

Results

Repeated Measures ANOVA

Within Subjects Effects

	Sphericity Correction	Sum of Squares	df	Mean Square	F	p	η^2_p	ω^2
ROI	Greenhouse-Geisser	0.150 ^a	4.701 ^a	0.032 ^a	38.644 ^a	< .001 ^a	0.571	0.314
Residual	Greenhouse-Geisser	0.113	136.332	8.253e -4				
Condition	Greenhouse-Geisser	1.460	1.000	1.460	216.213	< .001	0.882	0.782
Residual	Greenhouse-Geisser	0.196	29.000	0.007				
ROI * Condition	Greenhouse-Geisser	0.097 ^a	4.701 ^a	0.021 ^a	25.012 ^a	< .001 ^a	0.463	0.226
Residual	Greenhouse-Geisser	0.113	136.332	8.253e -4				

Note. Type III Sum of Squares

^a Mauchly's test of sphericity indicates that the assumption of sphericity is violated ($p < .05$).

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p	ω^2
Residual	0.196	29	0.007				

Note. Type III Sum of Squares

Post Hoc Tests

Post Hoc Comparisons - ROI

		95% CI of Mean Difference			SE	t	Cohen's d	p _{holm}
		Mean Difference	Lower	Upper				
ACC	ATL	0.036	0.022	0.051	0.004	8.773	1.602	< .001
	IFG	0.009	-0.005	0.023	0.004	2.336	0.426	0.194
	Ins	0.017	0.001	0.033	0.004	3.801	0.694	0.010
	LTL	-0.011	-0.024	0.003	0.004	-2.731	-0.499	0.117
	PCC	0.024	0.009	0.040	0.004	5.441	0.993	< .001
	Prec	0.005	-0.007	0.017	0.003	1.466	0.268	0.614
	V1	0.046	0.028	0.063	0.005	9.392	1.715	< .001
	aPFC	0.013	0.002	0.024	0.003	4.277	0.781	0.003
ATL	IFG	-0.027	-0.043	-0.011	0.005	-5.977	-1.091	< .001
	Ins	-0.019	-0.033	-0.006	0.004	-5.130	-0.937	< .001
	LTL	-0.047	-0.065	-0.029	0.005	-9.376	-1.712	< .001
	PCC	-0.012	-0.026	0.002	0.004	-3.029	-0.553	0.061
	Prec	-0.031	-0.045	-0.017	0.004	-7.877	-1.438	< .001
	V1	0.009	-0.004	0.023	0.004	2.407	0.440	0.194
	aPFC	-0.023	-0.038	-0.008	0.004	-5.431	-0.992	< .001

Post Hoc Comparisons - ROI

		95% CI of Mean Difference			SE	t	Cohen's d	p _{holm}
		Mean Difference	Lower	Upper				
IFG	Ins	0.008	-0.004	0.019	0.003	2.384	0.435	0.194
	LTL	-0.020	-0.032	-0.008	0.003	-5.901	-1.077	< .001
	PCC	0.015	0.002	0.028	0.004	4.081	0.745	0.005
	Prec	-0.004	-0.017	0.009	0.004	-1.143	-0.209	0.718
	V1	0.036	0.022	0.051	0.004	8.745	1.597	< .001
	aPFC	0.004	-0.008	0.016	0.003	1.201	0.219	0.718
Ins	LTL	-0.027	-0.044	-0.011	0.005	-5.991	-1.094	< .001
	PCC	0.008	-0.003	0.018	0.003	2.429	0.443	0.194
	Prec	-0.012	-0.025	0.001	0.004	-3.247	-0.593	0.038
	V1	0.029	0.020	0.038	0.003	11.305	2.064	< .001
	aPFC	-0.004	-0.019	0.012	0.005	-0.787	-0.144	0.718
LTL	PCC	0.035	0.019	0.051	0.005	7.763	1.417	< .001
	Prec	0.016	0.004	0.027	0.003	4.708	0.860	< .001
	V1	0.056	0.038	0.075	0.005	10.648	1.944	< .001
	aPFC	0.024	0.011	0.037	0.004	6.361	1.161	< .001
PCC	Prec	-0.019	-0.033	-0.006	0.004	-5.229	-0.955	< .001
	V1	0.021	0.009	0.034	0.004	5.912	1.079	< .001
	aPFC	-0.011	-0.028	0.006	0.005	-2.284	-0.417	0.194
Prec	V1	0.041	0.027	0.054	0.004	10.416	1.902	< .001
	aPFC	0.008	-0.003	0.020	0.003	2.515	0.459	0.177
V1	aPFC	-0.032	-0.051	-0.014	0.005	-6.266	-1.144	< .001

Note. Cohen's d does not correct for multiple comparisons.

