

# On the robustness of gender differences in economic behavior

## SUPPLEMENTARY INFORMATION

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# 1 Summary statistics

**Supplementary Table 1** Descriptives for the cisgender and transgender samples.

|                              | Total       | Gender       |              | <i>p</i> -value |
|------------------------------|-------------|--------------|--------------|-----------------|
|                              |             | Cisgender    | Transgender  |                 |
|                              | (N=780)     | (N=425)      | (N=355)      |                 |
| Treatment                    |             |              |              | 0.933           |
| NEUTRAL                      | 259 (33.2%) | 143 (33.6%)  | 116 (32.7%)  |                 |
| FEMININE                     | 263 (33.7%) | 141 (33.2%)  | 122 (34.4%)  |                 |
| MASCULINE                    | 258 (33.1%) | 141 (33.2%)  | 117 (33.0%)  |                 |
| Age (years)                  |             |              |              | 0.516           |
| Mean (SD)                    | 24.4 (6.60) | 24.3 (6.52)  | 24.6 (6.71)  |                 |
| Height (cm)                  |             |              |              | 0.002           |
| Mean (SD)                    | 170 (10.8)  | 171 (11.0)   | 169 (10.5)   |                 |
| Student status               |             |              |              | 0.830           |
| Yes                          | 368 (47.2%) | 202 (47.5%)  | 166 (46.8%)  |                 |
| No                           | 412 (52.8%) | 223 (52.5%)  | 189 (53.2%)  |                 |
| Highest education            |             |              |              | 0.094           |
| University degree            | 266 (34.1%) | 159 (37.4%)  | 107 (30.1%)  |                 |
| High school diploma/A-levels | 361 (46.3%) | 189 (44.5%)  | 172 (48.5%)  |                 |
| Other                        | 153 (19.6%) | 77 (18.1%)   | 76 (21.4%)   |                 |
| Income: Less than 20,000 GBP |             |              |              | 0.171           |
| Yes                          | 541 (69.4%) | 286 (67.3%)  | 255 (71.8%)  |                 |
| No                           | 239 (30.6%) | 139 (32.7%)  | 100 (28.2%)  |                 |
| Religion                     |             |              |              | 0.891           |
| Non-religious                | 547 (70.1%) | 295 (69.4%)  | 252 (71.0%)  |                 |
| Religious                    | 201 (25.8%) | 112 (26.4%)  | 89 (25.1%)   |                 |
| Not say                      | 32 (4.1%)   | 18 (4.2%)    | 14 (3.9%)    |                 |
| Residence                    |             |              |              | <0.001          |
| Continental Europe           | 250 (32.1%) | 169 (39.8%)  | 81 (22.8%)   |                 |
| United Kingdom               | 205 (26.3%) | 101 (23.8%)  | 104 (29.3%)  |                 |
| United States                | 265 (34.0%) | 133 (31.3%)  | 132 (37.2%)  |                 |
| Other                        | 60 (7.7%)   | 22 (5.2%)    | 38 (10.7%)   |                 |
| BEM group:                   |             |              |              | 0.002           |
| Androgynous                  | 188 (24.1%) | 116 (27.3%)  | 72 (20.3%)   |                 |
| Feminine                     | 222 (28.5%) | 104 (24.5%)  | 118 (33.2%)  |                 |
| Masculine                    | 151 (19.4%) | 95 (22.4%)   | 56 (15.8%)   |                 |
| Undifferentiated             | 219 (28.1%) | 110 (25.9%)  | 109 (30.7%)  |                 |
| BEM score: Feminine          |             |              |              | 0.730           |
| Mean (SD)                    | 41.8 (8.58) | 41.8 (8.19)  | 41.7 (9.03)  |                 |
| BEM score: Masculine         |             |              |              | <0.001          |
| Mean (SD)                    | 33.9 (7.95) | 35.0 (7.64)  | 32.5 (8.11)  |                 |
| TCS                          |             |              |              | <0.001          |
| Mean (SD)                    | 3.67 (1.14) | 4.47 (0.570) | 2.71 (0.865) |                 |
| STT                          |             |              |              | <0.001          |
| Mean (SD)                    | 4.35 (4.59) | 0.998 (1.47) | 8.37 (3.76)  |                 |

*Note:* The table summarizes the characteristics of the cisgender and transgender samples. The education category other includes subjects that replied technical/community college, secondary education (e.g. GED/GCSE), no formal qualification, or don't know/not applicable. The religion category religious includes subjects that replied Buddhism, Christianity, Hinduism, Islam, Judaism, Paganism, Sikhism, or Spiritualism. The residence category other includes subjects that replied Australia, Canada, Chile, Israel, Japan, Mexico, New Zealand, or South Africa. The column *p*-value reports the *p*-values of  $\chi^2$ -tests for categorical variables and the *p*-values of Wilcoxon-Mann Whitney tests for numerical variables between the cisgender and transgender column.

**Supplementary Table 2** Descriptives by treatment for cismen.

|                              | Total        | Treatment    |               |              | <i>p</i> -value |
|------------------------------|--------------|--------------|---------------|--------------|-----------------|
|                              |              | NEUTRAL      | FEMININE      | MASCULINE    |                 |
| <b>Cismen</b>                | (N=214)      | (N=72)       | (N=71)        | (N=71)       |                 |
| Age (years)                  |              |              |               |              | 0.042           |
| Mean (SD)                    | 24.1 (5.74)  | 25.8 (7.70)  | 24.1 (4.79)   | 22.5 (3.44)  |                 |
| Height (cm)                  |              |              |               |              | 0.449           |
| Mean (SD)                    | 178 (9.08)   | 180 (10.2)   | 177 (7.95)    | 177 (8.77)   |                 |
| Student status               |              |              |               |              | 0.754           |
| Yes                          | 102 (47.7%)  | 32 (44.4%)   | 34 (47.9%)    | 36 (50.7%)   |                 |
| No                           | 112 (52.3%)  | 40 (55.6%)   | 37 (52.1%)    | 35 (49.3%)   |                 |
| Highest education            |              |              |               |              | 0.237           |
| University degree            | 72 (33.6%)   | 26 (36.1%)   | 27 (38.0%)    | 19 (26.8%)   |                 |
| High school diploma/A-levels | 94 (43.9%)   | 27 (37.5%)   | 28 (39.4%)    | 39 (54.9%)   |                 |
| Other                        | 48 (22.4%)   | 19 (26.4%)   | 16 (22.5%)    | 13 (18.3%)   |                 |
| Income: Less than 20,000 GBP |              |              |               |              | 0.841           |
| Yes                          | 135 (63.1%)  | 47 (65.3%)   | 43 (60.6%)    | 45 (63.4%)   |                 |
| No                           | 79 (36.9%)   | 25 (34.7%)   | 28 (39.4%)    | 26 (36.6%)   |                 |
| Religion                     |              |              |               |              | 0.820           |
| Non-religious                | 144 (67.3%)  | 48 (66.7%)   | 47 (66.2%)    | 49 (69.0%)   |                 |
| Religious                    | 60 (28.0%)   | 21 (29.2%)   | 19 (26.8%)    | 20 (28.2%)   |                 |
| Not say                      | 10 (4.7%)    | 3 (4.2%)     | 5 (7.0%)      | 2 (2.8%)     |                 |
| Residence                    |              |              |               |              | 0.972           |
| Continental Europe           | 95 (44.4%)   | 31 (43.1%)   | 30 (42.3%)    | 34 (47.9%)   |                 |
| United Kingdom               | 50 (23.4%)   | 17 (23.6%)   | 17 (23.9%)    | 16 (22.5%)   |                 |
| United States                | 65 (30.4%)   | 23 (31.9%)   | 23 (32.4%)    | 19 (26.8%)   |                 |
| Other                        | 4 (1.9%)     | 1 (1.4%)     | 1 (1.4%)      | 2 (2.8%)     |                 |
| BEM group:                   |              |              |               |              | 0.490           |
| Androgynous                  | 56 (26.2%)   | 19 (26.4%)   | 19 (26.8%)    | 18 (25.4%)   |                 |
| Feminine                     | 40 (18.7%)   | 15 (20.8%)   | 11 (15.5%)    | 14 (19.7%)   |                 |
| Masculine                    | 59 (27.6%)   | 22 (30.6%)   | 15 (21.1%)    | 22 (31.0%)   |                 |
| Undifferentiated             | 59 (27.6%)   | 16 (22.2%)   | 26 (36.6%)    | 17 (23.9%)   |                 |
| BEM score: Feminine          |              |              |               |              | 0.644           |
| Mean (SD)                    | 40.0 (8.55)  | 40.4 (8.52)  | 39.3 (9.13)   | 40.4 (8.03)  |                 |
| BEM score: Masculine         |              |              |               |              | 0.522           |
| Mean (SD)                    | 35.7 (7.68)  | 36.2 (6.93)  | 34.9 (7.71)   | 36.0 (8.41)  |                 |
| TCS                          |              |              |               |              | 0.620           |
| Mean (SD)                    | 4.47 (0.591) | 4.45 (0.541) | 4.49 (0.590)  | 4.46 (0.645) |                 |
| STT                          |              |              |               |              | 0.001           |
| Mean (SD)                    | 0.986 (1.46) | 1.18 (1.09)  | 0.535 (0.939) | 1.24 (2.01)  |                 |

*Note:* The table summarizes the characteristics of the cisgender and transgender samples. The education category other includes subjects that replied technical/community college, secondary education (e.g. GED/GCSE), no formal qualification, or don't know/not applicable. The religion category religious includes subjects that replied Buddhism, Christianity, Hinduism, Islam, Judaism, Paganism, Sikhism, or Spiritualism. The residence category other includes subjects that replied Australia, Canada, Chile, Israel, Japan, Mexico, New Zealand, or South Africa. The column *p*-value reports the *p*-values of  $\chi^2$ -tests for categorical variables and the *p*-values of the Kruskal Wallis test for numerical variables between the treatment columns.

**Supplementary Table 3** Descriptives by treatment for ciswomen.

|                              | Total        | Treatment    |              |              | <i>p</i> -value |
|------------------------------|--------------|--------------|--------------|--------------|-----------------|
|                              |              | NEUTRAL      | FEMININE     | MASCULINE    |                 |
| <b>Ciswomen</b>              | (N=211)      | (N=71)       | (N=70)       | (N=70)       |                 |
| Age (years)                  |              |              |              |              | 0.644           |
| Mean (SD)                    | 24.6 (7.23)  | 25.0 (7.83)  | 25.1 (7.79)  | 23.6 (5.90)  |                 |
| Height (cm)                  |              |              |              |              | 0.541           |
| Mean (SD)                    | 164 (7.96)   | 164 (9.88)   | 164 (7.02)   | 165 (6.60)   |                 |
| Student status               |              |              |              |              | 0.813           |
| Yes                          | 100 (47.4%)  | 35 (49.3%)   | 34 (48.6%)   | 31 (44.3%)   |                 |
| No                           | 111 (52.6%)  | 36 (50.7%)   | 36 (51.4%)   | 39 (55.7%)   |                 |
| Highest education            |              |              |              |              | 0.667           |
| University degree            | 87 (41.2%)   | 32 (45.1%)   | 31 (44.3%)   | 24 (34.3%)   |                 |
| High school diploma/A-levels | 95 (45.0%)   | 29 (40.8%)   | 31 (44.3%)   | 35 (50.0%)   |                 |
| Other                        | 29 (13.7%)   | 10 (14.1%)   | 8 (11.4%)    | 11 (15.7%)   |                 |
| Income: Less than 20,000 GBP |              |              |              |              | 0.253           |
| Yes                          | 151 (71.6%)  | 53 (74.6%)   | 53 (75.7%)   | 45 (64.3%)   |                 |
| No                           | 60 (28.4%)   | 18 (25.4%)   | 17 (24.3%)   | 25 (35.7%)   |                 |
| Religion                     |              |              |              |              | 0.990           |
| Non-religious                | 151 (71.6%)  | 51 (71.8%)   | 50 (71.4%)   | 50 (71.4%)   |                 |
| Religious                    | 52 (24.6%)   | 17 (23.9%)   | 17 (24.3%)   | 18 (25.7%)   |                 |
| Not say                      | 8 (3.8%)     | 3 (4.2%)     | 3 (4.3%)     | 2 (2.9%)     |                 |
| Residence                    |              |              |              |              | 0.589           |
| Continental Europe           | 74 (35.1%)   | 28 (39.4%)   | 25 (35.7%)   | 21 (30.0%)   |                 |
| United Kingdom               | 51 (24.2%)   | 19 (26.8%)   | 15 (21.4%)   | 17 (24.3%)   |                 |
| United States                | 68 (32.2%)   | 21 (29.6%)   | 24 (34.3%)   | 23 (32.9%)   |                 |
| Other                        | 18 (8.5%)    | 3 (4.2%)     | 6 (8.6%)     | 9 (12.9%)    |                 |
| BEM group:                   |              |              |              |              | 0.187           |
| Androgynous                  | 60 (28.4%)   | 17 (23.9%)   | 28 (40.0%)   | 15 (21.4%)   |                 |
| Feminine                     | 64 (30.3%)   | 23 (32.4%)   | 19 (27.1%)   | 22 (31.4%)   |                 |
| Masculine                    | 36 (17.1%)   | 14 (19.7%)   | 11 (15.7%)   | 11 (15.7%)   |                 |
| Undifferentiated             | 51 (24.2%)   | 17 (23.9%)   | 12 (17.1%)   | 22 (31.4%)   |                 |
| BEM score: Feminine          |              |              |              |              | 0.212           |
| Mean (SD)                    | 43.5 (7.42)  | 43.3 (7.35)  | 44.7 (7.66)  | 42.6 (7.22)  |                 |
| BEM score: Masculine         |              |              |              |              | 0.099           |
| Mean (SD)                    | 34.3 (7.54)  | 33.9 (7.31)  | 35.9 (8.18)  | 33.2 (6.93)  |                 |
| TCS                          |              |              |              |              | 0.878           |
| Mean (SD)                    | 4.48 (0.550) | 4.55 (0.413) | 4.47 (0.585) | 4.42 (0.630) |                 |
| STT                          |              |              |              |              | 0.906           |
| Mean (SD)                    | 1.01 (1.49)  | 1.15 (2.07)  | 0.957 (1.04) | 0.914 (1.14) |                 |

*Note:* The table summarizes the characteristics of the cisgender and transgender samples. The education category other includes subjects that replied technical/community college, secondary education (e.g. GED/GCSE), no formal qualification, or don't know/not applicable. The religion category religious includes subjects that replied Buddhism, Christianity, Hinduism, Islam, Judaism, Paganism, Sikhism, or Spiritualism. The residence category other includes subjects that replied Australia, Canada, Chile, Israel, Japan, Mexico, New Zealand, or South Africa. The column *p*-value reports the *p*-values of  $\chi^2$ -tests for categorical variables and the *p*-values of the Kruskal Wallis test for numerical variables between the treatment columns.

**Supplementary Table 4** Descriptives by treatment for transmen.

|                              | Total        | Treatment    |              |              | <i>p</i> -value |
|------------------------------|--------------|--------------|--------------|--------------|-----------------|
|                              |              | NEUTRAL      | FEMININE     | MASCULINE    |                 |
| <b>Transmen</b>              | (N=215)      | (N=72)       | (N=72)       | (N=71)       |                 |
| Age (years)                  |              |              |              |              | 0.775           |
| Mean (SD)                    | 24.3 (6.40)  | 25.1 (8.07)  | 24.0 (5.61)  | 23.7 (5.12)  |                 |
| Height (cm)                  |              |              |              |              | 0.301           |
| Mean (SD)                    | 164 (8.52)   | 165 (10.4)   | 164 (7.32)   | 164 (7.64)   |                 |
| Student status               |              |              |              |              | 0.376           |
| Yes                          | 108 (50.2%)  | 34 (47.2%)   | 41 (56.9%)   | 33 (46.5%)   |                 |
| No                           | 107 (49.8%)  | 38 (52.8%)   | 31 (43.1%)   | 38 (53.5%)   |                 |
| Highest education            |              |              |              |              | 0.891           |
| University degree            | 63 (29.3%)   | 22 (30.6%)   | 19 (26.4%)   | 22 (31.0%)   |                 |
| High school diploma/A-levels | 109 (50.7%)  | 37 (51.4%)   | 39 (54.2%)   | 33 (46.5%)   |                 |
| Other                        | 43 (20.0%)   | 13 (18.1%)   | 14 (19.4%)   | 16 (22.5%)   |                 |
| Income: Less than 20,000 GBP |              |              |              |              | 0.355           |
| Yes                          | 155 (72.1%)  | 48 (66.7%)   | 52 (72.2%)   | 55 (77.5%)   |                 |
| No                           | 60 (27.9%)   | 24 (33.3%)   | 20 (27.8%)   | 16 (22.5%)   |                 |
| Religion                     |              |              |              |              | 0.892           |
| Non-religious                | 144 (67.0%)  | 47 (65.3%)   | 49 (68.1%)   | 48 (67.6%)   |                 |
| Religious                    | 62 (28.8%)   | 23 (31.9%)   | 19 (26.4%)   | 20 (28.2%)   |                 |
| Not say                      | 9 (4.2%)     | 2 (2.8%)     | 4 (5.6%)     | 3 (4.2%)     |                 |
| Residence                    |              |              |              |              | 0.939           |
| Continental Europe           | 47 (21.9%)   | 14 (19.4%)   | 17 (23.6%)   | 16 (22.5%)   |                 |
| United Kingdom               | 64 (29.8%)   | 22 (30.6%)   | 23 (31.9%)   | 19 (26.8%)   |                 |
| United States                | 85 (39.5%)   | 31 (43.1%)   | 25 (34.7%)   | 29 (40.8%)   |                 |
| Other                        | 19 (8.8%)    | 5 (6.9%)     | 7 (9.7%)     | 7 (9.9%)     |                 |
| BEM group:                   |              |              |              |              | 0.927           |
| Androgynous                  | 44 (20.5%)   | 17 (23.6%)   | 13 (18.1%)   | 14 (19.7%)   |                 |
| Feminine                     | 69 (32.1%)   | 20 (27.8%)   | 24 (33.3%)   | 25 (35.2%)   |                 |
| Masculine                    | 42 (19.5%)   | 16 (22.2%)   | 13 (18.1%)   | 13 (18.3%)   |                 |
| Undifferentiated             | 60 (27.9%)   | 19 (26.4%)   | 22 (30.6%)   | 19 (26.8%)   |                 |
| BEM score: Feminine          |              |              |              |              | 0.809           |
| Mean (SD)                    | 41.4 (8.90)  | 41.1 (8.18)  | 41.5 (9.47)  | 41.6 (9.13)  |                 |
| BEM score: Masculine         |              |              |              |              | 0.597           |
| Mean (SD)                    | 33.6 (7.43)  | 34.0 (7.42)  | 33.1 (6.98)  | 33.6 (7.95)  |                 |
| TCS                          |              |              |              |              | 0.692           |
| Mean (SD)                    | 2.82 (0.868) | 2.88 (0.946) | 2.75 (0.857) | 2.84 (0.800) |                 |
| STT                          |              |              |              |              | 0.910           |
| Mean (SD)                    | 9.26 (3.15)  | 9.29 (3.50)  | 9.21 (3.01)  | 9.27 (2.96)  |                 |

*Note:* The table summarizes the characteristics of the cisgender and transgender samples. The education category other includes subjects that replied technical/community college, secondary education (e.g. GED/GCSE), no formal qualification, or don't know/not applicable. The religion category religious includes subjects that replied Buddhism, Christianity, Hinduism, Islam, Judaism, Paganism, Sikhism, or Spiritualism. The residence category other includes subjects that replied Australia, Canada, Chile, Israel, Japan, Mexico, New Zealand, or South Africa. The column *p*-value reports the *p*-values of  $\chi^2$ -tests for categorical variables and the *p*-values of the Kruskal Wallis test for numerical variables between the treatment columns.

