**Table S1. Summary of the (generalized) linear mixed-effect models for the eye-tracking measures in pre-critical Region 2 (Bonferroni correction applied). Significant effects are marked in gray and bolded.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Log FFD** | | | **Log SFD** | | | **Log GD** | | | **Log TT** | | | **Rout** | | | **Rin** | | |
| *Predictors* | *Est.* | *SE* | *p* | *Est.* | *SE* | *p* | *Est.* | *SE* | *p* | *Est.* | *SE* | *p* | *Odds Ratios* | *SE* | *p* | *Odds Ratios* | *SE* | *p* |
| (Intercept) | 5.404 | .034 | **<.001** | 5.515 | .041 | **<.001** | 5.601 | .042 | **<.001** | 6.132 | .060 | **<.001** | .352 | .057 | **<.001** | .621 | .104 | .054 |
| Grammaticality | -.001 | .007 | 1.000 | .015 | .011 | 1.000 | .013 | .009 | 1.000 | -.075 | .013 | **<.001** | 1.062 | .064 | 1.000 | .620 | .041 | **<.001** |
| Agr. Element 1 (stim\_adj ) | .023 | .014 | 1.000 | .031 | .020 | 1.000 | .018 | .021 | 1.000 | -.017 | .040 | 1.000 | .925 | .115 | 1.000 | .940 | .106 | 1.000 |
| Agr. Element 2  (stim\_pred\_adj) | -.009 | .015 | 1.000 | .007 | .024 | 1.000 | -.005 | .023 | 1.000 | .137 | .044 | **.024** | 1.279 | .178 | .923 | 1.563 | .198 | **.005** |
| Target gender (fem) | .001 | .007 | 1.000 | -.011 | .010 | 1.000 | .005 | .009 | 1.000 | -.004 | .012 | 1.000 | 1.049 | .058 | 1.000 | .985 | .052 | 1.000 |
| Frequency (log) | -.013 | .013 | 1.000 | -.026 | .019 | 1.000 | -.023 | .019 | 1.000 | -.031 | .028 | 1.000 | .923 | .105 | 1.000 | .921 | .096 | 1.000 |
| Length (scaled) | -.013 | .010 | 1.000 | -.006 | .016 | 1.000 | .076 | .015 | **<.001** | .071 | .027 | .109 | .856 | .076 | .970 | 1.076 | .086 | 1.000 |
| N-1 length | -.008 | .010 | 1.000 | -.029 | .017 | 1.000 | -.007 | .016 | 1.000 | -.061 | .030 | .515 | .802 | .078 | .274 | .909 | .077 | 1.000 |
| N+1 length | .010 | .009 | 1.000 | -.006 | .014 | 1.000 | -.009 | .014 | 1.000 | -.001 | .024 | 1.000 | .971 | .082 | 1.000 | 1.157 | .087 | .646 |
| Trial order | .027 | .007 | **.003** | -.000 | .011 | 1.000 | .016 | .009 | .969 | -.099 | .012 | **<.001** | .757 | .042 | **<.001** | .688 | .038 | **<.001** |
| Grammaticality \* Agr. Element 1 | .020 | .010 | .523 | -.010 | .014 | 1.000 | .002 | .013 | 1.000 | .011 | .017 | 1.000 | 1.011 | .079 | 1.000 | .944 | .071 | 1.000 |
| Grammaticality \* Agr. Element 2 | -.015 | .010 | 1.000 | -.005 | .016 | 1.000 | .003 | .013 | 1.000 | .005 | .017 | 1.000 | 1.045 | .081 | 1.000 | 1.126 | .085 | 1.000 |
| **Random Effects** | | | | | | | | | | | | | | | | | | |
| σ2 | .10 | | | .06 | | | .16 | | | .26 | | | 3.29 | | | 3.29 | | |
| τ00 | .00 item | | | .00 item | | | .00 item | | | .03 item | | | .18 item | | | .13 item | | |
