| **Model Information** | |
| --- | --- |
| **Data Set** | Altmann et al |
| **Dependent Variable** | Neuro\_ |
| **Covariance Structure** | Variance Components |
| **Subject Effect** | Name |
| **Estimation Method** | REML |
| **Residual Variance Method** | Profile |
| **Fixed Effects SE Method** | Model-Based |
| **Degrees of Freedom Method** | Containment |

| **Class Level Information** | | |
| --- | --- | --- |
| **Class** | **Levels** | **Values** |
| **Name** | 16 | 9 10 11 12 13 14 15 16 1 2 3 4 5 6 7 8 |
| **time** | 3 | 3 2 1 |
| **Typ** | 2 | 1 0 |

| **Dimensions** | |
| --- | --- |
| **Covariance Parameters** | 2 |
| **Columns in X** | 12 |
| **Columns in Z Per Subject** | 1 |
| **Subjects** | 16 |
| **Max Obs Per Subject** | 3 |

| **Number of Observations** | |
| --- | --- |
| **Number of Observations Read** | 48 |
| **Number of Observations Used** | 48 |
| **Number of Observations Not Used** | 0 |

| **Iteration History** | | | |
| --- | --- | --- | --- |
| **Iteration** | **Evaluations** | **-2 Res Log Like** | **Criterion** |
| **0** | 1 | 102.61775800 |  |
| **1** | 1 | 93.96440449 | 0.00000000 |

|  |
| --- |
| Convergence criteria met. |

| **Covariance Parameter Estimates** | | |
| --- | --- | --- |
| **Cov Parm** | **Subject** | **Estimate** |
| **Intercept** | Name | 0.2374 |
| **Residual** |  | 0.2634 |

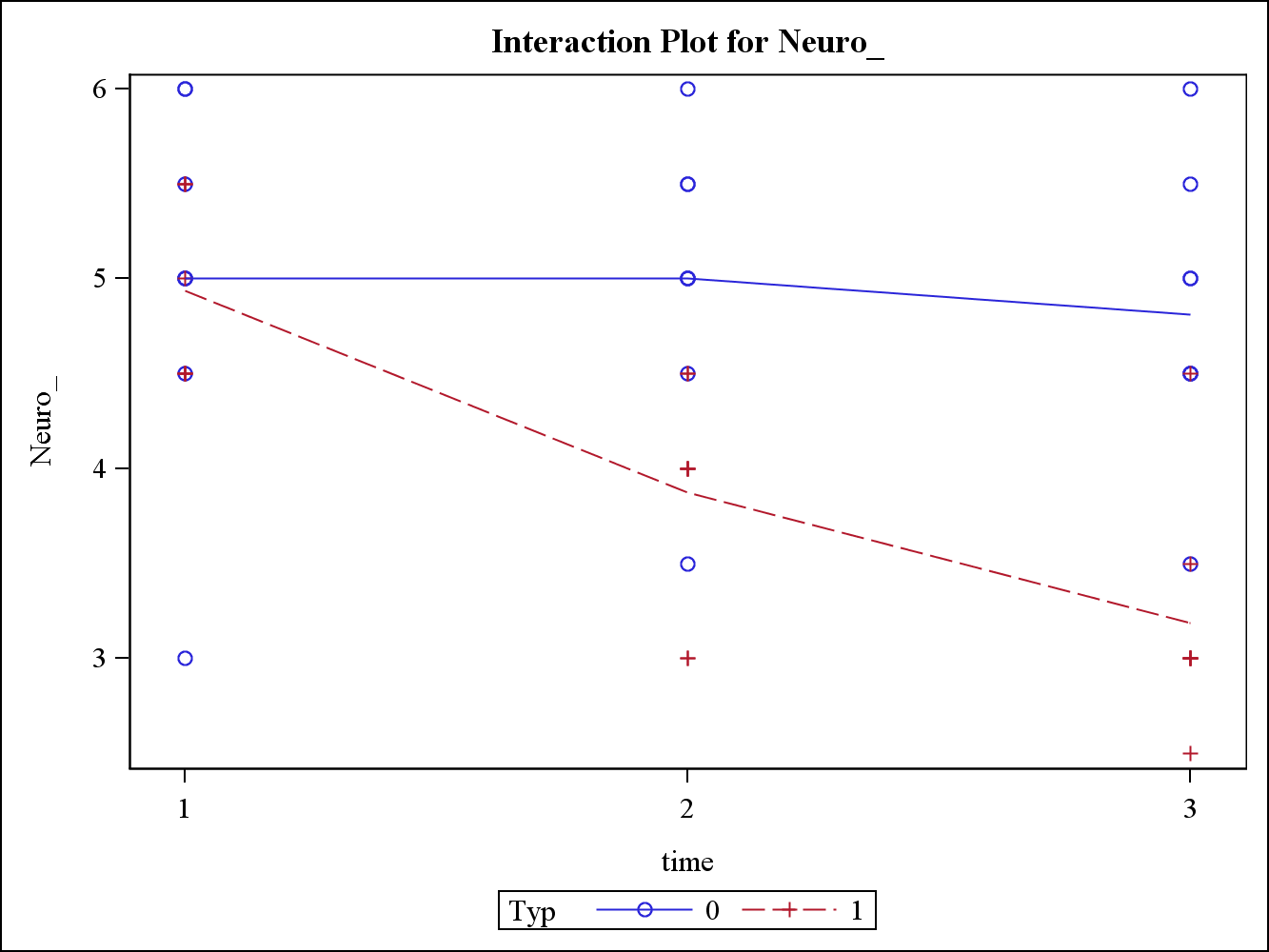
| **Fit Statistics** | |
| --- | --- |
| **-2 Res Log Likelihood** | 94.0 |
| **AIC (smaller is better)** | 98.0 |
| **AICC (smaller is better)** | 98.3 |
| **BIC (smaller is better)** | 99.5 |

