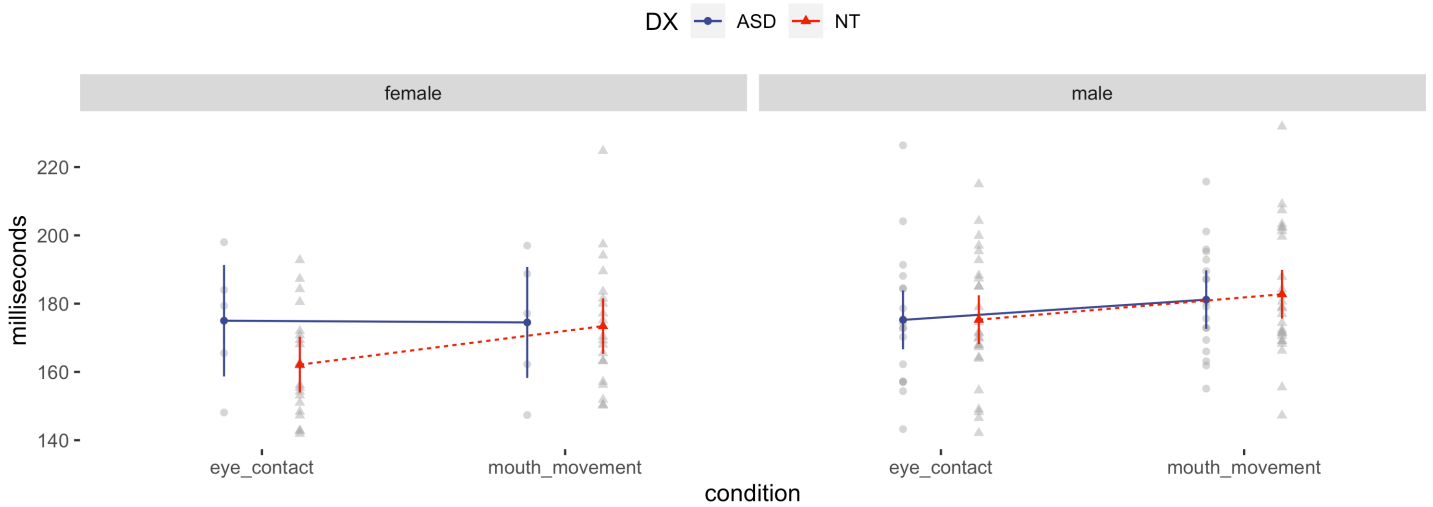


Table 3: Experiment 1: P300 Amplitude including Sex

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	65.000	6.591	6.875	0.096	<i>0.011</i>
Sex	1.000	65.000	6.591	0.015	0.000	<i>0.903</i>
DX:Sex	1.000	65.000	6.591	0.001	0.000	<i>0.981</i>
condition	1.000	65.000	0.622	7.152	0.099	<i>0.009</i>
DX:condition	1.000	65.000	0.622	5.488	0.078	<i>0.022</i>
Sex:condition	1.000	65.000	0.622	0.020	0.000	<i>0.887</i>
DX:Sex:condition	1.000	65.000	0.622	0.179	0.003	<i>0.674</i>

Experiment 1: P300 Amplitude including Sex

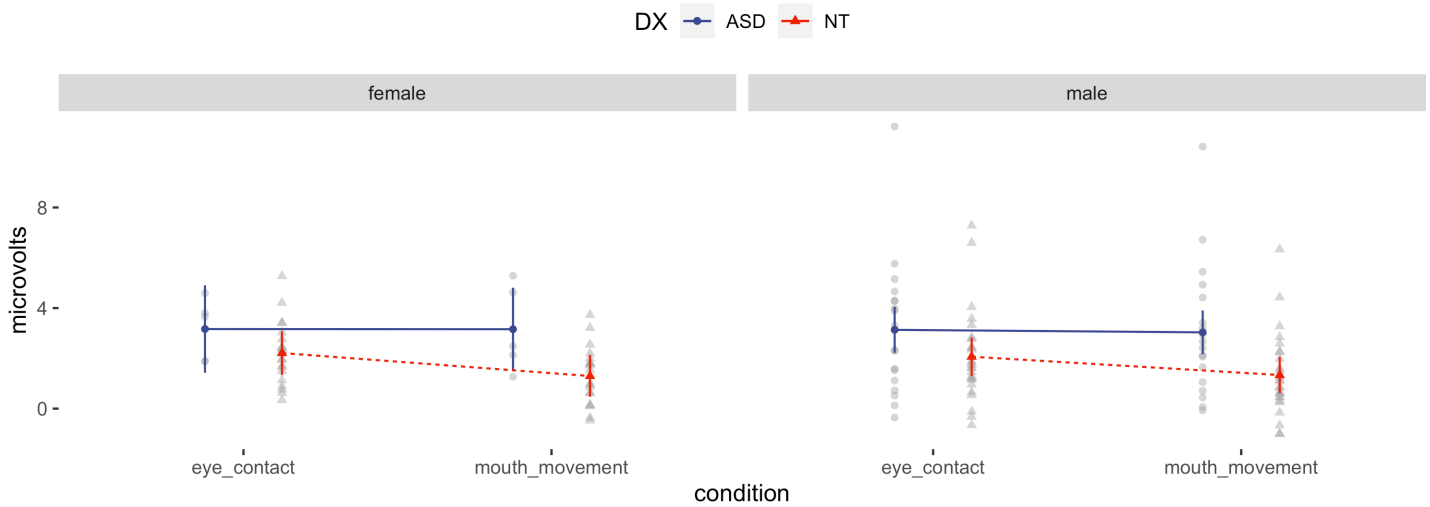


Table 4: Experiment 2: N170 Amplitude including Sex

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	64.000	4.380	3.565	0.053	<i>0.064</i>
Sex	1.000	64.000	4.380	0.041	0.001	<i>0.840</i>
DX:Sex	1.000	64.000	4.380	0.648	0.010	<i>0.424</i>
condition	1.000	64.000	0.446	11.902	0.157	<i>0.001</i>
DX:condition	1.000	64.000	0.446	0.002	0.000	<i>0.969</i>
Sex:condition	1.000	64.000	0.446	0.924	0.014	<i>0.340</i>
DX:Sex:condition	1.000	64.000	0.446	2.697	0.040	<i>0.105</i>

