|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Fake Words Model Comparisons Exp. 1 | | | | | |
| *Model* | *AIC* | *BIC* | *logLik* | *L.Ratio* | *p-value* |
| Intercept only model | 135987.4 | 136004.2 | -67991.68 |  |  |
| Random intercept model | **127711.3** | **127736.6** | **-63852.67** | **8278.027** | **<.0001** |
| Control model | 127713 | 127746.7 | -63852.5 | 0.339 | 0.5601 |
| Main Effects model | **127494.8** | **127562.2** | **-63739.4** | **226.2** | **<.0001** |
| Interaction Model | **127486.8** | **127647** | **-63724.39** | **30.024** | **0.0016** |
| Real Words Model Comparisons Exp 1 | | | | | |
| Intercept only model | 158239.5 | 158256.3 | -79117.73 |  |  |
| Random intercept model | **156731.7** | **156757** | **-78362.85** | **1509.7466** | **<.0001** |
| Control model | **156710.4** | **156744.1** | **-78351.2** | **23.302** | **<.0001** |
| Main Effects model | **156617.1** | **156684.5** | **-78300.54** | **101.3328** | **<.0001** |
| Interaction Model | **156575** | **156735.3** | **-78268.52** | **64.0313** | **<.0001** |
| Fake Words Model Comparisons Exp 2 | | | | | |
| Intercept only model | 13715.38 | 13727.76 | -6855.691 |  |  |
| Random intercept model | **12190.54** | **12209.1** | **-6092.268** | **1526.8453** | **<.0001** |
| Control model | 12192.17 | 12216.92 | -6092.083 | 0.3701 | 0.543 |
| Main Effects model | **12152.25** | **12201.76** | **-6068.126** | **47.9146** | **<.0001** |
| Interaction Model | **12127.85** | **12245.44** | **-6044.926** | **46.3997** | **<.0001** |
| Real Words Model Comparisons Exp2 | | | | | |
| Intercept only model | 16139.51 | 16151.89 | -8067.756 |  |  |
| Random intercept model | **15928.55** | **15947.11** | **-7961.274** | **212.96438** | **<.0001** |
| Control model | **15904.53** | **15929.29** | **-7948.266** | **26.01679** | **<.0001** |
| Main Effects model | **15818.14** | **15867.65** | **-7901.068** | **94.39552** | **<.0001** |
| Interaction Model | **15738.9** | **15856.49** | **-7850.449** | **101.23832** | **<.0001** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Experiment 1, Fake Words | | | | |
| Model | Predictor | *b* (*SE*) | *t* | *p* |
| 4-way interaction | **Letter Frequency** | **0.046 (0.008)** | **5.818** | **<0.001** |
| Speed | -0.001 (0.002) | -0.319 | 0.750 |
| **Left-Right Switch** | **-0.044 (0.010)** | **-4.170** | **<0.001** |
| **Finger Switch** | **-0.048 (0.014)** | **-3.478** | **0.001** |
| **Right Side Advantage** | **0.054 (0.007)** | **7.962** | **<0.001** |
| Speed X Left-Right Switch | 0.001 (0.001) | 1.444 | 0.149 |
| **Speed X Finger Switch** | **-0.002 (0.001)** | **-1.999** | **0.046** |
| **High Speed Finger Switch Simple Slope** | **-0.075 (0.019)** | **-3.860** | **<0.001** |
| Low Speed Finger Switch Simple Slope | -0.021 (0.019) | -1.057 | 0.291 |
| Left-Right Switch X Finger Switch | -0.006 (0.006) | -0.995 | 0.320 |
| **Speed X Right Side Advantage** | **-0.001 (0.000)** | **-1.890** | **0.059** |
| **High Speed RSA Simple Slope** | **0.042 (0.009)** | **4.453** | **<0.001** |
| **Low Speed RSA Simple Slope** | **0.067 (0.009)** | **7.049** | **<0.001** |
| Left-Right Switch X Right Side Advantage | 0.000 (0.005) | 0.000 | 1.000 |
| **Finger Switch X Right Side Advantage** | **0.020 (0.006)** | **3.444** | **0.001** |
| Speed X Left-Right Switch X Finger Switch | 0.000 (0.000) | 0.281 | 0.778 |