|  | .04 DATA\_FILE | | | .05 DATA\_FILE | | | .05 DATA\_FILE | | | .08 DATA\_FILE | | | .23 DATA\_FILE | | | .46 DATA\_FILE | | |
| τ11 | .00 DATA\_FILE.gram | | | .00 DATA\_FILE.gram | | |  | | | .00 DATA\_FILE.gram | | | .02 DATA\_FILE.gram | | | .05 DATA\_FILE.gram | | |
| ρ01 | -.70 DATA\_FILE | | | -.29 DATA\_FILE | | |  | | | .03 DATA\_FILE | | | -.44 DATA\_FILE | | | -.22 DATA\_FILE | | |
| N | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | |
|  | 48 item | | | 48 item | | | 48 item | | | 48 item | | | 48 item | | | 48 item | | |
| Observations | 1857 | | | 646 | | | 1857 | | | 1857 | | | 1857 | | | 1857 | | |
| Marginal R2 / Conditional R2 | .010 / .282 | | | .018 / .461 | | | .035 / .279 | | | .095 / .372 | | | .043 / .152 | | | .129 / .271 | | |

**Table S2. Summary of the (generalized) linear mixed-effect models for the eye-tracking measures in the critical Region 3 (Bonferroni correction applied). Significant effects are marked in gray and bolded.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Log FFD** | | | **Log SFD** | | | **Log GD** | | | **Log TT** | | | **Rout** | | | **Rin** | | |
| *Predictors* | *Est.* | *SE* | *p* | *Est.* | *SE* | *p* | *Est.* | *SE* | *p* | *Est.* | *SE* | *p* | *Odds Ratios* | *SE* | *p* | *Odds Ratios* | *SE* | *p* |
| (Intercept) | 5.443 | .036 | **<.001** | 5.543 | .047 | **<.001** | 5.746 | .045 | **<.001** | 6.193 | .064 | **<.001** | .649 | .134 | .437 | .245 | .059 | **<.001** |
| Grammaticality | -.004 | .008 | 1.000 | -.036 | .010 | **.004** | -.026 | .011 | .220 | -.098 | .015 | **<.001** | .591 | .037 | **<.001** | .800 | .053 | **.009** |
| Agr. Element 1 (stim\_adj ) | -.004 | .015 | 1.000 | -.002 | .021 | 1.000 | -.017 | .021 | 1.000 | -.081 | .034 | .198 | .812 | .103 | 1.000 | .763 | .117 | .942 |
| Agr. Element 2  (stim\_pred\_adj) | .032 | .014 | .246 | .076 | .020 | **.002** | .044 | .019 | .254 | .173 | .030 | **<.001** | 1.646 | .184 | **<.001** | 1.387 | .186 | .180 |
| Target gender (fem) | .006 | .008 | 1.000 | .008 | .010 | 1.000 | .012 | .009 | 1.000 | -.007 | .012 | 1.000 | .933 | .051 | 1.000 | 1.010 | .067 | 1.000 |
| Frequency (log) | -.046 | .014 | **.009** | -.071 | .018 | **.001** | -.104 | .018 | **<.001** | -.133 | .025 | **<.001** | .794 | .086 | .403 | .784 | .104 | .799 |
| Length (scaled) | -.042 | .015 | .058 | -.031 | .022 | 1.000 | .056 | .020 | .071 | .095 | .030 | **.017** | 1.083 | .126 | 1.000 | .986 | .140 | 1.000 |
| N-1 length | -.001 | .013 | 1.000 | -.035 | .019 | .747 | -.001 | .018 | 1.000 | .008 | .027 | 1.000 | 1.092 | .114 | 1.000 | 1.189 | .148 | 1.000 |
| N+1 length | -.005 | .009 | 1.000 | -.002 | .012 | 1.000 | -.006 | .013 | 1.000 | -.039 | .020 | .634 | .956 | .071 | 1.000 | .872 | .079 | 1.000 |
