

Results

ANOVA

ANOVA - LFP Power (mean)

	Sum of Squares	df	Mean Square	F	p
Sleep Stage	0.0164	4	0.00410	0.251	0.907
Residuals	0.6365	39	0.01632		

[3]

Post Hoc Tests

Post Hoc Comparisons - Sleep Stage

Comparison									95% Confidence Interval	
Sleep Stage	Sleep Stage	Mean Difference	SE	df	t	Pbonferroni	Cohen's d		Lower	Upper
W	- N1	-0.0251	0.0571	39.0	-0.439	1.000	-0.1965		-1.102	0.709
	- N2	-0.0529	0.0571	39.0	-0.926	1.000	-0.4141		-1.324	0.495
	- N3	-0.0386	0.0660	39.0	-0.585	1.000	-0.3022		-1.349	0.745
	- R	-0.0125	0.0606	39.0	-0.207	1.000	-0.0981		-1.058	0.862
N1	- N2	-0.0278	0.0571	39.0	-0.487	1.000	-0.2177		-1.124	0.688
	- N3	-0.0135	0.0660	39.0	-0.205	1.000	-0.1057		-1.151	0.939
	- R	0.0126	0.0606	39.0	0.207	1.000	0.0984		-0.861	1.058
N2	- N3	0.0143	0.0660	39.0	0.217	1.000	0.1119		-0.933	1.157
	- R	0.0404	0.0606	39.0	0.666	1.000	0.3160		-0.646	1.278
N3	- R	0.0261	0.0690	39.0	0.378	1.000	0.2041		-0.889	1.297

Note. Comparisons are based on estimated marginal means

[4]

ANOVA

ANOVA - LFP Power (mean)

	Sum of Squares	df	Mean Square	F	p
Patient ID	0.6065	9	0.06739	49.4	< .001
Residuals	0.0464	34	0.00136		

[3]

One-Way ANOVA

One-Way ANOVA (Welch's)

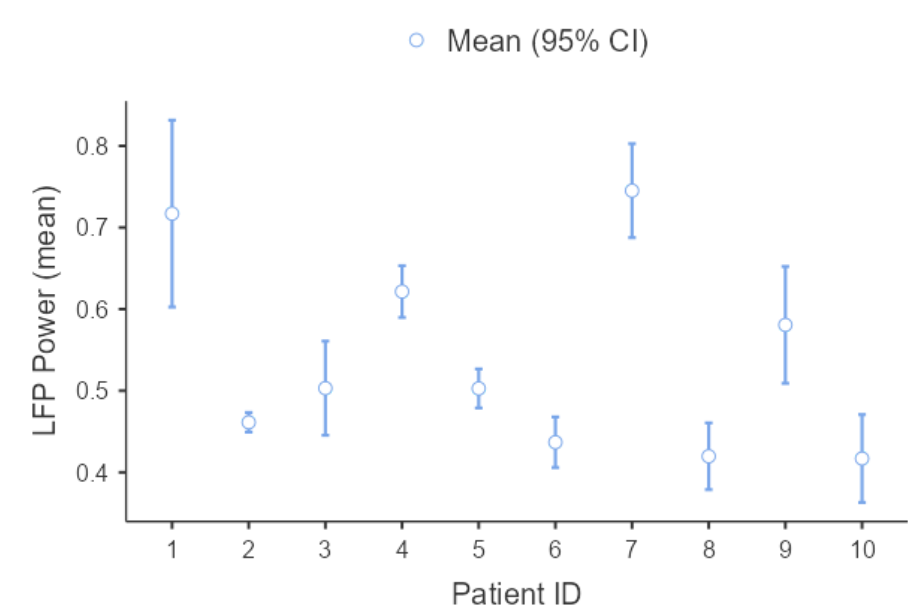
	F	df1	df2	p
LFP Power (mean)	36.6	9	12.7	< .001

Group Descriptives

	Patient ID	N	Mean	SD	SE
LFP Power (mean)	1	4	0.717	0.07193	0.03597
	2	5	0.461	0.00965	0.00432
	3	4	0.503	0.03626	0.01813
	4	5	0.622	0.02555	0.01143
	5	4	0.503	0.01501	0.00750
	6	4	0.437	0.01948	0.00974
	7	5	0.745	0.04636	0.02073
	8	5	0.420	0.03290	0.01471
	9	3	0.581	0.02881	0.01663
	10	5	0.417	0.04335	0.01939

Plots

LFP Power (mean)



Post Hoc Tests

Games-Howell Post-Hoc Test – LFP Power (mean)

