

## APPENDIX 1. DETAILS OF THE STATISTICAL ANALYSIS

**TABLE A1: Real words.**

Generalized linear mixed model fit by maximum likelihood (Laplace Approximation)  
 ['glmerMod']  
 Family: binomial ( logit )  
 Formula: Accuracy ~ Family + Gendertarget + Family:Gendertarget + Age:Gendertarget +  
 Gendertarget:Age:Family + (1 | Code) + (1 | Stimulus)

Fixed effects	Estimate (SE)
Intercept	20.05(32.80)
FamilyDR	-20.68(32.95)
FamilyRR	-19.46(32.81)
Gendertargetm	-21.38(32.79)
Gendertargetn	-21.83(32.79)
FamilyDR: Gendertargetm	18.25(32.94)
FamilyRR: Gendertargetm	18.97(32.8)
FamilyDR: Gendertargetn	20.29(32.94)
FamilyRR: Gendertargetn	19.10(32.80)
Gendertargetf:Age	-0.03(61.19)
<b>Gendertargetm:Age</b>	<b>0.75(0.34)*</b>
<b>Gendertargetn:Age</b>	<b>0.84(0.35)*</b>
FamilyDR: Gendertargetf:Age	1.12(61.2)
FamilyRR: Gendertargetf:Age	0.53(61.19)
FamilyDR: Gendertargetm:Age	-0.10(0.39)
FamilyRR: Gendertargetm:Age	-0.48(0.37)
FamilyDR: Gendertargetn:Age	-0.37(0.4)
FamilyRR: Gendertargetn:Age	-0.51(0.38)

Signif.codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 “ 1

**TABLE A2: Real words. Post-hoc pairwise comparisons of groups within conditions**

Condition	Contrast	Estimate (SE)	p-value
Gendertarget=f	DD - DR	13.87(1619.1)	1.00
	DD - RR	16.09(1619.1)	0.99
	DR - RR	2.22(2.22)	0.57
Gendertarget=m	<b>DD - DR</b>	<b>3.05(0.74)</b>	<b>0.0001***</b>
	<b>DD - RR</b>	<b>3.31(0.69)</b>	<b>&lt;0.0001***</b>
	DR - RR	0.26(0.46)	0.84
Gendertarget=n	<b>DD - DR</b>	<b>2.55(0.77)</b>	<b>0.003**</b>
	<b>DD - RR</b>	<b>3.36(0.73)</b>	<b>&lt;0.0001***</b>
	DR - RR	0.81(0.46)	0.18

P-value adjustment: tukey method for comparing a family of 3 estimates

**TABLE B1: Nonce words.**

Generalized linear mixed model fit by maximum likelihood (Laplace Approximation)  
 ['glmerMod']  
 Family: binomial ( logit )  
 Formula: Accuracy ~ Family + Gendertarget + Age + Family:Gendertarget + Age:Gendertarget  
 + Gendertarget:Age:Family + (1 | Code) + (1 | Stimulus)

Fixed effects	Estimate (SE)
<b>Intercept</b>	<b>2.28(0.74)**</b>
FamilyDR	-1.09(1.05)
<b>FamilyRR</b>	<b>-2.60(0.95)**</b>
<b>Gendertargetm</b>	<b>-2.75(1.03)**</b>
<b>Gendertargetn</b>	<b>-5.11(1.57)**</b>
<b>Age</b>	<b>-0.46(0.15)**</b>
FamilyDR: Gendertargetm	0.90(1.39)
FamilyRR: Gendertargetm	1.86(1.25)
<b>FamilyDR: Gendertargetn</b>	<b>3.93(1.79)*</b>
<b>FamilyRR: Gendertargetn</b>	<b>6.19(1.72)***</b>
Gendertargetm:Age	0.19(0.21)
<b>Gendertargetn:Age</b>	<b>1.64(0.38)***</b>
<b>FamilyDR: Gendertargetf:Age</b>	<b>0.53(0.18)**</b>
<b>FamilyRR: Gendertargetf:Age</b>	<b>0.66(0.17)***</b>
FamilyDR: Gendertargetm:Age	0.19(0.21)
FamilyRR: Gendertargetm:Age	0.30(0.2)
FamilyDR: Gendertargetn:Age	-1.12(0.37)**
FamilyRR: Gendertargetn:Age	-1.19(0.37)**

Signif.codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 " 1

**TABLE B2: Nonce words. Post-hoc pairwise comparisons of groups within conditions**

Condition	Contrast	Estimate (SE)	p-value
Gendertarget=f	<b>DD - DR</b>	<b>-2.0(0.37)</b>	<b>&lt;0.0001***</b>
	<b>DD - RR</b>	<b>-1.28(0.3)</b>	<b>&lt;0.0001***</b>
	DR - RR	0.73(0.33)	0.068
Gendertarget=m	DD - DR	-0.93(0.48)	0.07
	<b>DD - RR</b>	<b>-1.04(0.37)</b>	<b>0.01*</b>
	DR - RR	-0.1(0.31)	0.94
Gendertarget=n	<b>DD - DR</b>	<b>3.76(0.78)</b>	<b>&lt;0.0001***</b>
	<b>DD - RR</b>	<b>3.41(0.76)</b>	<b>&lt;0.0001***</b>
	DR - RR	-0.35(0.29)	0.45