| Trial order | .005 | .008 | 1.000 | -.010 | .010 | 1.000 | -.017 | .010 | .891 | -.094 | .012 | **<.001** | .758 | .042 | **<.001** | .723 | .048 | **<.001** |
| Grammaticality \* Agr. Element 1 | .019 | .011 | .939 | .018 | .014 | 1.000 | -.007 | .013 | 1.000 | -.007 | .016 | 1.000 | 1.038 | .081 | 1.000 | .971 | .092 | 1.000 |
| Grammaticality \* Agr. Element 2 | -.030 | .011 | .069 | -.051 | .015 | **.008** | .009 | .013 | 1.000 | .002 | .016 | 1.000 | 1.127 | .085 | 1.000 | .953 | .086 | 1.000 |
| **Random Effects** | | | | | | | | | | | | | | | | | | |
| σ2 | .11 | | | .08 | | | .17 | | | .24 | | | 3.29 | | | 3.29 | | |
| τ00 | .00 item | | | .00 item | | | .00 item | | | .01 item | | | .11 item | | | .16 item | | |
|  | .03 DATA\_FILE | | | .04 DATA\_FILE | | | .04 DATA\_FILE | | | .09 DATA\_FILE | | | .40 DATA\_FILE | | | .46 DATA\_FILE | | |
| τ11 |  | | |  | | | .00 DATA\_FILE.gram | | | .00 DATA\_FILE.gram | | | .03 DATA\_FILE.gram | | |  | | |
| ρ01 |  | | |  | | | .18 DATA\_FILE | | | .17 DATA\_FILE | | | -.30 DATA\_FILE | | |  | | |
| N | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | |
|  | 48 item | | | 48 item | | | 48 item | | | 48 item | | | 48 item | | | 48 item | | |
| Observations | 1857 | | | 843 | | | 1857 | | | 1857 | | | 1857 | | | 1857 | | |
| Marginal R2 / Conditional R2 | .014 / .236 | | | .054 / .414 | | | .042 / .259 | | | .124 / .383 | | | .122 / .245 | | | .060 / .208 | | |

**Table S3. Summary of the (generalized) linear mixed-effect models for the eye-tracking measures in the spillover Region 4 (Bonferroni correction applied). Significant effects are marked in gray and bolded.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Log FFD** | | | **Log SFD** | | | **Log GD** | | | **Log TT** | | | **Rout** | | | **Rin** | | |
| *Predictors* | *Est.* | *SE* | *p* | *Est.* | *SE* | *p* | *Est.* | *SE* | *p* | *Est.* | *SE* | *p* | *Odds Ratios* | *SE* | *p* | *Odds Ratios* | *SE* | *p* |
| (Intercept) | 5.406 | .026 | **<.001** | 5.534 | .035 | **<.001** | 5.739 | .039 | **<.001** | 6.066 | .050 | **<.001** | .206 | .026 | **<.001** | .184 | .023 | **<.001** |
| Grammaticality | .011 | .009 | 1.000 | .005 | .010 | 1.000 | .000 | .011 | 1.000 | -.035 | .011 | **.017** | .753 | .047 | **<.001** | .953 | .061 | 1.000 |
| Agr. Element 1 (stim\_adj ) | -.026 | .019 | 1.000 | -.029 | .025 | 1.000 | .025 | .030 | 1.000 | -.023 | .043 | 1.000 | .948 | .135 | 1.000 | .893 | .135 | 1.000 |
| Agr. Element 2  (stim\_pred\_adj) | .017 | .016 | 1.000 | .038 | .023 | 1.000 | -.008 | .026 | 1.000 | .077 | .037 | .441 | 1.361 | .166 | .139 | 1.030 | .134 | 1.000 |
| Target gender (fem) | -.009 | .007 | 1.000 | -.008 | .010 | 1.000 | -.011 | .009 | 1.000 | -.006 | .011 | 1.000 | .993 | .061 | 1.000 | 1.077 | .069 | 1.000 |
