**APPENDIX. DETAILS OF THE STATISTICAL ANALYSIS**

**Table A1**. Model 1 (the use of masculine predicted by an interaction of condition and group)

|  |  |
| --- | --- |
| **Fixed effects** | **Estimate (SE)** |
| Intercept | -3.85(0.6)\*\*\* |
| FM | 1.11 (0.5)\* |
| MF | 2.28 (0.5)\*\* |
| MM | 3.27(0.5)\*\*\* |
| Group: Monolinguals | 0.87(0.9) |
| FM: Monolinguals | -0.3(0.7) |
| MF: Monolinguals | -0.6(0.7) |
| MM: Monolinguals | -0.66(0.7) |

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

**Table A2.** Model 1. Post-hoc pairwise comparisons of groups within conditions

|  |  |  |  |
| --- | --- | --- | --- |
| **Condition** | **Contrast** | **Estimate (SE)** | **p-value** |
| FF | Bilinguals - Monolinguals | -0.87(0.9) | 0.32 |
| FM | Bilinguals - Monolinguals | -0.57(0.8) | 0.49 |
| MF | Bilinguals - Monolinguals | -0.26(0.8) | 0.75 |
| MM | Bilinguals - Monolinguals | -0.2(0.8) | 0.8 |

**Table A3**. Model 1. Post-hoc pairwise comparisons of conditions within groups

|  |  |  |  |
| --- | --- | --- | --- |
| **Group** | **Contrast** | **Estimate (SE)** | **p-value** |
| Bilinguals | FF - FM | -1.11(0.5) | 0.16 |
|  | FF - MF | 1.26(0.5)\*\*\* | 0.0001 |
|  | FF - MM | 0.6(0.5)\*\*\* | <0.0001 |
|  | FM - MF | 0.6(0.5). | 0.08 |
|  | FM- MM | 0.6(0.5)\*\*\* | 0.0001 |
|  | MF - MM | 0.6(0.5) | 0.15 |
| Monolinguals | FF - FM | -0.82(0.6) | 0.58 |
|  | FF - MF | -1.67(0.6)\* | 0.04 |
|  | FF - MM | -2.6(0.7)\*\*\* | 0.0004 |
|  | FM - MF | -0.85(0.6) | 0.51 |
|  | FM- MM | -1.79(0.6)\* | 0.02 |
|  | MF - MM | -0.93(0.6) | 0.38 |

Results are given on the log odds ratio (not the response) scale.

P value adjustment: tukey method for comparing a family of 4 estimates

**Table B1**. Model 2 (the use of feminine predicted by an interaction of condition and group)

|  |  |
| --- | --- |
| **Fixed effects** | **Estimate (SE)** |
| Intercept | 3.02(0.6)\*\*\* |
| FM | -0.78 (0.6) |
| MF | -2.79 (0.6)\*\*\* |
| MM | -3.84(0.6)\*\*\* |
| Group: Monolinguals | -4.06(0.9)\*\*\* |
| FM: Monolinguals | -0.2(0.6) |
| MF: Monolinguals | 0.78(0.7) |
| MM: Monolinguals | 0.92(0.7) |

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

**Table B2.** Model 2. Post-hoc pairwise comparisons of groups within conditions

|  |  |  |  |
| --- | --- | --- | --- |
| **Condition** | **Contrast** | **Estimate (SE)** | **p-value** |
| FF | Bilinguals - Monolinguals | 4.06(0.94)\*\*\* | <0.0001 |
| FM | Bilinguals - Monolinguals | 4.26(0.95)\*\*\* | <0.0001 |
| MF | Bilinguals - Monolinguals | 3.28(0.95)\*\*\* | 0.0006 |
| MM | Bilinguals - Monolinguals | 3.13(0.99)\*\* | 0.002 |

**Table B3.** Model 2. Post-hoc pairwise comparisons of conditions within groups

|  |  |  |  |
| --- | --- | --- | --- |
| **Group** | **Contrast** | **Estimate (SE)** | **p-value** |
| Bilinguals | FF - FM | 0.78(0.6) | 0.51 |
|  | FF - MF | 2.79(0.6)\*\*\* | <0.0001 |
|  | FF - MM | 3.85(0.6)\*\*\* | <0.0001 |
|  | FM - MF | 2.01(0.5). | 0.001 |
|  | FM- MM | 3.06(0.6)\*\*\* | <0.0001 |
|  | MF - MM | 1.05(0.5) | 0.17 |
| Monolinguals | FF - FM | 0.99(0.6) | 0.42 |
|  | FF - MF | 2.01(0.7)\* | 0.02 |
|  | FF - MM | 2.92(0.7)\*\*\* | 0.0005 |
|  | FM - MF | 1.03(0.7) | 0.43 |
|  | FM- MM | 1.93(0.7)\* | 0.04 |
|  | MF - MM | 0.91(0.7) | 0.62 |

Results are given on the log odds ratio (not the response) scale.

P value adjustment: tukey method for comparing a family of 4 estimates

**Table C1.** Model 3 (the use of neuter predicted by an interaction of condition and group)

|  |  |
| --- | --- |
| **Fixed effects** | **Estimate (SE)** |
| Intercept | -8.62(1.3)\*\*\* |
| FM | -0.7 (0.7) |
| MF | 2.11 (0.6)\*\*\* |
| MM | 2.21(0.6)\*\*\* |
| Group: Monolinguals | 5.97(1.8)\*\*\* |
| FM: Monolinguals | 1.26(0.9) |
| MF: Monolinguals | -1.35(0.9) |
| MM: Monolinguals | -2.11(0.9)\* |

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

**Table C2**. Model 3. Post-hoc pairwise comparisons of groups within conditions

|  |  |  |  |
| --- | --- | --- | --- |
| **Condition** | **Contrast** | **Estimate (SE)** | **p-value** |
| FF | Bilinguals - Monolinguals | -5.97(1.76)\*\*\* | 0.0007 |
| FM | Bilinguals - Monolinguals | -7.23(1.79)\*\*\* | 0.0001 |
| MF | Bilinguals - Monolinguals | -4.62(1.71)\*\*\* | 0.0006 |
| MM | Bilinguals - Monolinguals | -3.86(1.7)\* | 0.02 |

**Table C3**. Model 3. Post-hoc pairwise comparisons of conditions within groups

|  |  |  |  |
| --- | --- | --- | --- |
| **Group** | **Contrast** | **Estimate (SE)** | **p-value** |
| Bilinguals | FF - FM | 0.70(0.7) | 0.73 |
|  | FF - MF | -2.11(0.6)\*\*\* | 0.003 |
|  | FF - MM | -2.21(0.6)\*\*\* | 0.002 |
|  | FM - MF | -2.81(0.7)\*\*\* | 0.0001 |
|  | FM- MM | -2.9(0.7)\*\*\* | 0.0001 |
|  | MF - MM | -0.1(0.5) | 0.99 |
| Monolinguals | FF - FM | -0.56(0.6) | 0.79 |
|  | FF - MF | -0.76(0.6) | 0.61 |
|  | FF - MM | -0.1(0.6) | 0.99 |
|  | FM - MF | -0.2(0.6) | 0.99 |
|  | FM- MM | 0.46(0.6) | 0.88 |
|  | MF - MM | 0.66(0.6) | 0.72 |

Results are given on the log odds ratio (not the response) scale.

P value adjustment: tukey method for comparing a family of 4 estimates