Results

Repeated Measures ANOVA

Within Subjects Effects

	Sphericity Correction	Sum of Squares	df	Mean Square	F	p	η²ₚ	ω²
ROI	Greenhouse-Geisser	0.095	5.474	0.017	24.114	< .001	0.454	0.224
Residual	Greenhouse-Geisser	0.114	158.750	7.196e -4				
Condition	Greenhouse-Geisser	2.331	1.000	2.331	273.462	< .001	0.904	0.837
Residual	Greenhouse-Geisser	0.247	29.000	0.009				
ROI ✲ Condition	Greenhouse-Geisser	0.096 ᵃ	4.569 ᵃ	0.021 ᵃ	20.719 ᵃ	< .001 ᵃ	0.417	0.213
Residual	Greenhouse-Geisser	0.134	132.504	0.001				

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	η²ₚ	ω²
Residual	0.191	29	0.007				

Note. Type III Sum of Squares

Post Hoc Tests

Post Hoc Comparisons - ROI ✲ Condition

		Mean Difference	95% CI of Mean Difference Lower	Upper	SE	t	Cohen's d	p bonf
ACC,Chance	ACC,Estimate	-0.144	-0.181	-0.106	0.010	-14.555	-2.657	< .001
	ATL,Chance	5.039e -4	-0.021	0.022	0.006	0.084	0.015	1.000
	ATL,Estimate	-0.107	-0.144	-0.070	0.010	-11.049	-2.017	< .001
	IFG,Chance	0.002	-0.020	0.023	0.006	0.294	0.054	1.000
	IFG,Estimate	-0.152	-0.188	-0.115	0.010	-15.585	-2.845	< .001
	Ins,Chance	-0.008	-0.029	0.014	0.006	-1.291	-0.236	1.000
	Ins,Estimate	-0.129	-0.166	-0.092	0.010	-13.241	-2.417	< .001
	LTL,Chance	-0.006	-0.027	0.016	0.006	-0.979	-0.179	1.000
	LTL,Estimate	-0.182	-0.219	-0.145	0.010	-18.690	-3.412	< .001
	PCC,Chance	4.932e -4	-0.021	0.022	0.006	0.083	0.015	1.000
	PCC,Estimate	-0.118	-0.155	-0.081	0.010	-12.151	-2.219	< .001
	Prec,Chance	-0.002	-0.023	0.020	0.006	-0.317	-0.058	1.000
	Prec,Estimate	-0.152	-0.189	-0.115	0.010	-15.668	-2.861	< .001
	V1,Chance	-0.006	-0.028	0.016	0.006	-1.002	-0.183	1.000
	V1,Estimate	-0.087	-0.123	-0.050	0.010	-8.905	-1.626	< .001
	aPFC,Chance	4.965e -4	-0.021	0.022	0.006	0.083	0.015	1.000
	aPFC,Estimate	-0.131	-0.168	-0.094	0.010	-13.473	-2.460	< .001
ACC,Estimate	ATL,Chance	0.144	0.107	0.181	0.010	14.821	2.706	< .001
	ATL,Estimate	0.036	0.015	0.058	0.006	6.058	1.106	< .001
	IFG,Chance	0.145	0.108	0.182	0.010	14.949	2.729	< .001