P-value adjustment: tukey method for comparing a family of 3 estimates

**TABLE B3: Nonce words - defaulters excluded**

Generalized linear mixed model fit by maximum likelihood (Laplace Approximation)  
 ['glmerMod']  
 Family: binomial ( logit )  
 Formula: Accuracy ~ Family + Gendertarget + Age + Family:Gendertarget + Age:Gendertarget  
 + Gendertarget:Age:Family + (1 | Code) + (1 | Stimulus)

Fixed effects	Estimate (SE)
<b>Intercept</b>	<b>3.11(1.17)**</b>
FamilyDR	-1.12(1.85)
FamilyRR	-1.18(2.01)
<b>Gendertargetm</b>	<b>-4.51(1.41)**</b>
<b>Gendertargetn</b>	<b>-4.80(1.66)**</b>
Age	-0.41(0.23).
FamilyDR: Gendertargetm	2.66(2.11)
FamilyRR: Gendertargetm	2.03(2.22)
FamilyDR: Gendertargetn	4.17(2.32).
FamilyRR: Gendertargetn	3.69(2.37)
Gendertargetm:Age	0.44(0.29)
<b>Gendertargetn:Age</b>	<b>1.19(0.38)**</b>
FamilyDR: Gendertargetf:Age	0.62(0.34).
FamilyRR: Gendertargetf:Age	0.65(0.36).
FamilyDR: Gendertargetm:Age	-0.15(0.26)
FamilyRR: Gendertargetm:Age	0.06(0.26)
<b>FamilyDR: Gendertargetn:Age</b>	<b>-0.74(0.37)*</b>
<b>FamilyRR: Gendertargetn:Age</b>	<b>-0.81(0.35)*</b>

Signif.codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 “ 1

**TABLE B4: Nonce words – defaulters excluded. Post-hoc pairwise comparisons**

Condition	Contrast	Estimate (SE)	p-value
Gendertarget=f	<b>DD - DR</b>	<b>-2.56(0.67)</b>	<b>0.0004***</b>
	<b>DD - RR</b>	<b>-2.64(0.59)</b>	<b>&lt;0.0001***</b>
	DR - RR	-0.09(0.69)	0.99
Gendertarget=m	DD - DR	-0.65(0.53)	0.44
	<b>DD - RR</b>	<b>-1.22(0.48)</b>	<b>0.03*</b>
	DR - RR	-0.57(0.36)	0.25
Gendertarget=n	DD - DR	1.30(0.80)	0.23
	<b>DD - RR</b>	<b>2.29(0.73)</b>	<b>0.005**</b>
	<b>DR - RR</b>	<b>0.92(0.39)</b>	<b>0.03*</b>

P-value adjustment: tukey method for comparing a family of 3 estimates

**TABLE C1: Mixed cues. Model 1: Probability of following the prompted adjectival agreement**

Generalized linear mixed model fit by maximum likelihood (Laplace Approximation)  
['glmerMod']

Family: binomial ( logit )

Formula: adj ~ group + clash + Age + group:Age + clash:Age:group + (1 | Code) + (1 | Stimulus)

Fixed effects	Estimate (SE)
Intercept	-0.94(0.87)
groupMonolingual	1.91(0.99).
clash	-0.75(0.76)
<b>Age</b>	<b>0.42(0.12)***</b>
<b>groupMonolingual:Age</b>	<b>-4.80(1.66)**</b>
groupBilingual:clash:Age	-0.41(0.23).
groupMonolingual:clash:Age	-0.41(0.23).

Signif.codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 “ 1

**TABLE C2: Post-hoc pairwise comparisons (Model 1)**

Condition	Contrast	Estimate (SE)	p-value
clash = 0	Bilingual-Monolingual	-0.54(0.53)	0.31
<b>clash = 1</b>	<b>Bilingual-Monolingual</b>	<b>-0.89(0.37)</b>	<b>0.02*</b>

P-value adjustment: tukey method for comparing a family of 3 estimates

**TABLE C3: Mixed cues. Model 2: Probability of following the prompted nominal cue**

Generalized linear mixed model fit by maximum likelihood (Laplace Approximation)  
['glmerMod']

Family: binomial ( logit )

Formula: N ~ group + clash + Age + group:Age + clash:Age:group + (1 | Code) + (1 | Stimulus)

Fixed effects	Estimate (SE)
Intercept	-1.46(0.94)
groupMonolingual	2.88(1.31)*
clash	1.52(1.04)
<b>Age</b>	<b>0.49(0.14)***</b>
<b>groupMonolingual:clash</b>	<b>-3.99(1.47)**</b>
groupMonolingual:Age	-0.39(0.23).
<b>groupBilingual:clash:Age</b>	<b>-0.62(0.15)***</b>
groupMonolingual:clash:Age	-0.16(0.21)

Signif.codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 “ 1

**TABLE C4: Post-hoc pairwise comparisons (Model 2)**

Condition	Contrast	Estimate (SE)	p-value
clash = 0	Bilingual-Monolingual	-0.36(0.45)	0.42
<b>clash = 1</b>	<b>Bilingual-Monolingual</b>	<b>0.66(0.28)</b>	<b>0.02*</b>

P-value adjustment: tukey method for comparing a family of 3 estimates