

Results

ANOVA

ANOVA - LFP Power (mean)

	Sum of Squares	df	Mean Square	F	p
Patient ID	0.0000	NaN			
Sleep Stage	0.0412	2	0.02059		0.280
Patient ID * Sleep Stage	0.0910	30	0.00303		1.000
Residuals	3.5433	220	0.01611		

Note. Singular fit encountered; one or more predictor variables are a linear combination of other predictor variables.

[3]

ANOVA

ANOVA - LFP Power (mean)

	Sum of Squares	df	Mean Square	F	p
Patient ID	0.0000	NaN			
Sleep Stage	0.0412	2	0.02059		0.280
Patient ID * Sleep Stage	0.0910	30	0.00303		1.000
Residuals	3.5433	220	0.01611		

Note. Singular fit encountered; one or more predictor variables are a linear combination of other predictor variables.

[3]

ANOVA

ANOVA - ...

	Sum of Squares	df	Mean Square	F	p
...
Residuals

[3]

ANOVA

ANOVA - LFP Power (mean)

	Sum of Squares	df	Mean Square	F	p
Patient ID	0.0000	NaN			
Sleep Stage	0.0412	2	0.02059		0.280
Patient ID * Sleep Stage	0.0910	30	0.00303		1.000
Residuals	3.5433	220	0.01611		

Note. Singular fit encountered; one or more predictor variables are a linear combination of other predictor variables.

[3]

ANOVA

ANOVA - LFP Power (mean)

	Sum of Squares	df	Mean Square	F	p
Sleep Stage	0.0000	NaN			
Patient ID	1.2351	4	0.30877		< .001
Sleep Stage * Patient ID	0.0910	30	0.00303		1.000
Residuals	3.5433	220	0.01611		

Note. Singular fit encountered; one or more predictor variables are a linear combination of other predictor variables.

[3]

Contrasts

Contrasts - Sleep Stage

	Estimate	SE	t	p
N1 - W	-0.0202	0.0232	-0.870	0.385
N2 - W	-0.0370	0.0232	-1.597	0.112
N3 - W	-0.0346	0.0401	-0.863	0.389
R - W	-0.0185	0.0293	-0.631	0.528

Contrasts - Patient ID

	Estimate	SE	t	p
2 - 1	-0.1705	0.0388	-4.396	< .001
3 - 1	-0.1575	0.0388	-4.063	< .001
4 - 1	-0.0558	0.0388	-1.438	0.152
5 - 1	-0.1117	0.0388	-2.882	0.004
6 - 1	-0.2412	0.0463	-5.205	< .001
7 - 1	0.0172	0.0388	0.443	0.658
8 - 1	-0.2089	0.0388	-5.389	< .001
9 - 1	-0.0806	0.0486	-1.658	0.099
10 - 1	-0.2090	0.0388	-5.390	< .001

Repeated Measures ANOVA

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p
RM Factor 1
Residual

Note. Type 3 Sums of Squares

[4]

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p
Residual

Note. Type 3 Sums of Squares

ANOVA

ANOVA - LFP Power (mean)

	Sum of Squares	df	Mean Square	F	p
Sleep Stage	0.122	4	0.0305	1.42	0.227
Residuals	5.558	259	0.0215		

[3]

Contrasts

Contrasts - Sleep Stage

	Estimate	SE	t	p
N1 - W	-0.02016	0.0267	-0.754	0.452
N2 - W	-0.03700	0.0267	-1.383	0.168
N3 - W	-0.06643	0.0309	-2.151	0.032
R - W	-0.00835	0.0284	-0.294	0.769

Post Hoc Tests

Post Hoc Comparisons - Sleep Stage

Comparison		Mean Difference	SE	df	t	Pbonferroni	Cohen's d
Sleep Stage	Sleep Stage						
W	- N1	0.02016	0.0267	259	0.754	1.000	0.1376
	- N2	0.03700	0.0267	259	1.383	1.000	0.2526
	- N3	0.06643	0.0309	259	2.151	0.324	0.4535
	- R	0.00835	0.0284	259	0.294	1.000	0.0570
N1	- N2	0.01684	0.0267	259	0.630	1.000	0.1150
	- N3	0.04627	0.0309	259	1.498	1.000	0.3159
	- R	-0.01181	0.0284	259	-0.416	1.000	-0.0806
N2	- N3	0.02943	0.0309	259	0.953	1.000	0.2009
	- R	-0.02865	0.0284	259	-1.010	1.000	-0.1956
N3	- R	-0.05808	0.0323	259	-1.798	0.733	-0.3964

Note. Comparisons are based on estimated marginal means

[5]

ANOVA

ANOVA - LFP Power (mean)

	Sum of Squares	df	Mean Square	F	p
Patient ID	1.98	9	0.2204	15.1	< .001
Residuals	3.70	254	0.0146		

[3]