Note. Bonferroni adjusted confidence intervals.

Post Hoc Comparisons - Condition

		95% CI of Mean Difference			SE	t	Cohen's d	p _{holm}
		Mean Difference	Lower	Upper				
Chance Estimate		-0.104	-0.118	-0.090	0.007	-14.704	-2.685	< .001

Note. Cohen's d does not correct for multiple comparisons.

Note. Bonferroni adjusted confidence intervals.

Post Hoc Comparisons - ROI * Condition

		95% CI of Mean Difference			SE	t	Cohen's d	p _{holm}
		Mean Difference	Lower	Upper				
ACC,Chance	ACC,Estimate	-0.129	-0.163	-0.096	0.009	14.549	-2.656	< .001
	ATL,Chance	0.015	-0.006	0.035	0.006	2.550	0.466	0.455
	ATL,Estimate	-0.071	-0.104	-0.037	0.009	-7.982	-1.457	< .001
	IFG,Chance	0.003	-0.018	0.023	0.006	0.459	0.084	1.000
	IFG,Estimate	-0.113	-0.147	-0.080	0.009	12.770	-2.331	< .001
	Ins,Chance	-0.002	-0.022	0.019	0.006	-0.274	-0.050	1.000
	Ins,Estimate	-0.094	-0.127	-0.060	0.009	10.564	-1.929	< .001

Post Hoc Comparisons - ROI * Condition

		95% CI of Mean Difference		SE	t	Cohen's d	p _{holm}
	Mean Difference	Lower	Upper				
	LTL,Chance	-0.005	-0.026	0.015	0.006	-0.940	-0.172 1.000
	LTL,Estimate	-0.145	-0.178	-0.111	0.009	-16.319	-2.979 < .001
	PCC,Chance	0.004	-0.016	0.025	0.006	0.780	0.142 1.000
	PCC,Estimate	-0.085	-0.118	-0.051	0.009	-9.545	-1.743 < .001
	Prec,Chance	0.003	-0.018	0.023	0.006	0.452	0.083 1.000
	Prec,Estimate	-0.122	-0.155	-0.088	0.009	-13.707	-2.503 < .001
	V1,Chance	0.005	-0.016	0.025	0.006	0.822	0.150 1.000
	V1,Estimate	-0.042	-0.076	-0.009	0.009	-4.787	-0.874 < .001
	aPFC,Chance	0.006	-0.015	0.026	0.006	0.967	0.177 1.000
	aPFC,Estimate	-0.108	-0.141	-0.074	0.009	-12.157	-2.220 < .001
ACC,Estimate	ATL,Chance	0.144	0.110	0.177	0.009	16.183	2.955 < .001
	ATL,Estimate	0.058	0.038	0.079	0.006	10.249	1.871 < .001
	IFG,Chance	0.132	0.098	0.165	0.009	14.843	2.710 < .001
	IFG,Estimate	0.016	-0.005	0.036	0.006	2.776	0.507 0.246
	Ins,Chance	0.128	0.094	0.161	0.009	14.373	2.624 < .001
	Ins,Estimate	0.035	0.015	0.056	0.006	6.220	1.136 < .001
	LTL,Chance	0.124	0.090	0.157	0.009	13.947	2.546 < .001
	LTL,Estimate	-0.016	-0.036	0.005	0.006	-2.763	-0.504 0.250
	PCC,Chance	0.134	0.100	0.167	0.009	15.049	2.748 < .001
	PCC,Estimate	0.044	0.024	0.065	0.006	7.810	1.426 < .001
ATL,Chance	Prec,Chance	0.132	0.098	0.165	0.009	14.839	2.709 < .001
	Prec,Estimate	0.007	-0.013	0.028	0.006	1.314	0.240 1.000
	V1,Chance	0.134	0.100	0.167	0.009	15.075	2.752 < .001
	V1,Estimate	0.087	0.066	0.107	0.006	15.236	2.782 < .001
	aPFC,Chance	0.135	0.101	0.168	0.009	15.168	2.769 < .001
	aPFC,Estimate	0.021	6.394e -4	0.042	0.006	3.733	0.681 0.010
	ATL,Estimate	-0.085	-0.119	-0.052	0.009	-9.616	-1.756 < .001
	IFG,Chance	-0.012	-0.032	0.009	0.006	-2.091	-0.382 1.000
	IFG,Estimate	-0.128	-0.161	-0.094	0.009	-14.404	-2.630 < .001
	Ins,Chance	-0.016	-0.037	0.005	0.006	-2.824	-0.516 0.218
ATL,Estimate	Ins,Estimate	-0.108	-0.142	-0.075	0.009	-12.198	-2.227 < .001
	LTL,Chance	-0.020	-0.040	7.405e -4	0.006	-3.490	-0.637 0.024
	LTL,Estimate	-0.159	-0.193	-0.126	0.009	-17.953	-3.278 < .001
	PCC,Chance	-0.010	-0.031	0.011	0.006	-1.770	-0.323 1.000
	PCC,Estimate	-0.099	-0.133	-0.066	0.009	-11.179	-2.041 < .001
	Prec,Chance	-0.012	-0.033	0.009	0.006	-2.098	-0.383 1.000
	Prec,Estimate	-0.136	-0.170	-0.103	0.009	-15.341	-2.801 < .001