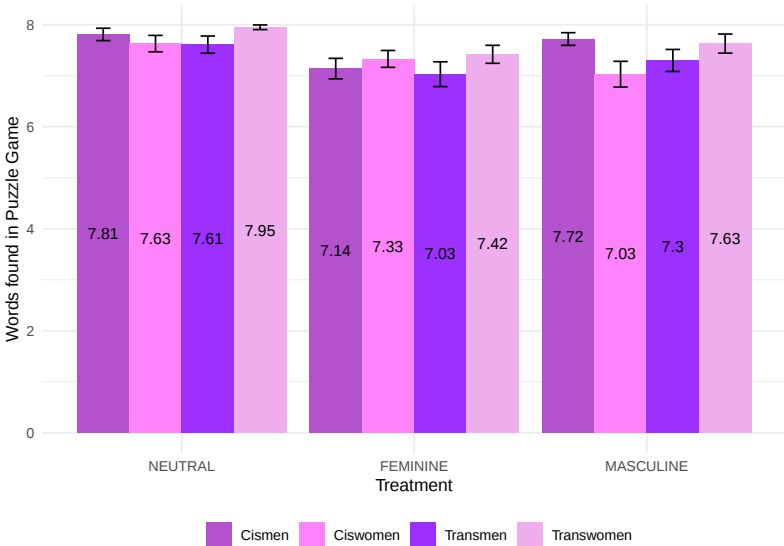
**Supplementary Table 5** Descriptives by treatment for transwomen.

|                              | Total        | Treatment    |              |              | <i>p</i> -value |
|------------------------------|--------------|--------------|--------------|--------------|-----------------|
|                              |              | NEUTRAL      | FEMININE     | MASCULINE    |                 |
| <b>Transwomen</b>            | (N=140)      | (N=44)       | (N=50)       | (N=46)       |                 |
| Age (years)                  |              |              |              |              | 0.345           |
| Mean (SD)                    | 25.1 (7.15)  | 25.3 (5.91)  | 25.6 (9.01)  | 24.2 (5.89)  |                 |
| Height (cm)                  |              |              |              |              | 0.864           |
| Mean (SD)                    | 175 (10.1)   | 176 (8.41)   | 174 (13.4)   | 175 (7.24)   |                 |
| Student status               |              |              |              |              | 0.939           |
| Yes                          | 58 (41.4%)   | 18 (40.9%)   | 20 (40.0%)   | 20 (43.5%)   |                 |
| No                           | 82 (58.6%)   | 26 (59.1%)   | 30 (60.0%)   | 26 (56.5%)   |                 |
| Highest education            |              |              |              |              | 0.090           |
| University degree            | 44 (31.4%)   | 13 (29.5%)   | 20 (40.0%)   | 11 (23.9%)   |                 |
| High school diploma/A-levels | 63 (45.0%)   | 16 (36.4%)   | 20 (40.0%)   | 27 (58.7%)   |                 |
| Other                        | 33 (23.6%)   | 15 (34.1%)   | 10 (20.0%)   | 8 (17.4%)    |                 |
| Income: Less than 20,000 GBP |              |              |              |              | 0.070           |
| Yes                          | 100 (71.4%)  | 37 (84.1%)   | 34 (68.0%)   | 29 (63.0%)   |                 |
| No                           | 40 (28.6%)   | 7 (15.9%)    | 16 (32.0%)   | 17 (37.0%)   |                 |
| Religion                     |              |              |              |              | 0.664           |
| Non-religious                | 108 (77.1%)  | 33 (75.0%)   | 39 (78.0%)   | 36 (78.3%)   |                 |
| Religious                    | 27 (19.3%)   | 10 (22.7%)   | 10 (20.0%)   | 7 (15.2%)    |                 |
| Not say                      | 5 (3.6%)     | 1 (2.3%)     | 1 (2.0%)     | 3 (6.5%)     |                 |
| Residence                    |              |              |              |              | 0.257           |
| Continental Europe           | 34 (24.3%)   | 11 (25.0%)   | 9 (18.0%)    | 14 (30.4%)   |                 |
| United Kingdom               | 40 (28.6%)   | 11 (25.0%)   | 17 (34.0%)   | 12 (26.1%)   |                 |
| United States                | 47 (33.6%)   | 13 (29.5%)   | 21 (42.0%)   | 13 (28.3%)   |                 |
| Other                        | 19 (13.6%)   | 9 (20.5%)    | 3 (6.0%)     | 7 (15.2%)    |                 |
| BEM group:                   |              |              |              |              | 0.333           |
| Androgynous                  | 28 (20.0%)   | 5 (11.4%)    | 12 (24.0%)   | 11 (23.9%)   |                 |
| Feminine                     | 49 (35.0%)   | 19 (43.2%)   | 17 (34.0%)   | 13 (28.3%)   |                 |
| Masculine                    | 14 (10.0%)   | 7 (15.9%)    | 3 (6.0%)     | 4 (8.7%)     |                 |
| Undifferentiated             | 49 (35.0%)   | 13 (29.5%)   | 18 (36.0%)   | 18 (39.1%)   |                 |
| BEM score: Feminine          |              |              |              |              | 0.973           |
| Mean (SD)                    | 42.3 (9.22)  | 42.8 (7.72)  | 41.3 (10.4)  | 42.8 (9.28)  |                 |
| BEM score: Masculine         |              |              |              |              | 0.996           |
| Mean (SD)                    | 30.9 (8.83)  | 31.0 (9.17)  | 30.8 (8.75)  | 30.9 (8.80)  |                 |
| TCS                          |              |              |              |              | 0.745           |
| Mean (SD)                    | 2.54 (0.835) | 2.54 (0.755) | 2.55 (0.872) | 2.52 (0.883) |                 |
| STT                          |              |              |              |              | 0.027           |
| Mean (SD)                    | 7.01 (4.19)  | 7.93 (4.05)  | 5.80 (4.35)  | 7.46 (3.91)  |                 |

*Note:* The table summarizes the characteristics of the cisgender and transgender samples. The education category other includes subjects that replied technical/community college, secondary education (e.g. GED/GCSE), no formal qualification, or don't know/not applicable. The religion category religious includes subjects that replied Buddhism, Christianity, Hinduism, Islam, Judaism, Paganism, Sikhism, or Spiritualism. The residence category other includes subjects that replied Australia, Canada, Chile, Israel, Japan, Mexico, New Zealand, or South Africa. The column *p*-value reports the *p*-values of  $\chi^2$ -tests for categorical variables and the *p*-values of the Kruskal Wallis test for numerical variables between the treatment columns.

## 2 Priming (Part 1)

Figure 1 presents the number of marked words split up by treatments and subject groups. We do not find any differences in marked words within one priming condition across subject groups (KW; NEUTRAL:  $p = 0.349$ ; FEMININE:  $p = 0.874$ ; MASCULINE:  $p = 0.112$ ). For the different subject groups separately across priming conditions, only the number of words marked by transmen didn't differ across priming conditions (KW; cismen:  $p < 0.000$ ; ciswomen:  $p = 0.038$ ; transmen:  $p = 0.123$ ; transwomen:  $p = 0.014$ ). Concerning gender differences, we do not see significant variations (MWU;  $p = 0.675$ ). The same is true for sex difference (MWU;  $p < 0.060$ ). As we did not pre-register to control for the number of words marked in our regressions, we do not add this variable in the reported analysis. However, please note that all main results remain qualitatively the same when we account for the heterogeneity in the number of marked words. The additional analyses are available on request.



**Supplementary Figure 1** Marked words in Part 1 by treatments and subject groups in alphabetical order ( $n = 780$ ). The bars show the average amount of marked words, and the error bars represent the standard error of the mean.

**Supplementary Table 6** Words found in the priming task across treatments and subject groups.

| Panel A: Priming across treatments                           |                |          |             |            |           |
|--------------------------------------------------------------|----------------|----------|-------------|------------|-----------|
|                                                              | Treatment      |          |             |            |           |
| Subject groups                                               | NEUTRAL        | FEMININE | MASCULINE   |            | p-value   |
| Cismen                                                       | 7.806          | 7.141    | 7.718       |            | <0.001    |
| Ciswomen                                                     | 7.634          | 7.329    | 7.029       |            | 0.038     |
| Transmen                                                     | 7.611          | 7.028    | 7.296       |            | 0.123     |
| Transwomen                                                   | 7.955          | 7.420    | 7.630       |            | 0.014     |
|                                                              |                |          |             |            |           |
| Panel B: Priming across subject groups                       |                |          |             |            |           |
|                                                              | Subject groups |          |             |            |           |
| Treatment                                                    | Cismen         | Ciswomen | Transmen    | Transwomen | p-value   |
| NEUTRAL                                                      | 7.806          | 7.634    | 7.611       | 7.955      | 0.349     |
| FEMININE                                                     | 7.141          | 7.329    | 7.028       | 7.420      | 0.874     |
| MASCULINE                                                    | 7.718          | 7.029    | 7.296       | 7.630      | 0.112     |
|                                                              |                |          |             |            |           |
| Panel C: Priming across groups within NEUTRAL                |                |          |             |            |           |
|                                                              | Group 1        |          | Group 2     |            |           |
|                                                              | Subjects       |          | Subjects    |            | p-value   |
| Case 1                                                       | Cisgender      | 7.720    | Transgender | 7.741      | 0.816     |
| Case 2                                                       | Cismen         | 7.806    | Ciswomen    | 7.634      | 0.339     |
| Case 3                                                       | Transmen       | 7.611    | Transwomen  | 7.955      | 0.122     |
| Case 4                                                       | Female         | 7.622    | Male        | 7.862      | 0.091     |
| Case 5                                                       | Feminine       | 7.757    | Masculine   | 7.708      | 0.820     |
|                                                              |                |          |             |            |           |
| Panel D: Priming in NEUTRAL compared to the other treatments |                |          |             |            |           |
|                                                              | NEUTRAL        |          | FEMININE    |            | MASCULINE |
| Subject groups                                               |                |          | p-value     |            | p-value   |
| Cismen                                                       | 7.806          |          | 7.141       | <0.001     | 7.718     |
| Ciswomen                                                     | 7.634          |          | 7.329       | 0.012      | 7.029     |
| Transmen                                                     | 7.611          |          | 7.028       | 0.040      | 7.296     |
| Transwomen                                                   | 7.955          |          | 7.420       | 0.004      | 7.630     |

*Note:* The columns *p*-value report the results of the tests performed column-wise. For continuous variables, we conducted Mann-Whitney U tests for two groups and Kruskal-Wallis tests for more than two groups.

### 3 Performance in the real effort math task (Part 2, 3, and 4)

The following tables summarize the performance in the math task by treatment and subject groups for Part 2 ([Table 7](#)) and Part 3 ([Table 8](#)). By treatments, ciswomen and cismen have differences in performance in MASCULINE in Part 2 (MWU; NEUTRAL:  $p = 0.080$ , FEMININE:  $p = 0.205$ , MASCULINE:  $p = 0.037$ ) and across all treatments in Part 3 (MWU; NEUTRAL:  $p = 0.004$ , Part 3 FEMININE:  $p = 0.010$ , Part 3 MASCULINE:  $p = 0.028$ ). Also, the paper<sup>1</sup> (which set up the online version of this math task) does find gender differences in performance. Thomas Buser states in a personal communication that women “perform significantly worse”. In their paper, this is true for their first-round (our Part 2), where “women score 1.3 fewer correct answers” than men (male average: 10.0). Moreover, in their second-round (our Part 4), males score on average 10.0, but women score 0.7 fewer correct answers.

Transgender participants show performance differences in NEUTRAL in Part 2 and 3 (MWU; Part 2: NEUTRAL:  $p = 0.007$ , FEMININE:  $p = 0.555$ , MASCULINE:  $p = 0.181$ ; Part 3: NEUTRAL:  $p = 0.015$ , FEMININE:  $p = 0.600$ , MASCULINE:  $p = 0.053$ ). Concerning sex differences, male participants always have a higher performance than female ones in NEUTRAL and MASCULINE when facing piece-rate incentives (MWU; Part 2: NEUTRAL:  $p = 0.003$ , FEMININE:  $p = 0.164$ , MASCULINE:  $p = 0.010$ ). Interestingly, this is true when they compete in Part 3 for all three treatments (MWU; NEUTRAL:  $p < 0.001$ , FEMININE:  $p = 0.014$ , MASCULINE:  $p = 0.003$ ).

However, performances do not differ by the individual’s gender (MWU; Part 2: NEUTRAL:  $p = 0.755$ , FEMININE:  $p = 0.621$ , MASCULINE:  $p = 0.553$ ; Part 3: NEUTRAL:  $p = 0.575$ , FEMININE:  $p = 0.161$ , MASCULINE:  $p = 0.675$ ). All differences vanish in Part 4, when we split up the data by those in the tournament (see the respective  $p$ -values in [Table 9](#) and [Table 9](#)). For the priming intervention, we have no evidence of priming influencing the performance, independent of the part or subject group (KW; cismen:  $p > 0.478$ ; ciswomen:  $p > 0.562$ ; transmen:  $p > 0.956$ ; or transwomen:  $p > 0.170$ ).

Please note that we can not exclude that the math task is not influenced by a participant’s gender and sex, combinations of it, in addition to interactions with priming. However, we can control how performance heterogeneity affects competitiveness by adding individual performances to our regressions measuring competitiveness. See [Table 15](#) to [Table 16](#).

### 3.1 Performance Part 2

**Supplementary Table 7** Performance in Part 2 across treatments and subject groups.

Panel A: Performance in Part 2 across treatments

| Subject groups | Treatment |          |           | p-value |
|----------------|-----------|----------|-----------|---------|
|                | NEUTRAL   | FEMININE | MASCULINE |         |
| Cismen         | 8.458     | 8.704    | 9.423     | 0.478   |
| Ciswomen       | 7.535     | 7.929    | 8.014     | 0.719   |
| Transmen       | 7.750     | 7.778    | 7.718     | 0.956   |
| Transwomen     | 9.409     | 8.740    | 8.739     | 0.285   |

Panel B: Performance in Part 2 across subject groups

| Treatment | Subject groups |          |          |            | p-value |
|-----------|----------------|----------|----------|------------|---------|
|           | Cismen         | Ciswomen | Transmen | Transwomen |         |
| NEUTRAL   | 8.458          | 7.535    | 7.750    | 9.409      | 0.011   |
| FEMININE  | 8.704          | 7.929    | 7.778    | 8.740      | 0.529   |
| MASCULINE | 9.423          | 8.014    | 7.718    | 8.739      | 0.062   |

Panel C: Performance in Part 2 across groups within NEUTRAL

|        | Group 1   |       | Group 2     |       | p-value |
|--------|-----------|-------|-------------|-------|---------|
|        | Subjects  |       | Subjects    |       |         |
| Case 1 | Cisgender | 8.000 | Transgender | 8.379 | 0.405   |
| Case 2 | Cismen    | 8.458 | Ciswomen    | 7.535 | 0.080   |
| Case 3 | Transmen  | 7.750 | Transwomen  | 9.409 | 0.007   |
| Case 4 | Female    | 7.643 | Male        | 8.819 | 0.003   |
| Case 5 | Feminine  | 8.252 | Masculine   | 8.104 | 0.755   |

Panel D: Performance in Part 2 in NEUTRAL compared to the other treatments

| Subject groups | NEUTRAL | FEMININE |       | MASCULINE |       |
|----------------|---------|----------|-------|-----------|-------|
|                |         | p-value  |       | p-value   |       |
| Cismen         | 8.458   | 8.704    | 0.797 | 9.423     | 0.231 |
| Ciswomen       | 7.535   | 7.929    | 0.488 | 8.014     | 0.476 |
| Transmen       | 7.750   | 7.778    | 0.832 | 7.718     | 0.932 |
| Transwomen     | 9.409   | 8.740    | 0.125 | 8.739     | 0.255 |

*Note:* The columns *p*-value report the results of the tests performed column-wise. For continuous variables, we conducted Mann-Whitney U tests for two groups and Kruskal-Wallis tests for more than two groups.

### 3.2 Performance Part 3

**Supplementary Table 8** Performance in Part 3 across treatments and subject groups.

| Panel A: Performance in Part 3 across treatments                           |                |          |             |            |           |       |
|----------------------------------------------------------------------------|----------------|----------|-------------|------------|-----------|-------|
|                                                                            | Treatment      |          |             |            |           |       |
| Subject groups                                                             | NEUTRAL        | FEMININE | MASCULINE   |            | p-value   |       |
| Cismen                                                                     | 9.333          | 10.070   | 9.930       |            | 0.593     |       |
| Ciswomen                                                                   | 7.423          | 7.957    | 8.271       |            | 0.562     |       |
| Transmen                                                                   | 7.833          | 7.736    | 7.930       |            | 0.979     |       |
| Transwomen                                                                 | 9.659          | 8.500    | 9.326       |            | 0.170     |       |
|                                                                            |                |          |             |            |           |       |
| Panel B: Performance in Part 3 across subject groups                       |                |          |             |            |           |       |
|                                                                            | Subject groups |          |             |            |           |       |
| Treatment                                                                  | Cismen         | Ciswomen | Transmen    | Transwomen | p-value   |       |
| NEUTRAL                                                                    | 9.333          | 7.423    | 7.833       | 9.659      | 0.002     |       |
| FEMININE                                                                   | 10.070         | 7.957    | 7.736       | 8.500      | 0.021     |       |
| MASCULINE                                                                  | 9.930          | 8.271    | 7.930       | 9.326      | 0.024     |       |
|                                                                            |                |          |             |            |           |       |
| Panel C: Performance in Part 3 across groups within NEUTRAL                |                |          |             |            |           |       |
|                                                                            | Group 1        |          | Group 2     |            |           |       |
|                                                                            | Subjects       |          | Subjects    |            | p-value   |       |
| Case 1                                                                     | Cisgender      | 8.385    | Transgender | 8.526      | 0.612     |       |
| Case 2                                                                     | Cismen         | 9.333    | Ciswomen    | 7.423      | 0.004     |       |
| Case 3                                                                     | Transmen       | 7.833    | Transwomen  | 9.659      | 0.015     |       |
| Case 4                                                                     | Female         | 7.629    | Male        | 9.457      | <0.001    |       |
| Case 5                                                                     | Feminine       | 8.278    | Masculine   | 8.583      | 0.575     |       |
|                                                                            |                |          |             |            |           |       |
| Panel D: Performance in Part 3 in NEUTRAL compared to the other treatments |                |          |             |            |           |       |
|                                                                            | NEUTRAL        |          | FEMININE    |            | MASCULINE |       |
| Subject groups                                                             |                |          |             | p-value    | p-value   |       |
| Cismen                                                                     | 9.333          |          | 10.070      | 0.353      | 9.930     | 0.406 |
| Ciswomen                                                                   | 7.423          |          | 7.957       | 0.396      | 8.271     | 0.325 |
| Transmen                                                                   | 7.833          |          | 7.736       | 0.920      | 7.930     | 0.832 |
| Transwomen                                                                 | 9.659          |          | 8.500       | 0.081      | 9.326     | 0.686 |

*Note:* The columns *p*-value report the results of the tests performed column-wise. For continuous variables, we conducted Mann-Whitney U tests for two groups and Kruskal-Wallis tests for more than two groups.

