

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	0.108	5.525	0.020	19.764	< .001	0.405	0.190
Residual	Greenhouse-Geisser	0.158	160.232	9.868e -4				
Condition	Greenhouse-Geisser	0.168	1.000	0.168	18.262	< .001	0.386	0.224
Residual	Greenhouse-Geisser	0.266	29.000	0.009				
ROI *								
Condition	Greenhouse-Geisser	0.076 ^a	5.443 ^a	0.014 ^a	15.354 ^a	< .001 ^a	0.346	0.144
Residual	Greenhouse-Geisser	0.143	157.838	9.053e -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	0.264	29	0.009				

Note. Type III Sum of Squares

Post Hoc Tests

Post Hoc Comparisons - ROI * Condition

		95% CI of Mean Difference						
		Mean Difference	Lower	Upper	SE	t	Cohen's d	p _{bonf}
ACC,Chance	ACC,Estimate	-0.066	-0.105	-0.027	0.010	-6.443	-1.176	< .001
	ATL,Chance	0.012	-0.012	0.036	0.007	1.812	0.331	1.000
	ATL,Estimate	-0.013	-0.052	0.026	0.010	-1.271	-0.232	1.000
	IFG,Chance	2.991e -4	-0.024	0.024	0.007	0.045	0.008	1.000
	IFG,Estimate	-0.040	-0.079	-4.667e -4	0.010	-3.825	-0.698	0.043
	Ins,Chance	-0.005	-0.029	0.019	0.007	-0.771	-0.141	1.000
	Ins,Estimate	-0.021	-0.060	0.018	0.010	-2.039	-0.372	1.000
	LTL,Chance	-0.007	-0.030	0.017	0.007	-0.996	-0.182	1.000
	LTL,Estimate	-0.069	-0.108	-0.030	0.010	-6.636	-1.212	< .001
	PCC,Chance	-2.312e -4	-0.024	0.024	0.007	-0.035	-0.006	1.000
	PCC,Estimate	-0.023	-0.062	0.016	0.010	-2.266	-0.414	1.000
	Prec,Chance	6.995e -6	-0.024	0.024	0.007	0.001	1.942e -4	1.000
	Prec,Estimate	-0.054	-0.093	-0.014	0.010	-5.183	-0.946	< .001
	V1,Chance	0.003	-0.021	0.027	0.007	0.475	0.087	1.000
	V1,Estimate	0.016	-0.023	0.055	0.010	1.554	0.284	1.000
	aPFC,Chance	0.006	-0.018	0.029	0.007	0.861	0.157	1.000
aPFC,Estimate	-0.039	-0.078	-1.822e -5	0.010	-3.782	-0.690	0.050	
ACC,Estimate	ATL,Chance	0.078	0.039	0.117	0.010	7.530	1.375	< .001
	ATL,Estimate	0.053	0.029	0.077	0.007	8.022	1.465	< .001
	IFG,Chance	0.066	0.027	0.105	0.010	6.406	1.170	< .001