| Speed X Left-Right Switch X Right Side Advantage | -0.000 (0.000) | -0.625 | 0.532 |
| Speed X Finger Switch X Right Side Advantage | 0.000 (0.000) | 0.512 | 0.609 |
| Left-Right Switch X Finger Switch X Right Side Advantage | 0.005 (0.003) | 1.374 | 0.169 |
| Speed X Left-Right Switch X Finger Switch X Right Side Advantage | 0.000 (0.000) | 0.206 | 0.837 |
| Experiment 1, Real Words | | | | |
| Model | Predictor | *b* (*SE*) | *t* | *p* |
| 4-way interaction | **Letter Frequency** | 0.093 (0.012) | 8.041 | **<0.001** |
| Speed | 0.002 (0.002) | 0.811 | 0.417 |
| Left-Right Switch | 0.009 (0.014) | 0.660 | 0.509 |
| **Finger Switch** | **-0.062 (0.012)** | **-4.958** | **<0.001** |
| **Right Side Advantage** | **0.067 (0.009)** | **7.148** | **<0.001** |
| Speed X Left-Right Switch | -0.001 (0.001) | -0.959 | 0.337 |
| **Speed X Finger Switch** | **0.003 (0.001)** | **2.881** | **0.004** |
| **Left-Right Switch X Finger Switch** | **0.012 (0.005)** | **2.467** | **0.014** |
| Speed X Right Side Advantage | 0.000 (0.001) | 0.105 | 0.917 |
| Left-Right Switch X Right Side Advantage | 0.002 (0.006) | 0.246 | 0.806 |
| Finger Switch X Right Side Advantage | 0.005 (0.004) | 1.106 | 0.269 |
| **Speed X Left-Right Switch X Finger Switch** | **-0.001 (0.000)** | **-3.047** | **0.002** |
| Speed X Left-Right Switch X Right Side Advantage | 0.000 (0.000) | -0.660 | 0.509 |
| Speed X Finger Switch X Right Side Advantage | 0.000 (0.000) | 0.009 | 0.993 |
| **Left-Right Switch X Finger Switch X Right Side Advantage** | **-0.011 (0.002)** | **-5.758** | **<0.001** |
| Speed X Left-Right Switch X Finger Switch X Right Side Advantage | 0.000 (0.000) | -0.188 | 0.851 |
| 2-way interaction for High Speed | Left-Right Switch | -0.004 (0.02) | -0.202 | 0.840 |
| Finger Switch | -0.026 (0.017) | -1.534 | 0.125 |
| Left-Right Switch X Finger Switch | -0.011 (0.003) | -0.429 | 0.668 |
| 2-way interaction for Average Speed | **Low Left-Right Switch Simple Slope** | **-0.078 (0.016)** | **-4.986** | **<0.001** |
| **High Left-Right Switch Simple Slope** | **-0.045 (0.012)** | **-3.654** | **<0.001** |
| 2-way interaction for Low Speed | Left-Right Switch | 0.023 (0.020) | 1.137 | 0.255 |
| **Finger Switch** | **-0.097 (0.018)** | **-5.481** | **<0.001** |
| **Left-Right Switch X Finger Switch** | **0.026 (0.007)** | **3.902** | **<0.001** |
| **Low Left-Right Switch Simple Slope** | **-0.134 (0.022)** | **-5.987** | **<0.001** |
| **High Left-Right Switch Simple Slope** | **-0.060 (0.018)** | **-3.429** | **0.001** |
| 2-way interaction for Low Left-Right Switch | **Finger Switch** | **-0.078 (0.016)** | **-4.986** | **<0.001** |
| **Right Side Advantage** | **0.065 (0.008)** | **8.313** | **<0.001** |
| **Finger Switch X Right Side Advantage** | **0.020 (0.005)** | **4.398** | **<0.001** |
| **Low Finger Switch Simple Slope** | **0.029 (0.009)** | **3.089** | **0.002** |
| **High Finger Switch Simple Slope** | **0.100 (0.013)** | **7.755** | **<0.001** |
| 2-way interaction for High LR Switch | **Finger Switch** | **-0.045 (0.012)** | **-3.654** | **<0.001** |
| **Right Side Advantage** | **0.069 (0.016)** | **4.206** | **<0.001** |
| **Finger Switch X Right Side Advantage** | **-0.011 (0.005)** | **-2.023** | **0.043** |
| **Low Finger Switch Simple Slope** | **0.088 (0.025)** | **3.558** | **<0.001** |
| **High Finger Switch Simple Slope** | **0.049 (0.010)** | **4.848** | **<0.001** |
