**Appendix D**

This appendix reports the results of a three-way mixed-designed analysis of variance (ANOVA) on reading accuracy and a comparison between the intermediate-learner group in Experiment 2 and the group of Japanese semantic dementia patients (Fushimi et al., 2009, Table 5, p. 1066). Results indicate the statistics for the ANOVA and post-hoc comparisons.

**Table D1**

*Results of the Mixed-Design Analysis of Variance*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Effect | *F-value*  *(df1, df2)* | MSE | *p-value* | *η2partial* |
| Intercept | **1,264.90** | **865.02** | **<.001** | **0.97 \*\*\*** |
| **(1, 43)** |
| Group | 1.76 | 865.02 | 0.19 | 0.04 |
| (1, 43) |
| Frequency | **241.44** | **93.16** | **<.001** | **0.86 \*\*\*** |
| **(1, 43)** |
| Frequency × Group | **9.23** | **93.16** | **<.01** | **0.18 \*\*** |
| **(1, 43)** |
| Consistency | **166.15** | **122.85** | **<.001** | **0.78 \*\*\*** |
| **(2, 86)** |
| Consistency × Group | 1.95 | 122.85 | 0.15 | 0.04 |
| (2, 86) |
| Frequency × Consistency | **21.92** | **70.19** | **<.001** | **0.34 \*\*\*** |
| **(2, 86)** |
| Frequency × Consistency ×Group | 0.07 | 70.19 | 0.93 | 0.00 |
| (2, 86) |

*Note.* A mixed-design ANOVA was conducted using the following formula: Reading Accuracy ~ Frequency × Consistency × Group + Error (subject\_id/ (Frequency × Consistency)). Group = L2 intermediate learners/Japanese SD patients; MSE = mean-squared error, deviation; \**p* < .05; \*\**p* < .01; \*\*\**p* < .001. The *p*-values below .05 and statistically significant effects are indicated in bold font.

**Table D2**

*Results of the Post-Hoc Comparisons*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Frequency Effect × Group Levels | | | | | | | |
|  | Contrast | Estimate | SE | *df* | *t* | *p* | 95% CI |
| HF | SD-IM | -1.27 | 3.44 | 43 | -0.37 | 1.00 | [-8.22, 5.67] |
| LF | SD-IM | -8.98 | 4.61 | 43 | -1.95 | 0.35 | [-18.28, 0.32] |
| SD | **HF-LF** | **23.57** | **2.11** | **43** | **11.19** | **<.001** | **[19.32, 27.82]** |
| IM | **HF-LF** | **15.86** | **1.42** | **43** | **11.20** | **<.001** | **[13.01, 18.71]** |
| Frequency Effect × Consistency Effect | | | | | | | |
| con | **HF-LF** | **12.17** | **1.57** | **43** | **7.73** | **<.001** | **[8.99, 15.34]** |
| typ | **HF-LF** | **17.41** | **2.30** | **43** | **7.58** | **<.001** | **[12.78, 22.04]** |
| atyp | **HF-LF** | **29.58** | **2.09** | **43** | **14.16** | **<.001** | **[25.36, 33.79]** |
| HF | **con - typ** | **11.61** | **1.75** | **43** | **6.64** | **<.001** | **[8.08, 15.14]** |
| **typ - atyp** | **12.13** | **2.15** | **43** | **5.65** | **<.001** | **[7.80, 16.46]** |
| **con - atyp** | **23.74** | **1.94** | **43** | **12.21** | **<.001** | **[19.82, 27.67]** |
| LF | **con - typ** | **16.85** | **2.05** | **43** | **8.24** | **<.001** | **[12.73, 20.98]** |
| **typ - atyp** | **24.30** | **2.73** | **43** | **8.89** | **<.001** | **[18.78, 29.81]** |
| **con - atyp** | **41.15** | **2.63** | **43** | **15.66** | **<.001** | **[35.85, 46.45]** |

*Note.* Post-hoc comparisons followed the estimation of the mixed-design ANOVA formula: Reading Accuracy ~ Frequency × Consistency × Group + Error (suject\_id/ (Frequency × Consistency). con = consistent, typ = inconsistent-typical, atyp = inconsistent-atypical; IM = intermediate learner, SD = Japanese semantic dementia patients. HF and LF represent high- and low-frequency bands, respectively. The *p*-values below .05 are indicated in bold font. The *p-value* adjustment used the Bonferroni correction.