### 3.3 Performance Part 4

**Supplementary Table 9** Performance in Part 4 of *competing* subjects across treatments and subject groups.

| Panel A: Performance in Part 4 of competing subjects across treatments                           |                |          |             |            |           |
|--------------------------------------------------------------------------------------------------|----------------|----------|-------------|------------|-----------|
| Subject groups                                                                                   | Treatment      |          |             |            |           |
|                                                                                                  | NEUTRAL        | FEMININE | MASCULINE   |            | p-value   |
| Cismen                                                                                           | 9.500          | 10.321   | 9.312       |            | 0.765     |
| Ciswomen                                                                                         | 8.391          | 8.947    | 9.053       |            | 0.763     |
| Transmen                                                                                         | 9.000          | 8.211    | 8.474       |            | 0.839     |
| Transwomen                                                                                       | 9.429          | 8.333    | 9.167       |            | 0.670     |
| Panel B: Performance in Part 4 of competing subjects across subject groups                       |                |          |             |            |           |
| Treatment                                                                                        | Subject groups |          |             |            |           |
|                                                                                                  | Cismen         | Ciswomen | Transmen    | Transwomen | p-value   |
| NEUTRAL                                                                                          | 9.500          | 8.391    | 9.000       | 9.429      | 0.705     |
| FEMININE                                                                                         | 10.321         | 8.947    | 8.211       | 8.333      | 0.389     |
| MASCULINE                                                                                        | 9.312          | 9.053    | 8.474       | 9.167      | 0.923     |
| Panel C: Performance in Part 4 of competing subjects across groups within NEUTRAL                |                |          |             |            |           |
|                                                                                                  | Group 1        |          | Group 2     |            |           |
|                                                                                                  | Subjects       |          | Subjects    |            | p-value   |
| Case 1                                                                                           | Cisgender      | 8.933    | Transgender | 9.176      | 0.651     |
| Case 2                                                                                           | Cismen         | 9.500    | Ciswomen    | 8.391      | 0.278     |
| Case 3                                                                                           | Transmen       | 9.000    | Transwomen  | 9.429      | 0.860     |
| Case 4                                                                                           | Female         | 8.674    | Male        | 9.472      | 0.358     |
| Case 5                                                                                           | Feminine       | 8.784    | Masculine   | 9.262      | 0.475     |
| Panel D: Performance in Part 4 of competing subjects in NEUTRAL compared to the other treatments |                |          |             |            |           |
|                                                                                                  | NEUTRAL        |          | FEMININE    |            | MASCULINE |
| Subject groups                                                                                   |                |          | p-value     |            | p-value   |
| Cismen                                                                                           | 9.500          |          | 10.321      | 0.556      | 9.312     |
| Ciswomen                                                                                         | 8.391          |          | 8.947       | 0.638      | 9.053     |
| Transmen                                                                                         | 9.000          |          | 8.211       | 0.563      | 8.474     |
| Transwomen                                                                                       | 9.429          |          | 8.333       | 0.360      | 9.167     |

*Note:* The columns *p*-value report the results of the tests performed column-wise. For continuous variables, we conducted Mann-Whitney U tests for two groups and Kruskal-Wallis tests for more than two groups.

**Supplementary Table 10** Performance in Part 4 of *non-competing* subjects across treatments and subject groups.

| Panel A: Performance in Part 4 of non-competing subjects across treatments                           |                |          |             |            |           |
|------------------------------------------------------------------------------------------------------|----------------|----------|-------------|------------|-----------|
| Subject groups                                                                                       | Treatment      |          |             |            |           |
|                                                                                                      | NEUTRAL        | FEMININE | MASCULINE   |            | p-value   |
| Cismen                                                                                               | 8.960          | 9.093    | 9.026       |            | 0.994     |
| Ciswomen                                                                                             | 7.979          | 9.098    | 8.725       |            | 0.341     |
| Transmen                                                                                             | 8.712          | 8.453    | 8.288       |            | 0.825     |
| Transwomen                                                                                           | 8.800          | 8.906    | 9.500       |            | 0.703     |
|                                                                                                      |                |          |             |            |           |
| Panel B: Performance in Part 4 of non-competing subjects across subject groups                       |                |          |             |            |           |
|                                                                                                      | Subject groups |          |             |            |           |
| Treatment                                                                                            | Cismen         | Ciswomen | Transmen    | Transwomen | p-value   |
| NEUTRAL                                                                                              | 8.960          | 7.979    | 8.712       | 8.800      | 0.577     |
| FEMININE                                                                                             | 9.093          | 9.098    | 8.453       | 8.906      | 0.929     |
| MASCULINE                                                                                            | 9.026          | 8.725    | 8.288       | 9.500      | 0.376     |
|                                                                                                      |                |          |             |            |           |
| Panel C: Performance in Part 4 of non-competing subjects across groups within NEUTRAL                |                |          |             |            |           |
|                                                                                                      | Group 1        |          | Group 2     |            |           |
|                                                                                                      | Subjects       |          | Subjects    |            | p-value   |
| Case 1                                                                                               | Cisgender      | 8.480    | Transgender | 8.744      | 0.874     |
| Case 2                                                                                               | Cismen         | 8.960    | Ciswomen    | 7.979      | 0.159     |
| Case 3                                                                                               | Transmen       | 8.712    | Transwomen  | 8.800      | 0.977     |
| Case 4                                                                                               | Female         | 8.360    | Male        | 8.900      | 0.292     |
| Case 5                                                                                               | Feminine       | 8.295    | Masculine   | 8.833      | 0.309     |
|                                                                                                      |                |          |             |            |           |
| Panel D: Performance in Part 4 of non-competing subjects in NEUTRAL compared to the other treatments |                |          |             |            |           |
|                                                                                                      | NEUTRAL        |          | FEMININE    |            | MASCULINE |
| Subject groups                                                                                       |                |          | p-value     |            | p-value   |
| Cismen                                                                                               | 8.960          |          | 9.093       | 0.914      | 9.026     |
| Ciswomen                                                                                             | 7.979          |          | 9.098       | 0.135      | 8.725     |
| Transmen                                                                                             | 8.712          |          | 8.453       | 0.921      | 8.288     |
| Transwomen                                                                                           | 8.800          |          | 8.906       | 0.843      | 9.500     |

*Note:* The columns *p*-value report the results of the tests performed column-wise. For continuous variables, we conducted Mann-Whitney U tests for two groups and Kruskal-Wallis tests for more than two groups.

## 4 Beliefs (Part 3)

### 4.1 Non-parametric tests

**Supplementary Table 11** Beliefs in Part 3 across treatments and subject groups.

| Panel A: Beliefs in Part 3 across treatments |           |          |           |         |  |
|----------------------------------------------|-----------|----------|-----------|---------|--|
| Subject groups                               | Treatment |          |           | p-value |  |
|                                              | NEUTRAL   | FEMININE | MASCULINE |         |  |
| Cismen                                       | 2.139     | 1.944    | 2.070     | 0.391   |  |
| Ciswomen                                     | 2.606     | 2.500    | 2.571     | 0.793   |  |
| Transmen                                     | 2.542     | 2.653    | 2.704     | 0.633   |  |
| Transwomen                                   | 2.205     | 2.440    | 2.304     | 0.396   |  |

| Panel B: Beliefs in Part 3 across subject groups |                |          |          |            |         |
|--------------------------------------------------|----------------|----------|----------|------------|---------|
| Treatment                                        | Subject groups |          |          |            | p-value |
|                                                  | Cismen         | Ciswomen | Transmen | Transwomen |         |
| NEUTRAL                                          | 2.139          | 2.606    | 2.542    | 2.205      | 0.006   |
| FEMININE                                         | 1.944          | 2.500    | 2.653    | 2.440      | <0.001  |
| MASCULINE                                        | 2.070          | 2.571    | 2.704    | 2.304      | <0.001  |

| Panel C: Beliefs in Part 3 across groups within NEUTRAL |           |       |             |       |         |
|---------------------------------------------------------|-----------|-------|-------------|-------|---------|
|                                                         | Group 1   |       | Group 2     |       | p-value |
|                                                         | Subjects  |       | Subjects    |       |         |
| Case 1                                                  | Cisgender | 2.371 | Transgender | 2.414 | 0.746   |
| Case 2                                                  | Cismen    | 2.139 | Ciswomen    | 2.606 | 0.003   |
| Case 3                                                  | Transmen  | 2.542 | Transwomen  | 2.205 | 0.061   |
| Case 4                                                  | Female    | 2.573 | Male        | 2.164 | 0.001   |
| Case 5                                                  | Feminine  | 2.452 | Masculine   | 2.340 | 0.362   |

| Panel D: Beliefs in Part 3 in NEUTRAL compared to the other treatments |         |          |         |           |         |
|------------------------------------------------------------------------|---------|----------|---------|-----------|---------|
| Subject groups                                                         | NEUTRAL | FEMININE |         | MASCULINE | p-value |
|                                                                        |         |          | p-value |           |         |
| Cismen                                                                 | 2.139   | 1.944    | 0.177   | 2.070     | 0.567   |
| Ciswomen                                                               | 2.606   | 2.500    | 0.496   | 2.571     | 0.772   |
| Transmen                                                               | 2.542   | 2.653    | 0.529   | 2.704     | 0.354   |
| Transwomen                                                             | 2.205   | 2.440    | 0.178   | 2.304     | 0.537   |

*Note:* The columns *p*-value report the results of the tests performed column-wise. For continuous variables, we conducted Mann-Whitney U tests for two groups and Kruskal-Wallis tests for more than two groups.

## 4.2 Regressions

**Supplementary Table 12** OLS regression for NEUTRAL.  
Dependent variable: Beliefs in Part 3.

|                      | (1)                  | (2)                 | (3)                  |
|----------------------|----------------------|---------------------|----------------------|
| Ciswomen             | 0.467 **<br>(0.155)  | 0.586 **<br>(0.176) | 0.494 **<br>(0.156)  |
| Transmen             | 0.403 *<br>(0.159)   | 0.511 **<br>(0.180) | -0.155<br>(0.322)    |
| Transwomen           | 0.066<br>(0.172)     | 0.194<br>(0.173)    | -0.551<br>(0.324)    |
| Age                  |                      | 0.000<br>(0.009)    |                      |
| Height               |                      | 0.005<br>(0.006)    |                      |
| Student status       |                      | -0.169<br>(0.136)   |                      |
| Income: < 20,000 GBP |                      | -0.077<br>(0.135)   |                      |
| Religion: Religious  |                      | 0.243<br>(0.135)    |                      |
| Religion: Not say    |                      | 0.460<br>(0.313)    |                      |
| Residence: US        |                      | -0.080<br>(0.152)   |                      |
| Residence: UK        |                      | 0.097<br>(0.170)    |                      |
| Residence: Other     |                      | -0.408 *<br>(0.202) |                      |
| TCS                  |                      |                     | -0.253 **<br>(0.093) |
| STT                  |                      |                     | 0.020<br>(0.022)     |
| Const.               | 2.139 ***<br>(0.105) | 1.226<br>(1.195)    | 3.242 ***<br>(0.436) |
| N                    | 259                  | 259                 | 259                  |
| Adj. R2              | 0.035                | 0.057               | 0.057                |
| $H_0$ : Sex          | 0.001                | 0.001               | 0.000                |
| $H_0$ : Gender       | 0.587                | 0.259               | 0.682                |

*Note:* The beliefs in Part 3 are the participants belief about how their performance ranks within the group (1 = best to 4 = worst). Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .  $H_0$ : Sex reports the  $p$ -values of a joint coefficient test comparing Male (Cismen and Transwomen) with Female (Ciswomen and Transmen).  $H_0$ : Gender reports the  $p$ -values of a joint coefficient test comparing Masculine (Cismen and Transmen) with Feminine (Ciswomen and Transwomen).

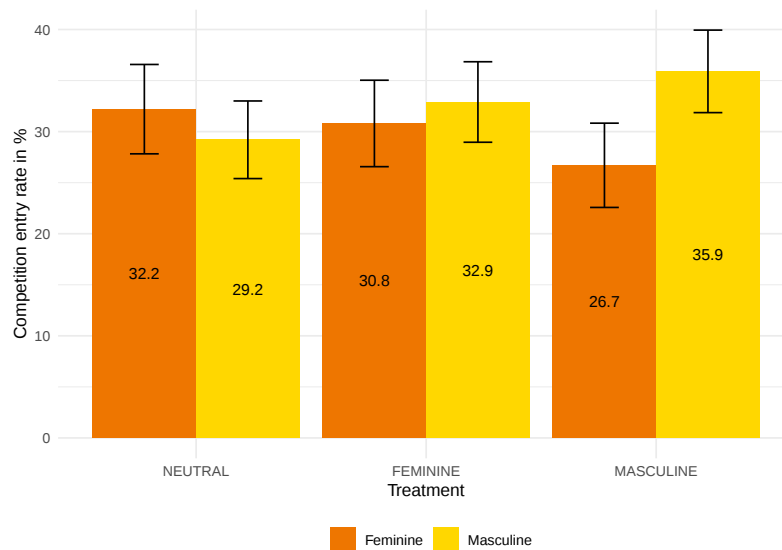
**Supplementary Table 13** OLS regression for all treatments. Dependent variable: Beliefs in Part 3.

|                                                                     | (1)                  | (2)                  | (3)                  |
|---------------------------------------------------------------------|----------------------|----------------------|----------------------|
| Ciswomen                                                            | 0.467 **<br>(0.155)  | 0.444 **<br>(0.162)  | 0.484 **<br>(0.155)  |
| Transmen                                                            | 0.403 *<br>(0.159)   | 0.405 *<br>(0.164)   | 0.093<br>(0.229)     |
| Transwomen                                                          | 0.066<br>(0.172)     | 0.080<br>(0.174)     | -0.291<br>(0.234)    |
| Treatment: FEMININE                                                 | -0.195<br>(0.149)    | -0.187<br>(0.146)    | -0.184<br>(0.148)    |
| Treatment: MASCULINE                                                | -0.068<br>(0.151)    | -0.045<br>(0.148)    | -0.067<br>(0.150)    |
| FEMININE x Ciswomen                                                 | 0.090<br>(0.218)     | 0.094<br>(0.216)     | 0.065<br>(0.217)     |
| MASCULINE x Ciswomen                                                | 0.034<br>(0.220)     | 0.034<br>(0.215)     | 0.013<br>(0.219)     |
| FEMININE x Transmen                                                 | 0.306<br>(0.218)     | 0.309<br>(0.216)     | 0.273<br>(0.215)     |
| MASCULINE x Transmen                                                | 0.231<br>(0.222)     | 0.210<br>(0.220)     | 0.222<br>(0.219)     |
| FEMININE x Transwomen                                               | 0.431<br>(0.239)     | 0.421<br>(0.238)     | 0.434<br>(0.236)     |
| MASCULINE x Transwomen                                              | 0.168<br>(0.242)     | 0.145<br>(0.242)     | 0.166<br>(0.241)     |
| Const.                                                              | 2.139 ***<br>(0.105) | 2.547 ***<br>(0.693) | 2.860 ***<br>(0.250) |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | Yes                  | –                    |
| Controls (TCS, STT)                                                 | –                    | –                    | Yes                  |
| N                                                                   | 780                  | 780                  | 780                  |
| Adj. R2                                                             | 0.055                | 0.074                | 0.067                |
| $H_0$ : FEMININE on Cismen                                          | 0.192                | 0.201                | 0.213                |
| $H_0$ : MASCULINE on Cismen                                         | 0.651                | 0.762                | 0.654                |
| $H_0$ : FEMININE on Ciswomen                                        | 0.504                | 0.553                | 0.454                |
| $H_0$ : MASCULINE on Ciswomen                                       | 0.830                | 0.943                | 0.736                |
| $H_0$ : FEMININE on Transmen                                        | 0.483                | 0.443                | 0.568                |
| $H_0$ : MASCULINE on Transmen                                       | 0.317                | 0.309                | 0.331                |
| $H_0$ : FEMININE on Transwomen                                      | 0.207                | 0.211                | 0.178                |
| $H_0$ : MASCULINE on Transwomen                                     | 0.597                | 0.601                | 0.599                |

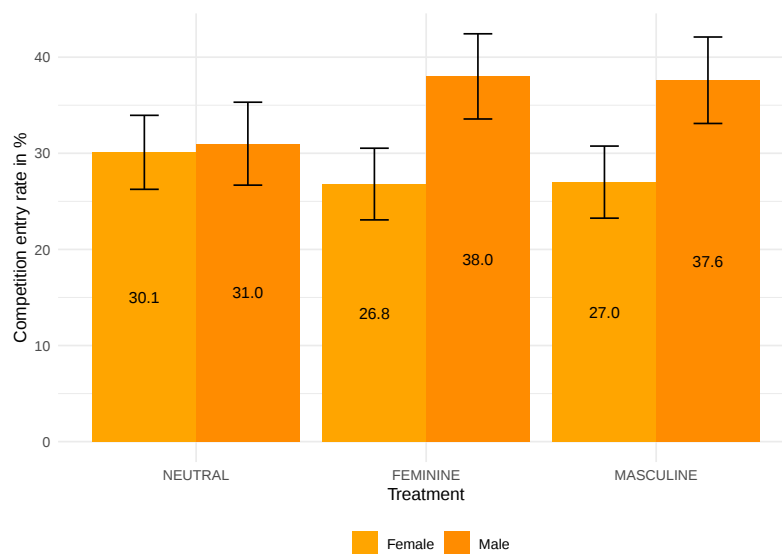
*Note:* The beliefs in Part 3 are the participants belief about how their performance ranks within the group (1 = best to 4 = worst). Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on Ciswomen" tests the effect of the treatment (FEMININE) on the subject group (Ciswomen).

## 5 Competitiveness (Part 4)

### 5.1 Bar graphs



**Supplementary Figure 2** Tournament entry rates in Part 4 by treatments and gender ( $n = 780$ ). The bars show the percentage of participants (between 0 and 100) who chose to compete rather than to perform under piece-rate incentives. The error bars represent the standard error of the mean.



**Supplementary Figure 3** Tournament entry rates in Part 4 by treatments and sex ( $n = 780$ ). The bars show the percentage of participants (between 0 and 100) who chose to compete rather than to perform under piece-rate incentives. The error bars represent the standard error of the mean.