Experiment 2: N170 Amplitude including Sex

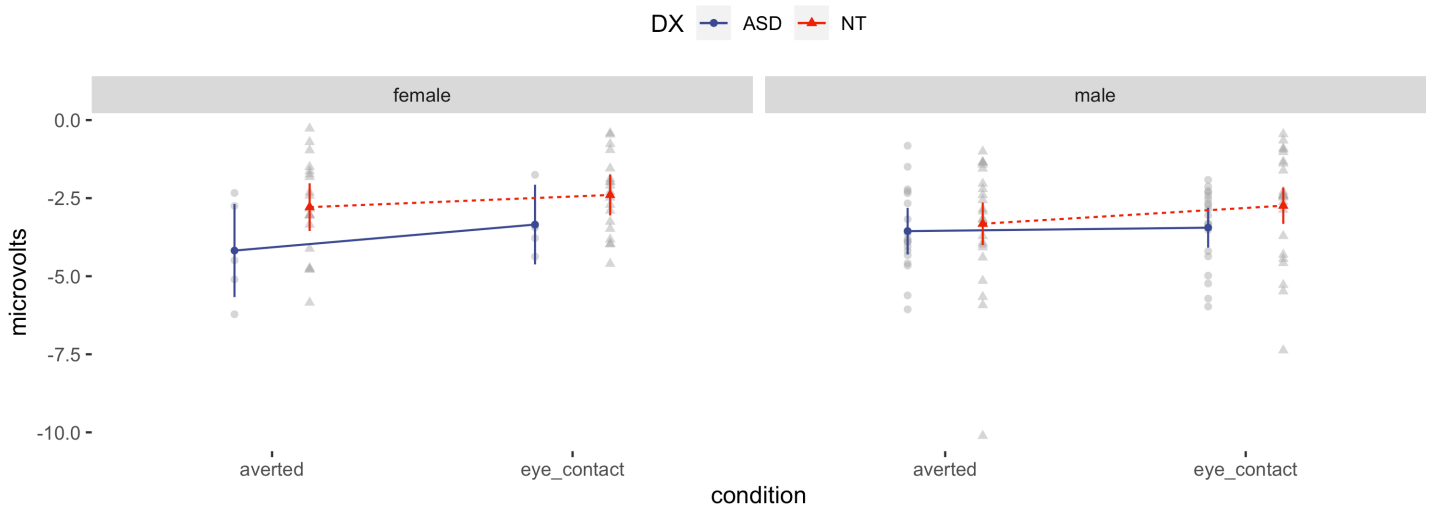


Table 5: Experiment 2: N170 Latency including Sex

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	64.000	677.751	7.970	0.111	<i>0.006</i>
Sex	1.000	64.000	677.751	0.852	0.013	<i>0.359</i>
DX:Sex	1.000	64.000	677.751	2.264	0.034	<i>0.137</i>
condition	1.000	64.000	192.949	0.012	0.000	<i>0.914</i>
DX:condition	1.000	64.000	192.949	1.730	0.026	<i>0.193</i>
Sex:condition	1.000	64.000	192.949	3.283	0.049	<i>0.075</i>
DX:Sex:condition	1.000	64.000	192.949	0.473	0.007	<i>0.494</i>

Experiment 2: N170 Latency including Sex

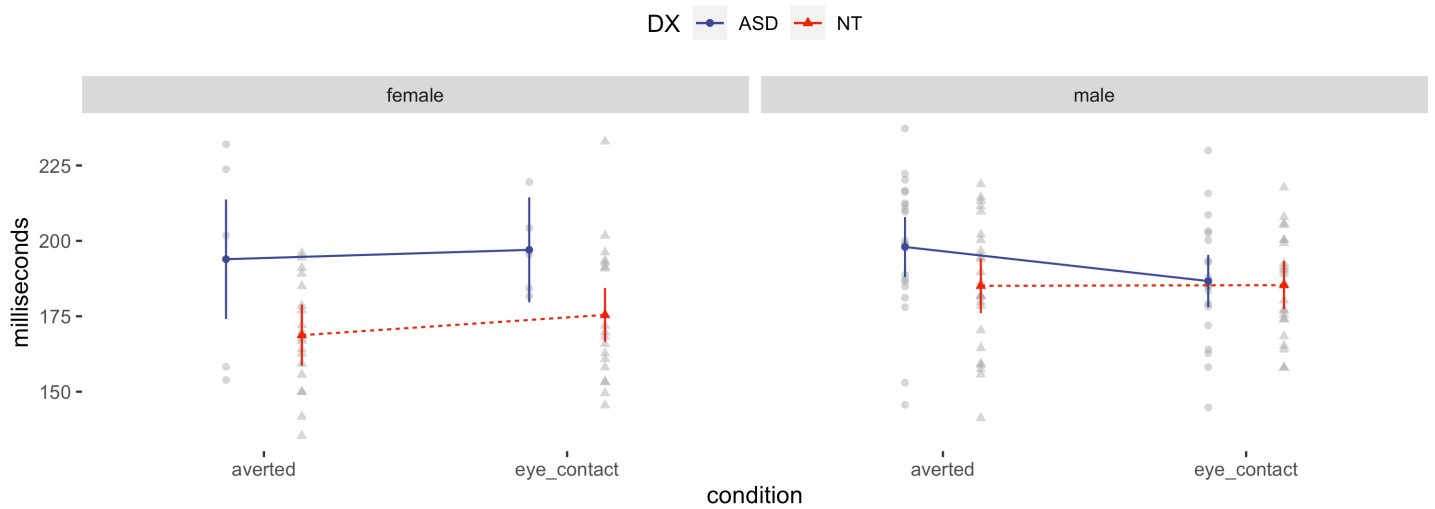
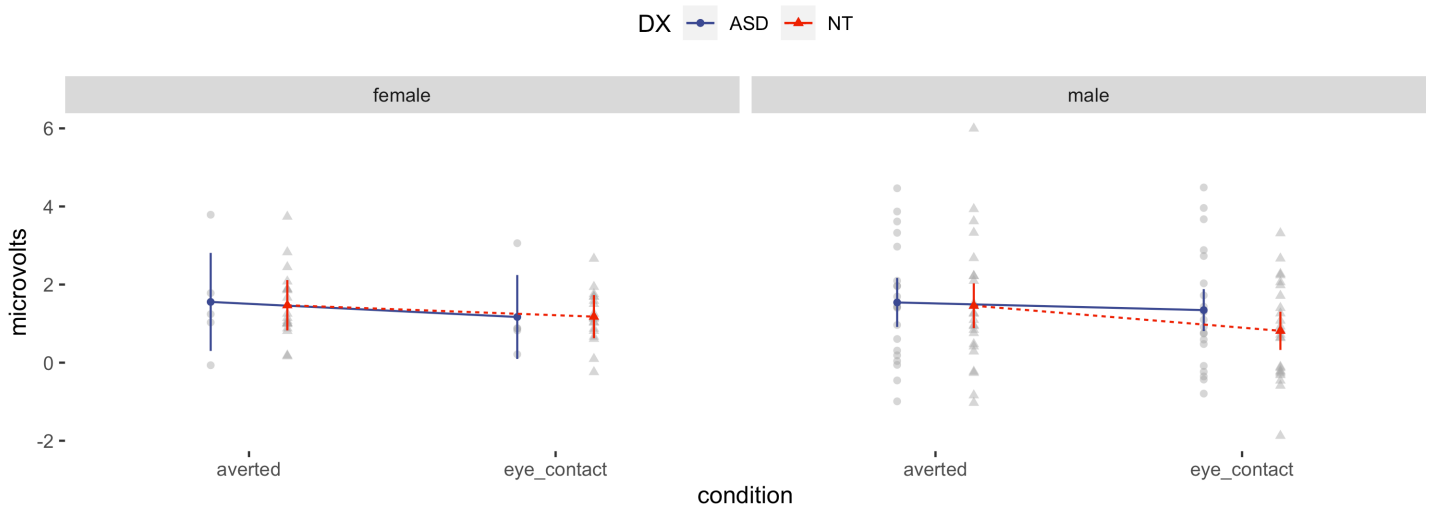


