

Supplemental Material S6

Experiment 2 - Coefficients of the best fitting model for the subgroup of CI users for fixations towards the phonological competitor

Phonological Competitor Fixations ~
Condition · CVC · (linear + quadratic + cubic + quartic) +
Condition · d' · (linear + quadratic + cubic + quartic) +
(linear + quadratic + cubic + quartic | participant)

| Fixed Effects | | | | |
|--------------------------|----------|------------|---------|----------|
| | Estimate | Std. Error | z value | Pr(> z) |
| (Intercept) | -2.63 | 0.25 | -10.33 | 0.00 |
| linear | -12.30 | 4.66 | -2.64 | 0.01 |
| quadratic | 8.44 | 3.00 | 2.81 | 0.00 |
| cubic | 2.85 | 3.46 | 0.82 | 0.41 |
| quartic | -4.96 | 2.82 | -1.76 | 0.08 |
| d' | -0.21 | 0.16 | -1.30 | 0.19 |
| cond_c | -0.29 | 0.04 | -7.48 | 0.00 |
| CVC | 0.02 | 0.01 | 1.65 | 0.10 |
| linear : d' | -0.21 | 2.90 | -0.07 | 0.94 |
| quadratic : d' | 4.55 | 1.86 | 2.44 | 0.01 |
| cubic : d' | 0.29 | 2.15 | 0.14 | 0.89 |
| quartic : d' | -0.99 | 1.75 | -0.57 | 0.57 |
| linear : cond_c | -7.45 | 0.72 | -10.37 | 0.00 |
| quadratic : cond_c | -0.24 | 0.74 | -0.32 | 0.75 |
| cubic : cond_c | 6.95 | 0.72 | 9.58 | 0.00 |
| quartic : cond_c | 5.56 | 0.70 | 7.99 | 0.00 |
| d' : cond_c | 0.11 | 0.02 | 4.96 | 0.00 |
| linear : CVC | -0.17 | 0.25 | -0.67 | 0.50 |
| quadratic : CVC | -0.31 | 0.16 | -1.92 | 0.05 |
| cubic : CVC | -0.07 | 0.19 | -0.36 | 0.72 |
| quartic : CVC | 0.02 | 0.15 | 0.15 | 0.88 |
| cond_c : CVC | 0.01 | 0.00 | 5.45 | 0.00 |
| linear : d' : cond_c | -1.54 | 0.43 | -3.61 | 0.00 |
| quadratic : d' : cond_c | 1.71 | 0.45 | 3.84 | 0.00 |
| cubic : d' : cond_c | 3.88 | 0.43 | 8.96 | 0.00 |
| quartic : d' : cond_c | 0.17 | 0.42 | 0.40 | 0.69 |
| linear : CVC : cond_c | 0.64 | 0.05 | 13.76 | 0.00 |
| quadratic : CVC : cond_c | 0.26 | 0.04 | 5.98 | 0.00 |
| cubic : CVC : cond_c | -0.53 | 0.04 | -11.88 | 0.00 |
| quartic : CVC : cond_c | -0.29 | 0.04 | -6.85 | 0.00 |

| Random Effects | | | |
|---------------------|-------------|----------|----------|
| Groups | Name | Variance | Std.Dev. |
| Participant | (Intercept) | 0.1714 | 0.414 |
| | linear | 57.6032 | 7.590 |
| | quadratic | 23.3659 | 4.834 |
| | cubic | 31.3174 | 5.596 |
| | quartic | 20.5537 | 4.534 |
| Observations | 175,502 | | |
| Log Likelihood | -51,776.870 | | |
| Akaike Inf. Crit. | 103,643.700 | | |
| Bayesian Inf. Crit. | 104,097.100 | | |