Post Hoc Comparisons - ROI * Condition

		95% CI of Mean Difference		SE	t	Cohen's d	p bonf
	Mean Difference	Lower	Upper				
ATL,Chance	IFG,Estimate	0.026	0.003	0.050	0.007	4.009	0.732 0.011
	Ins,Chance	0.061	0.022	0.100	0.010	5.886	1.075 < .001
	Ins,Estimate	0.045	0.021	0.069	0.007	6.815	1.244 < .001
	LTL,Chance	0.059	0.020	0.098	0.010	5.743	1.048 < .001
	LTL,Estimate	-0.003	-0.026	0.021	0.007	-0.407	-0.074 1.000
	PCC,Chance	0.066	0.027	0.105	0.010	6.355	1.160 < .001
	PCC,Estimate	0.042	0.019	0.066	0.007	6.459	1.179 < .001
	Prec,Chance	0.066	0.027	0.105	0.010	6.378	1.164 < .001
	Prec,Estimate	0.012	-0.011	0.036	0.007	1.875	0.342 1.000
	V1,Chance	0.069	0.030	0.108	0.010	6.679	1.219 < .001
	V1,Estimate	0.082	0.058	0.106	0.007	12.461	2.275 < .001
	aPFC,Chance	0.072	0.032	0.111	0.010	6.925	1.264 < .001
	aPFC,Estimate	0.027	0.003	0.051	0.007	4.077	0.744 0.008
	ATL,Estimate	-0.025	-0.064	0.014	0.010	-2.449	-0.447 1.000
	IFG,Chance	-0.012	-0.035	0.012	0.007	-1.766	-0.322 1.000
	IFG,Estimate	-0.051	-0.090	-0.012	0.010	-4.978	-0.909 < .001
	Ins,Chance	-0.017	-0.041	0.007	0.007	-2.583	-0.472 1.000
	Ins,Estimate	-0.033	-0.072	0.006	0.010	-3.193	-0.583 0.324
	LTL,Chance	-0.018	-0.042	0.005	0.007	-2.808	-0.513 0.795
	LTL,Estimate	-0.080	-0.120	-0.041	0.010	-7.789	-1.422 < .001
ATL,Estimate	PCC,Chance	-0.012	-0.036	0.012	0.007	-1.847	-0.337 1.000
	PCC,Estimate	-0.035	-0.074	0.004	0.010	-3.419	-0.624 0.161
	Prec,Chance	-0.012	-0.036	0.012	0.007	-1.811	-0.331 1.000
	Prec,Estimate	-0.065	-0.105	-0.026	0.010	-6.336	-1.157 < .001
	V1,Chance	-0.009	-0.033	0.015	0.007	-1.337	-0.244 1.000
	V1,Estimate	0.004	-0.035	0.043	0.010	0.401	0.073 1.000
	aPFC,Chance	-0.006	-0.030	0.018	0.007	-0.951	-0.174 1.000
	aPFC,Estimate	-0.051	-0.090	-0.012	0.010	-4.935	-0.901 < .001
	IFG,Chance	0.013	-0.026	0.052	0.010	1.300	0.237 1.000
	IFG,Estimate	-0.026	-0.050	-0.003	0.007	-4.014	-0.733 0.011
	Ins,Chance	0.008	-0.031	0.047	0.010	0.780	0.142 1.000
	Ins,Estimate	-0.008	-0.032	0.016	0.007	-1.208	-0.221 1.000
	LTL,Chance	0.007	-0.032	0.046	0.010	0.637	0.116 1.000
	LTL,Estimate	-0.055	-0.079	-0.032	0.007	-8.430	-1.539 < .001
	PCC,Chance	0.013	-0.026	0.052	0.010	1.248	0.228 1.000
	PCC,Estimate	-0.010	-0.034	0.014	0.007	-1.563	-0.285 1.000
	Prec,Chance	0.013	-0.026	0.052	0.010	1.271	0.232 1.000
	Prec,Estimate	-0.040	-0.064	-0.017	0.007	-6.147	-1.122 < .001
	V1,Chance	0.016	-0.023	0.055	0.010	1.573	0.287 1.000
	V1,Estimate	0.029	0.005	0.053	0.007	4.438	0.810 0.002
IFG,Chance	aPFC,Chance	0.019	-0.020	0.058	0.010	1.819	0.332 1.000
	aPFC,Estimate	-0.026	-0.050	-0.002	0.007	-3.945	-0.720 0.014
	IFG,Estimate	-0.040	-0.079	-0.001	0.010	-3.894	-0.711 0.036
	Ins,Chance	-0.005	-0.029	0.018	0.007	-0.817	-0.149 1.000
	Ins,Estimate	-0.021	-0.060	0.018	0.010	-2.068	-0.378 1.000
	LTL,Chance	-0.007	-0.031	0.017	0.007	-1.042	-0.190 1.000