Table 6: Experiment 2: P300 Amplitude including Sex

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	64.000	2.592	0.267	0.004	0.607
Sex	1.000	64.000	2.592	0.025	0.000	0.874
DX:Sex	1.000	64.000	2.592	0.162	0.003	0.689
condition	1.000	64.000	0.832	4.010	0.059	0.049
DX:condition	1.000	64.000	0.832	0.215	0.003	0.644
Sex:condition	1.000	64.000	0.832	0.045	0.001	0.832
DX:Sex:condition	1.000	64.000	0.832	0.510	0.008	0.478

Experiment 2: P300 Amplitude including Sex



2. Analytic models including # of good trials as a covariate

Table 7: Experiment 2: P300 Amplitude with trial count

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	64.000	2.349	0.236	0.004	0.629
trialCount	1.000	64.000	2.349	5.175	0.075	0.026
DX:trialCount	1.000	64.000	2.349	1.479	0.023	0.228
condition	1.000	64.000	0.800	0.742	0.011	0.392
DX:condition	1.000	64.000	0.800	0.815	0.013	0.370
trialCount:condition	1.000	64.000	0.800	0.216	0.003	0.644
DX:trialCount:condition	1.000	64.000	0.800	0.331	0.005	0.567

Experiment 2: P300 Amplitude with trial count

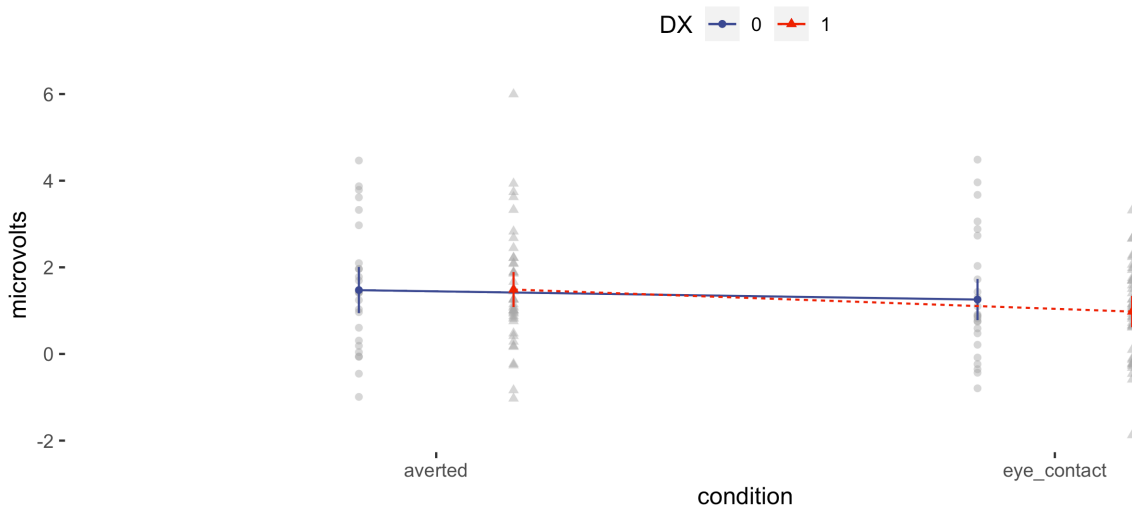


Table 8: Experiment 1: P300 Amplitude with trial count

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	65.000	6.591	8.619	0.117	<i>0.005</i>
trialCount	1.000	65.000	6.591	0.001	0.000	<i>0.975</i>
DX:trialCount	1.000	65.000	6.591	0.006	0.000	<i>0.938</i>
condition	1.000	65.000	0.591	0.001	0.000	<i>0.981</i>
DX:condition	1.000	65.000	0.591	7.982	0.109	<i>0.006</i>
trialCount:condition	1.000	65.000	0.591	3.475	0.051	<i>0.067</i>
DX:trialCount:condition	1.000	65.000	0.591	3.361	0.049	<i>0.071</i>