Post Hoc Comparisons - ROI ✱ Condition

		Mean Difference	95% CI of Mean Difference		SE	t	Cohen's d	p bonf
			Lower	Upper				
	IFG,Estimate	-0.008	-0.030	0.014	0.006	-1.329	-0.243	1.000
	Ins,Chance	0.136	0.099	0.173	0.010	13.976	2.552	< .001
	Ins,Estimate	0.015	-0.007	0.036	0.006	2.489	0.454	1.000
	LTL,Chance	0.138	0.101	0.175	0.010	14.167	2.587	< .001
	LTL,Estimate	-0.038	-0.060	-0.017	0.006	-6.386	-1.166	< .001
	PCC,Chance	0.144	0.107	0.181	0.010	14.820	2.706	< .001
	PCC,Estimate	0.025	0.004	0.047	0.006	4.263	0.778	0.004
	Prec,Chance	0.142	0.105	0.179	0.010	14.574	2.661	< .001
	Prec,Estimate	-0.009	-0.030	0.013	0.006	-1.464	-0.267	1.000
	V1,Chance	0.138	0.101	0.175	0.010	14.153	2.584	< .001
	V1,Estimate	0.057	0.035	0.079	0.006	9.551	1.744	< .001
	aPFC,Chance	0.144	0.107	0.181	0.010	14.820	2.706	< .001
	aPFC,Estimate	0.013	-0.009	0.034	0.006	2.111	0.385	1.000
ATL,Chance	ATL,Estimate	-0.108	-0.145	-0.071	0.010	-10.940	-1.997	< .001
	IFG,Chance	0.001	-0.020	0.023	0.006	0.210	0.038	1.000
	IFG,Estimate	-0.152	-0.189	-0.115	0.010	-15.637	-2.855	< .001
	Ins,Chance	-0.008	-0.030	0.013	0.006	-1.375	-0.251	1.000
	Ins,Estimate	-0.129	-0.166	-0.092	0.010	-13.293	-2.427	< .001
	LTL,Chance	-0.006	-0.028	0.015	0.006	-1.064	-0.194	1.000
	LTL,Estimate	-0.182	-0.219	-0.145	0.010	-18.742	-3.422	< .001
	PCC,Chance	-1.070e -5	-0.022	0.022	0.006	-0.002	-3.274e -4	1.000
	PCC,Estimate	-0.119	-0.156	-0.082	0.010	-12.203	-2.228	< .001
	Prec,Chance	-0.002	-0.024	0.019	0.006	-0.401	-0.073	1.000
	Prec,Estimate	-0.153	-0.190	-0.116	0.010	-15.720	-2.870	< .001
	V1,Chance	-0.006	-0.028	0.015	0.006	-1.087	-0.198	1.000
	V1,Estimate	-0.087	-0.124	-0.050	0.010	-8.957	-1.635	< .001
	aPFC,Chance	-7.408e -6	-0.022	0.022	0.006	-0.001	-2.266e -4	1.000
	aPFC,Estimate	-0.131	-0.168	-0.095	0.010	-13.525	-2.469	< .001
ATL,Estimate	IFG,Chance	0.109	0.072	0.146	0.010	11.230	2.050	< .001
	IFG,Estimate	-0.044	-0.066	-0.022	0.006	-7.388	-1.349	< .001
	Ins,Chance	0.100	0.063	0.137	0.010	10.257	1.873	< .001
	Ins,Estimate	-0.021	-0.043	3.010e -4	0.006	-3.570	-0.652	0.060
	LTL,Chance	0.102	0.065	0.138	0.010	10.448	1.908	< .001
	LTL,Estimate	-0.074	-0.096	-0.053	0.006	-12.445	-2.272	< .001
	PCC,Chance	0.108	0.071	0.145	0.010	11.100	2.027	< .001
	PCC,Estimate	-0.011	-0.032	0.011	0.006	-1.795	-0.328	1.000
	Prec,Chance	0.106	0.069	0.142	0.010	10.855	1.982	< .001
	Prec,Estimate	-0.045	-0.067	-0.023	0.006	-7.523	-1.373	< .001
	V1,Chance	0.101	0.065	0.138	0.010	10.434	1.905	< .001
	V1,Estimate	0.021	-7.635e -4	0.042	0.006	3.492	0.638	0.080
	aPFC,Chance	0.108	0.071	0.145	0.010	11.100	2.027	< .001
	aPFC,Estimate	-0.024	-0.045	-0.002	0.006	-3.948	-0.721	0.014
IFG,Chance	IFG,Estimate	-0.153	-0.191	-0.116	0.010	-15.537	-2.837	< .001
	Ins,Chance	-0.009	-0.031	0.012	0.006	-1.585	-0.289	1.000

