**Supplementary Material 1**

Table S1*. Percent of data points removed per measure (FFD = First Fixation Duration, GD = Gaze Duration, and Skipping = Skipping Rate) and amount the of data points remaining per condition*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Percentage removed | Identical | English translation | English orthography | English word | English pseudo word |
| FFD | 25.00% | 1249 | 1272 | 1299 | 1307 | 1286 |
| GD | 25.00% | 1253 | 1272 | 1299 | 1306 | 1284 |
| Skipping | NA | 1715 | 1713 | 1711 | 1710 | 1702 |

**Supplementary Material 2**

Table S2.1. *Mean values and standard deviations per measure (FFD = First Fixation Duration, GD = Gaze Duration, and Skipping = Skipping Rate)*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | FFD (ms) | | GD (ms) | | Skipping (%) | |
| Condition | M | SD | M | SD | M | SD |
| Identical | 210.32 | 69.91 | 245.05 | 120.47 | 25.71 | 43.72 |
| English translation | 222.66 | 85.42 | 257.75 | 116.98 | 24.17 | 42.82 |
| English orthography | 225.57 | 88.43 | 264.88 | 124.42 | 23.20 | 42.23 |
| English word | 220.56 | 86.60 | 261.92 | 129.04 | 22.34 | 41.66 |
| English pseudo-word | 224.05 | 85.01 | 266.22 | 127.85 | 23.10 | 42.15 |

Table S2.2. *FFD (model 1)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. error | t-value | p-value |
| **Intercept** | **222.55** | **2.45** | **90.72** | **<.001** |
| **Identical vs. English translation** | **13.77** | **2.92** | **4.71** | **<.001** |
| English translation vs. English orthography | 2.61 | 4.06 | 0.64 | 0.52 |
| English orthography vs English pseudo-word | -1.93 | 4.23 | -0.46 | 0.65 |
| English translation vs. English orthography & pseudo-word | -1.42 | 3.21 | -0.44 | 0.66 |
| LexTALE | 0.29 | 0.28 | 1.01 | 0.31 |
| Proficiency | 0.15 | 0.21 | 0.71 | 0.48 |
| Identical vs. English translation\*LexTALE | -0.21 | 0.37 | -0.57 | 0.57 |
| English translation vs. English orthography\*LexTALE | 0.24 | 0.43 | 0.56 | 0.57 |
| English orthography vs English pseudo-word\*LexTALE | -0.23 | 0.43 | -0.54 | 0.59 |
| English translation vs. English orthography & pseudo-word\*LexTALE | 0.01 | 0.36 | 0.02 | 0.98 |
| Identical vs. English translation | 0.05 | 0.26 | 0.18 | 0.86 |
| English translation vs. English orthography\*Proficiency | -0.35 | 0.31 | -1.13 | 0.26 |
| English orthography vs English pseudo-word\*Proficiency | 0.22 | 0.31 | 0.71 | 0.48 |
| English translation vs. English orthography & pseudo-word\*Proficiency | -0.03 | 0.26 | -0.13 | 0.90 |
| **LexTALE\*Proficiency** | **0.08** | **0.02** | **3.28** | **<.01** |
| Identical vs. English translation\*LexTALE\*Proficiency | 0.06 | 0.03 | 1.96 | 0.05 |
| English translation vs. English orthography\*LexTALE\*Proficiency | -0.04 | 0.04 | -1.06 | 0.29 |
| English orthography vs English pseudo-word\*LexTALE\*Proficiency | -0.02 | 0.04 | -0.65 | 0.52 |
| English translation vs. English orthography & pseudo-word\*LexTALE\*Proficiency | -0.05 | 0.03 | -1.77 | 0.08 |

Table S2.3. *FFD (model 2)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. error | t-value | p-value |
| **Intercept** | **222.71** | **2.51** | **88.56** | **<.001** |
| English translation vs. English word | -2.44 | 3.98 | -0.61 | 0.54 |
| LexTALE | 0.39 | 0.29 | 1.35 | 0.18 |
| Proficiency | 0.15 | 0.21 | 0.73 | 0.47 |
| Semantic score | -2.23 | 12.75 | -0.18 | 0.86 |
| English translation vs. English word\*LexTALE | -0.01 | 0.45 | -0.03 | 0.98 |
| English translation vs. English word\*Proficiency | 0.02 | 0.32 | 0.05 | 0.96 |
| **LexTALE\*Proficiency** | **0.07** | **0.02** | **3.04** | **<.01** |
| English translation vs. English word\*LexTALE\*Proficiency | -0.04 | 0.04 | -1.11 | 0.27 |