## 5.2 Non-parametric tests

**Supplementary Table 14** Tournament entry rates across treatments and subject groups.

Panel A: Competitiveness across treatments

|                | Treatment |          |           |         |
|----------------|-----------|----------|-----------|---------|
| Subject groups | NEUTRAL   | FEMININE | MASCULINE | p-value |
| Cismen         | 30.6%     | 39.4%    | 45.1%     | 0.198   |
| Ciswomen       | 32.4%     | 27.1%    | 27.1%     | 0.729   |
| Transmen       | 27.8%     | 26.4%    | 26.8%     | 0.981   |
| Transwomen     | 31.8%     | 36.0%    | 26.1%     | 0.578   |

Panel B: Competitiveness across subject groups

|           | Subject groups |          |          |            |         |
|-----------|----------------|----------|----------|------------|---------|
| Treatment | Cismen         | Ciswomen | Transmen | Transwomen | p-value |
| NEUTRAL   | 30.6%          | 32.4%    | 27.8%    | 31.8%      | 0.939   |
| FEMININE  | 39.4%          | 27.1%    | 26.4%    | 36.0%      | 0.264   |
| MASCULINE | 45.1%          | 27.1%    | 26.8%    | 26.1%      | 0.046   |

Panel C: Competitiveness across groups within NEUTRAL

|        | Group 1   |       | Group 2     |       |         |
|--------|-----------|-------|-------------|-------|---------|
|        | Subjects  |       | Subjects    |       | p-value |
| Case 1 | Cisgender | 31.5% | Transgender | 29.3% | 0.708   |
| Case 2 | Cismen    | 30.6% | Ciswomen    | 32.4% | 0.813   |
| Case 3 | Transmen  | 27.8% | Transwomen  | 31.8% | 0.643   |
| Case 4 | Female    | 30.1% | Male        | 31.0% | 0.867   |
| Case 5 | Feminine  | 32.2% | Masculine   | 29.2% | 0.601   |

Panel D: Competitiveness in NEUTRAL compared to the other treatments

|                | NEUTRAL | FEMININE |       | MASCULINE |       |
|----------------|---------|----------|-------|-----------|-------|
| Subject groups |         | p-value  |       | p-value   |       |
| Cismen         | 30.6%   | 39.4%    | 0.265 | 45.1%     | 0.073 |
| Ciswomen       | 32.4%   | 27.1%    | 0.495 | 27.1%     | 0.495 |
| Transmen       | 27.8%   | 26.4%    | 0.851 | 26.8%     | 0.891 |
| Transwomen     | 31.8%   | 36.0%    | 0.669 | 26.1%     | 0.549 |

*Note:* The column *p*-value reports the results of  $\chi^2$  tests performed column-wise.

### 5.3 Regressions

**Supplementary Table 15** Probit regression for NEUTRAL. Dependent variable: Competition.

|                      | (1)                  | (2)                  | (3)                   | (4)                   | (5)                   |
|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
| Ciswomen             | 0.052<br>(0.220)     | 0.173<br>(0.231)     | 0.281<br>(0.254)      | 0.360<br>(0.297)      | 0.268<br>(0.254)      |
| Transmen             | -0.081<br>(0.223)    | 0.013<br>(0.231)     | 0.106<br>(0.239)      | 0.114<br>(0.292)      | 0.516<br>(0.462)      |
| Transwomen           | 0.036<br>(0.252)     | 0.108<br>(0.261)     | 0.084<br>(0.265)      | -0.076<br>(0.306)     | 0.478<br>(0.472)      |
| Perf. tournament     |                      | 0.003<br>(0.025)     | -0.064 *<br>(0.029)   | -0.054<br>(0.030)     | -0.064 *<br>(0.029)   |
| Delta perf.          |                      | 0.122 ***<br>(0.035) | 0.096 *<br>(0.039)    | 0.103 **<br>(0.038)   | 0.095 *<br>(0.040)    |
| Belief tournament    |                      |                      | -0.522 ***<br>(0.123) | -0.516 ***<br>(0.127) | -0.518 ***<br>(0.124) |
| Risk                 |                      |                      | 0.124<br>(0.074)      | 0.137<br>(0.077)      | 0.130<br>(0.074)      |
| Age                  |                      |                      |                       | 0.026 *<br>(0.012)    |                       |
| Height               |                      |                      |                       | 0.007<br>(0.010)      |                       |
| Student status       |                      |                      |                       | -0.073<br>(0.209)     |                       |
| Income: < 20,000 GBP |                      |                      |                       | 0.442<br>(0.232)      |                       |
| Religion: Religious  |                      |                      |                       | 0.081<br>(0.207)      |                       |
| Religion: Not say    |                      |                      |                       | 0.268<br>(0.485)      |                       |
| Residence: US        |                      |                      |                       | 0.159<br>(0.254)      |                       |
| Residence: UK        |                      |                      |                       | 0.421<br>(0.270)      |                       |
| Residence: Other     |                      |                      |                       | 0.564<br>(0.391)      |                       |
| TCS                  |                      |                      |                       |                       | 0.094<br>(0.139)      |
| STT                  |                      |                      |                       |                       | -0.033<br>(0.033)     |
| Const.               | -0.508 **<br>(0.156) | -0.670 *<br>(0.272)  | 0.823<br>(0.468)      | -1.618<br>(2.000)     | 0.419<br>(0.789)      |
| N                    | 259                  | 259                  | 259                   | 259                   | 259                   |
| Pseudo R2 (McFadden) | 0.001                | 0.059                | 0.129                 | 0.168                 | 0.132                 |
| $H_0$ : Sex          | 0.846                | 0.823                | 0.415                 | 0.214                 | 0.420                 |
| $H_0$ : Gender       | 0.614                | 0.437                | 0.470                 | 0.656                 | 0.527                 |

*Note:* Competition is a binary variable equal to 1 if the participant enters the tournament in Part 4 and 0 otherwise. Delta perf. is the difference in performance between Part 3 (tournament) and Part 2 (piece-rate). Belief tournament is the participants' belief of their performance rank within their group in Part 3, where the value 1 represents the rank with the highest performance. Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .  $H_0$ : Sex reports the  $p$ -values of a joint coefficient test comparing Male (Cismen and Transwomen) with Female (Ciswomen and Transmen).  $H_0$ : Gender reports the  $p$ -values of a joint coefficient test comparing Masculine (Cismen and Transmen) with Feminine (Ciswomen and Transwomen).

**Supplementary Table 16** Probit regression for all treatments. Dependent variable: Competition.

|                                                                     | (1)                  | (2)                  | (3)                   | (4)                   | (5)                   |
|---------------------------------------------------------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
| Ciswomen                                                            | 0.052<br>(0.220)     | 0.167<br>(0.229)     | 0.307<br>(0.255)      | 0.461<br>(0.270)      | 0.280<br>(0.255)      |
| Transmen                                                            | -0.081<br>(0.223)    | 0.008<br>(0.230)     | 0.127<br>(0.241)      | 0.189<br>(0.270)      | 0.634<br>(0.343)      |
| Transwomen                                                          | 0.036<br>(0.252)     | 0.122<br>(0.262)     | 0.078<br>(0.272)      | 0.079<br>(0.287)      | 0.635<br>(0.359)      |
| Treatment: FEMININE                                                 | 0.241<br>(0.218)     | 0.187<br>(0.223)     | 0.129<br>(0.227)      | 0.167<br>(0.241)      | 0.104<br>(0.231)      |
| Treatment: MASCULINE                                                | 0.385<br>(0.217)     | 0.473 *<br>(0.225)   | 0.428<br>(0.232)      | 0.544 *<br>(0.246)    | 0.423<br>(0.234)      |
| FEMININE x Ciswomen                                                 | -0.392<br>(0.313)    | -0.339<br>(0.329)    | -0.318<br>(0.360)     | -0.383<br>(0.365)     | -0.285<br>(0.360)     |
| MASCULINE x Ciswomen                                                | -0.536<br>(0.312)    | -0.678 *<br>(0.323)  | -0.645<br>(0.342)     | -0.755 *<br>(0.348)   | -0.614<br>(0.343)     |
| FEMININE x Transmen                                                 | -0.282<br>(0.313)    | -0.201<br>(0.325)    | -0.107<br>(0.329)     | -0.112<br>(0.340)     | -0.052<br>(0.333)     |
| MASCULINE x Transmen                                                | -0.415<br>(0.313)    | -0.543<br>(0.319)    | -0.405<br>(0.327)     | -0.475<br>(0.341)     | -0.369<br>(0.333)     |
| FEMININE x Transwomen                                               | -0.126<br>(0.347)    | -0.018<br>(0.352)    | 0.187<br>(0.357)      | 0.131<br>(0.366)      | 0.150<br>(0.360)      |
| MASCULINE x Transwomen                                              | -0.552<br>(0.356)    | -0.690<br>(0.366)    | -0.573<br>(0.377)     | -0.651<br>(0.393)     | -0.583<br>(0.379)     |
| Perf. tournament                                                    |                      | -0.008<br>(0.014)    | -0.067 ***<br>(0.016) | -0.066 ***<br>(0.016) | -0.066 ***<br>(0.016) |
| Delta perf.                                                         |                      | 0.136 ***<br>(0.020) | 0.108 ***<br>(0.021)  | 0.114 ***<br>(0.022)  | 0.110 ***<br>(0.021)  |
| Belief tournament                                                   |                      |                      | -0.561 ***<br>(0.071) | -0.557 ***<br>(0.072) | -0.543 ***<br>(0.071) |
| Risk                                                                |                      |                      | 0.150 ***<br>(0.045)  | 0.153 ***<br>(0.046)  | 0.153 ***<br>(0.045)  |
| Const.                                                              | -0.508 **<br>(0.156) | -0.587 **<br>(0.200) | 0.865 **<br>(0.310)   | -1.757<br>(1.255)     | -0.072<br>(0.480)     |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | –                    | –                     | Yes                   | –                     |
| Controls (TCS, STT)                                                 | –                    | –                    | –                     | –                     | Yes                   |
| N                                                                   | 780                  | 780                  | 780                   | 780                   | 780                   |
| Pseudo R2 (McFadden)                                                | 0.013                | 0.082                | 0.161                 | 0.178                 | 0.167                 |
| $H_0$ : FEMININE on Cismen                                          | 0.266                | 0.402                | 0.579                 | 0.478                 | 0.656                 |
| $H_0$ : MASCULINE on Cismen                                         | 0.074                | 0.034                | 0.063                 | 0.021                 | 0.068                 |
| $H_0$ : FEMININE on Ciswomen                                        | 0.495                | 0.508                | 0.432                 | 0.374                 | 0.452                 |
| $H_0$ : MASCULINE on Ciswomen                                       | 0.495                | 0.374                | 0.368                 | 0.387                 | 0.426                 |
| $H_0$ : FEMININE on Transmen                                        | 0.851                | 0.953                | 0.928                 | 0.821                 | 0.832                 |
| $H_0$ : MASCULINE on Transmen                                       | 0.891                | 0.761                | 0.922                 | 0.779                 | 0.828                 |
| $H_0$ : FEMININE on Transwomen                                      | 0.669                | 0.541                | 0.274                 | 0.310                 | 0.386                 |
| $H_0$ : MASCULINE on Transwomen                                     | 0.549                | 0.449                | 0.627                 | 0.724                 | 0.591                 |

*Note:* Competition is a binary variable equal to 1 if the participant enters the tournament in Part 4 and 0 otherwise. Delta perf. is the difference in performance between Part 3 (tournament) and Part 2 (piece-rate). Belief tournament is the participants' belief of their performance rank within their group in Part 3, where the value 1 represents the rank with the highest performance. Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on Ciswomen" tests the effect of the treatment (FEMININE) on the subject group (Ciswomen).

## 5.4 Cohen's *d*

**Supplementary Table 17** Cohen's *d* analysis: Competitiveness

|                           | Cohen's <i>d</i> | Cohen's <i>d</i> | CI.95-Lower | CI.95-Upper | t-statistic | p-value |
|---------------------------|------------------|------------------|-------------|-------------|-------------|---------|
| <b>Within NEUTRAL</b>     |                  |                  |             |             |             |         |
| Female vs. Male           | 0.021            | -0.021           | -0.266      | 0.224       | -0.169      | 0.866   |
| Feminine vs. Masculine    | 0.065            | 0.065            | -0.180      | 0.310       | 0.526       | 0.599   |
| Cismen vs. Ciswomen       | 0.040            | -0.040           | -0.367      | 0.288       | -0.237      | 0.813   |
| Cismen vs. Transmen       | 0.061            | 0.061            | -0.266      | 0.388       | 0.367       | 0.714   |
| Cismen vs. Transwomen     | 0.027            | -0.027           | -0.402      | 0.348       | -0.147      | 0.883   |
| Ciswomen vs. Transmen     | 0.101            | 0.101            | -0.228      | 0.429       | 0.603       | 0.548   |
| Ciswomen vs. Transwomen   | 0.012            | 0.012            | -0.364      | 0.388       | 0.066       | 0.947   |
| Transmen vs. Transwomen   | 0.089            | -0.089           | -0.464      | 0.287       | -0.478      | 0.633   |
| <b>Between treatments</b> |                  |                  |             |             |             |         |
| NEUTRAL vs. FEMININE      | 0.031            | -0.031           | -0.203      | 0.141       | -0.354      | 0.723   |
| Cismen                    | 0.187            | -0.187           | -0.516      | 0.143       | -1.118      | 0.265   |
| Ciswomen                  | 0.115            | 0.115            | -0.216      | 0.445       | 0.683       | 0.496   |
| Transmen                  | 0.031            | 0.031            | -0.296      | 0.358       | 0.188       | 0.852   |
| Transwomen                | 0.088            | -0.088           | -0.493      | 0.318       | -0.428      | 0.669   |
| NEUTRAL vs. MASCULINE     | 0.028            | -0.028           | -0.200      | 0.145       | -0.315      | 0.753   |
| Cismen                    | 0.303            | -0.303           | -0.633      | 0.030       | -1.811      | 0.072   |
| Ciswomen                  | 0.115            | 0.115            | -0.216      | 0.445       | 0.683       | 0.496   |
| Transmen                  | 0.023            | 0.023            | -0.305      | 0.351       | 0.137       | 0.892   |
| Transwomen                | 0.127            | 0.127            | -0.288      | 0.540       | 0.601       | 0.549   |

## 6 Payoffs (Part 4)

### 6.1 Regressions

**Supplementary Table 18** OLS regression for NEUTRAL.  
Dependent variable: Payoff in Part 4.

|                      | (1)                  | (2)                  | (3)               |
|----------------------|----------------------|----------------------|-------------------|
| Ciswomen             | -0.156<br>(1.183)    | 1.315<br>(1.326)     | -0.267<br>(1.177) |
| Transmen             | 0.951<br>(1.256)     | 2.316<br>(1.358)     | 3.377<br>(2.170)  |
| Transwomen           | -1.071<br>(1.244)    | -0.560<br>(1.278)    | 1.571<br>(2.215)  |
| Age                  |                      | -0.040<br>(0.047)    |                   |
| Height               |                      | 0.113 **<br>(0.041)  |                   |
| Student status       |                      | 3.479 ***<br>(1.017) |                   |
| Income: < 20,000 GBP |                      | 0.402<br>(0.922)     |                   |
| Religion: Religious  |                      | -2.336 *<br>(0.953)  |                   |
| Religion: Not say    |                      | -3.673 **<br>(1.247) |                   |
| Residence: US        |                      | 1.421<br>(1.212)     |                   |
| Residence: UK        |                      | 1.468<br>(1.176)     |                   |
| Residence: Other     |                      | -1.269<br>(1.576)    |                   |
| TCS                  |                      |                      | 1.036<br>(0.634)  |
| STT                  |                      |                      | -0.099<br>(0.153) |
| Const.               | 5.389 ***<br>(0.851) | -15.595 *<br>(7.668) | 0.895<br>(2.853)  |
| N                    | 259                  | 259                  | 259               |
| Adj. R2              | -0.003               | 0.073                | -0.002            |
| $H_0$ : Sex          | 0.289                | 0.056                | 0.366             |
| $H_0$ : Gender       | 0.215                | 0.381                | 0.234             |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .  $H_0$ : Sex reports the  $p$ -values of a joint coefficient test comparing Male (Cismen and Transwomen) with Female (Ciswomen and Transmen).  $H_0$ : Gender reports the  $p$ -values of a joint coefficient test comparing Masculine (Cismen and Transmen) with Feminine (Ciswomen and Transwomen).

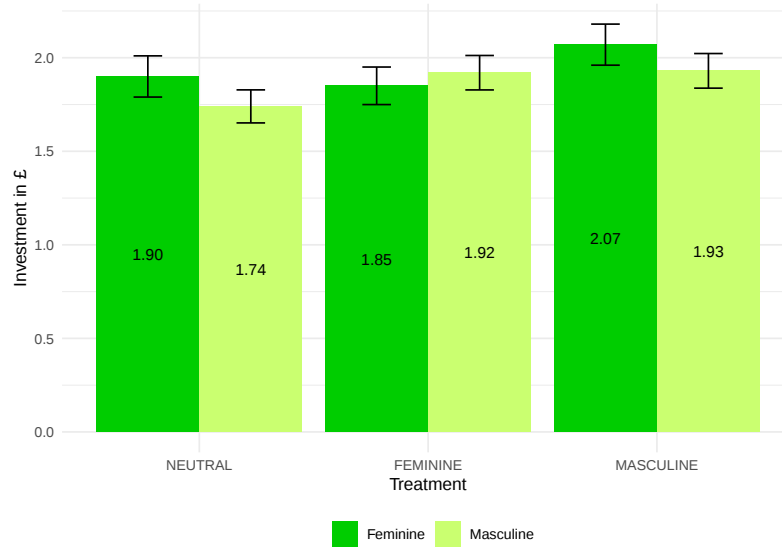
**Supplementary Table 19** OLS regression for all treatments. Dependent variable: Payoff in Part 4.

|                                                                     | (1)                  | (2)                 | (3)                 |
|---------------------------------------------------------------------|----------------------|---------------------|---------------------|
| Ciswomen                                                            | -0.156<br>(1.183)    | 0.922<br>(1.245)    | -0.225<br>(1.178)   |
| Transmen                                                            | 0.951<br>(1.256)     | 1.785<br>(1.279)    | 1.993<br>(1.614)    |
| Transwomen                                                          | -1.071<br>(1.244)    | -0.976<br>(1.250)   | 0.193<br>(1.643)    |
| Treatment: FEMININE                                                 | 2.660<br>(1.516)     | 2.622<br>(1.483)    | 2.632<br>(1.525)    |
| Treatment: MASCULINE                                                | 0.442<br>(1.331)     | 0.354<br>(1.343)    | 0.435<br>(1.328)    |
| FEMININE x Ciswomen                                                 | -2.293<br>(1.925)    | -2.286<br>(1.892)   | -2.207<br>(1.931)   |
| MASCULINE x Ciswomen                                                | -1.096<br>(1.700)    | -1.243<br>(1.717)   | -1.003<br>(1.692)   |
| FEMININE x Transmen                                                 | -4.501 *<br>(1.905)  | -4.672 *<br>(1.868) | -4.383 *<br>(1.909) |
| MASCULINE x Transmen                                                | -0.818<br>(1.859)    | -0.744<br>(1.850)   | -0.781<br>(1.849)   |
| FEMININE x Transwomen                                               | -1.689<br>(2.111)    | -1.536<br>(2.116)   | -1.664<br>(2.108)   |
| MASCULINE x Transwomen                                              | -0.075<br>(1.813)    | -0.088<br>(1.770)   | -0.054<br>(1.827)   |
| Const.                                                              | 5.389 ***<br>(0.851) | -8.821<br>(5.310)   | 2.454<br>(1.658)    |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | Yes                 | –                   |
| Controls (TCS, STT)                                                 | –                    | –                   | Yes                 |
| N                                                                   | 780                  | 780                 | 780                 |
| Adj. R2                                                             | 0.003                | 0.034               | 0.005               |
| $H_0$ : FEMININE on Cismen                                          | 0.080                | 0.077               | 0.085               |
| $H_0$ : MASCULINE on Cismen                                         | 0.740                | 0.792               | 0.743               |
| $H_0$ : FEMININE on Ciswomen                                        | 0.757                | 0.773               | 0.719               |
| $H_0$ : MASCULINE on Ciswomen                                       | 0.536                | 0.411               | 0.589               |
| $H_0$ : FEMININE on Transmen                                        | 0.111                | 0.070               | 0.129               |
| $H_0$ : MASCULINE on Transmen                                       | 0.772                | 0.760               | 0.788               |
| $H_0$ : FEMININE on Transwomen                                      | 0.509                | 0.472               | 0.514               |
| $H_0$ : MASCULINE on Transwomen                                     | 0.766                | 0.822               | 0.762               |

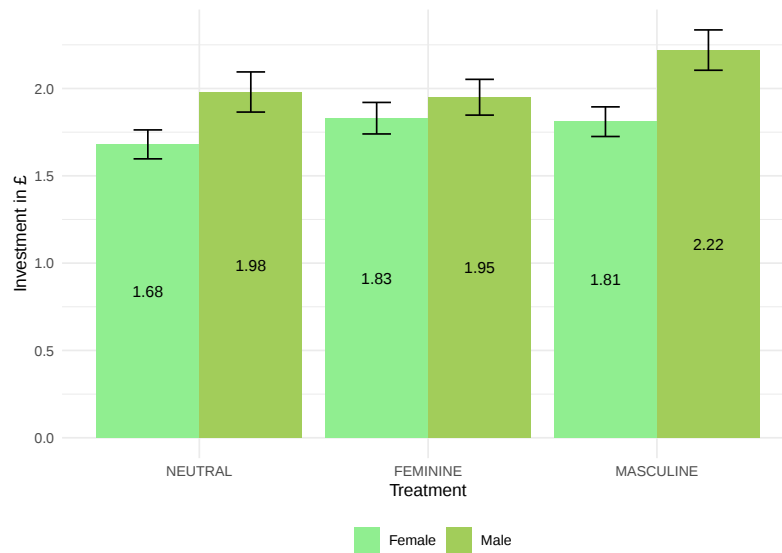
*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on Ciswomen" tests the effect of the treatment (FEMININE) on the subject group (Ciswomen).