Post Hoc Comparisons - ROI * Condition

		95% CI of Mean Difference		SE	t	Cohen's d	p bonf
	Mean Difference	Lower	Upper				
	LTL,Estimate	-0.069	-0.108	-0.030	0.010	-6.665	-1.217 < .001
	PCC,Chance	-5.303e -4	-0.024	0.023	0.007	-0.081	-0.015 1.000
	PCC,Estimate	-0.024	-0.063	0.015	0.010	-2.295	-0.419 1.000
	Prec,Chance	-2.921e -4	-0.024	0.024	0.007	-0.044	-0.008 1.000
	Prec,Estimate	-0.054	-0.093	-0.015	0.010	-5.212	-0.952 < .001
	V1,Chance	0.003	-0.021	0.027	0.007	0.429	0.078 1.000
	V1,Estimate	0.016	-0.023	0.055	0.010	1.525	0.278 1.000
	aPFC,Chance	0.005	-0.018	0.029	0.007	0.815	0.149 1.000
	aPFC,Estimate	-0.039	-0.078	-3.173e -4	0.010	-3.811	-0.696 0.045
IFG,Estimate	Ins,Chance	0.034	-0.005	0.074	0.010	3.335	0.609 0.210
	Ins,Estimate	0.018	-0.005	0.042	0.007	2.806	0.512 0.800
	LTL,Chance	0.033	-0.006	0.072	0.010	3.191	0.583 0.325
	LTL,Estimate	-0.029	-0.053	-0.005	0.007	-4.416	-0.806 0.002
	PCC,Chance	0.039	2.354e -4	0.078	0.010	3.803	0.694 0.046
	PCC,Estimate	0.016	-0.008	0.040	0.007	2.450	0.447 1.000
	Prec,Chance	0.040	4.737e -4	0.079	0.010	3.826	0.699 0.043
	Prec,Estimate	-0.014	-0.038	0.010	0.007	-2.134	-0.390 1.000
	V1,Chance	0.043	0.004	0.082	0.010	4.127	0.754 0.015
	V1,Estimate	0.056	0.032	0.079	0.007	8.452	1.543 < .001
	aPFC,Chance	0.045	0.006	0.084	0.010	4.373	0.798 0.006
	aPFC,Estimate	4.484e -4	-0.023	0.024	0.007	0.068	0.012 1.000
Ins,Chance	Ins,Estimate	-0.016	-0.055	0.023	0.010	-1.565	-0.286 1.000
	LTL,Chance	-0.001	-0.025	0.022	0.007	-0.225	-0.041 1.000
	LTL,Estimate	-0.063	-0.103	-0.024	0.010	-6.145	-1.122 < .001
	PCC,Chance	0.005	-0.019	0.029	0.007	0.736	0.134 1.000
	PCC,Estimate	-0.018	-0.057	0.021	0.010	-1.775	-0.324 1.000
	Prec,Chance	0.005	-0.019	0.029	0.007	0.772	0.141 1.000
	Prec,Estimate	-0.048	-0.088	-0.009	0.010	-4.693	-0.857 0.002
	V1,Chance	0.008	-0.016	0.032	0.007	1.246	0.227 1.000
	V1,Estimate	0.021	-0.018	0.060	0.010	2.045	0.373 1.000
	aPFC,Chance	0.011	-0.013	0.035	0.007	1.632	0.298 1.000
	aPFC,Estimate	-0.034	-0.073	0.005	0.010	-3.291	-0.601 0.240
Ins,Estimate	LTL,Chance	0.015	-0.025	0.054	0.010	1.405	0.257 1.000
	LTL,Estimate	-0.047	-0.071	-0.024	0.007	-7.222	-1.319 < .001
	PCC,Chance	0.021	-0.018	0.060	0.010	2.017	0.368 1.000
	PCC,Estimate	-0.002	-0.026	0.021	0.007	-0.356	-0.065 1.000
	Prec,Chance	0.021	-0.018	0.060	0.010	2.040	0.372 1.000
	Prec,Estimate	-0.032	-0.056	-0.009	0.007	-4.939	-0.902 < .001
	V1,Chance	0.024	-0.015	0.063	0.010	2.342	0.428 1.000
	V1,Estimate	0.037	0.013	0.061	0.007	5.646	1.031 < .001
	aPFC,Chance	0.027	-0.012	0.066	0.010	2.587	0.472 1.000
	aPFC,Estimate	-0.018	-0.042	0.006	0.007	-2.738	-0.500 0.983
LTL,Chance	LTL,Estimate	-0.062	-0.101	-0.023	0.010	-6.065	-1.107 < .001
	PCC,Chance	0.006	-0.017	0.030	0.007	0.961	0.175 1.000
	PCC,Estimate	-0.017	-0.056	0.022	0.010	-1.632	-0.298 1.000
	Prec,Chance	0.007	-0.017	0.030	0.007	0.997	0.182 1.000