Experiment 1: P300 Amplitude with trial count

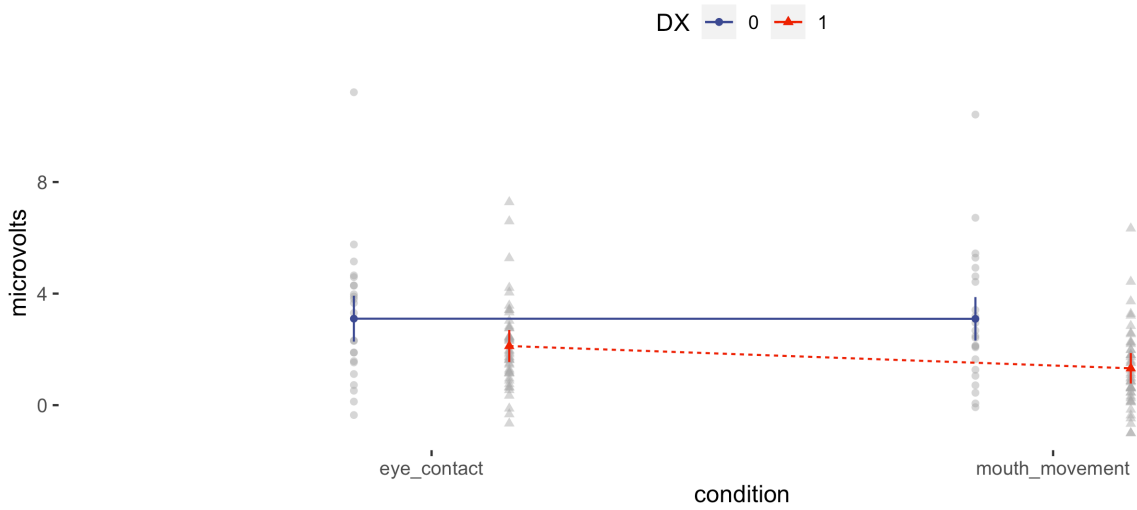


Table 9: Experiment 2: N170 Latency with Trial Count

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	64.000	734.559	7.807	0.109	<i>0.007</i>
trialCount	1.000	64.000	734.559	0.014	0.000	<i>0.905</i>
DX:trialCount	1.000	64.000	734.559	0.076	0.001	<i>0.783</i>
condition	1.000	64.000	200.735	4.145	0.061	<i>0.046</i>
DX:condition	1.000	64.000	200.735	4.876	0.071	<i>0.031</i>
trialCount:condition	1.000	64.000	200.735	0.164	0.003	<i>0.687</i>
DX:trialCount:condition	1.000	64.000	200.735	0.002	0.000	<i>0.964</i>

Experiment 2: N170 Latency with trial count

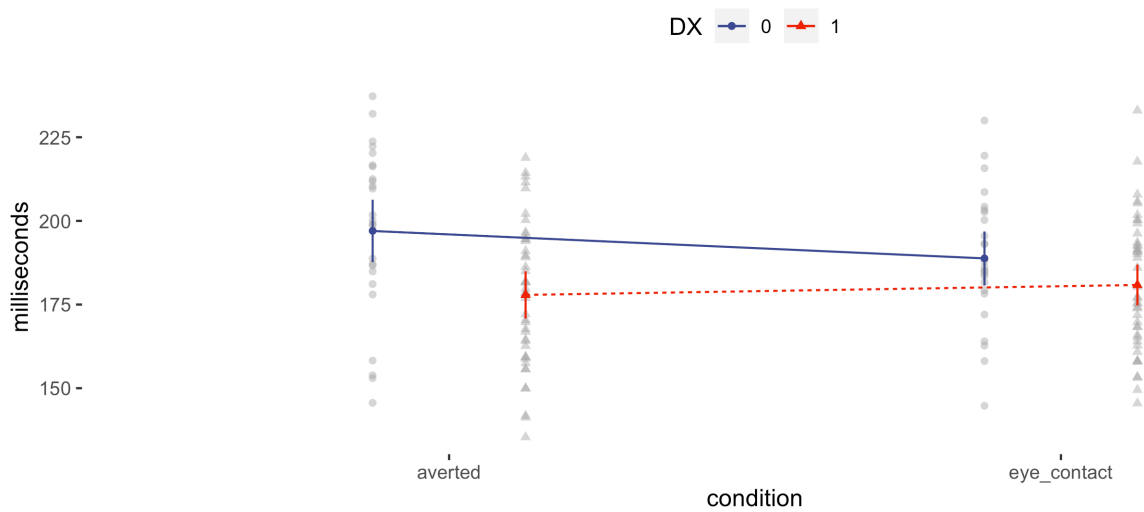


Table 10: Experiment 2: N170 Amplitude with Trial Count

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	64.000	4.087	3.517	0.052	<i>0.065</i>
trialCount	1.000	64.000	4.087	0.034	0.001	<i>0.853</i>
DX:trialCount	1.000	64.000	4.087	1.238	0.019	<i>0.270</i>
condition	1.000	64.000	0.438	2.478	0.037	<i>0.120</i>
DX:condition	1.000	64.000	0.438	0.755	0.012	<i>0.388</i>
trialCount:condition	1.000	64.000	0.438	3.035	0.045	<i>0.086</i>
DX:trialCount:condition	1.000	64.000	0.438	3.971	0.058	<i>0.051</i>