## 7 Risk (Part 5)

### 7.1 Bar graphs



**Supplementary Figure 4** Investment into the risky lottery in Part 5 by treatments and gender ( $n = 780$ ). The bars show the average investment rate, and the error bars represent the standard error of the mean.



**Supplementary Figure 5** Investment into the risky lottery in Part 5 by treatments and sex ( $n = 780$ ). The bars show the average investment rate, and the error bars represent the standard error of the mean.

## 7.2 Non-parametric tests

**Supplementary Table 20** Investment into the risky lottery across treatments and subject groups.

| Panel A: Risk across treatments                           |                |          |             |            |         |
|-----------------------------------------------------------|----------------|----------|-------------|------------|---------|
| Subject groups                                            | Treatment      |          |             | p-value    |         |
|                                                           | NEUTRAL        | FEMININE | MASCULINE   |            |         |
| Cismen                                                    | 1.814          | 2.021    | 2.208       | 0.119      |         |
| Ciswomen                                                  | 1.690          | 1.852    | 1.972       | 0.446      |         |
| Transmen                                                  | 1.673          | 1.816    | 1.655       | 0.660      |         |
| Transwomen                                                | 2.244          | 1.840    | 2.227       | 0.357      |         |
|                                                           |                |          |             |            |         |
| Panel B: Risk across subject groups                       |                |          |             |            |         |
| Treatment                                                 | Subject groups |          |             |            | p-value |
|                                                           | Cismen         | Ciswomen | Transmen    | Transwomen |         |
| NEUTRAL                                                   | 1.814          | 1.690    | 1.673       | 2.244      | 0.194   |
| FEMININE                                                  | 2.021          | 1.852    | 1.816       | 1.840      | 0.715   |
| MASCULINE                                                 | 2.208          | 1.972    | 1.655       | 2.227      | 0.030   |
|                                                           |                |          |             |            |         |
| Panel C: Risk across groups within NEUTRAL                |                |          |             |            |         |
|                                                           | Group 1        |          | Group 2     |            | p-value |
|                                                           | Subjects       |          | Subjects    |            |         |
| Case 1                                                    | Cisgender      | 1.753    | Transgender | 1.890      | 0.461   |
| Case 2                                                    | Cismen         | 1.814    | Ciswomen    | 1.690      | 0.704   |
| Case 3                                                    | Transmen       | 1.673    | Transwomen  | 2.244      | 0.048   |
| Case 4                                                    | Female         | 1.681    | Male        | 1.977      | 0.130   |
| Case 5                                                    | Feminine       | 1.902    | Masculine   | 1.743      | 0.355   |
|                                                           |                |          |             |            |         |
| Panel D: Risk in NEUTRAL compared to the other treatments |                |          |             |            |         |
| Subject groups                                            | NEUTRAL        | FEMININE |             | MASCULINE  |         |
|                                                           |                | p-value  |             | p-value    |         |
| Cismen                                                    | 1.814          | 2.021    | 0.262       | 2.208      | 0.038   |
| Ciswomen                                                  | 1.690          | 1.852    | 0.550       | 1.972      | 0.208   |
| Transmen                                                  | 1.673          | 1.816    | 0.479       | 1.655      | 0.881   |
| Transwomen                                                | 2.244          | 1.840    | 0.206       | 2.227      | 0.927   |

*Note:* The column p-value reports the results of the tests performed column-wise. For continuous variables, we conducted Mann-Whitney U tests for two groups and Kruskal-Wallis tests for more than two groups.

### 7.3 Regressions

**Supplementary Table 21** OLS regression for NEUTRAL.  
Dependent variable: Risk.

|                      | (1)                  | (2)                | (3)                  |
|----------------------|----------------------|--------------------|----------------------|
| Ciswomen             | -0.124<br>(0.179)    | -0.164<br>(0.218)  | -0.109<br>(0.177)    |
| Transmen             | -0.141<br>(0.177)    | -0.221<br>(0.212)  | -0.295<br>(0.396)    |
| Transwomen           | 0.430<br>(0.245)     | 0.316<br>(0.258)   | 0.216<br>(0.412)     |
| Age                  |                      | -0.008<br>(0.010)  |                      |
| Height               |                      | -0.001<br>(0.008)  |                      |
| Student status       |                      | 0.064<br>(0.161)   |                      |
| Income: < 20,000 GBP |                      | -0.125<br>(0.162)  |                      |
| Religion: Religious  |                      | -0.045<br>(0.160)  |                      |
| Religion: Not say    |                      | -0.502<br>(0.414)  |                      |
| Residence: US        |                      | 0.052<br>(0.202)   |                      |
| Residence: UK        |                      | 0.145<br>(0.194)   |                      |
| Residence: Other     |                      | 0.618 *<br>(0.309) |                      |
| TCS                  |                      |                    | -0.143<br>(0.105)    |
| STT                  |                      |                    | -0.009<br>(0.029)    |
| Const.               | 1.814 ***<br>(0.133) | 2.273<br>(1.565)   | 2.463 ***<br>(0.499) |
| N                    | 259                  | 259                | 259                  |
| Adj. R2              | 0.022                | 0.018              | 0.024                |
| $H_0$ : Sex          | 0.020                | 0.042              | 0.037                |
| $H_0$ : Gender       | 0.132                | 0.228              | 0.183                |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .  $H_0$ : Sex reports the  $p$ -values of a joint coefficient test comparing Male (Cismen and Transwomen) with Female (Ciswomen and Transmen).  $H_0$ : Gender reports the  $p$ -values of a joint coefficient test comparing Masculine (Cismen and Transmen) with Feminine (Ciswomen and Transwomen).

**Supplementary Table 22** OLS regression for all treatments. Dependent variable: Risk.

|                                                                     | (1)                  | (2)                | (3)                  |
|---------------------------------------------------------------------|----------------------|--------------------|----------------------|
| Ciswomen                                                            | -0.124<br>(0.179)    | -0.123<br>(0.195)  | -0.124<br>(0.179)    |
| Transmen                                                            | -0.141<br>(0.177)    | -0.154<br>(0.189)  | -0.273<br>(0.286)    |
| Transwomen                                                          | 0.430<br>(0.245)     | 0.387<br>(0.248)   | 0.325<br>(0.324)     |
| Treatment: FEMININE                                                 | 0.207<br>(0.192)     | 0.210<br>(0.193)   | 0.218<br>(0.192)     |
| Treatment: MASCULINE                                                | 0.394 *<br>(0.191)   | 0.386 *<br>(0.193) | 0.393 *<br>(0.191)   |
| FEMININE x Ciswomen                                                 | -0.045<br>(0.263)    | -0.048<br>(0.263)  | -0.052<br>(0.263)    |
| MASCULINE x Ciswomen                                                | -0.112<br>(0.256)    | -0.118<br>(0.259)  | -0.106<br>(0.255)    |
| FEMININE x Transmen                                                 | -0.064<br>(0.255)    | -0.074<br>(0.257)  | -0.073<br>(0.255)    |
| MASCULINE x Transmen                                                | -0.412<br>(0.252)    | -0.409<br>(0.253)  | -0.410<br>(0.252)    |
| FEMININE x Transwomen                                               | -0.611<br>(0.319)    | -0.593<br>(0.320)  | -0.585<br>(0.322)    |
| MASCULINE x Transwomen                                              | -0.412<br>(0.348)    | -0.380<br>(0.350)  | -0.403<br>(0.349)    |
| Const.                                                              | 1.814 ***<br>(0.133) | 1.605<br>(0.913)   | 1.762 ***<br>(0.308) |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | Yes                | –                    |
| Controls (TCS, STT)                                                 | –                    | –                  | Yes                  |
| N                                                                   | 780                  | 780                | 780                  |
| Adj. R2                                                             | 0.018                | 0.013              | 0.017                |
| $H_0$ : FEMININE on Cismen                                          | 0.282                | 0.278              | 0.257                |
| $H_0$ : MASCULINE on Cismen                                         | 0.039                | 0.046              | 0.040                |
| $H_0$ : FEMININE on Ciswomen                                        | 0.368                | 0.370              | 0.356                |
| $H_0$ : MASCULINE on Ciswomen                                       | 0.097                | 0.125              | 0.092                |
| $H_0$ : FEMININE on Transmen                                        | 0.395                | 0.426              | 0.388                |
| $H_0$ : MASCULINE on Transmen                                       | 0.915                | 0.889              | 0.918                |
| $H_0$ : FEMININE on Transwomen                                      | 0.113                | 0.132              | 0.156                |
| $H_0$ : MASCULINE on Transwomen                                     | 0.951                | 0.984              | 0.975                |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, “ $H_0$ : FEMININE on Ciswomen” tests the effect of the treatment (FEMININE) on the subject group (Ciswomen).

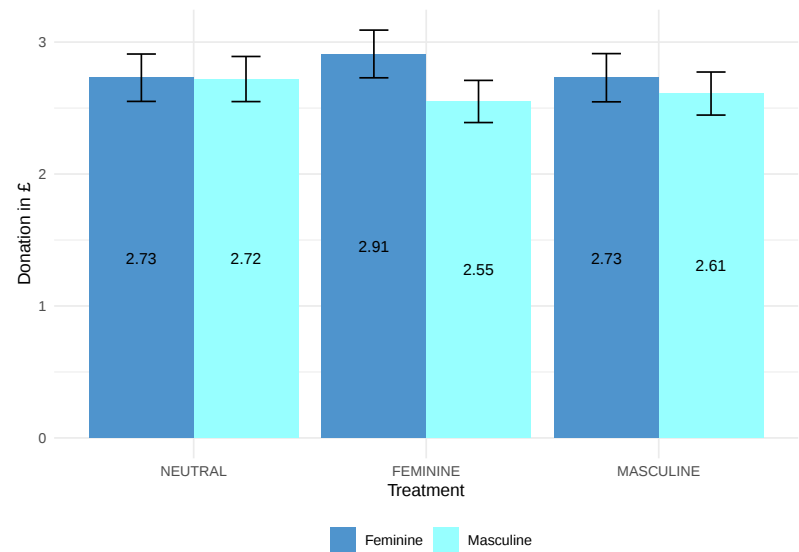
## 7.4 Cohen's $d$

**Supplementary Table 23** Cohen's  $d$  analysis: Risk

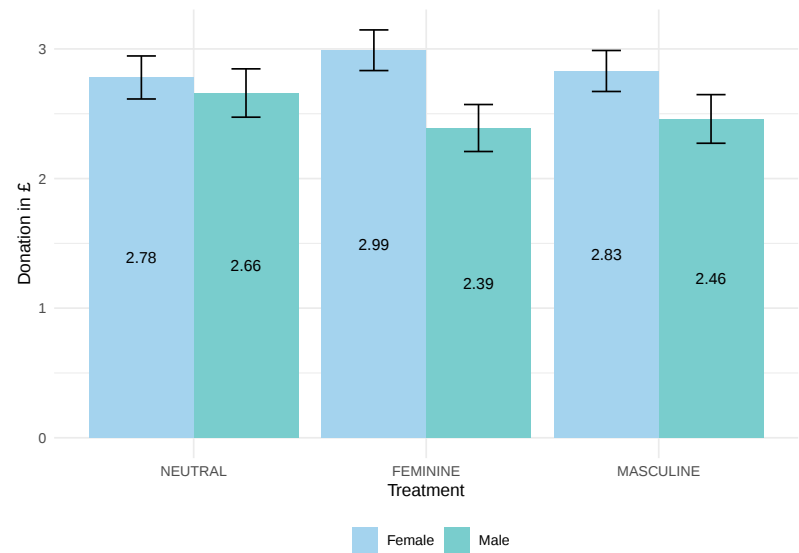
|                           | Cohen's $d$ | Cohen's $d$ | CI.95-Lower | CI.95-Upper | t-statistic | p-value |
|---------------------------|-------------|-------------|-------------|-------------|-------------|---------|
| <b>Within NEUTRAL</b>     |             |             |             |             |             |         |
| Female vs. Male           | 0.268       | -0.268      | -0.515      | -0.020      | -2.156      | 0.032   |
| Feminine vs. Masculine    | 0.143       | 0.143       | -0.103      | 0.388       | 1.150       | 0.251   |
| Cismen vs. Ciswomen       | 0.117       | 0.117       | -0.212      | 0.445       | 0.698       | 0.486   |
| Cismen vs. Transmen       | 0.134       | 0.134       | -0.194      | 0.461       | 0.804       | 0.423   |
| Cismen vs. Transwomen     | 0.354       | -0.354      | -0.735      | 0.030       | -1.908      | 0.059   |
| Ciswomen vs. Transmen     | 0.017       | 0.017       | -0.310      | 0.345       | 0.104       | 0.917   |
| Ciswomen vs. Transwomen   | 0.484       | -0.484      | -0.871      | -0.092      | -2.596      | 0.011   |
| Transmen vs. Transwomen   | 0.504       | -0.504      | -0.891      | -0.111      | -2.712      | 0.008   |
| <b>Between treatments</b> |             |             |             |             |             |         |
| NEUTRAL vs. FEMININE      | 0.065       | -0.065      | -0.236      | 0.107       | -0.740      | 0.459   |
| Cismen                    | 0.182       | -0.182      | -0.510      | 0.148       | -1.086      | 0.279   |
| Ciswomen                  | 0.153       | -0.153      | -0.484      | 0.179       | -0.909      | 0.365   |
| Transmen                  | 0.143       | -0.143      | -0.470      | 0.185       | -0.857      | 0.393   |
| Transwomen                | 0.335       | 0.335       | -0.077      | 0.744       | 1.626       | 0.107   |
| NEUTRAL vs. MASCULINE     | 0.161       | -0.161      | -0.334      | 0.012       | -1.833      | 0.067   |
| Cismen                    | 0.348       | -0.348      | -0.680      | -0.014      | -2.080      | 0.039   |
| Ciswomen                  | 0.282       | -0.282      | -0.614      | 0.053       | -1.673      | 0.097   |
| Transmen                  | 0.018       | 0.018       | -0.310      | 0.346       | 0.107       | 0.915   |
| Transwomen                | 0.013       | 0.013       | -0.400      | 0.426       | 0.062       | 0.951   |

# 8 Altruism (Part 6)

## 8.1 Bar graphs



**Supplementary Figure 6** Donation in Part 6 by treatments and gender ( $n = 780$ ). The average donations are indicated by the bars and the error bars represent the standard error of the mean.



**Supplementary Figure 7** Donation in Part 6 by treatments and sex ( $n = 780$ ). The average donations are indicated by the bars and the error bars represent the standard error of the mean.

## 8.2 Non-parametric tests

**Supplementary Table 24** Donations across treatments and subject groups.

| Panel A: Donations across treatments |           |          |           |         |  |
|--------------------------------------|-----------|----------|-----------|---------|--|
| Subject groups                       | Treatment |          |           | p-value |  |
|                                      | NEUTRAL   | FEMININE | MASCULINE |         |  |
| Cismen                               | 2.685     | 2.265    | 2.423     | 0.582   |  |
| Ciswomen                             | 2.803     | 3.161    | 2.864     | 0.478   |  |
| Transmen                             | 2.762     | 2.822    | 2.792     | 0.999   |  |
| Transwomen                           | 2.615     | 2.556    | 2.525     | 0.999   |  |

| Panel B: Donations across subject groups |                |          |          |            |         |
|------------------------------------------|----------------|----------|----------|------------|---------|
| Treatment                                | Subject groups |          |          |            | p-value |
|                                          | Cismen         | Ciswomen | Transmen | Transwomen |         |
| NEUTRAL                                  | 2.685          | 2.803    | 2.762    | 2.615      | 0.933   |
| FEMININE                                 | 2.265          | 3.161    | 2.822    | 2.556      | 0.073   |
| MASCULINE                                | 2.423          | 2.864    | 2.792    | 2.525      | 0.540   |

| Panel C: Donations across groups within NEUTRAL |           |       |             |       |         |
|-------------------------------------------------|-----------|-------|-------------|-------|---------|
|                                                 | Group 1   |       | Group 2     |       | p-value |
|                                                 | Subjects  |       | Subjects    |       |         |
| Case 1                                          | Cisgender | 2.743 | Transgender | 2.706 | 0.871   |
| Case 2                                          | Cismen    | 2.685 | Ciswomen    | 2.803 | 0.759   |
| Case 3                                          | Transmen  | 2.762 | Transwomen  | 2.615 | 0.583   |
| Case 4                                          | Female    | 2.782 | Male        | 2.658 | 0.564   |
| Case 5                                          | Feminine  | 2.731 | Masculine   | 2.723 | 0.914   |

| Panel D: Donations in NEUTRAL compared to the other treatments |         |          |       |           |       |
|----------------------------------------------------------------|---------|----------|-------|-----------|-------|
| Subject groups                                                 | NEUTRAL | FEMININE |       | MASCULINE |       |
|                                                                |         | p-value  |       | p-value   |       |
| Cismen                                                         | 2.685   | 2.265    | 0.322 | 2.423     | 0.454 |
| Ciswomen                                                       | 2.803   | 3.161    | 0.260 | 2.864     | 0.863 |
| Transmen                                                       | 2.762   | 2.822    | 0.982 | 2.792     | 0.977 |
| Transwomen                                                     | 2.615   | 2.556    | 0.948 | 2.525     | 0.987 |

*Note:* The columns *p*-value report the results of the tests performed column-wise. For continuous variables, we conducted Mann-Whitney U tests for two groups and Kruskal-Wallis tests for more than two groups.