| Experiment 2, Fake Words | | | | |
| Model | Predictor | *b* (*SE*) | *t* | *p* |
| 4-way interaction | **Letter Frequency** | **0.060 (0.022)** | **2.756** | **0.006** |
| Speed | -0.011 (0.011) | -0.922 | 0.361 |
| Left-Right Switch | 0.015 (0.027) | 0.547 | 0.585 |
| **Finger Switch** | **-0.112 (0.046)** | **-2.418** | **0.016** |
| **Right Side Advantage** | **0.116 (0.031)** | **3.770** | **<0.001** |
| Speed X Left-Right Switch | 0.002 (0.002) | 0.867 | 0.386 |
| Speed X Finger Switch | 0.004 (0.004) | 1.101 | 0.271 |
| Left-Right Switch X Finger Switch | 0.063 (0.043) | 1.455 | 0.146 |
| Speed X Right Side Advantage | 0.001 (0.002) | 0.443 | 0.658 |
| **Left-Right Switch X Right Side Advantage** | **0.055 (0.027)** | **2.048** | **0.041** |
| **Finger Switch X Right Side Advantage** | **-0.245 (0.049)** | **-4.946** | **<0.001** |
| Speed X Left-Right Switch X Finger Switch | 0.003 (0.004) | 0.884 | 0.377 |
| Speed X Left-Right Switch X Right Side Advantage | 0.000 (0.002) | -0.222 | 0.824 |
| **Speed X Finger Switch X Right Side Advantage** | **-0.008 (0.004)** | **-2.005** | **0.045** |
| **Left-Right Switch X Finger Switch X Right Side Advantage** | **-0.207 (0.047)** | **-4.443** | **<0.001** |
| **Speed X Left-Right Switch X Finger Switch X Right Side Advantage** | **-0.009 (0.004)** | **-2.351** | **0.019** |
| 3-way interaction for Low Speed | Left-Right Switch | -0.008 (0.038) | -0.213 | 0.831 |
| **Finger Switch** | **-0.162 (0.065)** | **-2.490** | **0.013** |
| **Right Side Advantage** | **0.104 (0.040)** | **2.628** | **0.009** |
| Left-Right Switch X Finger Switch | 0.025 (0.061) | 0.413 | 0.680 |
| Left-Right Switch X Right Side Advantage | 0.060 (0.036) | 1.657 | 0.098 |
| **Finger Switch X Right Side Advantage** | **-0.150 (0.068)** | **-2.202** | **0.028** |
| Left-Right Switch X Finger Switch X Right Side Advantage | -0.105 (0.064) | -1.641 | 0.101 |
| 2-way interaction for Average Speed, Low Left-Right Switch | **Finger Switch** | **-0.178 (0.046)** | **-3.873** | **<0.001** |
| **Right Side Advantage** | **0.058 (0.012)** | **4.653** | **<0.001** |
| **Finger Switch X Right Side Advantage** | **-0.027 (0.014)** | **-1.956** | **0.051** |
| **Low Finger Switch Simple Slope** | **0.075 (0.012)** | **6.493** | **<0.001** |
| **High Finger Switch Simple Slope** | **0.041 (0.018)** | **2.238** | **0.025** |
| 2-way interaction for Average Speed, Average Left-Right Switch | **Low Finger Switch Simple Slope** | **0.273 (0.057)** | **4.817** | **<0.001** |
| High Finger Switch Simple Slope | -0.042 (0.026) | -1.579 | 0.115 |
| 2-way interaction for Average Speed, High Left-Right Switch | Finger Switch | -0.045 (0.079) | -0.568 | 0.570 |
| **Right Side Advantage** | **0.173 (0.057)** | **3.013** | **0.003** |
| **Finger Switch X Right Side Advantage** | **-0.462 (0.097)** | **-4.742** | **<0.001** |
| **Low Finger Switch Simple Slope** | **0.470 (0.109)** | **4.311** | **<0.001** |
| **High Finger Switch Simple Slope** | **-0.124 (0.051)** | **-2.455** | **0.014** |
| 3-way interaction for High Speed | Left-Right Switch | 0.038 (0.038) | 0.997 | 0.319 |
| Finger Switch | -0.061 (0.065) | -0.934 | 0.351 |
| **Right Side Advantage** | **0.127 (0.040)** | **3.191** | **0.001** |
| Left-Right Switch X Finger Switch | 0.101 (0.061) | 1.656 | 0.098 |
| Left-Right Switch X Right Side Advantage | 0.049 (0.036) | 1.356 | 0.175 |