Post Hoc Comparisons - ROI * Condition

		95% CI of Mean Difference						
		Mean Difference	Lower	Upper	SE	t	Cohen's d	p _{holm}
ATL,Estimate	V1,Chance	-0.010	-0.030	0.011	0.006	-1.729	-0.316	1.000
	V1,Estimate	-0.057	-0.091	-0.023	0.009	-6.421	-1.172	< .001
	aPFC,Chance	-0.009	-0.030	0.012	0.006	-1.583	-0.289	1.000
	aPFC,Estimate	-0.122	-0.156	-0.089	0.009	13.791	-2.518	< .001
	IFG,Chance	0.073	0.040	0.107	0.009	8.277	1.511	< .001
	IFG,Estimate	-0.042	-0.063	-0.022	0.006	-7.473	-1.364	< .001
	Ins,Chance	0.069	0.036	0.103	0.009	7.807	1.425	< .001
	Ins,Estimate	-0.023	-0.043	-0.002	0.006	-4.029	-0.736	0.003
	LTL,Chance	0.066	0.032	0.099	0.009	7.380	1.347	< .001
	LTL,Estimate	-0.074	-0.095	-0.053	0.006	13.012	-2.376	< .001
	PCC,Chance	0.075	0.042	0.109	0.009	8.482	1.549	< .001
	PCC,Estimate	-0.014	-0.034	0.007	0.006	-2.440	-0.445	0.588
	Prec,Chance	0.073	0.040	0.107	0.009	8.272	1.510	< .001
	Prec,Estimate	-0.051	-0.071	-0.030	0.006	-8.936	-1.631	< .001
	V1,Chance	0.076	0.042	0.109	0.009	8.509	1.553	< .001
	V1,Estimate	0.028	0.008	0.049	0.006	4.987	0.911	< .001
IFG,Chance	aPFC,Chance	0.076	0.043	0.110	0.009	8.602	1.571	< .001
	aPFC,Estimate	-0.037	-0.058	-0.016	0.006	-6.517	-1.190	< .001
	IFG,Estimate	-0.116	-0.150	-0.082	0.009	13.064	-2.385	< .001
	Ins,Chance	-0.004	-0.025	0.016	0.006	-0.733	-0.134	1.000
	Ins,Estimate	-0.096	-0.130	-0.063	0.009	10.858	-1.982	< .001
	LTL,Chance	-0.008	-0.029	0.013	0.006	-1.399	-0.255	1.000
	LTL,Estimate	-0.147	-0.181	-0.114	0.009	16.613	-3.033	< .001
	PCC,Chance	0.002	-0.019	0.022	0.006	0.321	0.059	1.000
	PCC,Estimate	-0.087	-0.121	-0.054	0.009	-9.840	-1.796	< .001
	Prec,Chance	-4.049e -5	-0.021	0.021	0.006	-0.007	-0.001	1.000
	Prec,Estimate	-0.124	-0.158	-0.091	0.009	14.001	-2.556	< .001
	V1,Chance	0.002	-0.019	0.023	0.006	0.362	0.066	1.000
	V1,Estimate	-0.045	-0.079	-0.012	0.009	-5.081	-0.928	< .001
	aPFC,Chance	0.003	-0.018	0.023	0.006	0.508	0.093	1.000
	aPFC,Estimate	-0.111	-0.144	-0.077	0.009	12.452	-2.273	< .001
	IFG,Estimate	Ins,Chance	0.112	0.078	0.145	0.009	12.594	2.299
Ins,Estimate		0.020	-0.001	0.040	0.006	3.443	0.629	0.028
LTL,Chance		0.108	0.074	0.142	0.009	12.168	2.222	< .001
LTL,Estimate		-0.031	-0.052	-0.011	0.006	-5.539	-1.011	< .001
PCC,Chance		0.118	0.084	0.151	0.009	13.270	2.423	< .001
PCC,Estimate		0.029	0.008	0.049	0.006	5.033	0.919	< .001
Prec,Chance		0.116	0.082	0.149	0.009	13.060	2.384	< .001