### 8.3 Regressions

**Supplementary Table 25** OLS regression for NEUTRAL.  
Dependent variable: Donations.

|                      | (1)                  | (2)                 | (3)                  |
|----------------------|----------------------|---------------------|----------------------|
| Ciswomen             | 0.118<br>(0.335)     | 0.188<br>(0.403)    | 0.128<br>(0.337)     |
| Transmen             | 0.077<br>(0.343)     | 0.239<br>(0.387)    | -0.162<br>(0.646)    |
| Transwomen           | -0.070<br>(0.378)    | 0.103<br>(0.409)    | -0.324<br>(0.647)    |
| Age                  |                      | 0.040 *             |                      |
|                      |                      | (0.016)             |                      |
| Height               |                      | 0.002<br>(0.013)    |                      |
| Student status       |                      | 0.713 **<br>(0.274) |                      |
| Income: < 20,000 GBP |                      | 0.025<br>(0.279)    |                      |
| Religion: Religious  |                      | 0.800 **<br>(0.274) |                      |
| Religion: Not say    |                      | 0.701<br>(0.736)    |                      |
| Residence: US        |                      | -0.789 *<br>(0.324) |                      |
| Residence: UK        |                      | -0.470<br>(0.335)   |                      |
| Residence: Other     |                      | -0.391<br>(0.538)   |                      |
| TCS                  |                      |                     | -0.091<br>(0.199)    |
| STT                  |                      |                     | 0.012<br>(0.046)     |
| Const.               | 2.685 ***<br>(0.244) | 1.123<br>(2.413)    | 3.077 ***<br>(0.909) |
| N                    | 259                  | 259                 | 259                  |
| Adj. R2              | -0.011               | 0.044               | -0.018               |
| <hr/>                |                      |                     |                      |
| $H_0$ : Sex          | 0.600                | 0.600               | 0.580                |
| $H_0$ : Gender       | 0.955                | 0.920               | 0.948                |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .  $H_0$ : Sex reports the  $p$ -values of a joint coefficient test comparing Male (Cismen and Transwomen) with Female (Ciswomen and Transmen).  $H_0$ : Gender reports the  $p$ -values of a joint coefficient test comparing Masculine (Cismen and Transmen) with Feminine (Ciswomen and Transwomen).

**Supplementary Table 26** OLS regression for all treatments. Dependent variable: Donations.

|                                                                     | (1)                  | (2)               | (3)                  |
|---------------------------------------------------------------------|----------------------|-------------------|----------------------|
| Ciswomen                                                            | 0.118<br>(0.335)     | 0.175<br>(0.358)  | 0.128<br>(0.336)     |
| Transmen                                                            | 0.077<br>(0.343)     | 0.208<br>(0.351)  | -0.036<br>(0.465)    |
| Transwomen                                                          | -0.070<br>(0.378)    | -0.004<br>(0.386) | -0.222<br>(0.477)    |
| Treatment: FEMININE                                                 | -0.420<br>(0.338)    | -0.377<br>(0.343) | -0.419<br>(0.338)    |
| Treatment: MASCULINE                                                | -0.262<br>(0.340)    | -0.229<br>(0.346) | -0.261<br>(0.340)    |
| FEMININE x Ciswomen                                                 | 0.778<br>(0.468)     | 0.745<br>(0.471)  | 0.767<br>(0.469)     |
| MASCULINE x Ciswomen                                                | 0.323<br>(0.468)     | 0.355<br>(0.470)  | 0.308<br>(0.468)     |
| FEMININE x Transmen                                                 | 0.480<br>(0.468)     | 0.410<br>(0.458)  | 0.465<br>(0.468)     |
| MASCULINE x Transmen                                                | 0.292<br>(0.474)     | 0.270<br>(0.466)  | 0.287<br>(0.474)     |
| FEMININE x Transwomen                                               | 0.361<br>(0.530)     | 0.444<br>(0.533)  | 0.350<br>(0.529)     |
| MASCULINE x Transwomen                                              | 0.172<br>(0.543)     | 0.191<br>(0.547)  | 0.166<br>(0.545)     |
| Const.                                                              | 2.685 ***<br>(0.244) | 1.806<br>(1.435)  | 3.117 ***<br>(0.516) |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | Yes               | –                    |
| Controls (TCS, STT)                                                 | –                    | –                 | Yes                  |
| N                                                                   | 780                  | 780               | 780                  |
| Adj. R2                                                             | -0.000               | 0.023             | -0.002               |
| $H_0$ : FEMININE on Cismen                                          | 0.214                | 0.272             | 0.216                |
| $H_0$ : MASCULINE on Cismen                                         | 0.441                | 0.509             | 0.444                |
| $H_0$ : FEMININE on Ciswomen                                        | 0.270                | 0.256             | 0.282                |
| $H_0$ : MASCULINE on Ciswomen                                       | 0.848                | 0.693             | 0.882                |
| $H_0$ : FEMININE on Transmen                                        | 0.854                | 0.914             | 0.886                |
| $H_0$ : MASCULINE on Transmen                                       | 0.926                | 0.895             | 0.937                |
| $H_0$ : FEMININE on Transwomen                                      | 0.885                | 0.870             | 0.867                |
| $H_0$ : MASCULINE on Transwomen                                     | 0.832                | 0.930             | 0.825                |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, “ $H_0$ : FEMININE on Ciswomen” tests the effect of the treatment (FEMININE) on the subject group (Ciswomen).

## 8.4 Cohen's $d$

**Supplementary Table 27** Cohen's  $d$  analysis: Altruism

|                           | Cohen's $d$ | Cohen's $d$ | CI.95-Lower | CI.95-Upper | t-statistic | p-value |
|---------------------------|-------------|-------------|-------------|-------------|-------------|---------|
| <b>Within NEUTRAL</b>     |             |             |             |             |             |         |
| Female vs. Male           | 0.062       | 0.062       | -0.183      | 0.307       | 0.502       | 0.616   |
| Feminine vs. Masculine    | 0.004       | 0.004       | -0.241      | 0.249       | 0.031       | 0.975   |
| Cismen vs. Ciswomen       | 0.059       | -0.059      | -0.387      | 0.269       | -0.355      | 0.723   |
| Cismen vs. Transmen       | 0.038       | -0.038      | -0.364      | 0.289       | -0.226      | 0.821   |
| Cismen vs. Transwomen     | 0.035       | 0.035       | -0.340      | 0.410       | 0.188       | 0.851   |
| Ciswomen vs. Transmen     | 0.021       | 0.021       | -0.307      | 0.348       | 0.124       | 0.902   |
| Ciswomen vs. Transwomen   | 0.098       | 0.098       | -0.279      | 0.474       | 0.526       | 0.600   |
| Transmen vs. Transwomen   | 0.074       | 0.074       | -0.302      | 0.449       | 0.399       | 0.691   |
| <b>Between treatments</b> |             |             |             |             |             |         |
| NEUTRAL vs. FEMININE      | 0.008       | 0.008       | -0.164      | 0.180       | 0.091       | 0.928   |
| Cismen                    | 0.210       | 0.210       | -0.121      | 0.538       | 1.253       | 0.212   |
| Ciswomen                  | 0.188       | -0.188      | -0.518      | 0.145       | -1.113      | 0.267   |
| Transmen                  | 0.031       | -0.031      | -0.358      | 0.296       | -0.186      | 0.853   |
| Transwomen                | 0.030       | 0.030       | -0.375      | 0.435       | 0.145       | 0.885   |
| NEUTRAL vs. MASCULINE     | 0.033       | 0.033       | -0.140      | 0.205       | 0.371       | 0.711   |
| Cismen                    | 0.130       | 0.130       | -0.199      | 0.458       | 0.776       | 0.439   |
| Ciswomen                  | 0.032       | -0.032      | -0.363      | 0.298       | -0.193      | 0.847   |
| Transmen                  | 0.016       | -0.016      | -0.343      | 0.312       | -0.093      | 0.926   |
| Transwomen                | 0.045       | 0.045       | -0.369      | 0.458       | 0.214       | 0.831   |

## 9 Continuous gender measure (BEM)

### 9.1 Competitiveness

**Supplementary Table 28** Probit regression for NEUTRAL. Dependent variable: Competition. Gender is measured on a continuous scale.

|                      | (1)                  | (2)                  | (3)                   | (4)                   | (5)                   |
|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
| BEM score: Feminine  | 0.010<br>(0.011)     | 0.014<br>(0.011)     | 0.016<br>(0.012)      | 0.017<br>(0.013)      | 0.016<br>(0.012)      |
| BEM score: Masculine | 0.022<br>(0.012)     | 0.019<br>(0.012)     | 0.015<br>(0.012)      | 0.016<br>(0.013)      | 0.015<br>(0.013)      |
| Perf. tournament     |                      | 0.004<br>(0.024)     | -0.064 *<br>(0.028)   | -0.057<br>(0.029)     | -0.063 *<br>(0.029)   |
| Delta perf.          |                      | 0.121 ***<br>(0.034) | 0.097 *<br>(0.038)    | 0.108 **<br>(0.038)   | 0.097 *<br>(0.039)    |
| Belief tournament    |                      |                      | -0.500 ***<br>(0.123) | -0.484 ***<br>(0.126) | -0.501 ***<br>(0.122) |
| Risk                 |                      |                      | 0.129<br>(0.077)      | 0.131<br>(0.079)      | 0.129<br>(0.077)      |
| Age                  |                      |                      |                       | 0.023<br>(0.012)      |                       |
| Height               |                      |                      |                       | -0.000<br>(0.009)     |                       |
| Student status       |                      |                      |                       | -0.114<br>(0.204)     |                       |
| Income: < 20,000 GBP |                      |                      |                       | 0.464 *<br>(0.231)    |                       |
| Religion: Religious  |                      |                      |                       | -0.001<br>(0.212)     |                       |
| Religion: Not say    |                      |                      |                       | 0.227<br>(0.471)      |                       |
| Residence: US        |                      |                      |                       | 0.094<br>(0.255)      |                       |
| Residence: UK        |                      |                      |                       | 0.391<br>(0.260)      |                       |
| Residence: Other     |                      |                      |                       | 0.495<br>(0.380)      |                       |
| TCS                  |                      |                      |                       |                       | -0.012<br>(0.096)     |
| STT                  |                      |                      |                       |                       | -0.011<br>(0.022)     |
| Const.               | -1.677 **<br>(0.585) | -1.847 **<br>(0.651) | -0.315<br>(0.803)     | -1.493<br>(1.759)     | -0.224<br>(0.889)     |
| N                    | 259                  | 259                  | 259                   | 259                   | 259                   |
| Pseudo R2 (McFadden) | 0.018                | 0.074                | 0.139                 | 0.175                 | 0.140                 |

*Note:* Competition is a binary variable equal to 1 if the participant enters the tournament in Part 4 and 0 otherwise. Delta perf. is the difference in performance between Part 3 (tournament) and Part 2 (piece-rate). Belief tournament is the participants' belief of their performance rank within their group in Part 3, where the value 1 represents the rank with the highest performance. Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious person, who earns more than 20K GBP, and lives in continental Europe. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

**Supplementary Table 29** Probit regression for all treatments. Dependent variable: Competition.  
Gender is measured on a continuous scale.

|                                                                     | (1)                  | (2)                  | (3)                   | (4)                   | (5)                   |
|---------------------------------------------------------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
| BEM score: Feminine                                                 | 0.010<br>(0.011)     | 0.014<br>(0.011)     | 0.017<br>(0.012)      | 0.013<br>(0.012)      | 0.017<br>(0.012)      |
| BEM score: Masculine                                                | 0.022<br>(0.012)     | 0.018<br>(0.012)     | 0.014<br>(0.013)      | 0.014<br>(0.013)      | 0.012<br>(0.013)      |
| FEMININE x BEM score: Masculine                                     | 0.002<br>(0.016)     | 0.003<br>(0.016)     | -0.001<br>(0.017)     | 0.000<br>(0.017)      | -0.001<br>(0.017)     |
| MASCULINE x BEM score: Masculine                                    | 0.001<br>(0.016)     | 0.004<br>(0.016)     | 0.003<br>(0.017)      | 0.007<br>(0.017)      | 0.004<br>(0.017)      |
| FEMININE x BEM score: Feminine                                      | -0.017<br>(0.014)    | -0.018<br>(0.014)    | -0.026<br>(0.015)     | -0.022<br>(0.016)     | -0.027<br>(0.016)     |
| MASCULINE x BEM score: Feminine                                     | -0.015<br>(0.015)    | -0.021<br>(0.015)    | -0.029<br>(0.016)     | -0.029<br>(0.016)     | -0.031<br>(0.016)     |
| Treatment: FEMININE                                                 | 0.652<br>(0.729)     | 0.706<br>(0.750)     | 1.148<br>(0.797)      | 0.972<br>(0.832)      | 1.219<br>(0.820)      |
| Treatment: MASCULINE                                                | 0.671<br>(0.783)     | 0.771<br>(0.810)     | 1.166<br>(0.884)      | 1.061<br>(0.913)      | 1.210<br>(0.895)      |
| Perf. tournament                                                    |                      | -0.003<br>(0.013)    | -0.067 ***<br>(0.016) | -0.065 ***<br>(0.016) | -0.068 ***<br>(0.017) |
| Delta perf.                                                         |                      | 0.132 ***<br>(0.019) | 0.106 ***<br>(0.021)  | 0.112 ***<br>(0.022)  | 0.107 ***<br>(0.021)  |
| Belief tournament                                                   |                      |                      | -0.557 ***<br>(0.071) | -0.552 ***<br>(0.071) | -0.551 ***<br>(0.071) |
| Risk                                                                |                      |                      | 0.151 ***<br>(0.045)  | 0.152 ***<br>(0.046)  | 0.153 ***<br>(0.045)  |
| Const.                                                              | -1.677 **<br>(0.585) | -1.794 **<br>(0.628) | -0.241<br>(0.719)     | -1.998<br>(1.227)     | -0.521<br>(0.767)     |
| Controls (Age, Height, Student status, Income, Religion, Residence) | —                    | —                    | —                     | Yes                   | —                     |
| Controls (TCS, STT)                                                 | —                    | —                    | —                     | —                     | Yes                   |
| N                                                                   | 780                  | 780                  | 780                   | 780                   | 780                   |
| Pseudo R2 (McFadden)                                                | 0.016                | 0.085                | 0.163                 | 0.179                 | 0.166                 |
| $H_0$ : FEMININE on BEM score: Feminine                             | 0.361                | 0.338                | 0.135                 | 0.213                 | 0.115                 |
| $H_0$ : MASCULINE on BEM score: Feminine                            | 0.381                | 0.329                | 0.160                 | 0.206                 | 0.145                 |
| $H_0$ : FEMININE on BEM score: Masculine                            | 0.347                | 0.324                | 0.127                 | 0.203                 | 0.108                 |
| $H_0$ : MASCULINE on BEM score: Masculine                           | 0.370                | 0.315                | 0.149                 | 0.191                 | 0.135                 |

*Note:* Competition is a binary variable equal to 1 if the participant enters the tournament in Part 4 and 0 otherwise. Delta perf. is the difference in performance between Part 3 (tournament) and Part 2 (piece-rate). Belief tournament is the participants' belief of their performance rank within their group in Part 3, where the value 1 represents the rank with the highest performance. Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious person, who earns more than 20K GBP, and lives in continental Europe. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on BEM score: Feminine" tests the effect of the treatment (FEMININE) on the subject group (BEM score: Feminine).

## 9.2 Risk

**Supplementary Table 30** OLS regression for NEUTRAL.  
Dependent variable: Risk. Gender is measured on a continuous scale.

|                      | (1)                  | (2)                | (3)                  |
|----------------------|----------------------|--------------------|----------------------|
| BEM score: Feminine  | -0.009<br>(0.009)    | -0.008<br>(0.009)  | -0.009<br>(0.009)    |
| BEM score: Masculine | 0.006<br>(0.009)     | 0.006<br>(0.010)   | 0.010<br>(0.009)     |
| Age                  |                      | -0.008<br>(0.009)  |                      |
| Height               |                      | 0.005<br>(0.007)   |                      |
| Student status       |                      | 0.045<br>(0.160)   |                      |
| Income: < 20,000 GBP |                      | -0.091<br>(0.161)  |                      |
| Religion: Religious  |                      | -0.067<br>(0.167)  |                      |
| Religion: Not say    |                      | -0.518<br>(0.419)  |                      |
| Residence: US        |                      | 0.091<br>(0.204)   |                      |
| Residence: UK        |                      | 0.167<br>(0.190)   |                      |
| Residence: Other     |                      | 0.769 *<br>(0.302) |                      |
| TCS                  |                      |                    | -0.173 *<br>(0.078)  |
| STT                  |                      |                    | -0.019<br>(0.018)    |
| Const.               | 2.011 ***<br>(0.440) | 1.262<br>(1.339)   | 2.577 ***<br>(0.568) |
| N                    | 259                  | 259                | 259                  |
| Adj. R2              | -0.002               | 0.004              | 0.012                |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious person, who earns more than 20K GBP, and lives in continental Europe. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

**Supplementary Table 31** OLS regression for all treatments. Dependent variable: Risk. Gender is measured on a continuous scale.

|                                                                     | (1)                  | (2)               | (3)                  |
|---------------------------------------------------------------------|----------------------|-------------------|----------------------|
| BEM score: Feminine                                                 | -0.009<br>(0.009)    | -0.009<br>(0.009) | -0.010<br>(0.009)    |
| BEM score: Masculine                                                | 0.006<br>(0.009)     | 0.005<br>(0.009)  | 0.005<br>(0.009)     |
| FEMININE x BEM score: Masculine                                     | -0.000<br>(0.013)    | -0.000<br>(0.013) | -0.001<br>(0.013)    |
| MASCULINE x BEM score: Masculine                                    | -0.001<br>(0.014)    | -0.000<br>(0.014) | -0.001<br>(0.014)    |
| FEMININE x BEM score: Feminine                                      | 0.001<br>(0.012)     | 0.001<br>(0.012)  | 0.001<br>(0.012)     |
| MASCULINE x BEM score: Feminine                                     | 0.017<br>(0.012)     | 0.016<br>(0.012)  | 0.017<br>(0.013)     |
| Treatment: FEMININE                                                 | 0.045<br>(0.596)     | 0.044<br>(0.600)  | 0.061<br>(0.602)     |
| Treatment: MASCULINE                                                | -0.489<br>(0.635)    | -0.503<br>(0.640) | -0.485<br>(0.637)    |
| Const.                                                              | 2.011 ***<br>(0.440) | 0.739<br>(0.861)  | 1.953 ***<br>(0.482) |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | Yes               | –                    |
| Controls (TCS, STT)                                                 | –                    | –                 | Yes                  |
| N                                                                   | 780                  | 780               | 780                  |
| Adj. R2                                                             | -0.001               | -0.001            | -0.003               |
| $H_0$ : FEMININE on BEM score: Feminine                             | 0.938                | 0.939             | 0.917                |
| $H_0$ : MASCULINE on BEM score: Feminine                            | 0.452                | 0.441             | 0.457                |
| $H_0$ : FEMININE on BEM score: Masculine                            | 0.940                | 0.941             | 0.919                |
| $H_0$ : MASCULINE on BEM score: Masculine                           | 0.435                | 0.426             | 0.440                |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious person, who earns more than 20K GBP, and lives in continental Europe. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, “ $H_0$ : FEMININE on BEM score: Feminine” tests the effect of the treatment (FEMININE) on the subject group (BEM score: Feminine).

