# Tables from Statistica

Loading the csv files, these are the results from Statistica, used as reference in the glm testing function fir limo meeg

## ANOVA 2 groups

| | Test of SS Whole Model vs. SS Residual | | | | |
|---|---|---|---|---|---|
| | R^2 | df Model | df Residual | F | p |
| 2 gp | 0.543624 | 1 | 8 | 9.529412 | 0.014958 |

| | df | SS | MS | F | p |
|---|---|---|---|---|---|
| effect | 1 | 32.4000 | 32.4000 | 9.52941 | 0.014958 |
| error | 8 | 27.2000 | 3.4000 | | |

## ANOVA 3 groups

| | Test of SS Whole Model vs. SS Residual | | | | |
|---|---|---|---|---|---|
| | R^2 | df Model | df Residual | F | p |
| 3 gp | 0.582166 | 2 | 12 | 8.359777 | 0.005321 |

| | df | SS | MS | F | p |
|---|---|---|---|---|---|
| effect | 2 | 47.5048 | 23.7524 | 8.3598 | 0.005321 |
| error | 12 | 34.0952 | 2.8413 | | |

| | estimate | std | t | p |
|---|---|---|---|---|
| [1 -1 0] | 3.28571 | 0.986990 | 3.32902 | 0.006009 |
| [0 1 -1] | -3.95238 | 1.163179 | -3.39791 | 0.005290 |

## 2 ways ANOVA (factorial)

| | Test of SS Whole Model vs. SS Residual | | | | |
|---|---|---|---|---|---|
| | R^2 | df Model | df Residual | F | p |
| 2 factors | 0.6939 | 4 | 10 | 5.668217 | 0.012004 |

| | df | SS | MS | F | p |
|---|---|---|---|---|---|
| Effect 1 | 2 | 51.8251 | 25.9126 | 10.3755 | 0.003637 |
| Effect 2 | 2 | 9.1204 | 4.5602 | 1.8259 | 0.210885 |
| error | 10 | 24.9749 | 2.4975 | | |

## 2 ways ANOVA (factorial) with interaction

| | | Test of SS Whole Model vs. SS Residual | | | |
|---|---|---|---|---|---|
| | R^2 | df Model | df Residual | F | p |
| 2 factors | 0.482900 | 5 | 6 | 1.120635 | 0.438895 |

| | df | SS | MS | F | p |
|---|---|---|---|---|---|
| Effect 1 | 1 | 18.7500 | 18.7500 | 3.57143 | 0.107679 |
| Effect 2 | 2 | 0.1667 | 0.0833 | 0.01587 | 0.984293 |
| interaction | 2 | 10.5000 | 5.2500 | 1.00000 | 0.421875 |
| error | 6 | 31.5000 | 5.2500 | | |

## 3 ways ANOVA with interaction

| | | Test of SS Whole Model vs. SS Residual | | | |
|---|---|---|---|---|---|
| | R^2 | df Model | df Residual | F | p |
| 3 factors | 0.693136 | 11 | 12 | 2.464115 | 0.068242 |

| | df | SS | MS | F | p |
|---|---|---|---|---|---|
| Effect 1 | 2 | 7.5833 | 3.7917 | 1.1974 | 0.335633 |
| Effect 2 | 1 | 0.6667 | 0.6667 | 0.2105 | 0.654555 |
| Effect 3 | 1 | 6.0000 | 6.0000 | 1.8947 | 0.193810 |
| Interaction 12 | 2 | 31.5833 | 15.7917 | 4.9868 | 0.026526 |
| Interaction 23 | 2 | 0.7500 | 0.3750 | 0.1184 | 0.889347 |
| Interaction 31 | 1 | 0.1667 | 0.1667 | 0.0526 | 0.822409 |
| Interaction123 | 2 | 39.0833 | 19.5417 | 6.1711 | 0.014353 |
| error | 12 | 38.0000 | 3.1667 | | |

## Simple Regression

| | | Test of SS Whole Model vs. SS Residual | | | |
|---|---|---|---|---|---|
| | R^2 | df Model | df Residual | F | p |
| 1 var | 0.031613 | 1 | 13 | 0.424388 | 0.526105 |

## Multiple Regression

| | | Test of SS Whole Model vs. SS Residual | | | |
|---|---|---|---|---|---|
| | R^2 | df Model | df Residual | F | p |
| 2 factors | 0.081383 | 2 | 12 | 0.531554 | 0.600908 |

|  | df | SS | MS | F | p |
|---|---|---|---|---|---|
| Effect 1 | 1 | 1.4775 | 1.4775 | 0.23653 | 0.635482 |
| Effect 2 | 1 | 4.0612 | 4.0612 | 0.65014 | 0.435751 |
| error | 12 | 74.9592 | 6.2466 |  |  |

|  | Partial | Semi-Partial | t | p |
|---|---|---|---|---|
| Var 1 | -0.1390328 | -0.1345622 | -0.4863471 | 0.6354819 |
| Var 2 | -0.2267025 | -0.2230903 | -0.8063135 | 0.4357508 |

➔ Note limo computes the part of variance explained (rather than like here giving the difference) to R2 along with F values, since it's the same stats, limo F must equal t^2

## 1 way ANCOVA

|  | Test of SS Whole Model vs. SS Residual | | | | |
|---|---|---|---|---|---|
|  | R^2 | df Model | df Residual | F | p |
| 3 variables | 0.598562 | 4 | 10 | 3.727608 | 0.041627 |

|  | df | SS | MS | F | p |
|---|---|---|---|---|---|
| Cov1 | 1 | 0.0569 | 0.0569 | 0.0174 | 0.897759 |
| Cov2 | 1 | 1.3272 | 1.3272 | 0.4052 | 0.538737 |
| Cat | 2 | 42.2018 | 21.1009 | 6.4416 | 0.015938 |
| error | 10 | 32.7574 | 3.2757 |  |  |

## 2 ways ANCOVA

|  | Test of SS Whole Model vs. SS Residual | | | | |
|---|---|---|---|---|---|
|  | R^2 | df Model | df Residual | F | p |
| 3 variables | 0.706808 | 6 | 8 | 3.214315 | 0.065197 |

|  | df | SS | MS | F | p |
|---|---|---|---|---|---|
| Cat 1 | 2 | 43.5130 | 21.7565 | 7.2751 | 0.015840 |
| Cat 2 | 2 | 8.8329 | 4.4165 | 1.4768 | 0.284533 |
| Cont 1 | 1 | 0.1773 | 0.1773 | 0.0593 | 0.813750 |
| Cont 2 | 1 | 0.7180 | 0.7180 | 0.2401 | 0.637294 |
| error | 8 | 23.9245 | 2.9906 |  |  |