Post Hoc Comparisons - ROI ✶ Condition

		Mean Difference	95% CI of Mean Difference		SE	t	Cohen's d	p bonf
			Lower	Upper				
	Ins,Estimate	-0.130	-0.167	-0.094	0.010	-13.421	-2.450	< .001
	LTL,Chance	-0.008	-0.029	0.014	0.006	-1.273	-0.232	1.000
	LTL,Estimate	-0.183	-0.220	-0.147	0.010	-18.870	-3.445	< .001
	PCC,Chance	-0.001	-0.023	0.020	0.006	-0.211	-0.039	1.000
	PCC,Estimate	-0.120	-0.157	-0.083	0.010	-12.332	-2.251	< .001
	Prec,Chance	-0.004	-0.025	0.018	0.006	-0.611	-0.112	1.000
	Prec,Estimate	-0.154	-0.191	-0.117	0.010	-15.848	-2.893	< .001
	V1,Chance	-0.008	-0.029	0.014	0.006	-1.296	-0.237	1.000
	V1,Estimate	-0.088	-0.125	-0.051	0.010	-9.085	-1.659	< .001
	aPFC,Chance	-0.001	-0.023	0.020	0.006	-0.211	-0.038	1.000
	aPFC,Estimate	-0.133	-0.170	-0.096	0.010	-13.654	-2.493	< .001
IFG,Estimate	Ins,Chance	0.144	0.107	0.181	0.010	14.793	2.701	< .001
	Ins,Estimate	0.023	0.001	0.044	0.006	3.818	0.697	0.023
	LTL,Chance	0.146	0.109	0.183	0.010	14.984	2.736	< .001
	LTL,Estimate	-0.030	-0.052	-0.009	0.006	-5.057	-0.923	< .001
	PCC,Chance	0.152	0.115	0.189	0.010	15.636	2.855	< .001
	PCC,Estimate	0.033	0.012	0.055	0.006	5.593	1.021	< .001
	Prec,Chance	0.150	0.113	0.187	0.010	15.390	2.810	< .001
	Prec,Estimate	-8.036e -4	-0.022	0.021	0.006	-0.135	-0.025	1.000
	V1,Chance	0.146	0.109	0.182	0.010	14.970	2.733	< .001
	V1,Estimate	0.065	0.043	0.087	0.006	10.880	1.986	< .001
	aPFC,Chance	0.152	0.115	0.189	0.010	15.636	2.855	< .001
	aPFC,Estimate	0.021	-0.001	0.042	0.006	3.440	0.628	0.097
Ins,Chance	Ins,Estimate	-0.121	-0.158	-0.084	0.010	-12.269	-2.240	< .001
	LTL,Chance	0.002	-0.020	0.023	0.006	0.311	0.057	1.000
	LTL,Estimate	-0.174	-0.211	-0.137	0.010	-17.897	-3.268	< .001
	PCC,Chance	0.008	-0.013	0.030	0.006	1.373	0.251	1.000
	PCC,Estimate	-0.110	-0.147	-0.073	0.010	-11.359	-2.074	< .001
	Prec,Chance	0.006	-0.016	0.027	0.006	0.974	0.178	1.000
	Prec,Estimate	-0.145	-0.182	-0.108	0.010	-14.875	-2.716	< .001
	V1,Chance	0.002	-0.020	0.023	0.006	0.288	0.053	1.000
	V1,Estimate	-0.079	-0.116	-0.042	0.010	-8.113	-1.481	< .001
	aPFC,Chance	0.008	-0.013	0.030	0.006	1.374	0.251	1.000
	aPFC,Estimate	-0.123	-0.160	-0.086	0.010	-12.681	-2.315	< .001
Ins,Estimate	LTL,Chance	0.123	0.086	0.160	0.010	12.640	2.308	< .001
	LTL,Estimate	-0.053	-0.075	-0.031	0.006	-8.875	-1.620	< .001
	PCC,Chance	0.129	0.092	0.166	0.010	13.292	2.427	< .001
	PCC,Estimate	0.011	-0.011	0.032	0.006	1.775	0.324	1.000
	Prec,Chance	0.127	0.090	0.164	0.010	13.046	2.382	< .001
	Prec,Estimate	-0.024	-0.045	-0.002	0.006	-3.953	-0.722	0.014
	V1,Chance	0.123	0.086	0.160	0.010	12.626	2.305	< .001
	V1,Estimate	0.042	0.021	0.064	0.006	7.062	1.289	< .001
	aPFC,Chance	0.129	0.092	0.166	0.010	13.292	2.427	< .001
	aPFC,Estimate	-0.002	-0.024	0.019	0.006	-0.378	-0.069	1.000
LTL,Chance	LTL,Estimate	-0.176	-0.213	-0.138	0.010	-17.827	-3.255	< .001
	PCC,Chance	0.006	-0.015	0.028	0.006	1.062	0.194	1.000