### 9.3 Altruism

**Supplementary Table 32** OLS regression for  
NEUTRAL. Dependent variable: Donations.  
Gender is measured on a continuous scale.

|                      | (1)                | (2)                  | (3)               |
|----------------------|--------------------|----------------------|-------------------|
| BEM score: Feminine  | 0.023<br>(0.015)   | 0.018<br>(0.015)     | 0.023<br>(0.016)  |
| BEM score: Masculine | 0.002<br>(0.016)   | -0.014<br>(0.016)    | 0.003<br>(0.016)  |
| Age                  |                    | 0.040 *              |                   |
|                      |                    | (0.017)              |                   |
| Height               |                    | -0.002<br>(0.010)    |                   |
| Student status       |                    | 0.710 *<br>(0.278)   |                   |
| Income: < 20,000 GBP |                    | 0.051<br>(0.275)     |                   |
| Religion: Religious  |                    | 0.797 **<br>(0.279)  |                   |
| Religion: Not say    |                    | 0.608<br>(0.722)     |                   |
| Residence: US        |                    | -0.831 **<br>(0.309) |                   |
| Residence: UK        |                    | -0.480<br>(0.330)    |                   |
| Residence: Other     |                    | -0.401<br>(0.499)    |                   |
| TCS                  |                    |                      | -0.031<br>(0.133) |
| STT                  |                    |                      | -0.002<br>(0.031) |
| Const.               | 1.713 *<br>(0.774) | 1.573<br>(1.963)     | 1.808<br>(0.919)  |
| N                    | 259                | 259                  | 259               |
| Adj. R2              | 0.001              | 0.054                | -0.007            |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious person, who earns more than 20K GBP, and lives in continental Europe. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

**Supplementary Table 33** OLS regression for all treatments. Dependent variable: Donations.  
Gender is measured on a continuous scale.

|                                                                     | (1)                | (2)                | (3)                |
|---------------------------------------------------------------------|--------------------|--------------------|--------------------|
| BEM score: Feminine                                                 | 0.023<br>(0.015)   | 0.022<br>(0.015)   | 0.023<br>(0.015)   |
| BEM score: Masculine                                                | 0.002<br>(0.016)   | -0.006<br>(0.016)  | 0.004<br>(0.016)   |
| FEMININE x BEM score: Masculine                                     | -0.003<br>(0.023)  | 0.003<br>(0.023)   | -0.002<br>(0.023)  |
| MASCULINE x BEM score: Masculine                                    | 0.002<br>(0.022)   | 0.002<br>(0.022)   | 0.001<br>(0.022)   |
| FEMININE x BEM score: Feminine                                      | 0.013<br>(0.020)   | 0.009<br>(0.020)   | 0.015<br>(0.020)   |
| MASCULINE x BEM score: Feminine                                     | 0.019<br>(0.021)   | 0.018<br>(0.020)   | 0.021<br>(0.021)   |
| Treatment: FEMININE                                                 | -0.484<br>(1.012)  | -0.446<br>(1.007)  | -0.603<br>(1.012)  |
| Treatment: MASCULINE                                                | -0.927<br>(1.067)  | -0.841<br>(1.052)  | -0.976<br>(1.076)  |
| Const.                                                              | 1.713 *<br>(0.774) | 2.827 *<br>(1.351) | 2.100 *<br>(0.821) |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                  | Yes                | –                  |
| Controls (TCS, STT)                                                 | –                  | –                  | Yes                |
| N                                                                   | 780                | 780                | 780                |
| Adj. R2                                                             | 0.013              | 0.034              | 0.014              |
| $H_0$ : FEMININE on BEM score: Feminine                             | 0.638              | 0.660              | 0.556              |
| $H_0$ : MASCULINE on BEM score: Feminine                            | 0.389              | 0.428              | 0.368              |
| $H_0$ : FEMININE on BEM score: Masculine                            | 0.627              | 0.656              | 0.545              |
| $H_0$ : MASCULINE on BEM score: Masculine                           | 0.381              | 0.420              | 0.359              |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious person, who earns more than 20K GBP, and lives in continental Europe. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on BEM score: Feminine" tests the effect of the treatment (FEMININE) on the subject group (BEM score: Feminine).

## 10 Controlling for the strength of the priming intervention

### 10.1 Competitiveness

**Supplementary Table 34** Probit regression for all treatments. Dependent variable: Competition.

|                                                                     | (1)                  | (2)                 | (3)                 | (4)               | (5)                |
|---------------------------------------------------------------------|----------------------|---------------------|---------------------|-------------------|--------------------|
| Ciswomen                                                            | -0.080<br>(0.190)    | 0.015<br>(0.201)    | 0.177<br>(0.221)    | 0.305<br>(0.237)  | 0.167<br>(0.222)   |
| Transmen                                                            | -0.094<br>(0.188)    | -0.021<br>(0.197)   | 0.126<br>(0.201)    | 0.170<br>(0.229)  | 0.616 *<br>(0.313) |
| Transwomen                                                          | -0.140<br>(0.216)    | -0.051<br>(0.224)   | -0.021<br>(0.233)   | -0.020<br>(0.243) | 0.509<br>(0.324)   |
| Rem. feminine words                                                 | 0.028<br>(0.039)     | 0.009<br>(0.038)    | 0.009<br>(0.037)    | 0.018<br>(0.039)  | 0.006<br>(0.038)   |
| Rem. masculine words                                                | 0.042<br>(0.044)     | 0.054<br>(0.045)    | 0.047<br>(0.046)    | 0.070<br>(0.048)  | 0.048<br>(0.046)   |
| Rem. feminine words x Ciswomen                                      | -0.058<br>(0.053)    | -0.038<br>(0.054)   | -0.042<br>(0.057)   | -0.055<br>(0.058) | -0.040<br>(0.057)  |
| Rem. masculine words x Ciswomen                                     | -0.063<br>(0.061)    | -0.088<br>(0.062)   | -0.087<br>(0.063)   | -0.108<br>(0.064) | -0.086<br>(0.062)  |
| Rem. feminine words x Transmen                                      | -0.063<br>(0.053)    | -0.043<br>(0.052)   | -0.036<br>(0.052)   | -0.039<br>(0.053) | -0.024<br>(0.052)  |
| Rem. masculine words x Transmen                                     | -0.085<br>(0.058)    | -0.106<br>(0.058)   | -0.082<br>(0.061)   | -0.095<br>(0.065) | -0.072<br>(0.061)  |
| Rem. feminine words x Transwomen                                    | 0.021<br>(0.060)     | 0.038<br>(0.059)    | 0.056<br>(0.059)    | 0.041<br>(0.059)  | 0.056<br>(0.059)   |
| Rem. masculine words x Transwomen                                   | -0.068<br>(0.068)    | -0.092<br>(0.069)   | -0.091<br>(0.074)   | -0.109<br>(0.075) | -0.091<br>(0.072)  |
| Const.                                                              | -0.394 **<br>(0.131) | -0.463 *<br>(0.183) | 0.954 **<br>(0.293) | -1.462<br>(1.248) | 0.014<br>(0.468)   |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | –                   | –                   | Yes               | –                  |
| Controls (TCS, STT)                                                 | –                    | –                   | –                   | –                 | Yes                |
| N                                                                   | 780                  | 780                 | 780                 | 780               | 780                |
| Pseudo R2 (McFadden)                                                | 0.013                | 0.081               | 0.160               | 0.176             | 0.167              |
| $H_0$ : Rem. feminine words on Cismen                               | 0.472                | 0.819               | 0.830               | 0.663             | 0.880              |
| $H_0$ : Rem. masculine words on Cismen                              | 0.337                | 0.242               | 0.317               | 0.145             | 0.312              |
| $H_0$ : Rem. feminine words on Ciswomen                             | 0.415                | 0.446               | 0.402               | 0.364             | 0.395              |
| $H_0$ : Rem. masculine words on Ciswomen                            | 0.600                | 0.402               | 0.352               | 0.388             | 0.373              |
| $H_0$ : Rem. feminine words on Transmen                             | 0.322                | 0.349               | 0.476               | 0.588             | 0.638              |
| $H_0$ : Rem. masculine words on Transmen                            | 0.273                | 0.198               | 0.415               | 0.571             | 0.587              |
| $H_0$ : Rem. feminine words on Transwomen                           | 0.279                | 0.315               | 0.177               | 0.223             | 0.203              |
| $H_0$ : Rem. masculine words on Transwomen                          | 0.613                | 0.462               | 0.420               | 0.469             | 0.429              |

*Note:* Competition is a binary variable equal to 1 if the participant enters the tournament in Part 4 and 0 otherwise. Delta perf. is the difference in performance between Part 3 (tournament) and Part 2 (piece-rate). In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : Rem. feminine words on Ciswomen" tests the effect of Rem. feminine words on the subject group (Ciswomen).

## 10.2 Risk

**Supplementary Table 35** OLS regression for all treatments. Dependent variable: Risk.

|                                                                     | (1)                  | (2)                 | (3)                  |
|---------------------------------------------------------------------|----------------------|---------------------|----------------------|
| Ciswomen                                                            | -0.063<br>(0.155)    | -0.052<br>(0.170)   | -0.065<br>(0.156)    |
| Transmen                                                            | -0.163<br>(0.147)    | -0.164<br>(0.161)   | -0.309<br>(0.265)    |
| Transwomen                                                          | 0.270<br>(0.205)     | 0.235<br>(0.205)    | 0.162<br>(0.290)     |
| Rem. feminine words                                                 | 0.058<br>(0.037)     | 0.062<br>(0.037)    | 0.060<br>(0.037)     |
| Rem. masculine words                                                | 0.101 *<br>(0.041)   | 0.103 *<br>(0.041)  | 0.100 *<br>(0.041)   |
| Rem. feminine words x Ciswomen                                      | -0.031<br>(0.046)    | -0.036<br>(0.046)   | -0.031<br>(0.046)    |
| Rem. masculine words x Ciswomen                                     | -0.064<br>(0.052)    | -0.070<br>(0.052)   | -0.062<br>(0.052)    |
| Rem. feminine words x Transmen                                      | -0.019<br>(0.046)    | -0.026<br>(0.046)   | -0.022<br>(0.046)    |
| Rem. masculine words x Transmen                                     | -0.092<br>(0.049)    | -0.099 *<br>(0.049) | -0.092<br>(0.049)    |
| Rem. feminine words x Transwomen                                    | -0.082<br>(0.056)    | -0.084<br>(0.056)   | -0.079<br>(0.056)    |
| Rem. masculine words x Transwomen                                   | -0.056<br>(0.061)    | -0.054<br>(0.062)   | -0.057<br>(0.061)    |
| Const.                                                              | 1.798 ***<br>(0.110) | 1.552<br>(0.906)    | 1.752 ***<br>(0.300) |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | Yes                 | –                    |
| Controls (TCS, STT)                                                 | –                    | –                   | Yes                  |
| N                                                                   | 780                  | 780                 | 780                  |
| Adj. R2                                                             | 0.019                | 0.015               | 0.019                |
| $H_0$ : Rem. feminine words on Cismen                               | 0.114                | 0.092               | 0.104                |
| $H_0$ : Rem. masculine words on Cismen                              | 0.014                | 0.012               | 0.014                |
| $H_0$ : Rem. feminine words on Ciswomen                             | 0.334                | 0.362               | 0.314                |
| $H_0$ : Rem. masculine words on Ciswomen                            | 0.259                | 0.319               | 0.244                |
| $H_0$ : Rem. feminine words on Transmen                             | 0.158                | 0.196               | 0.166                |
| $H_0$ : Rem. masculine words on Transmen                            | 0.755                | 0.867               | 0.766                |
| $H_0$ : Rem. feminine words on Transwomen                           | 0.558                | 0.587               | 0.640                |
| $H_0$ : Rem. masculine words on Transwomen                          | 0.330                | 0.285               | 0.353                |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : Rem. feminine words on Ciswomen" tests the effect of Rem. feminine words on the subject group (Ciswomen).

### 10.3 Altruism

**Supplementary Table 36** OLS regression for all treatments. Dependent variable: Donations.

|                                                                     | (1)                  | (2)                 | (3)                  |
|---------------------------------------------------------------------|----------------------|---------------------|----------------------|
| Ciswomen                                                            | 0.007<br>(0.285)     | 0.025<br>(0.303)    | 0.012<br>(0.285)     |
| Transmen                                                            | 0.122<br>(0.284)     | 0.230<br>(0.298)    | -0.014<br>(0.420)    |
| Transwomen                                                          | -0.225<br>(0.324)    | -0.164<br>(0.324)   | -0.403<br>(0.438)    |
| Rem. feminine words                                                 | -0.112<br>(0.062)    | -0.115<br>(0.065)   | -0.113<br>(0.062)    |
| Rem. masculine words                                                | -0.054<br>(0.071)    | -0.063<br>(0.073)   | -0.055<br>(0.071)    |
| Rem. feminine words x Ciswomen                                      | 0.212 **<br>(0.080)  | 0.218 **<br>(0.082) | 0.211 **<br>(0.080)  |
| Rem. masculine words x Ciswomen                                     | 0.100<br>(0.090)     | 0.123<br>(0.092)    | 0.098<br>(0.090)     |
| Rem. feminine words x Transmen                                      | 0.117<br>(0.080)     | 0.113<br>(0.081)    | 0.115<br>(0.081)     |
| Rem. masculine words x Transmen                                     | 0.032<br>(0.090)     | 0.041<br>(0.090)    | 0.030<br>(0.090)     |
| Rem. feminine words x Transwomen                                    | 0.141<br>(0.096)     | 0.164<br>(0.097)    | 0.139<br>(0.096)     |
| Rem. masculine words x Transwomen                                   | 0.084<br>(0.102)     | 0.093<br>(0.102)    | 0.085<br>(0.103)     |
| Const.                                                              | 2.695 ***<br>(0.202) | 1.848<br>(1.396)    | 3.150 ***<br>(0.506) |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | Yes                 | –                    |
| Controls (TCS, STT)                                                 | –                    | –                   | Yes                  |
| N                                                                   | 780                  | 780                 | 780                  |
| Adj. R2                                                             | 0.005                | 0.030               | 0.004                |
| $H_0$ : Rem. feminine words on Cismen                               | 0.072                | 0.076               | 0.071                |
| $H_0$ : Rem. masculine words on Cismen                              | 0.450                | 0.390               | 0.441                |
| $H_0$ : Rem. feminine words on Ciswomen                             | 0.049                | 0.041               | 0.051                |
| $H_0$ : Rem. masculine words on Ciswomen                            | 0.412                | 0.279               | 0.433                |
| $H_0$ : Rem. feminine words on Transmen                             | 0.921                | 0.975               | 0.971                |
| $H_0$ : Rem. masculine words on Transmen                            | 0.697                | 0.684               | 0.659                |
| $H_0$ : Rem. feminine words on Transwomen                           | 0.693                | 0.492               | 0.717                |
| $H_0$ : Rem. masculine words on Transwomen                          | 0.685                | 0.673               | 0.681                |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : Rem. feminine words on Ciswomen" tests the effect of Rem. feminine words on the subject group (Ciswomen).

## 11 Participants remembered at least 4 words

### 11.1 Competitiveness

**Supplementary Table 37** Probit regression for all treatments. Dependent variable: Competition. The participants remembered at least 4 words in Part 1.

|                                                                     | (1)                 | (2)                  | (3)                   | (4)                   | (5)                   |
|---------------------------------------------------------------------|---------------------|----------------------|-----------------------|-----------------------|-----------------------|
| Ciswomen                                                            | 0.047<br>(0.317)    | 0.066<br>(0.330)     | 0.197<br>(0.344)      | 0.357<br>(0.363)      | 0.158<br>(0.346)      |
| Transmen                                                            | 0.065<br>(0.318)    | 0.117<br>(0.329)     | 0.220<br>(0.320)      | 0.286<br>(0.378)      | 0.554<br>(0.435)      |
| Transwomen                                                          | 0.122<br>(0.377)    | 0.223<br>(0.392)     | 0.208<br>(0.416)      | 0.264<br>(0.413)      | 0.650<br>(0.516)      |
| Treatment: FEMININE                                                 | 0.361<br>(0.306)    | 0.189<br>(0.309)     | 0.158<br>(0.302)      | 0.212<br>(0.326)      | 0.136<br>(0.305)      |
| Treatment: MASCULINE                                                | 0.331<br>(0.312)    | 0.351<br>(0.325)     | 0.272<br>(0.325)      | 0.434<br>(0.349)      | 0.247<br>(0.327)      |
| FEMININE x Ciswomen                                                 | -0.378<br>(0.404)   | -0.139<br>(0.421)    | -0.094<br>(0.446)     | -0.112<br>(0.465)     | -0.055<br>(0.448)     |
| MASCULINE x Ciswomen                                                | -0.413<br>(0.412)   | -0.455<br>(0.432)    | -0.383<br>(0.449)     | -0.471<br>(0.459)     | -0.327<br>(0.450)     |
| FEMININE x Transmen                                                 | -0.558<br>(0.405)   | -0.375<br>(0.415)    | -0.284<br>(0.409)     | -0.314<br>(0.431)     | -0.222<br>(0.409)     |
| MASCULINE x Transmen                                                | -0.592<br>(0.414)   | -0.660<br>(0.428)    | -0.469<br>(0.434)     | -0.496<br>(0.461)     | -0.406<br>(0.441)     |
| FEMININE x Transwomen                                               | -0.128<br>(0.466)   | -0.021<br>(0.476)    | 0.139<br>(0.494)      | 0.053<br>(0.492)      | 0.132<br>(0.507)      |
| MASCULINE x Transwomen                                              | -0.533<br>(0.479)   | -0.707<br>(0.499)    | -0.651<br>(0.521)     | -0.779<br>(0.534)     | -0.638<br>(0.533)     |
| Perf. tournament                                                    |                     | 0.006<br>(0.017)     | -0.056 **<br>(0.021)  | -0.059 **<br>(0.022)  | -0.061 **<br>(0.021)  |
| Delta perf.                                                         |                     | 0.147 ***<br>(0.024) | 0.114 ***<br>(0.027)  | 0.129 ***<br>(0.027)  | 0.118 ***<br>(0.027)  |
| Belief tournament                                                   |                     |                      | -0.602 ***<br>(0.088) | -0.612 ***<br>(0.091) | -0.604 ***<br>(0.089) |
| Risk                                                                |                     |                      | 0.165 **<br>(0.054)   | 0.166 **<br>(0.055)   | 0.164 **<br>(0.054)   |
| Const.                                                              | -0.595 *<br>(0.251) | -0.759 *<br>(0.305)  | 0.790<br>(0.439)      | -2.259<br>(1.839)     | -0.228<br>(0.594)     |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                   | –                    | –                     | Yes                   | –                     |
| Controls (TCS, STT)                                                 | –                   | –                    | –                     | –                     | Yes                   |
| N                                                                   | 546                 | 546                  | 546                   | 546                   | 546                   |
| Pseudo R2 (McFadden)                                                | 0.017               | 0.104                | 0.189                 | 0.231                 | 0.200                 |
| $H_0$ : FEMININE on Cismen                                          | 0.232               | 0.546                | 0.631                 | 0.530                 | 0.682                 |
| $H_0$ : MASCULINE on Cismen                                         | 0.283               | 0.274                | 0.419                 | 0.215                 | 0.463                 |
| $H_0$ : FEMININE on Ciswomen                                        | 0.947               | 0.853                | 0.822                 | 0.732                 | 0.778                 |
| $H_0$ : MASCULINE on Ciswomen                                       | 0.758               | 0.710                | 0.704                 | 0.902                 | 0.786                 |
| $H_0$ : FEMININE on Transmen                                        | 0.452               | 0.496                | 0.661                 | 0.731                 | 0.766                 |
| $H_0$ : MASCULINE on Transmen                                       | 0.332               | 0.275                | 0.513                 | 0.841                 | 0.604                 |
| $H_0$ : FEMININE on Transwomen                                      | 0.502               | 0.640                | 0.430                 | 0.480                 | 0.481                 |
| $H_0$ : MASCULINE on Transwomen                                     | 0.574               | 0.336                | 0.327                 | 0.373                 | 0.317                 |

*Note:* Competition is a binary variable equal to 1 if the participant enters the tournament in Part 4 and 0 otherwise. Delta perf. is the difference in performance between Part 3 (tournament) and Part 2 (piece-rate). Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on Ciswomen" tests the effect of the treatment (FEMININE) on the subject group (Ciswomen).