Table S2.4. *GD (model 1)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. error | t-value | p-value |
| **Intercept** | **258.10** | **3.62** | **71.37** | **<.001** |
| **Identical vs. English translation** | **15.80** | **4.91** | **3.22** | **<.001** |
| English translation vs. English orthography | 7.16 | 6.00 | 1.20 | 0.23 |
| English orthography vs English pseudo-word | -0.36 | 6.21 | -0.06 | 0.95 |
| English translation vs. English orthography & pseudo-word | 5.05 | 5.19 | 0.97 | 0.33 |
| LexTALE | 0.39 | 0.38 | 1.03 | 0.30 |
| Proficiency | -0.11 | 0.28 | -0.39 | 0.70 |
| Identical vs. English translation\*LexTALE | -0.13 | 0.51 | -0.25 | 0.80 |
| English translation vs. English orthography\*LexTALE | 0.59 | 0.63 | 0.94 | 0.35 |
| English orthography vs English pseudo-word\*LexTALE | -0.63 | 0.66 | -0.96 | 0.34 |
| English translation vs. English orthography & pseudo-word\*LexTALE | 0.10 | 0.55 | 0.19 | 0.85 |
| Identical vs. English translation | 0.57 | 0.37 | 1.54 | 0.12 |
| English translation vs. English orthography\*Proficiency | -0.69 | 0.46 | -1.50 | 0.13 |
| English orthography vs English pseudo-word\*Proficiency | 0.12 | 0.49 | 0.24 | 0.81 |
| English translation vs. English orthography & pseudo-word\*Proficiency | -0.56 | 0.40 | -1.39 | 0.17 |
| **LexTALE\*Proficiency** | **0.08** | **0.03** | **2.63** | **<.01** |
| Identical vs. English translation\*LexTALE\*Proficiency | 0.04 | 0.04 | 0.88 | 0.38 |
| English translation vs. English orthography\*LexTALE\*Proficiency | -0.06 | 0.05 | -1.18 | 0.24 |
| English orthography vs English pseudo-word\*LexTALE\*Proficiency | -0.01 | 0.06 | -0.23 | 0.82 |
| English translation vs. English orthography & pseudo-word\*LexTALE\*Proficiency | -0.06 | 0.05 | -1.31 | 0.19 |

Table S2.5. *GD (model 2)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. error | t-value | p-value |
| **Intercept** | **259.30** | **3.76** | **68.93** | **<.001** |
| English translation vs. English word | 4.54 | 5.12 | 0.89 | 0.38 |
| LexTALE | 0.55 | 0.39 | 1.39 | 0.16 |
| Proficiency | -0.08 | 0.28 | -0.28 | 0.78 |
| Semantic score | 3.74 | 23.89 | 0.16 | 0.88 |
| English translation vs. English word\*LexTALE | 0.46 | 0.51 | 0.91 | 0.36 |
| English translation vs. English word\*Proficiency | -0.54 | 0.38 | -1.43 | 0.15 |
| **LexTALE\*Proficiency** | **0.08** | **0.03** | **2.34** | **<.025** |
| English translation vs. English word\*LexTALE\*Proficiency | -0.04 | 0.04 | -0.84 | 0.40 |

Table S2.6. *Skipping (model 1)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. error | z-value | p-value |
| **Intercept** | **-1.38** | **0.11** | **-12.52** | **<.001** |
| Identical vs. English translation | -0.14 | 0.1 | -1.46 | 0.15 |
| English translation vs. English orthography | 0.00 | 0.1 | 0.02 | 0.98 |
| English orthography vs English pseudo-word | -0.08 | 0.1 | -0.76 | 0.45 |
| English translation vs. English orthography & pseudo-word | -0.08 | 0.09 | -0.93 | 0.35 |
| LexTALE | 0.00 | 0.01 | -0.35 | 0.72 |
| Proficiency | 0.01 | 0.01 | 1.04 | 0.30 |
| Identical vs. English translation\*LexTALE | 0.01 | 0.01 | 1.21 | 0.23 |
| English translation vs. English orthography\*LexTALE | -0.01 | 0.01 | -1.03 | 0.30 |
| English orthography vs English pseudo-word\*LexTALE | 0.00 | 0.01 | -0.08 | 0.93 |
| English translation vs. English orthography & pseudo-word\*LexTALE | -0.01 | 0.01 | -1.44 | 0.15 |
| Identical vs. English translation | 0.01 | 0.01 | 0.82 | 0.41 |
| English translation vs. English orthography\*Proficiency | 0.00 | 0.01 | 0.29 | 0.78 |
| English orthography vs English pseudo-word\*Proficiency | 0.00 | 0.01 | -0.42 | 0.67 |
| English translation vs. English orthography & pseudo-word\*Proficiency | 0.00 | 0.01 | -0.32 | 0.75 |
| LexTALE\*Proficiency | 0.00 | 0.00 | 0.23 | 0.82 |
| Identical vs. English translation\*LexTALE\*Proficiency | 0.00 | 0.00 | 1.68 | 0.09 |
| English translation vs. English orthography\*LexTALE\*Proficiency | 0.00 | 0.00 | -0.34 | 0.74 |
| English orthography vs English pseudo-word\*LexTALE\*Proficiency | 0.00 | 0.00 | -0.22 | 0.83 |
| English translation vs. English orthography & pseudo-word\*LexTALE\*Proficiency | 0.00 | 0.00 | -0.32 | 0.75 |

Table S2.7. *Skipping (model 2)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. error | z-value | p-value |
| **Intercept** | **-1.38** | **0.11** | **-12.63** | **<0.001** |
| English translation vs. English word | -0.09 | 0.09 | -0.99 | 0.32 |
| LexTALE | -0.01 | 0.01 | -0.73 | 0.47 |
| Proficiency | 0.01 | 0.01 | 1.21 | 0.22 |
| Semantic score | 0.93 | 0.50 | 1.88 | 0.06 |
| English translation vs. English word\*LexTALE | -0.02 | 0.01 | -1.48 | 0.14 |
| English translation vs. English word\*Proficiency | 0.00 | 0.01 | -0.42 | 0.68 |
| LexTALE\*Proficiency | 0.00 | 0.00 | 0.06 | 0.96 |
| English translation vs. English word\*LexTALE\*Proficiency | 0.00 | 0.00 | -0.04 | 0.97 |

**Supplementary Material 3**



Figure S3. Mean skipping rate across all conditions (error bars reflect 97.5% confidence intervals)