**Supplementary Materials: Behavioral Full Model Summaries**

1. Appropriateness ~ Sentence Type \* Group + (1 + Sentence Type | Subject) + (1 + Group | Item)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Predictors* | *Odds Ratios* | *std. Error* | *CI* | *p* |
| (Intercept) | 2.39 | 0.26 | 1.93 – 2.94 | **<0.001** |
| Sentence1 | 4.06 | 0.58 | 3.07 – 5.37 | **<0.001** |
| Sentence2 | 25.68 | 5.44 | 16.95 – 38.90 | **<0.001** |
| Group | 0.81 | 0.16 | 0.55 – 1.20 | 0.301 |
| Sentence1 × Group | 3.54 | 0.75 | 2.34 – 5.36 | **<0.001** |
| Sentence2 × Group | 15.81 | 5.69 | 7.81 – 32.01 | **<0.001** |
| **Random Effects** | | | | |
| σ2 | 3.29 | | | |
| τ00 Item | 0.52 | | | |
| τ00 Subject | 0.56 | | | |
| τ11 Item.Group | 0.66 | | | |
| τ11 Subject.Sentence1 | 0.28 | | | |
| τ11 Subject.Sentence2 | 1.29 | | | |
| ρ01 Item | 0.55 | | | |
| ρ01 Subject.Sentence1 | -0.05 | | | |
| ρ01 Subject.Sentence2 | -0.25 | | | |
| ICC | 0.30 | | | |
| N Subject | 65 | | | |
| N Item | 228 | | | |
| Observations | 14724 | | | |
| Marginal R2 / Conditional R2 | 0.291 / 0.507 | | | |

1. Unusualness ~ Sentence Type \* Group + (1 + Sentence Type | Subject) + (1 + Group | Item)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Predictors* | *Odds Ratios* | *std. Error* | *CI* | *p* |
| (Intercept) | 1.04 | 0.13 | 0.81 – 1.34 | 0.746 |
| Sentence1 | 0.32 | 0.05 | 0.24 – 0.44 | **<0.001** |
| Sentence2 | 0.02 | 0.01 | 0.02 – 0.04 | **<0.001** |
| Group | 1.75 | 0.42 | 1.09 – 2.79 | **0.019** |
| Sentence1 × Group | 0.44 | 0.09 | 0.30 – 0.67 | **<0.001** |
| Sentence2 × Group | 0.07 | 0.03 | 0.03 – 0.15 | **<0.001** |
| **Random Effects** | | | | |
| σ2 | 3.29 | | | |
| τ00 Item | 0.64 | | | |
| τ00 Subject | 0.85 | | | |
| τ11 Item.Group | 0.52 | | | |
| τ11 Subject.Sentence1 | 0.28 | | | |
| τ11 Subject.Sentence2 | 1.77 | | | |
| ρ01 Item | 0.65 | | | |
| ρ01 Subject.Sentence1 | -0.30 | | | |
| ρ01 Subject.Sentence2 | -0.53 | | | |
| ICC | 0.36 | | | |
| N Subject | 65 | | | |
| N Item | 228 | | | |
| Observations | 14724 | | | |
| Marginal R2 / Conditional R2 | 0.302 / 0.556 | | | |