| Frequency (log) | -.003 | .008 | 1.000 | -.030 | .015 | .513 | -.068 | .013 | **<.001** | -.097 | .019 | **<.001** | .915 | .057 | 1.000 | .802 | .054 | **.012** |
| Length (scaled) | -.025 | .014 | .975 | -.012 | .021 | 1.000 | .081 | .023 | **.006** | .027 | .033 | 1.000 | .841 | .093 | 1.000 | .645 | .080 | **.005** |
| N-1 length | -.028 | .011 | .098 | -.027 | .014 | .766 | -.025 | .016 | 1.000 | -.032 | .021 | 1.000 | .942 | .076 | 1.000 | 1.068 | .090 | 1.000 |
| N+1 length | .002 | .011 | 1.000 | -.002 | .015 | 1.000 | .003 | .018 | 1.000 | .011 | .025 | 1.000 | 1.026 | .086 | 1.000 | .924 | .084 | 1.000 |
| Trial order | .007 | .008 | 1.000 | -.018 | .011 | 1.000 | .002 | .009 | 1.000 | -.072 | .011 | **<.001** | .671 | .042 | **<.001** | .826 | .054 | **.039** |
| Grammaticality \* Agr. Element 1 | -.018 | .011 | 1.000 | -.029 | .014 | .446 | -.014 | .013 | 1.000 | -.023 | .015 | 1.000 | 1.014 | .090 | 1.000 | 1.131 | .104 | 1.000 |
| Grammaticality \* Agr. Element 2 | .031 | .011 | **.038** | .023 | .015 | 1.000 | .032 | .013 | .184 | .023 | .015 | 1.000 | .981 | .083 | 1.000 | .907 | .081 | 1.000 |
| **Random Effects** | | | | | | | | | | | | | | | | | | |
| σ2 | .10 | | | .07 | | | .16 | | | .21 | | | 3.29 | | | 3.29 | | |
| τ00 | .00 item | | | .00 item | | | .01 item | | | .02 item | | | .09 item | | | .11 item | | |
|  | .02 DATA\_FILE | | | .03 DATA\_FILE | | | .05 DATA\_FILE | | | .07 DATA\_FILE | | | .33 DATA\_FILE | | | .28 DATA\_FILE | | |
| τ11 | .00 DATA\_FILE.gram | | |  | | | .00 DATA\_FILE.gram | | | .00 DATA\_FILE.gram | | |  | | |  | | |
| ρ01 | .27 DATA\_FILE | | |  | | | .48 DATA\_FILE | | | .39 DATA\_FILE | | |  | | |  | | |
| N | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | |
|  | 48 item | | | 47 item | | | 48 item | | | 48 item | | | 48 item | | | 48 item | | |
| Observations | 1881 | | | 687 | | | 1881 | | | 1881 | | | 1881 | | | 1881 | | |
| Marginal R2 / Conditional R2 | .012 / .204 | | | .034 / .382 | | | .126 / .358 | | | .137 / .405 | | | .083 / .188 | | | .051 / .151 | | |

**Table S4. Summary of the (generalized) linear mixed-effect models for the eye-tracking measures in the spillover Region 5 (Bonferroni correction applied). Significant effects are marked in gray and bolded.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Log FFD** | | | **Log SFD** | | | **Log GD** | | | **Log TT** | | | **ROF** | | | **Rin** | | |
| *Predictors* | *Predictors* | *Est.* | *SE* | *p* | *Est.* | *SE* | *p* | *Est.* | *SE* | *p* | *Est.* | *SE* | *p* | *Odds Ratios* | *SE* | *p* | *Odds Ratios* | *SE* |
| (Intercept) | 5.397 | .024 | **<.001** | 5.507 | .032 | **<.001** | 5.698 | .040 | **<.001** | 5.963 | .053 | **<.001** | .293 | .036 | **<.001** | .195 | .027 | **<.001** |