Experiment 2: N170 Amplitude with trial count

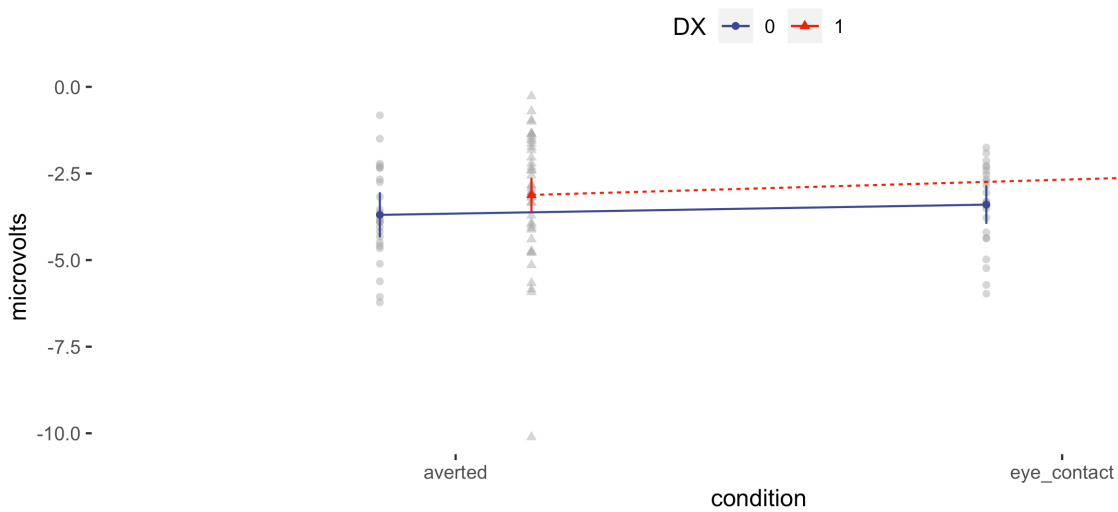


Table 11: Experiment 1: N170 Amplitude with Trial Count

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	65.000	7.478	0.969	0.015	0.329
trialCount	1.000	65.000	7.478	0.264	0.004	0.609
DX:trialCount	1.000	65.000	7.478	0.004	0.000	0.951
condition	1.000	65.000	1.008	26.883	0.293	0.000
DX:condition	1.000	65.000	1.008	5.961	0.084	0.017
trialCount:condition	1.000	65.000	1.008	2.536	0.038	0.116
DX:trialCount:condition	1.000	65.000	1.008	0.472	0.007	0.495

Experiment 1: N170 Amplitude with trial count

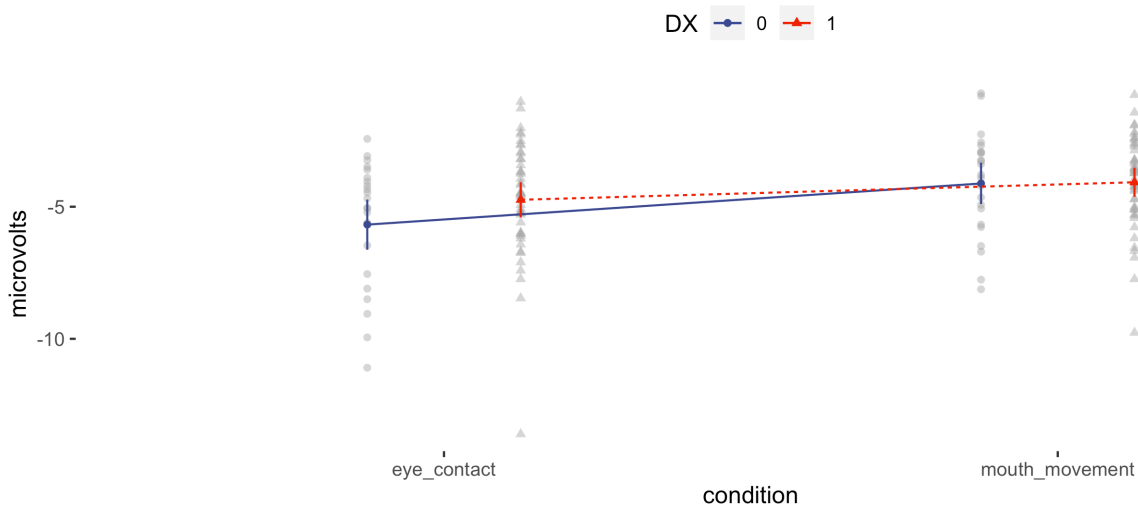
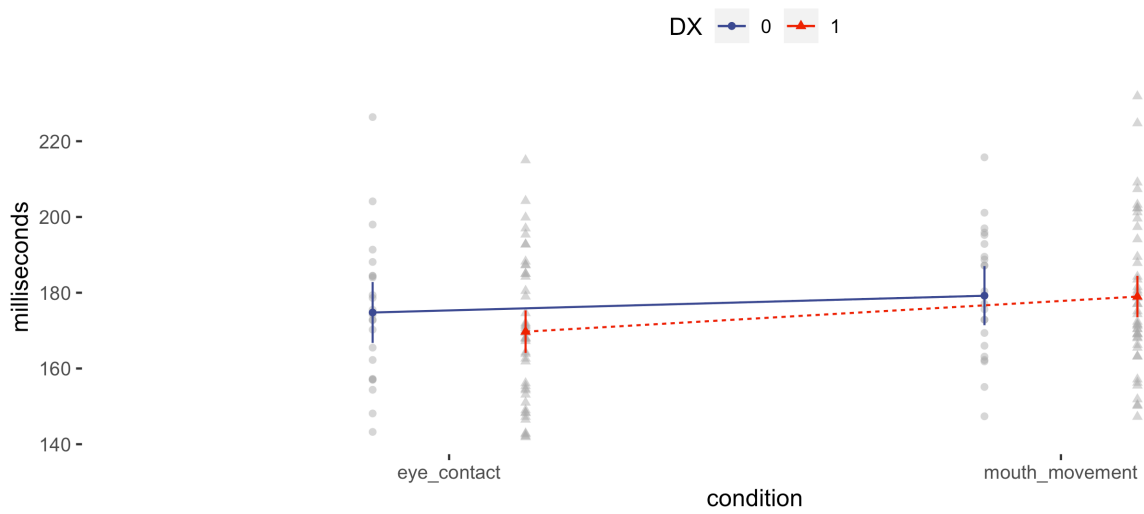


Table 12: Experiment 1: N170 Latency with Trial Count

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	65.000	576.764	0.365	0.006	0.548
trialCount	1.000	65.000	576.764	0.531	0.008	0.469
DX:trialCount	1.000	65.000	576.764	0.001	0.000	0.982
condition	1.000	65.000	124.854	1.767	0.026	0.188
DX:condition	1.000	65.000	124.854	1.391	0.021	0.243
trialCount:condition	1.000	65.000	124.854	0.021	0.000	0.884
DX:trialCount:condition	1.000	65.000	124.854	0.070	0.001	0.792