Post Hoc Comparisons - ROI * Condition

		95% CI of Mean Difference						
		Mean Difference	Lower	Upper	SE	t	Cohen's d	p bonf
LTL,Estimate	Prec,Estimate	-0.047	-0.086	-0.008	0.010	-4.549	-0.831	0.003
	V1,Chance	0.010	-0.014	0.033	0.007	1.471	0.269	1.000
	V1,Estimate	0.023	-0.016	0.062	0.010	2.188	0.400	1.000
	aPFC,Chance	0.012	-0.012	0.036	0.007	1.857	0.339	1.000
	aPFC,Estimate	-0.033	-0.072	0.007	0.010	-3.148	-0.575	0.370
	PCC,Chance	0.068	0.029	0.107	0.010	6.614	1.208	< .001
	PCC,Estimate	0.045	0.021	0.069	0.007	6.866	1.254	< .001
	Prec,Chance	0.069	0.030	0.108	0.010	6.637	1.212	< .001
	Prec,Estimate	0.015	-0.009	0.039	0.007	2.282	0.417	1.000
	V1,Chance	0.072	0.033	0.111	0.010	6.938	1.267	< .001
PCC,Chance	V1,Estimate	0.085	0.061	0.108	0.007	12.868	2.349	< .001
	aPFC,Chance	0.074	0.035	0.113	0.010	7.184	1.312	< .001
	aPFC,Estimate	0.029	0.006	0.053	0.007	4.484	0.819	0.001
	PCC,Estimate	-0.023	-0.062	0.016	0.010	-2.267	-0.414	1.000
	Prec,Chance	2.382e -4	-0.024	0.024	0.007	0.036	0.007	1.000
	Prec,Estimate	-0.053	-0.092	-0.014	0.010	-5.161	-0.942	< .001
	V1,Chance	0.003	-0.020	0.027	0.007	0.510	0.093	1.000
	V1,Estimate	0.016	-0.023	0.055	0.010	1.577	0.288	1.000
	aPFC,Chance	0.006	-0.018	0.030	0.007	0.896	0.164	1.000
	aPFC,Estimate	-0.039	-0.078	2.130e -4	0.010	-3.760	-0.686	0.054
PCC,Estimate	Prec,Chance	0.023	-0.016	0.062	0.010	2.266	0.414	1.000
	Prec,Estimate	-0.030	-0.054	-0.006	0.007	-4.584	-0.837	< .001
	V1,Chance	0.027	-0.013	0.066	0.010	2.568	0.469	1.000
	V1,Estimate	0.039	0.016	0.063	0.007	6.002	1.096	< .001
	aPFC,Chance	0.029	-0.010	0.068	0.010	2.814	0.514	0.972
	aPFC,Estimate	-0.016	-0.039	0.008	0.007	-2.382	-0.435	1.000
	Prec,Chance	-0.054	-0.092	-0.015	0.010	-5.238	-0.956	< .001
	V1,Chance	0.003	-0.021	0.027	0.007	0.474	0.086	1.000
	V1,Estimate	0.016	-0.023	0.055	0.010	1.554	0.284	1.000
	aPFC,Chance	0.006	-0.018	0.029	0.007	0.860	0.157	1.000
Prec,Chance	aPFC,Estimate	-0.039	-0.078	-2.521e -5	0.010	-3.783	-0.691	0.050
	V1,Chance	0.057	0.018	0.096	0.010	5.486	1.002	< .001
	V1,Estimate	0.070	0.046	0.093	0.007	10.586	1.933	< .001
	aPFC,Chance	0.059	0.020	0.098	0.010	5.731	1.046	< .001
	aPFC,Estimate	0.014	-0.009	0.038	0.007	2.202	0.402	1.000
	V1,Chance	0.013	-0.026	0.052	0.010	1.265	0.231	1.000
	aPFC,Chance	0.003	-0.021	0.026	0.007	0.386	0.071	1.000
	aPFC,Estimate	-0.042	-0.081	-0.003	0.010	-4.084	-0.746	0.018
	V1,Estimate	-0.010	-0.049	0.029	0.010	-1.006	-0.184	1.000
	aPFC,Estimate	-0.055	-0.079	-0.031	0.007	-8.384	-1.531	< .001
aPFC,Chance	aPFC,Estimate	-0.045	-0.084	-0.006	0.010	-4.375	-0.799	0.007

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

Note. Bonferroni adjusted confidence intervals.

Descriptives

Descriptives

ROI	Condition	Mean	SD	N
LTL	Estimate	0.606	0.057	30
	Chance	0.544	0.034	30
IFG	Estimate	0.577	0.050	30
	Chance	0.537	0.029	30
Prec	Estimate	0.591	0.047	30
	Chance	0.538	0.032	30
ATL	Estimate	0.551	0.045	30
	Chance	0.526	0.030	30
aPFC	Estimate	0.577	0.058	30
	Chance	0.532	0.032	30
Ins	Estimate	0.559	0.032	30
	Chance	0.543	0.029	30
ACC	Estimate	0.603	0.061	30
	Chance	0.538	0.023	30
PCC	Estimate	0.561	0.036	30
	Chance	0.538	0.032	30
V1	Estimate	0.521	0.029	30
	Chance	0.534	0.033	30

Descriptives Plot

