Behavioral data- maximal model (without interactions)

Linear mixed model fit by REML t-tests use Satterthwaite approximations to degrees of freedom [lmerMod]

Formula: TargetWord.RT ~ 1 + faceRace \* wordVal \* FixArea + (faceRace +

wordVal + FixArea | Subject) + (faceRace + wordVal + FixArea | TargetWord)

Data: corTrials

REML criterion at convergence: 273561.5

Scaled residuals:

Min 1Q Median 3Q Max

-6.6152 -0.6412 -0.0735 0.5296 4.2750

Random effects:

Groups Name Variance Std.Dev. Corr

Subject (Intercept) 1646.762 40.580

faceRaceWhite 7.146 2.673 0.35

wordValpositive 295.123 17.179 -0.44 -1.00

FixAreaforehead 4.363 2.089 0.30 0.19 -0.20

TargetWord (Intercept) 10.182 3.191

faceRaceWhite 2.045 1.430 1.00

wordValpositive 260.838 16.150 -0.79 -0.76

FixAreaforehead 2.833 1.683 0.54 0.58 0.08

Residual 5877.652 76.666

Number of obs: 23723, groups: Subject, 51; TargetWord, 16

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 516.524 5.960 55.000 86.661 <2e-16 \*\*\*

faceRaceWhite -2.294 2.084 157.000 -1.101 0.2726

wordValpositive -15.312 5.895 11.000 -2.597 0.0254 \*

FixAreaforehead -4.176 2.090 49.000 -1.998 0.0513 .

faceRaceWhite:wordValpositive 5.710 2.907 157.000 1.965 0.0512 .

faceRaceWhite:FixAreaforehead 3.692 2.812 23553.000 1.313 0.1893

wordValpositive:FixAreaforehead 3.834 2.934 51.000 1.307 0.1972

faceRaceWhite:wordValpositive:FixAreaforehead -5.796 3.983 23554.000 -1.455 0.1456

Behavioral data- random slopes just for subject

Linear mixed model fit by REML

t-tests use Satterthwaite approximations to degrees of freedom ['lmerMod']

Formula: TargetWord.RT ~ faceRace \* wordVal \* FixArea + (faceRace + wordVal +

FixArea | Subject) + (1 | TargetWord)

Data: corTrials

REML criterion at convergence: 273570.2

Scaled residuals:

Min 1Q Median 3Q Max

-6.6106 -0.6424 -0.0727 0.5302 4.2720

Random effects:

Groups Name Variance Std.Dev. Corr

Subject (Intercept) 1647.441 40.589

faceRaceWhite 7.129 2.670 0.35

wordValpositive 295.074 17.178 -0.44 -1.00

FixAreaforehead 4.362 2.089 0.30 0.19 -0.20

TargetWord (Intercept) 102.772 10.138

Residual 5878.770 76.673

Number of obs: 23723, groups: Subject, 51; TargetWord, 16

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 516.536 6.864 64.000 75.255 <2e-16 \*\*\*

faceRaceWhite -2.307 2.021 2309.000 -1.141 0.2539

wordValpositive -15.327 5.953 24.000 -2.575 0.0166 \*

FixAreaforehead -4.181 2.004 684.000 -2.087 0.0373 \*

faceRaceWhite:wordValpositive 5.737 2.818 23542.000 2.036 0.0417 \*

faceRaceWhite:FixAreaforehead 3.693 2.813 23542.000 1.313 0.1892

wordValpositive:FixAreaforehead 3.826 2.811 23548.000 1.361 0.1735

faceRaceWhite:wordValpositive:FixAreaforehead -5.800 3.983 23543.000 -1.456 0.1454

AIC BIC logLik deviance df.resid

273638.9 273800.4 -136799.5 273598.9 23703.0 Behavioral data- valence is random for subject and word stimulus

Linear mixed model fit by REML

t-tests use Satterthwaite approximations to degrees of freedom ['lmerMod']

Formula: TargetWord.RT ~ faceRace \* wordVal \* FixArea + (wordVal | Subject) + (wordVal | TargetWord)

Data: corTrials

REML criterion at convergence: 273570.9

Scaled residuals:

Min 1Q Median 3Q Max

-6.6182 -0.6435 -0.0729 0.5329 4.2734

Random effects:

Groups Name Variance Std.Dev. Corr

Subject (Intercept) 1712.97 41.388

wordValpositive 293.69 17.137 -0.46

TargetWord (Intercept) 20.97 4.579

wordValpositive 177.62 13.327 -0.11

Residual 5881.72 76.692

Number of obs: 23723, groups: Subject, 51; TargetWord, 16

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 516.564 6.178 59.000 83.607 <2e-16 \*\*\*

faceRaceWhite -2.330 1.987 23596.000 -1.173 0.2410

wordValpositive -15.361 5.951 15.000 -2.581 0.0206 \*

FixAreaforehead -4.219 1.983 23596.000 -2.128 0.0334 \*

faceRaceWhite:wordValpositive 5.791 2.818 23596.000 2.055 0.0399 \*

faceRaceWhite:FixAreaforehead 3.689 2.813 23596.000 1.311 0.1898

wordValpositive:FixAreaforehead 3.854 2.812 23595.000 1.371 0.1704

faceRaceWhite:wordValpositive:FixAreaforehead -5.804 3.984 23596.000 -1.457 0.1452

AIC BIC logLik deviance df.resid

273629.4 273750.6 -136799.7 273599.4 23708.0 Behavioral data- varying intercept only

Linear mixed model fit by REML t-tests use Satterthwaite approximations to degrees of freedom [lmerMod]

Formula: TargetWord.RT ~ 1 + faceRace \* wordVal \* FixArea + (1 | Subject) + (1 | TargetWord)

Data: corTrials

REML criterion at convergence: 273769.4

Scaled residuals:

Min 1Q Median 3Q Max

-6.5223 -0.6412 -0.0726 0.5361 4.4725

Random effects:

Groups Name Variance Std.Dev.

Subject (Intercept) 1459 38.20

TargetWord (Intercept) 102 10.10

Residual 5953 77.16

Number of obs: 23723, groups: Subject, 51; TargetWord, 16

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 516.407 6.584 64.000 78.431 <2e-16 \*\*\*

faceRaceWhite -2.208 1.999 23663.000 -1.105 0.2693

wordValpositive -15.265 5.432 17.000 -2.810 0.0119 \*

FixAreaforehead -4.071 1.995 23663.000 -2.041 0.0412 \*

faceRaceWhite:wordValpositive 5.641 2.835 23663.000 1.990 0.0466 \*

faceRaceWhite:FixAreaforehead 3.434 2.830 23663.000 1.213 0.2250

wordValpositive:FixAreaforehead 3.680 2.828 23663.000 1.301 0.1932

faceRaceWhite:wordValpositive:FixAreaforehead -5.484 4.008 23663.000 -1.368 0.1713

AIC BIC logLik deviance df.resid

273819.8 273908.6 -136898.9 273797.8 23712.0