| **Solution for Fixed Effects** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Effect** | **time** | **Typ** | **Estimate** | **Standard Error** | **DF** | **t Value** | **Pr > |t|** |
| **Intercept** |  |  | 5.0000 | 0.2502 | 14 | 19.99 | <.0001 |
| **time** | 3 |  | -0.1875 | 0.2566 | 28 | -0.73 | 0.4710 |
| **time** | 2 |  | 2.01E-15 | 0.2566 | 28 | 0.00 | 1.0000 |
| **time** | 1 |  | 0 | . | . | . | . |
| **Typ** |  | 1 | -0.06250 | 0.3538 | 28 | -0.18 | 0.8611 |
| **Typ** |  | 0 | 0 | . | . | . | . |
| **time\*Typ** | 3 | 1 | -1.5625 | 0.3629 | 28 | -4.31 | 0.0002 |
| **time\*Typ** | 3 | 0 | 0 | . | . | . | . |
| **time\*Typ** | 2 | 1 | -1.0625 | 0.3629 | 28 | -2.93 | 0.0067 |
| **time\*Typ** | 2 | 0 | 0 | . | . | . | . |
| **time\*Typ** | 1 | 1 | 0 | . | . | . | . |
| **time\*Typ** | 1 | 0 | 0 | . | . | . | . |