Post Hoc Comparisons - ROI * Condition

		95% CI of Mean Difference				t	Cohen's d	p _{holm}
		Mean Difference	Lower	Upper	SE			
Ins,Chance	Prec,Estimate	-0.008	-0.029	0.012	0.006	-1.463	-0.267	1.000
	V1,Chance	0.118	0.084	0.152	0.009	13.296	2.428	< .001
	V1,Estimate	0.071	0.050	0.091	0.006	12.460	2.275	< .001
	aPFC,Chance	0.119	0.085	0.152	0.009	13.390	2.445	< .001
	aPFC,Estimate	0.005	-0.015	0.026	0.006	0.956	0.175	1.000
	Ins,Estimate	-0.092	-0.126	-0.059	0.009	-10.388	-1.897	< .001
	LTL,Chance	-0.004	-0.024	0.017	0.006	-0.666	-0.122	1.000
	LTL,Estimate	-0.143	-0.177	-0.110	0.009	-16.144	-2.947	< .001
	PCC,Chance	0.006	-0.015	0.027	0.006	1.054	0.192	1.000
	PCC,Estimate	-0.083	-0.117	-0.050	0.009	-9.370	-1.711	< .001
Ins,Estimate	Prec,Chance	0.004	-0.016	0.025	0.006	0.726	0.133	1.000
	Prec,Estimate	-0.120	-0.154	-0.087	0.009	-13.532	-2.471	< .001
	V1,Chance	0.006	-0.014	0.027	0.006	1.095	0.200	1.000
	V1,Estimate	-0.041	-0.074	-0.007	0.009	-4.612	-0.842	< .001
	aPFC,Chance	0.007	-0.014	0.028	0.006	1.241	0.227	1.000
	aPFC,Estimate	-0.106	-0.140	-0.073	0.009	-11.982	-2.188	< .001
	LTL,Chance	0.088	0.055	0.122	0.009	9.962	1.819	< .001
	LTL,Estimate	-0.051	-0.072	-0.030	0.006	-8.983	-1.640	< .001
	PCC,Chance	0.098	0.065	0.132	0.009	11.064	2.020	< .001
	PCC,Estimate	0.009	-0.012	0.030	0.006	1.590	0.290	1.000
LTL,Chance	Prec,Chance	0.096	0.063	0.130	0.009	10.854	1.982	< .001
	Prec,Estimate	-0.028	-0.048	-0.007	0.006	-4.906	-0.896	< .001
	V1,Chance	0.098	0.065	0.132	0.009	11.090	2.025	< .001
	V1,Estimate	0.051	0.031	0.072	0.006	9.017	1.646	< .001
	aPFC,Chance	0.099	0.066	0.133	0.009	11.184	2.042	< .001
	aPFC,Estimate	-0.014	-0.035	0.006	0.006	-2.487	-0.454	0.529
	LTL,Estimate	-0.139	-0.173	-0.106	0.009	-15.717	-2.869	< .001
	PCC,Chance	0.010	-0.011	0.030	0.006	1.720	0.314	1.000
	PCC,Estimate	-0.079	-0.113	-0.046	0.009	-8.943	-1.633	< .001
	Prec,Chance	0.008	-0.013	0.029	0.006	1.392	0.254	1.000
LTL,Estimate	Prec,Estimate	-0.116	-0.150	-0.083	0.009	-13.105	-2.393	< .001
	V1,Chance	0.010	-0.011	0.031	0.006	1.761	0.322	1.000
	V1,Estimate	-0.037	-0.071	-0.004	0.009	-4.185	-0.764	0.004
	aPFC,Chance	0.011	-0.010	0.031	0.006	1.907	0.348	1.000
	aPFC,Estimate	-0.103	-0.136	-0.069	0.009	-11.555	-2.110	< .001
	PCC,Chance	0.149	0.116	0.183	0.009	16.819	3.071	< .001
	PCC,Estimate	0.060	0.040	0.081	0.006	10.573	1.930	< .001
	Prec,Chance	0.147	0.114	0.181	0.009	16.609	3.032	< .001