| Grammaticality | .001 | .007 | 1.000 | .018 | .011 | 1.000 | .000 | .009 | 1.000 | .005 | .011 | 1.000 | .977 | .062 | 1.000 | .959 | .060 | 1.000 |
| Agr. Element 1 (stim\_adj ) | .011 | .019 | 1.000 | .004 | .028 | 1.000 | .027 | .034 | 1.000 | -.032 | .049 | 1.000 | .646 | .093 | **.029** | 1.070 | .172 | 1.000 |
| Agr. Element 2  (stim\_pred\_adj) | -.012 | .016 | 1.000 | .001 | .025 | 1.000 | .006 | .029 | 1.000 | .064 | .042 | 1.000 | 1.263 | .152 | .625 | 1.018 | .139 | 1.000 |
| Target gender (fem) | -.011 | .007 | 1.000 | -.018 | .011 | 1.000 | -.004 | .009 | 1.000 | .004 | .011 | 1.000 | 1.063 | .059 | 1.000 | 1.130 | .071 | .641 |
| Frequency (log) | -.011 | .011 | 1.000 | -.037 | .018 | .432 | -.062 | .020 | **.018** | -.058 | .028 | .478 | 1.025 | .086 | 1.000 | .915 | .084 | 1.000 |
| Length (scaled) | -.012 | .017 | 1.000 | .012 | .025 | 1.000 | .086 | .029 | **.041** | .114 | .042 | .087 | .976 | .123 | 1.000 | .874 | .120 | 1.000 |
| N-1 length | .017 | .014 | 1.000 | .012 | .020 | 1.000 | -.003 | .024 | 1.000 | -.060 | .035 | 1.000 | .718 | .075 | **.019** | 1.111 | .128 | 1.000 |
| N+1 length | -.017 | .013 | 1.000 | -.017 | .019 | 1.000 | -.021 | .023 | 1.000 | -.013 | .033 | 1.000 | .758 | .073 | **.046** | 1.220 | .130 | .737 |
| Trial order | -.005 | .008 | 1.000 | -.035 | .011 | **.022** | -.028 | .009 | **.027** | -.075 | .011 | **<.001** | .914 | .052 | 1.000 | .885 | .056 | .660 |
| Grammaticality \* Agr. Element 1 | -.004 | .011 | 1.000 | .005 | .015 | 1.000 | -.009 | .013 | 1.000 | .008 | .015 | 1.000 | 1.058 | .085 | 1.000 | 1.025 | .092 | 1.000 |
| Grammaticality \* Agr. Element 2 | -.000 | .010 | 1.000 | .009 | .016 | 1.000 | .011 | .013 | 1.000 | .002 | .015 | 1.000 | .914 | .071 | 1.000 | .921 | .082 | 1.000 |
| **Random Effects** | | | | | | | | | | | | | | | | | | |
| σ2 | .10 | | | .09 | | | .15 | | | .21 | | | 3.29 | | | 3.29 | | |
| τ00 | .00 item | | | .01 item | | | .01 item | | | .03 item | | | .16 item | | | .19 item | | |
|  | .01 DATA\_FILE | | | .02 DATA\_FILE | | | .04 DATA\_FILE | | | .06 DATA\_FILE | | | .15 DATA\_FILE | | | .19 DATA\_FILE | | |
| τ11 |  | | |  | | |  | | |  | | | .03 DATA\_FILE.gram | | |  | | |
| ρ01 |  | | |  | | |  | | |  | | | .90 DATA\_FILE | | |  | | |
| N | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | | 40 DATA\_FILE | | |
|  | 48 item | | | 48 item | | | 48 item | | | 48 item | | | 48 item | | | 48 item | | |
| Observations | 1841 | | | 789 | | | 1841 | | | 1841 | | | 1841 | | | 1841 | | |
| Marginal R2 / Conditional R2 | .009 / .153 | | | .042 / .264 | | | .110 / .342 | | | .125 / .385 | | | .037 / .127 | | | .018 / .121 | | |