| **Covariance Matrix for Fixed Effects** | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Row** | **Effect** | **time** | **Typ** | **Col1** | **Col2** | **Col3** | **Col4** | **Col5** | **Col6** | **Col7** | **Col8** | **Col9** | **Col10** | **Col11** |
| **1** | Intercept |  |  | 0.06259 | -0.03292 | -0.03292 |  | -0.06259 |  | 0.03292 |  | 0.03292 |  |  |
| **2** | time | 3 |  | -0.03292 | 0.06585 | 0.03292 |  | 0.03292 |  | -0.06585 |  | -0.03292 |  |  |
| **3** | time | 2 |  | -0.03292 | 0.03292 | 0.06585 |  | 0.03292 |  | -0.03292 |  | -0.06585 |  |  |
| **4** | time | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| **5** | Typ |  | 1 | -0.06259 | 0.03292 | 0.03292 |  | 0.1252 |  | -0.06585 |  | -0.06585 |  |  |
| **6** | Typ |  | 0 |  |  |  |  |  |  |  |  |  |  |  |
| **7** | time\*Typ | 3 | 1 | 0.03292 | -0.06585 | -0.03292 |  | -0.06585 |  | 0.1317 |  | 0.06585 |  |  |
| **8** | time\*Typ | 3 | 0 |  |  |  |  |  |  |  |  |  |  |  |
| **9** | time\*Typ | 2 | 1 | 0.03292 | -0.03292 | -0.06585 |  | -0.06585 |  | 0.06585 |  | 0.1317 |  |  |
| **10** | time\*Typ | 2 | 0 |  |  |  |  |  |  |  |  |  |  |  |
| **11** | time\*Typ | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |
| **12** | time\*Typ | 1 | 0 |  |  |  |  |  |  |  |  |  |  |  |

| **Covariance Matrix for Fixed Effects** | |
| --- | --- |
| **Row** | **Col12** |
| **1** |  |
| **2** |  |
| **3** |  |
| **4** |  |
| **5** |  |
| **6** |  |
| **7** |  |
| **8** |  |
| **9** |  |
| **10** |  |
| **11** |  |
| **12** |  |

| **Type 3 Tests of Fixed Effects** | | | | |
| --- | --- | --- | --- | --- |
| **Effect** | **Num DF** | **Den DF** | **F Value** | **Pr > F** |
| **Time** | 2 | 28 | 14.30 | <.0001 |
| **Typ** | 1 | 28 | 10.81 | 0.0027 |
| **time\*Typ** | 2 | 28 | 9.67 | 0.0006 |



| **Model Information** | |
| --- | --- |
| **Data Set** | ALTMAN.DATA\_LONG\_SORT |
| **Dependent Variable** | Neuro\_ |
| **Covariance Structure** | Variance Components |
| **Subject Effect** | Name |
| **Estimation Method** | REML |
| **Residual Variance Method** | Profile |
| **Fixed Effects SE Method** | Model-Based |
| **Degrees of Freedom Method** | Containment |

| **Class Level Information** | | |
| --- | --- | --- |
| **Class** | **Levels** | **Values** |
| **Name** | 14 | 24 25 26 27 28 29 30 17 18 19 20 21 22 23 |
| **time** | 3 | 3 2 1 |
| **Typ** | 2 | 3 2 |

| **Dimensions** | |
| --- | --- |
| **Covariance Parameters** | 2 |
| **Columns in X** | 12 |
| **Columns in Z Per Subject** | 1 |
| **Subjects** | 14 |
| **Max Obs Per Subject** | 3 |

| **Number of Observations** | |
| --- | --- |
| **Number of Observations Read** | 42 |
| **Number of Observations Used** | 42 |
| **Number of Observations Not Used** | 0 |

| **Iteration History** | | | |
| --- | --- | --- | --- |
| **Iteration** | **Evaluations** | **-2 Res Log Like** | **Criterion** |
| **0** | 1 | 91.23589930 |  |
| **1** | 1 | 89.60526381 | 0.00000000 |

|  |
| --- |
| Convergence criteria met. |

| **Covariance Parameter Estimates** | | |
| --- | --- | --- |
| **Cov Parm** | **Subject** | **Estimate** |
| **Intercept** | Name | 0.1190 |
| **Residual** |  | 0.4147 |

| **Fit Statistics** | |
| --- | --- |
| **-2 Res Log Likelihood** | 89.6 |
| **AIC (smaller is better)** | 93.6 |
| **AICC (smaller is better)** | 94.0 |
| **BIC (smaller is better)** | 94.9 |