Experiment 1: N170 Latency with trial count



3. Analytic Models including IQ as a covariate

Table 13: Experiment 1: N170 Amplitude including IQ

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	28.000	8.151	0.624	0.022	0.436
IQ	39.000	28.000	8.151	0.824	0.535	0.715
condition	1.000	28.000	1.067	28.909	0.508	0.000
DX:condition	1.000	28.000	1.067	3.201	0.103	0.084
IQ:condition	39.000	28.000	1.067	0.937	0.566	0.580

Experiment 1: N170 Amplitude including IQ

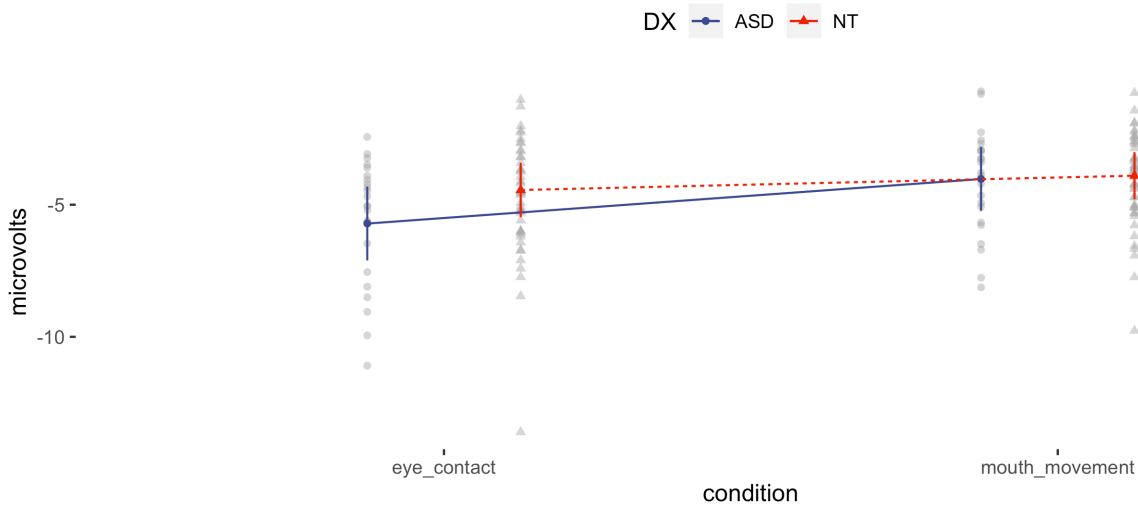


Table 14: Experiment 1: N170 Latency including IQ

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	28.000	664.917	1.034	0.036	<i>0.318</i>
IQ	39.000	28.000	664.917	0.757	0.513	<i>0.792</i>
condition	1.000	28.000	158.022	6.562	0.190	0.016
DX:condition	1.000	28.000	158.022	2.683	0.087	<i>0.113</i>
IQ:condition	39.000	28.000	158.022	0.607	0.458	<i>0.926</i>

Experiment 1: N170 Latency including IQ

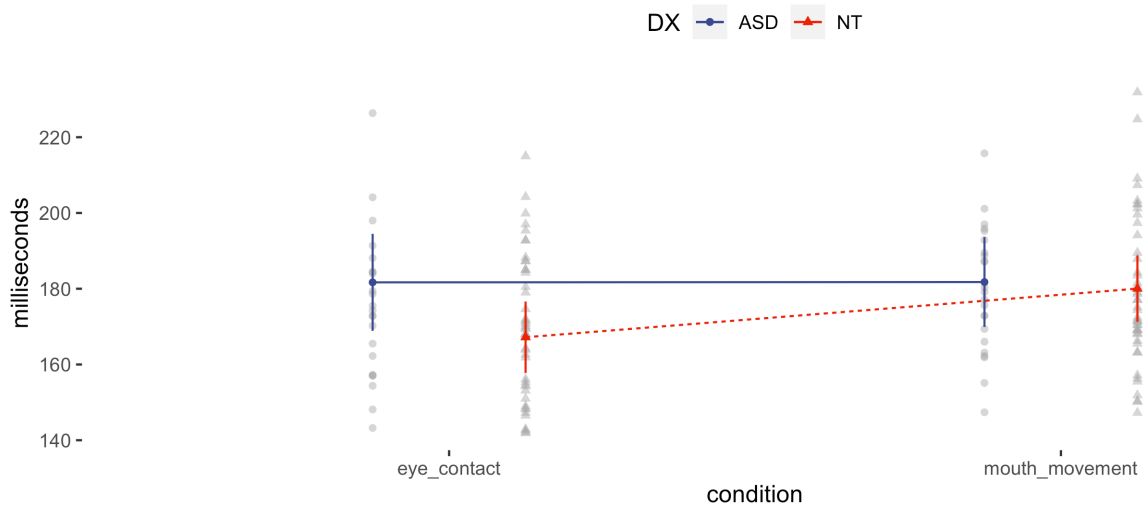


Table 15: Experiment 1: P300 Amplitude including IQ

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	28.000	4.146	11.634	0.294	<i>0.002</i>
IQ	39.000	28.000	4.146	1.932	0.729	<i>0.036</i>
condition	1.000	28.000	0.762	7.097	0.202	<i>0.013</i>
DX:condition	1.000	28.000	0.762	4.823	0.147	<i>0.037</i>
IQ:condition	39.000	28.000	0.762	0.649	0.475	<i>0.895</i>