Post Hoc Tests

Comparison								95% Confidence Interval	
Patient ID	Patient ID	Mean Difference	SE	df	t	Pbonferroni	Cohen's d	Lower	Upper
1	- 2	0.1716	0.0330	254	5.195	< .001	1.423	0.8693	1.9763
	- 3	0.1560	0.0348	254	4.479	< .001	1.293	0.7134	1.8726
	- 4	0.0570	0.0330	254	1.724	1.000	0.472	-0.0688	1.0130
	- 5	0.1153	0.0348	254	3.310	0.048	0.956	0.3809	1.5301
	- 6	0.2411	0.0348	254	6.922	< .001	1.998	1.4036	2.5930
	- 7	-0.0160	0.0330	254	-0.484	1.000	-0.132	-0.6719	0.4070
	- 8	0.2101	0.0330	254	6.360	< .001	1.742	1.1815	2.3023
	- 9	0.0881	0.0376	254	2.341	0.900	0.730	0.1126	1.3473
	- 10	0.2102	0.0330	254	6.361	< .001	1.742	1.1816	2.3024
2	- 3	-0.0157	0.0330	254	-0.474	1.000	-0.130	-0.6692	0.4097
	- 4	-0.1147	0.0311	254	-3.682	0.013	-0.951	-1.4659	-0.4354
	- 5	-0.0564	0.0330	254	-1.706	1.000	-0.467	-1.0081	0.0736
	- 6	0.0694	0.0330	254	2.102	1.000	0.576	0.0339	1.1172
	- 7	-0.1876	0.0311	254	-6.024	< .001	-1.555	-2.0816	-1.0289
	- 8	0.0385	0.0311	254	1.236	1.000	0.319	-0.1902	0.8283
	- 9	-0.0836	0.0360	254	-2.324	0.942	-0.693	-1.2831	-0.1026
	- 10	0.0385	0.0311	254	1.236	1.000	0.319	-0.1900	0.8285
3	- 4	-0.0990	0.0330	254	-2.997	0.135	-0.821	-1.3650	-0.2768
	- 5	-0.0407	0.0348	254	-1.169	1.000	-0.338	-0.9068	0.2318
	- 6	0.0851	0.0348	254	2.443	0.686	0.705	0.1335	1.2771
	- 7	-0.1720	0.0330	254	-5.205	< .001	-1.425	-1.9790	-0.8720
	- 8	0.0541	0.0330	254	1.639	1.000	0.449	-0.0919	0.9896
	- 9	-0.0679	0.0376	254	-1.806	1.000	-0.563	-1.1791	0.0530
	- 10	0.0542	0.0330	254	1.639	1.000	0.449	-0.0918	0.9897
4	- 5	0.0583	0.0330	254	1.765	1.000	0.483	-0.0576	1.0244
	- 6	0.1841	0.0330	254	5.573	< .001	1.526	0.9706	2.0818
	- 7	-0.0729	0.0311	254	-2.342	0.899	-0.605	-1.1158	-0.0934
	- 8	0.1532	0.0311	254	4.918	< .001	1.270	0.7493	1.7902
	- 9	0.0311	0.0360	254	0.865	1.000	0.258	-0.3297	0.8454
	- 10	0.1532	0.0311	254	4.918	< .001	1.270	0.7494	1.7903
5	- 6	0.1258	0.0348	254	3.612	0.016	1.043	0.4671	1.6186
	- 7	-0.1313	0.0330	254	-3.973	0.004	-1.088	-1.6356	-0.5403
	- 8	0.0949	0.0330	254	2.871	0.199	0.786	0.2427	1.3300
	- 9	-0.0272	0.0376	254	-0.723	1.000	-0.226	-0.8399	0.3888
	- 10	0.0949	0.0330	254	2.872	0.199	0.786	0.2428	1.3302
6	- 7	-0.2571	0.0330	254	-7.781	< .001	-2.131	-2.7014	-1.5602
	- 8	-0.0309	0.0330	254	-0.936	1.000	-0.256	-0.7963	0.2833
	- 9	-0.1530	0.0376	254	-4.068	0.003	-1.268	-1.8923	-0.6444
	- 10	-0.0309	0.0330	254	-0.936	1.000	-0.256	-0.7961	0.2835
7	- 8	0.2261	0.0311	254	7.259	< .001	1.874	1.3401	2.4085
	- 9	0.1040	0.0360	254	2.893	0.187	0.862	0.2705	1.4544
	- 10	0.2261	0.0311	254	7.260	< .001	1.874	1.3403	2.4087
8	- 9	-0.1221	0.0360	254	-3.394	0.036	-1.012	-1.6057	-0.4181
	- 10	1.78e-5	0.0311	254	5.71e-4	1.000	1.47e-4	-0.5083	0.5086

Note. Comparisons are based on estimated marginal means

Comparison		95% Confidence Interval							
Patient ID	Patient ID	Mean Difference	SE	df	t	P _{bonferroni}	Cohen's d	Lower	Upper
9	- 10	0.1221	0.0360	254	3.395	0.036	1.012	0.4183	1.6058

Note. Comparisons are based on estimated marginal means

[5]

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] Singmann, H. (2018). *afex: Analysis of Factorial Experiments*. [R package]. Retrieved from <https://cran.r-project.org/package=afex>.
- [5] Lenth, R. (2020). *emmeans: Estimated Marginal Means, aka Least-Squares Means*. [R package]. Retrieved from <https://cran.r-project.org/package=emmeans>.