Post Hoc Comparisons - ROI ✶ Condition

		Mean Difference	95% CI of Mean Difference		SE	t	Cohen's d	p bonf
			Lower	Upper				
	PCC,Estimate	-0.112	-0.149	-0.075	0.010	-11.550	-2.109	< .001
	Prec,Chance	0.004	-0.018	0.026	0.006	0.662	0.121	1.000
	Prec,Estimate	-0.146	-0.183	-0.110	0.010	-15.066	-2.751	< .001
	V1,Chance	-1.373e -4	-0.022	0.021	0.006	-0.023	-0.004	1.000
	V1,Estimate	-0.081	-0.118	-0.044	0.010	-8.304	-1.516	< .001
	aPFC,Chance	0.006	-0.015	0.028	0.006	1.063	0.194	1.000
	aPFC,Estimate	-0.125	-0.162	-0.088	0.010	-12.872	-2.350	< .001
LTL,Estimate	PCC,Chance	0.182	0.145	0.219	0.010	18.741	3.422	< .001
	PCC,Estimate	0.064	0.042	0.085	0.006	10.650	1.944	< .001
	Prec,Chance	0.180	0.143	0.217	0.010	18.495	3.377	< .001
	Prec,Estimate	0.029	0.008	0.051	0.006	4.922	0.899	< .001
	V1,Chance	0.176	0.139	0.213	0.010	18.074	3.300	< .001
	V1,Estimate	0.095	0.074	0.117	0.006	15.937	2.910	< .001
	aPFC,Chance	0.182	0.145	0.219	0.010	18.741	3.422	< .001
	aPFC,Estimate	0.051	0.029	0.072	0.006	8.497	1.551	< .001
PCC,Chance	PCC,Estimate	-0.119	-0.156	-0.081	0.010	-12.026	-2.196	< .001
	Prec,Chance	-0.002	-0.024	0.019	0.006	-0.400	-0.073	1.000
	Prec,Estimate	-0.153	-0.190	-0.116	0.010	-15.718	-2.870	< .001
	V1,Chance	-0.006	-0.028	0.015	0.006	-1.085	-0.198	1.000
	V1,Estimate	-0.087	-0.124	-0.050	0.010	-8.956	-1.635	< .001
	aPFC,Chance	3.295e -6	-0.022	0.022	0.006	5.521e -4	1.008e -4	1.000
	aPFC,Estimate	-0.131	-0.168	-0.095	0.010	-13.524	-2.469	< .001
PCC,Estimate	Prec,Chance	0.116	0.079	0.153	0.010	11.957	2.183	< .001
	Prec,Estimate	-0.034	-0.056	-0.013	0.006	-5.727	-1.046	< .001
	V1,Chance	0.112	0.075	0.149	0.010	11.536	2.106	< .001
	V1,Estimate	0.032	0.010	0.053	0.006	5.288	0.965	< .001
	aPFC,Chance	0.119	0.082	0.156	0.010	12.202	2.228	< .001
	aPFC,Estimate	-0.013	-0.034	0.009	0.006	-2.153	-0.393	1.000
Prec,Chance	Prec,Estimate	-0.150	-0.188	-0.113	0.010	-15.249	-2.784	< .001
	V1,Chance	-0.004	-0.026	0.018	0.006	-0.685	-0.125	1.000
	V1,Estimate	-0.085	-0.122	-0.048	0.010	-8.710	-1.590	< .001
	aPFC,Chance	0.002	-0.019	0.024	0.006	0.400	0.073	1.000
	aPFC,Estimate	-0.129	-0.166	-0.092	0.010	-13.278	-2.424	< .001
Prec,Estimate	V1,Chance	0.146	0.109	0.183	0.010	15.052	2.748	< .001
	V1,Estimate	0.066	0.044	0.087	0.006	11.015	2.011	< .001
	aPFC,Chance	0.153	0.116	0.190	0.010	15.719	2.870	< .001
	aPFC,Estimate	0.021	-2.730e -4	0.043	0.006	3.575	0.653	0.059
V1,Chance	V1,Estimate	-0.081	-0.118	-0.043	0.010	-8.170	-1.492	< .001
	aPFC,Chance	0.006	-0.015	0.028	0.006	1.086	0.198	1.000
	aPFC,Estimate	-0.125	-0.162	-0.088	0.010	-12.858	-2.347	< .001
V1,Estimate	aPFC,Chance	0.087	0.050	0.124	0.010	8.956	1.635	< .001
	aPFC,Estimate	-0.044	-0.066	-0.023	0.006	-7.440	-1.358	< .001
aPFC,Chance	aPFC,Estimate	-0.131	-0.169	-0.094	0.010	-13.328	-2.433	< .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	0.466	0.067	30
	Chance	0.290	0.021	30
IFG	Estimate	0.436	0.051	30
	Chance	0.282	0.017	30
Prec	Estimate	0.436	0.049	30
	Chance	0.286	0.019	30
ATL	Estimate	0.392	0.039	30
	Chance	0.284	0.018	30
aPFC	Estimate	0.415	0.059	30
	Chance	0.284	0.019	30
Ins	Estimate	0.413	0.034	30
	Chance	0.292	0.023	30
ACC	Estimate	0.428	0.052	30
	Chance	0.284	0.021	30
PCC	Estimate	0.402	0.030	30
	Chance	0.284	0.024	30
V1	Estimate	0.371	0.030	30
	Chance	0.290	0.017	30

Descriptives Plot