Experiment 1: P300 Amplitude including IQ

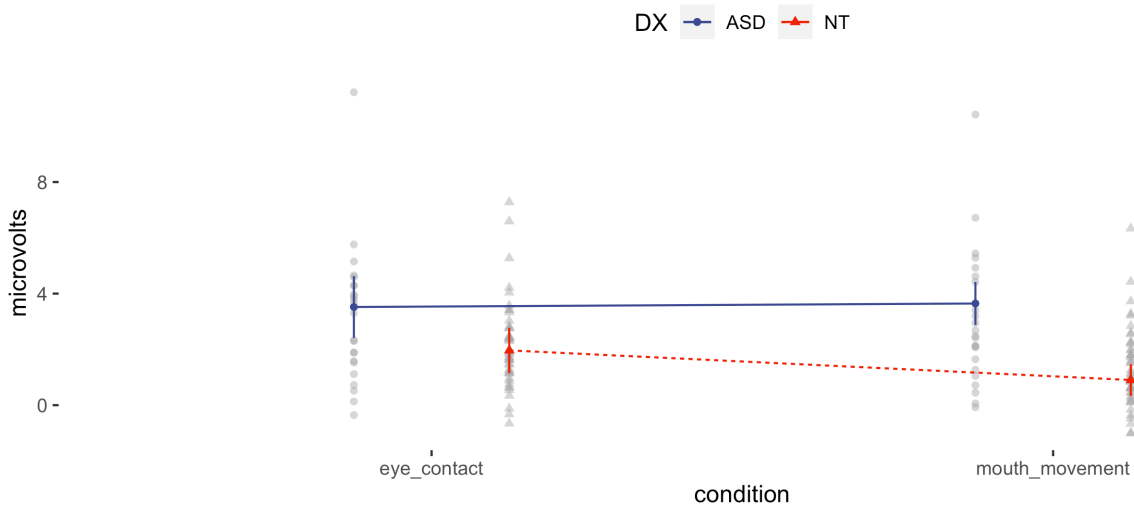


Table 16: Experiment 2: N170 Amplitude including IQ

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	28.000	4.014	3.567	0.113	<i>0.069</i>
IQ	38.000	28.000	4.014	1.131	0.606	<i>0.371</i>
condition	1.000	28.000	0.401	10.188	0.267	<i>0.003</i>
DX:condition	1.000	28.000	0.401	0.000	0.000	<i>0.997</i>
IQ:condition	38.000	28.000	0.401	1.214	0.622	<i>0.299</i>

Experiment 2: N170 Amplitude including IQ

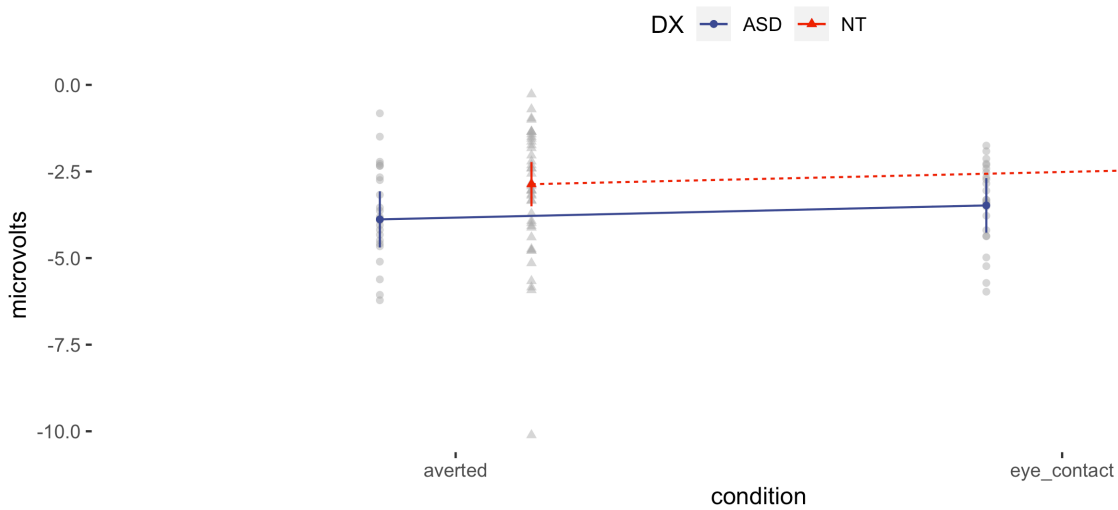


Table 17: Experiment 2: N170 Latency including IQ

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	28.000	992.863	7.384	0.209	<i>0.011</i>
IQ	38.000	28.000	992.863	0.512	0.410	<i>0.973</i>
condition	1.000	28.000	224.035	0.985	0.034	<i>0.329</i>
DX:condition	1.000	28.000	224.035	7.254	0.206	<i>0.012</i>
IQ:condition	38.000	28.000	224.035	0.789	0.517	<i>0.755</i>

Experiment 2: N170 Latency including IQ

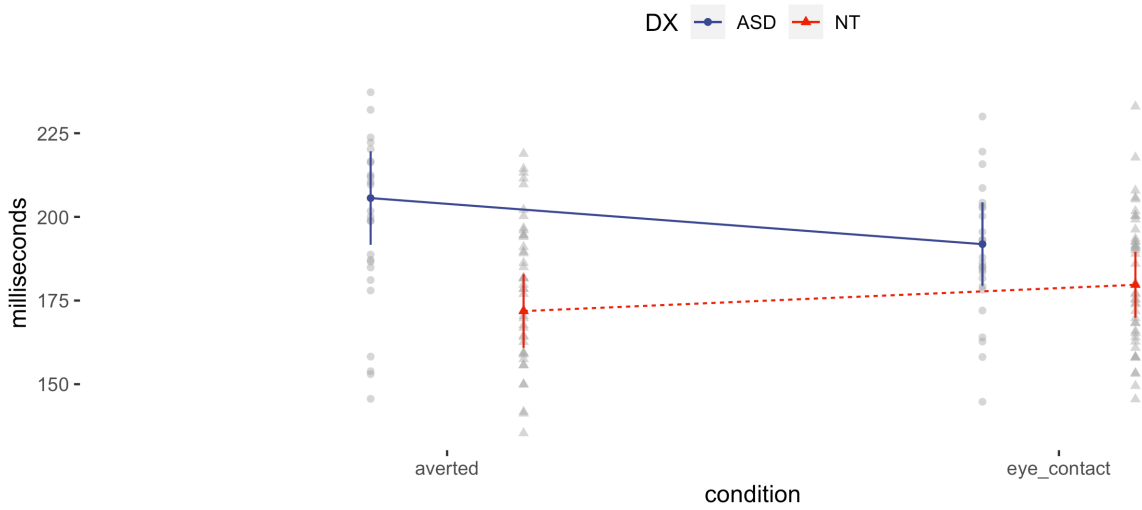
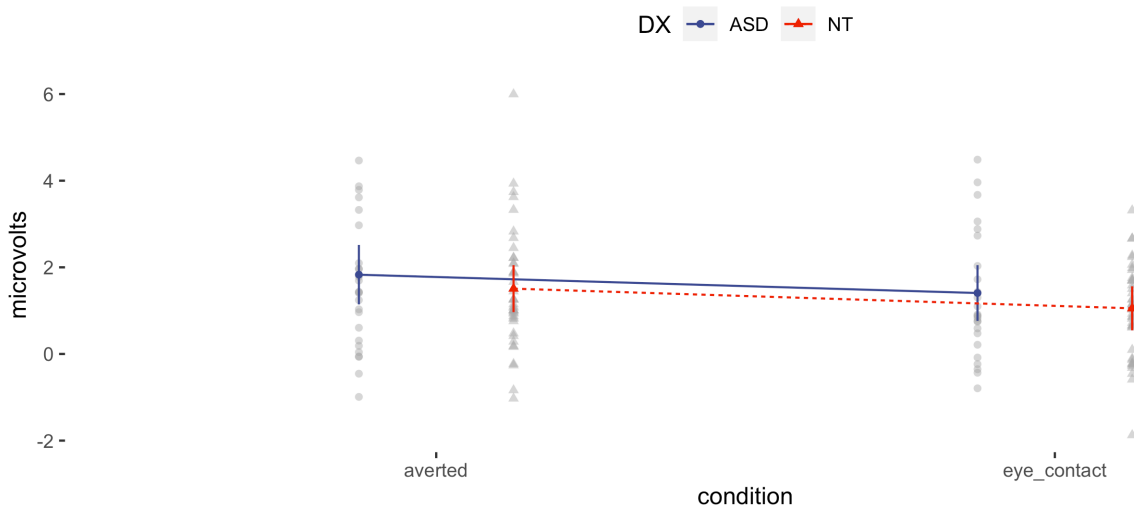