Post Hoc Comparisons - ROI * Condition

		Mean Difference	95% CI of Mean Difference		SE	t	Cohen's d	p _{holm}	
			Lower	Upper					
	Prec,Estimate	0.023	0.003	0.044	0.006	4.077	0.744	0.003	
	V1,Chance	0.150	0.116	0.183	0.009	16.845	3.076	< .001	
	V1,Estimate	0.102	0.082	0.123	0.006	17.999	3.286	< .001	
	aPFC,Chance	0.150	0.117	0.184	0.009	16.939	3.093	< .001	
	aPFC,Estimate	0.037	0.016	0.058	0.006	6.496	1.186	< .001	
	PCC,Chance	PCC,Estimate	-0.089	-0.123	-0.056	0.009	10.045	-1.834	< .001
	Prec,Chance	-0.002	-0.022	0.019	0.006	-0.328	-0.060	1.000	
	Prec,Estimate	-0.126	-0.160	-0.093	0.009	14.207	-2.594	< .001	
	V1,Chance	2.343e -4	-0.020	0.021	0.006	0.041	0.008	1.000	
	V1,Estimate	-0.047	-0.080	-0.013	0.009	-5.287	-0.965	< .001	
	aPFC,Chance	0.001	-0.020	0.022	0.006	0.187	0.034	1.000	
	aPFC,Estimate	-0.112	-0.146	-0.079	0.009	12.657	-2.311	< .001	
	PCC,Estimate	Prec,Chance	0.087	0.054	0.121	0.009	9.835	1.796	< .001
	Prec,Estimate	-0.037	-0.058	-0.016	0.006	-6.496	-1.186	< .001	
	V1,Chance	0.089	0.056	0.123	0.009	10.072	1.839	< .001	
	V1,Estimate	0.042	0.022	0.063	0.006	7.427	1.356	< .001	
	aPFC,Chance	0.090	0.057	0.124	0.009	10.165	1.856	< .001	
	aPFC,Estimate	-0.023	-0.044	-0.003	0.006	-4.077	-0.744	0.003	
	Prec,Chance	Prec,Estimate	-0.124	-0.158	-0.091	0.009	13.997	-2.555	< .001
	V1,Chance	0.002	-0.018	0.023	0.006	0.369	0.067	1.000	
	V1,Estimate	-0.045	-0.079	-0.012	0.009	-5.077	-0.927	< .001	
	aPFC,Chance	0.003	-0.018	0.024	0.006	0.515	0.094	1.000	
	aPFC,Estimate	-0.110	-0.144	-0.077	0.009	12.447	-2.273	< .001	
	Prec,Estimate	V1,Chance	0.126	0.093	0.160	0.009	14.234	2.599	< .001
	V1,Estimate	0.079	0.059	0.100	0.006	13.923	2.542	< .001	
	aPFC,Chance	0.127	0.094	0.161	0.009	14.327	2.616	< .001	
	aPFC,Estimate	0.014	-0.007	0.034	0.006	2.419	0.442	0.606	
	V1,Chance	V1,Estimate	-0.047	-0.081	-0.014	0.009	-5.313	-0.970	< .001
	aPFC,Chance	8.288e -4	-0.020	0.021	0.006	0.146	0.027	1.000	
	aPFC,Estimate	-0.113	-0.146	-0.079	0.009	12.684	-2.316	< .001	
	V1,Estimate	aPFC,Chance	0.048	0.014	0.082	0.009	5.407	0.987	< .001
	aPFC,Estimate	-0.065	-0.086	-0.045	0.006	11.504	-2.100	< .001	
	aPFC,Chance	aPFC,Estimate	-0.113	-0.147	-0.080	0.009	12.777	-2.333	< .001

Note. Cohen's d does not correct for multiple comparisons.

Note. Bonferroni adjusted confidence intervals.

Descriptives

Descriptives

ROI	Condition	Mean	SD	N
LTL	Estimate	0.682	0.065	30
	Chance	0.543	0.000	30
IFG	Estimate	0.651	0.048	30
	Chance	0.535	0.000	30
Prec	Estimate	0.659	0.049	30
	Chance	0.535	0.000	30
ATL	Estimate	0.608	0.047	30
	Chance	0.523	0.000	30
aPFC	Estimate	0.645	0.062	30
	Chance	0.532	0.000	30
Ins	Estimate	0.631	0.029	30
	Chance	0.539	0.000	30
ACC	Estimate	0.666	0.058	30
	Chance	0.537	0.000	30
PCC	Estimate	0.622	0.035	30
	Chance	0.533	0.000	30
V1	Estimate	0.580	0.028	30
	Chance	0.533	0.000	30

Descriptives Plot