| **Solution for Fixed Effects** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Effect** | **time** | **Typ** | **Estimate** | **Standard Error** | **DF** | **t Value** | **Pr > |t|** |
| **Intercept** |  |  | 4.5714 | 0.2761 | 12 | 16.56 | <.0001 |
| **time** | 3 |  | -0.5000 | 0.3442 | 24 | -1.45 | 0.1593 |
| **time** | 2 |  | 0.1429 | 0.3442 | 24 | 0.42 | 0.6818 |
| **time** | 1 |  | 0 | . | . | . | . |
| **Typ** |  | 3 | -714E-17 | 0.3905 | 24 | -0.00 | 1.0000 |
| **Typ** |  | 2 | 0 | . | . | . | . |
| **time\*Typ** | 3 | 3 | -1.6429 | 0.4868 | 24 | -3.37 | 0.0025 |
| **time\*Typ** | 3 | 2 | 0 | . | . | . | . |
| **time\*Typ** | 2 | 3 | -1.4286 | 0.4868 | 24 | -2.93 | 0.0072 |
| **time\*Typ** | 2 | 2 | 0 | . | . | . | . |
| **time\*Typ** | 1 | 3 | 0 | . | . | . | . |
| **time\*Typ** | 1 | 2 | 0 | . | . | . | . |

| **Covariance Matrix for Fixed Effects** | | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Row** | **Effect** | **time** | **Typ** | **Col1** | **Col2** | **Col3** | **Col4** | **Col5** | **Col6** | **Col7** | **Col8** | **Col9** | **Col10** | **Col11** |
| **1** | Intercept |  |  | 0.07625 | -0.05924 | -0.05924 |  | -0.07625 |  | 0.05924 |  | 0.05924 |  |  |
| **2** | time | 3 |  | -0.05924 | 0.1185 | 0.05924 |  | 0.05924 |  | -0.1185 |  | -0.05924 |  |  |
| **3** | time | 2 |  | -0.05924 | 0.05924 | 0.1185 |  | 0.05924 |  | -0.05924 |  | -0.1185 |  |  |
| **4** | time | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| **5** | Typ |  | 3 | -0.07625 | 0.05924 | 0.05924 |  | 0.1525 |  | -0.1185 |  | -0.1185 |  |  |
| **6** | Typ |  | 2 |  |  |  |  |  |  |  |  |  |  |  |
| **7** | time\*Typ | 3 | 3 | 0.05924 | -0.1185 | -0.05924 |  | -0.1185 |  | 0.2370 |  | 0.1185 |  |  |
| **8** | time\*Typ | 3 | 2 |  |  |  |  |  |  |  |  |  |  |  |
| **9** | time\*Typ | 2 | 3 | 0.05924 | -0.05924 | -0.1185 |  | -0.1185 |  | 0.1185 |  | 0.2370 |  |  |
| **10** | time\*Typ | 2 | 2 |  |  |  |  |  |  |  |  |  |  |  |
| **11** | time\*Typ | 1 | 3 |  |  |  |  |  |  |  |  |  |  |  |
| **12** | time\*Typ | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |

| **Covariance Matrix for Fixed Effects** | |
| --- | --- |
| **Row** | **Col12** |
| **1** |  |
| **2** |  |
| **3** |  |
| **4** |  |
| **5** |  |
| **6** |  |
| **7** |  |
| **8** |  |
| **9** |  |
| **10** |  |
| **11** |  |
| **12** |  |

| **Type 3 Tests of Fixed Effects** | | | | |
| --- | --- | --- | --- | --- |
| **Effect** | **Num DF** | **Den DF** | **F Value** | **Pr > F** |
| **Time** | 2 | 24 | 14.83 | <.0001 |
| **Typ** | 1 | 24 | 14.26 | 0.0009 |
| **time\*Typ** | 2 | 24 | 6.73 | 0.0048 |