Table 18: Experiment 2: P300 Amplitude including IQ

	num Df	den Df	MSE	F	pes	Pr(>F)
DX	1.000	28.000	2.524	0.630	0.022	0.434
IQ	38.000	28.000	2.524	1.001	0.576	0.506
condition	1.000	28.000	0.542	8.939	0.242	0.006
DX:condition	1.000	28.000	0.542	0.006	0.000	0.939
IQ:condition	38.000	28.000	0.542	1.885	0.719	0.042

Experiment 2: P300 Amplitude including IQ



4. Means and standard deviations of dependent measures.

Table 19: Means and SDs for all Dependent Variables

DX	experimental_condition	component	mean	sd	N	experiment
ASD	eye_contact	N170 Amplitude	-5.599	2.358	23.000	<i>Experiment 1</i>
ASD	eye_contact	N170 Latency	175.190	19.244	23.000	<i>Experiment 1</i>
ASD	mouth_movement	N170 Amplitude	-4.123	1.971	23.000	<i>Experiment 1</i>
ASD	mouth_movement	N170 Latency	179.723	16.490	23.000	<i>Experiment 1</i>
NT	eye_contact	N170 Amplitude	-4.762	2.177	46.000	<i>Experiment 1</i>
NT	eye_contact	N170 Latency	169.571	18.589	46.000	<i>Experiment 1</i>
NT	mouth_movement	N170 Amplitude	-4.081	1.753	46.000	<i>Experiment 1</i>
NT	mouth_movement	N170 Latency	178.693	19.281	46.000	<i>Experiment 1</i>
ASD	eye_contact	P300	3.141	2.457	23.000	<i>Experiment 1</i>
ASD	mouth_movement	P300	3.061	2.432	23.000	<i>Experiment 1</i>
NT	eye_contact	P300	2.128	1.592	46.000	<i>Experiment 1</i>
NT	mouth_movement	P300	1.319	1.431	46.000	<i>Experiment 1</i>
ASD	averted gaze	N170 Amplitude	-3.681	1.356	25.000	<i>Experiment 2</i>
ASD	averted gaze	N170 Latency	197.175	25.250	25.000	<i>Experiment 2</i>
ASD	eye_contact	N170 Amplitude	-3.425	1.166	25.000	<i>Experiment 2</i>
ASD	eye_contact	N170 Latency	188.750	19.798	25.000	<i>Experiment 2</i>
NT	averted gaze	N170 Amplitude	-3.084	1.817	43.000	<i>Experiment 2</i>
NT	averted gaze	N170 Latency	177.869	21.297	43.000	<i>Experiment 2</i>
NT	eye_contact	N170 Amplitude	-2.590	1.538	43.000	<i>Experiment 2</i>
NT	eye_contact	N170 Latency	180.971	19.718	43.000	<i>Experiment 2</i>
ASD	averted gaze	P300	1.545	1.472	25.000	<i>Experiment 2</i>
ASD	eye_contact	P300	1.310	1.434	25.000	<i>Experiment 2</i>
NT	averted gaze	P300	1.463	1.331	43.000	<i>Experiment 2</i>
NT	eye_contact	P300	0.976	1.033	43.000	<i>Experiment 2</i>
ASD		N170 Amplitude Difference	-1.476	1.458	23.000	<i>Experiment 1</i>
ASD		N170 Latency Difference	-4.533	18.550	23.000	<i>Experiment 1</i>
NT		N170 Amplitude Difference	-0.682	1.422	46.000	<i>Experiment 1</i>
NT		N170 Latency Difference	-9.122	13.952	46.000	<i>Experiment 1</i>
ASD		P300 Amplitude Difference	0.080	1.078	23.000	<i>Experiment 1</i>
NT		P300 Amplitude Difference	0.809	1.113	46.000	<i>Experiment 1</i>
ASD		N170 Amplitude Difference	0.256	0.991	25.000	<i>Experiment 2</i>
ASD		N170 Latency Difference	-8.425	21.836	25.000	<i>Experiment 2</i>
NT		N170 Amplitude Difference	0.494	0.925	43.000	<i>Experiment 2</i>
NT		N170 Latency Difference	3.102	18.599	43.000	<i>Experiment 2</i>
ASD		P300 Amplitude Difference	-0.234	0.969	25.000	<i>Experiment 2</i>
NT		P300 Amplitude Difference	-0.487	1.426	43.000	<i>Experiment 2</i>