| **Finger Switch X Right Side Advantage** | **-0.339 (0.068)** | **-4.966** | **<0.001** |
| **Left-Right Switch X Finger Switch X Right Side Advantage** | **-0.310 (0.064)** | **-4.851** | **<0.001** |
| 2-way interaction for High Speed, Low Left-Right Switch | **Finger Switch** | **-0.167 (0.065)** | **-2.576** | **0.010** |
| **Right Side Advantage** | **0.075 (0.016)** | **4.564** | **<0.001** |
| Finger Switch X Right Side Advantage | -0.014 (0.019) | -0.702 | 0.483 |
| 2-way interaction for High Speed, Average Left-Right Switch | **Low Finger Switch Simple Slope** | **0.344 (0.075)** | **4.575** | **<0.001** |
| **High Finger Switch Simple Slope** | **-0.091 (0.036)** | **-2.494** | **0.013** |
| 2-way interaction for High Speed, High Left-Right Switch | Finger Switch | 0.046 (0.112) | 0.406 | 0.684 |
| **Right Side Advantage** | **0.178 (0.076)** | **2.345** | **0.019** |
| **Finger Switch X Right Side Advantage** | **-0.664 (0.134)** | **-4.960** | **<0.001** |
| **Low Finger Switch Simple Slope** | **0.605 (0.146)** | **4.143** | **<0.001** |
| **High Finger Switch Simple Slope** | **-0.248 (0.071)** | **-3.493** | **0.001** |
| Experiment 2, Real Words | | | | |
| Model | Predictor | *b* (*SE*) | *t* | *p* |
| 4-way interaction | **Letter Frequency** | **0.256 (0.031)** | **8.294** | **<0.001** |
| Speed | 0.014 (0.008) | 1.753 | 0.085 |
| **Left-Right Switch** | **0.327 (0.042)** | **7.762** | **<0.001** |
| Finger Switch | -0.126 (0.067) | -1.880 | 0.060 |
| Right Side Advantage | -0.049 (0.036) | -1.345 | 0.179 |
| Speed X Left-Right Switch | 0.004 (0.004) | 1.061 | 0.289 |
| Speed X Finger Switch | 0.001 (0.006) | 0.233 | 0.816 |
| Left-Right Switch X Finger Switch | 0.077 (0.083) | 0.930 | 0.353 |
| Speed X Right Side Advantage | 0.003 (0.003) | 0.846 | 0.398 |
| **Left-Right Switch X Right Side Advantage** | **-0.191 (0.032)** | **-5.898** | **<0.001** |
| **Finger Switch X Right Side Advantage** | **-0.322 (0.066)** | **-4.899** | **<0.001** |
| Speed X Left-Right Switch X Finger Switch | -0.004 (0.007) | -0.502 | 0.616 |
| Speed X Left-Right Switch X Right Side Advantage | 0.004 (0.003) | 1.283 | 0.200 |
| Speed X Finger Switch X Right Side Advantage | -0.006 (0.006) | -1.082 | 0.279 |
| **Left-Right Switch X Finger Switch X Right Side Advantage** | **-0.306 (0.063)** | **-4.833** | **<0.001** |
| Speed X Left-Right Switch X Finger Switch X Right Side Advantage | -0.006 (0.005) | -1.026 | 0.305 |
| 2-way interaction for Low Left-Right Switch | **Finger Switch** | **-0.203 (0.099)** | **-2.049** | **0.041** |
| **Right Side Advantage** | **0.144 (0.021)** | **6.807** | **<0.001** |
| Finger Switch X Right Side Advantage | -0.014 (0.035) | -0.395 | 0.693 |
| 2-way interaction for Average Left-Right Switch | **Low Finger Switching Simple Slope** | **0.150 (0.063)** | **2.374** | **0.018** |
| **High Finger Switching Simple Slope** | **-0.248 (0.044)** | **-5.622** | **<0.001** |
| 2-way interaction for High Left-Right Switch | Finger Switch | -0.048 (0.114) | -0.425 | 0.671 |
| **Right Side Advantage** | **-0.242 (0.066)** | **-3.666** | **<0.001** |
| **Finger Switch X Right Side Advantage** | **-0.631 (0.125)** | **-5.051** | **<0.001** |
| Low Finger Switching Simple Slope | 0.149 (0.120) | 1.242 | 0.214 |
| **High Finger Switching Simple Slope** | **-0.632 (0.079)** | **-7.970** | **<0.001** |