		1	2	3	4	5	6	7	8	9	10
1	Mean difference	—	0.256 *	0.2139 *	0.0955	0.2143	0.2802 *	-0.0281	0.2973 *	0.1364	0.30009 *
	t-value	—	7.06	5.31	2.53	5.8318	7.52	-0.678	7.652	3.44	7.345
	df	—	3.09	4.43	3.61	3.26	3.44	4.92	4.00	4.14	4.70
	p-value	—	0.040	0.048	0.445	0.062	0.026	0.998	0.016	0.209	0.011
2	Mean difference		—	-0.0418	-0.1602 ***	-0.0414	0.0245	-0.2838 **	0.0416	-0.1193	0.04439
	t-value		—	-2.24	-13.11	-4.7871	2.30	-13.402	2.715	-6.94	2.235
	df		—	3.34	5.12	4.91	4.17	4.35	4.68	2.27	4.40
	p-value		—	0.551	< .001	0.059	0.514	0.001	0.358	0.079	0.535
3	Mean difference			—	-0.1184 *	3.40e-4	0.0662	-0.2420 ***	0.0834	-0.0775	0.08617
	t-value			—	-5.53	0.0173	3.22	-8.789	3.572	-3.15	3.246
	df			—	5.24	4.00	4.60	7.00	6.23	4.93	6.96
	p-value			—	0.029	1.000	0.234	< .001	0.134	0.238	0.175
4	Mean difference				—	0.1187 **	0.1847 ***	-0.1236 *	0.2018 ***	0.0409	0.20458 **
	t-value				—	8.6862	12.30	-5.222	10.833	2.03	9.090
	df				—	6.57	7.00	6.22	7.54	3.90	6.48
	p-value				—	0.001	< .001	0.026	< .001	0.627	0.001
5	Mean difference					—	0.0659 *	-0.2424 **	0.0831 *	-0.0779	0.08583
	t-value					—	5.36	-10.993	5.029	-4.27	4.128
	df					—	5.63	5.00	5.83	2.82	5.13
	p-value					—	0.028	0.001	0.035	0.170	0.096
6	Mean difference						—	-0.3083 ***	0.0172	-0.1438 *	0.01992
	t-value						—	-13.459	0.973	-7.46	0.918
	df						—	5.60	6.59	3.34	5.78
	p-value						—	< .001	0.985	0.028	0.988
7	Mean difference							—	0.3255 ***	0.1645 *	0.32822 ***
	t-value							—	12.801	6.19	11.562
	df							—	7.21	5.91	7.96
	p-value							—	< .001	0.013	< .001
8	Mean difference								—	-0.1609 *	0.00276
	t-value								—	-7.25	0.114
	df								—	4.86	7.46
	p-value								—	0.011	1.000
9	Mean difference									—	0.16371 *
	t-value									—	6.408
	df									—	5.79
	p-value									—	0.011
10	Mean difference										—
	t-value										—
	df										—
	p-value										—

Note. * p < .05, ** p < .01, *** p < .001

One-Way ANOVA

One-Way ANOVA (Welch's)

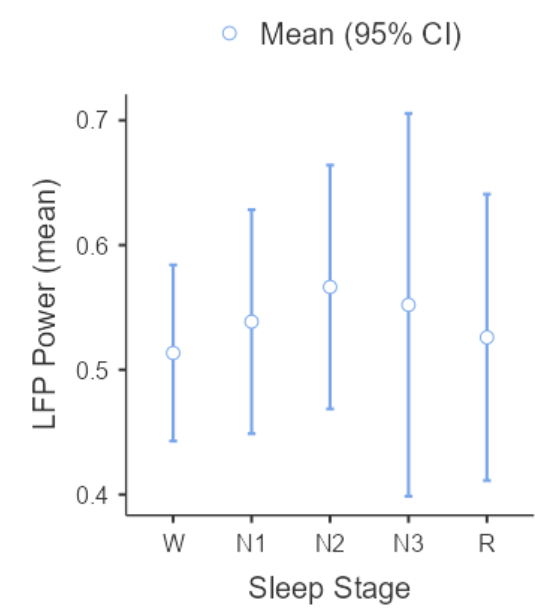
	F	df1	df2	p
LFP Power (mean)	0.253	4	17.6	0.904

Group Descriptives

	Sleep Stage	N	Mean	SD	SE
LFP Power (mean)	W	10	0.513	0.0987	0.0312
	N1	10	0.539	0.1255	0.0397
	N2	10	0.566	0.1366	0.0432
	N3	6	0.552	0.1462	0.0597
	R	8	0.526	0.1373	0.0486

Plots

LFP Power (mean)



Post Hoc Tests

Games-Howell Post-Hoc Test – LFP Power (mean)

		W	N1	N2	N3	R
W	Mean difference	—	-0.0251	-0.0529	-0.0386	-0.0125
	t-value	—	-0.497	-0.993	-0.573	-0.217
	df	—	17.0	16.4	7.78	12.3
	p-value	—	0.987	0.855	0.975	0.999
N1	Mean difference		—	-0.0278	-0.0135	0.0126
	t-value		—	-0.474	-0.188	0.200
	df		—	17.9	9.38	14.5
	p-value		—	0.989	1.000	1.000
N2	Mean difference			—	0.0143	0.0404
	t-value			—	0.194	0.621
	df			—	10.07	15.1
	p-value			—	1.000	0.969
N3	Mean difference				—	0.0261
	t-value				—	0.339
	df				—	10.5
	p-value				—	0.997
R	Mean difference					—
	t-value					—
	df					—
	p-value					—

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

References

- [1] The jamovi project (2022). *jamovi*. (Version 2.3) [Computer Software]. Retrieved from <https://www.jamovi.org>.
- [2] R Core Team (2021). *R: A Language and environment for statistical computing*. (Version 4.1) [Computer software]. Retrieved from <https://cran.r-project.org>. (R packages retrieved from MRAN snapshot 2022-01-01).
- [3] Fox, J., & Weisberg, S. (2020). *car: Companion to Applied Regression*. [R package]. Retrieved from <https://cran.r-project.org/package=car>.
- [4] Lenth, R. (2020). *emmeans: Estimated Marginal Means, aka Least-Squares Means*. [R package]. Retrieved from <https://cran.r-project.org/package=emmeans>.