## 11.2 Risk

**Supplementary Table 38** OLS regression for all treatments. Dependent variable: Risk. The participants remembered at least 4 words in Part 1.

|                                                                     | (1)                  | (2)               | (3)                  |
|---------------------------------------------------------------------|----------------------|-------------------|----------------------|
| Ciswomen                                                            | -0.148<br>(0.284)    | -0.142<br>(0.297) | -0.154<br>(0.285)    |
| Transmen                                                            | -0.192<br>(0.293)    | -0.217<br>(0.306) | -0.430<br>(0.414)    |
| Transwomen                                                          | 0.083<br>(0.333)     | 0.069<br>(0.338)  | -0.107<br>(0.411)    |
| Treatment: FEMININE                                                 | 0.228<br>(0.294)     | 0.260<br>(0.291)  | 0.247<br>(0.294)     |
| Treatment: MASCULINE                                                | 0.525<br>(0.299)     | 0.577<br>(0.300)  | 0.517<br>(0.299)     |
| FEMININE x Ciswomen                                                 | -0.094<br>(0.361)    | -0.120<br>(0.358) | -0.096<br>(0.362)    |
| MASCULINE x Ciswomen                                                | -0.364<br>(0.362)    | -0.417<br>(0.361) | -0.340<br>(0.363)    |
| FEMININE x Transmen                                                 | -0.081<br>(0.364)    | -0.116<br>(0.362) | -0.093<br>(0.365)    |
| MASCULINE x Transmen                                                | -0.469<br>(0.369)    | -0.535<br>(0.370) | -0.459<br>(0.370)    |
| FEMININE x Transwomen                                               | -0.289<br>(0.415)    | -0.349<br>(0.418) | -0.262<br>(0.411)    |
| MASCULINE x Transwomen                                              | -0.229<br>(0.436)    | -0.236<br>(0.440) | -0.216<br>(0.433)    |
| Const.                                                              | 1.883 ***<br>(0.240) | 1.775<br>(1.280)  | 1.844 ***<br>(0.416) |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | Yes               | –                    |
| Controls (TCS, STT)                                                 | –                    | –                 | Yes                  |
| N                                                                   | 546                  | 546               | 546                  |
| Adj. R2                                                             | 0.014                | 0.008             | 0.015                |
| $H_0$ : FEMININE on Cismen                                          | 0.437                | 0.373             | 0.402                |
| $H_0$ : MASCULINE on Cismen                                         | 0.080                | 0.055             | 0.084                |
| $H_0$ : FEMININE on Ciswomen                                        | 0.524                | 0.514             | 0.475                |
| $H_0$ : MASCULINE on Ciswomen                                       | 0.432                | 0.452             | 0.390                |
| $H_0$ : FEMININE on Transmen                                        | 0.494                | 0.512             | 0.481                |
| $H_0$ : MASCULINE on Transmen                                       | 0.798                | 0.854             | 0.790                |
| $H_0$ : FEMININE on Transwomen                                      | 0.836                | 0.764             | 0.956                |
| $H_0$ : MASCULINE on Transwomen                                     | 0.353                | 0.291             | 0.338                |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on Ciswomen" tests the effect of the treatment (FEMININE) on the subject group (Ciswomen).

### 11.3 Altruism

**Supplementary Table 39** OLS regression for all treatments. Dependent variable: Donations. The participants remembered at least 4 words in Part 1.

|                                                                     | (1)                  | (2)               | (3)                  |
|---------------------------------------------------------------------|----------------------|-------------------|----------------------|
| Ciswomen                                                            | 0.327<br>(0.469)     | 0.389<br>(0.500)  | 0.342<br>(0.472)     |
| Transmen                                                            | 0.487<br>(0.497)     | 0.579<br>(0.526)  | 0.099<br>(0.651)     |
| Transwomen                                                          | -0.243<br>(0.541)    | -0.116<br>(0.555) | -0.670<br>(0.669)    |
| Treatment: FEMININE                                                 | -0.349<br>(0.477)    | -0.360<br>(0.490) | -0.335<br>(0.478)    |
| Treatment: MASCULINE                                                | -0.079<br>(0.484)    | -0.135<br>(0.499) | -0.082<br>(0.484)    |
| FEMININE x Ciswomen                                                 | 0.745<br>(0.604)     | 0.769<br>(0.609)  | 0.726<br>(0.605)     |
| MASCULINE x Ciswomen                                                | 0.093<br>(0.612)     | 0.204<br>(0.618)  | 0.080<br>(0.613)     |
| FEMININE x Transmen                                                 | 0.178<br>(0.619)     | 0.189<br>(0.618)  | 0.141<br>(0.619)     |
| MASCULINE x Transmen                                                | -0.253<br>(0.632)    | -0.149<br>(0.639) | -0.256<br>(0.632)    |
| FEMININE x Transwomen                                               | 0.591<br>(0.704)     | 0.669<br>(0.716)  | 0.603<br>(0.705)     |
| MASCULINE x Transwomen                                              | 0.204<br>(0.701)     | 0.199<br>(0.718)  | 0.218<br>(0.704)     |
| Const.                                                              | 2.528 ***<br>(0.384) | 1.844<br>(1.901)  | 3.301 ***<br>(0.675) |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | Yes               | –                    |
| Controls (TCS, STT)                                                 | –                    | –                 | Yes                  |
| N                                                                   | 546                  | 546               | 546                  |
| Adj. R2                                                             | 0.004                | 0.015             | 0.004                |
| $H_0$ : FEMININE on Cismen                                          | 0.465                | 0.462             | 0.485                |
| $H_0$ : MASCULINE on Cismen                                         | 0.870                | 0.786             | 0.866                |
| $H_0$ : FEMININE on Ciswomen                                        | 0.286                | 0.266             | 0.293                |
| $H_0$ : MASCULINE on Ciswomen                                       | 0.971                | 0.853             | 0.996                |
| $H_0$ : FEMININE on Transmen                                        | 0.665                | 0.652             | 0.625                |
| $H_0$ : MASCULINE on Transmen                                       | 0.415                | 0.475             | 0.407                |
| $H_0$ : FEMININE on Transwomen                                      | 0.640                | 0.556             | 0.606                |
| $H_0$ : MASCULINE on Transwomen                                     | 0.805                | 0.902             | 0.790                |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on Ciswomen" tests the effect of the treatment (FEMININE) on the subject group (Ciswomen).

## 12 Participants remembered less than 4 words

### 12.1 Competitiveness

**Supplementary Table 40** Probit regression for all treatments. Dependent variable: Competition.  
The participants remembered less than 4 words in Part 1.

|                                                                     | (1)                 | (2)                 | (3)                   | (4)                   | (5)                   |
|---------------------------------------------------------------------|---------------------|---------------------|-----------------------|-----------------------|-----------------------|
| Ciswomen                                                            | 0.176<br>(0.340)    | 0.327<br>(0.352)    | 0.481<br>(0.417)      | 0.450<br>(0.453)      | 0.444<br>(0.408)      |
| Transmen                                                            | -0.254<br>(0.348)   | -0.235<br>(0.362)   | -0.094<br>(0.401)     | -0.184<br>(0.421)     | 0.671<br>(0.594)      |
| Transwomen                                                          | -0.021<br>(0.351)   | 0.047<br>(0.362)    | -0.051<br>(0.363)     | -0.307<br>(0.384)     | 0.653<br>(0.572)      |
| Treatment: FEMININE                                                 | 0.075<br>(0.380)    | 0.122<br>(0.425)    | -0.034<br>(0.440)     | -0.241<br>(0.475)     | -0.076<br>(0.451)     |
| Treatment: MASCULINE                                                | 0.616<br>(0.338)    | 0.746 *<br>(0.335)  | 0.729 *<br>(0.348)    | 0.870 *<br>(0.400)    | 0.705 *<br>(0.351)    |
| FEMININE x Ciswomen                                                 | -0.590<br>(0.606)   | -0.771<br>(0.655)   | -0.844<br>(0.740)     | -0.699<br>(0.800)     | -0.721<br>(0.745)     |
| MASCULINE x Ciswomen                                                | -0.882<br>(0.545)   | -1.096 *<br>(0.551) | -1.124<br>(0.606)     | -1.140<br>(0.687)     | -1.050<br>(0.612)     |
| FEMININE x Transmen                                                 | 0.421<br>(0.603)    | 0.431<br>(0.681)    | 0.554<br>(0.672)      | 0.639<br>(0.708)      | 0.631<br>(0.689)      |
| MASCULINE x Transmen                                                | 0.006<br>(0.552)    | -0.116<br>(0.543)   | -0.029<br>(0.543)     | 0.177<br>(0.616)      | -0.002<br>(0.561)     |
| FEMININE x Transwomen                                               | -0.338<br>(0.617)   | -0.200<br>(0.641)   | 0.095<br>(0.630)      | 0.643<br>(0.637)      | -0.206<br>(0.647)     |
| MASCULINE x Transwomen                                              | -0.668<br>(0.616)   | -0.857<br>(0.618)   | -0.583<br>(0.616)     | -0.741<br>(0.636)     | -0.598<br>(0.628)     |
| Perf. tournament                                                    |                     | -0.038<br>(0.024)   | -0.097 ***<br>(0.029) | -0.109 ***<br>(0.033) | -0.088 **<br>(0.030)  |
| Delta perf.                                                         |                     | 0.118 **<br>(0.036) | 0.105 **<br>(0.038)   | 0.107 **<br>(0.041)   | 0.104 **<br>(0.039)   |
| Belief tournament                                                   |                     |                     | -0.493 ***<br>(0.129) | -0.531 ***<br>(0.148) | -0.467 ***<br>(0.132) |
| Risk                                                                |                     |                     | 0.172<br>(0.092)      | 0.179<br>(0.099)      | 0.169<br>(0.093)      |
| Const.                                                              | -0.452 *<br>(0.204) | -0.273<br>(0.291)   | 0.975<br>(0.509)      | 0.666<br>(2.158)      | 0.490<br>(0.944)      |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                   | –                   | –                     | Yes                   | –                     |
| Controls (TCS, STT)                                                 | –                   | –                   | –                     | –                     | Yes                   |
| N                                                                   | 234                 | 234                 | 234                   | 234                   | 234                   |
| Pseudo R2 (McFadden)                                                | 0.032               | 0.076               | 0.147                 | 0.214                 | 0.160                 |
| $H_0$ : FEMININE on Cismen                                          | 0.840               | 0.750               | 0.931                 | 0.551                 | 0.849                 |
| $H_0$ : MASCULINE on Cismen                                         | 0.061               | 0.029               | 0.036                 | 0.024                 | 0.043                 |
| $H_0$ : FEMININE on Ciswomen                                        | 0.262               | 0.167               | 0.080                 | 0.073                 | 0.114                 |
| $H_0$ : MASCULINE on Ciswomen                                       | 0.523               | 0.409               | 0.375                 | 0.563                 | 0.440                 |
| $H_0$ : FEMININE on Transmen                                        | 0.278               | 0.232               | 0.273                 | 0.432                 | 0.252                 |
| $H_0$ : MASCULINE on Transmen                                       | 0.143               | 0.144               | 0.115                 | 0.032                 | 0.118                 |
| $H_0$ : FEMININE on Transwomen                                      | 0.579               | 0.873               | 0.910                 | 0.483                 | 0.627                 |
| $H_0$ : MASCULINE on Transwomen                                     | 0.918               | 0.829               | 0.787                 | 0.822                 | 0.844                 |

*Note:* Competition is a binary variable equal to 1 if the participant enters the tournament in Part 4 and 0 otherwise. Delta perf. is the difference in performance between Part 3 (tournament) and Part 2 (piece-rate). Belief tournament is the participants' belief of their performance rank within their group in Part 3, where the value 1 represents the rank with the highest performance. Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on Ciswomen" tests the effect of the treatment (FEMININE) on the subject group (Ciswomen).

## 12.2 Risk

**Supplementary Table 41** OLS regression for all treatments. Dependent variable: Risk. The participants remembered less than 4 words in Part 1.

|                                                                     | (1)                  | (2)               | (3)                 |
|---------------------------------------------------------------------|----------------------|-------------------|---------------------|
| Ciswomen                                                            | -0.170<br>(0.247)    | -0.141<br>(0.268) | -0.188<br>(0.252)   |
| Transmen                                                            | -0.128<br>(0.196)    | -0.107<br>(0.216) | 0.161<br>(0.435)    |
| Transwomen                                                          | 0.755 *<br>(0.370)   | 0.651<br>(0.392)  | 1.044 *<br>(0.510)  |
| Treatment: FEMININE                                                 | -0.032<br>(0.262)    | -0.053<br>(0.283) | -0.054<br>(0.265)   |
| Treatment: MASCULINE                                                | 0.026<br>(0.236)     | 0.036<br>(0.249)  | 0.014<br>(0.234)    |
| FEMININE x Ciswomen                                                 | 0.220<br>(0.472)     | 0.258<br>(0.482)  | 0.275<br>(0.479)    |
| MASCULINE x Ciswomen                                                | 0.588<br>(0.395)     | 0.471<br>(0.409)  | 0.621<br>(0.397)    |
| FEMININE x Transmen                                                 | 0.101<br>(0.406)     | 0.167<br>(0.429)  | 0.117<br>(0.411)    |
| MASCULINE x Transmen                                                | -0.349<br>(0.322)    | -0.461<br>(0.340) | -0.345<br>(0.324)   |
| FEMININE x Transwomen                                               | -0.837<br>(0.507)    | -0.734<br>(0.536) | -0.909<br>(0.499)   |
| MASCULINE x Transwomen                                              | -0.449<br>(0.676)    | -0.337<br>(0.662) | -0.462<br>(0.671)   |
| Const.                                                              | 1.768 ***<br>(0.157) | 2.141<br>(1.294)  | 1.537 **<br>(0.542) |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | Yes               | –                   |
| Controls (TCS, STT)                                                 | –                    | –                 | Yes                 |
| N                                                                   | 234                  | 234               | 234                 |
| Adj. R2                                                             | 0.032                | 0.029             | 0.027               |
| $H_0$ : FEMININE on Cismen                                          | 0.902                | 0.851             | 0.840               |
| $H_0$ : MASCULINE on Cismen                                         | 0.913                | 0.886             | 0.951               |
| $H_0$ : FEMININE on Ciswomen                                        | 0.633                | 0.597             | 0.580               |
| $H_0$ : MASCULINE on Ciswomen                                       | 0.054                | 0.121             | 0.049               |
| $H_0$ : FEMININE on Transmen                                        | 0.826                | 0.730             | 0.843               |
| $H_0$ : MASCULINE on Transmen                                       | 0.142                | 0.072             | 0.145               |
| $H_0$ : FEMININE on Transwomen                                      | 0.047                | 0.081             | 0.024               |
| $H_0$ : MASCULINE on Transwomen                                     | 0.505                | 0.624             | 0.478               |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on Ciswomen" tests the effect of the treatment (FEMININE) on the subject group (Ciswomen).

## 12.3 Altruism

**Supplementary Table 42** OLS regression for all treatments. Dependent variable: Donations. The participants remembered less than 4 words in Part 1.

|                                                                     | (1)                  | (2)               | (3)                 |
|---------------------------------------------------------------------|----------------------|-------------------|---------------------|
| Ciswomen                                                            | -0.095<br>(0.547)    | 0.081<br>(0.625)  | -0.126<br>(0.554)   |
| Transmen                                                            | -0.505<br>(0.479)    | -0.169<br>(0.482) | -0.034<br>(0.695)   |
| Transwomen                                                          | 0.155<br>(0.539)     | 0.193<br>(0.557)  | 0.628<br>(0.705)    |
| Treatment: FEMININE                                                 | -0.252<br>(0.500)    | -0.076<br>(0.545) | -0.287<br>(0.506)   |
| Treatment: MASCULINE                                                | -0.421<br>(0.519)    | 0.009<br>(0.559)  | -0.440<br>(0.520)   |
| FEMININE x Ciswomen                                                 | 0.360<br>(0.849)     | 0.231<br>(0.879)  | 0.449<br>(0.867)    |
| MASCULINE x Ciswomen                                                | 0.578<br>(0.818)     | 0.133<br>(0.873)  | 0.632<br>(0.820)    |
| FEMININE x Transmen                                                 | 0.675<br>(0.810)     | 0.462<br>(0.797)  | 0.700<br>(0.807)    |
| MASCULINE x Transmen                                                | 1.335<br>(0.775)     | 0.723<br>(0.765)  | 1.342<br>(0.775)    |
| FEMININE x Transwomen                                               | -0.055<br>(0.828)    | -0.093<br>(0.857) | -0.171<br>(0.816)   |
| MASCULINE x Transwomen                                              | 0.416<br>(1.016)     | 0.291<br>(0.969)  | 0.394<br>(1.014)    |
| Const.                                                              | 2.791 ***<br>(0.322) | 0.629<br>(2.381)  | 2.396 **<br>(0.915) |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | Yes               | –                   |
| Controls (TCS, STT)                                                 | –                    | –                 | Yes                 |
| N                                                                   | 234                  | 234               | 234                 |
| Adj. R2                                                             | -0.033               | 0.006             | -0.039              |
| $H_0$ : FEMININE on Cismen                                          | 0.614                | 0.889             | 0.571               |
| $H_0$ : MASCULINE on Cismen                                         | 0.418                | 0.987             | 0.399               |
| $H_0$ : FEMININE on Ciswomen                                        | 0.875                | 0.825             | 0.817               |
| $H_0$ : MASCULINE on Ciswomen                                       | 0.804                | 0.831             | 0.762               |
| $H_0$ : FEMININE on Transmen                                        | 0.508                | 0.514             | 0.515               |
| $H_0$ : MASCULINE on Transmen                                       | 0.114                | 0.184             | 0.118               |
| $H_0$ : FEMININE on Transwomen                                      | 0.642                | 0.796             | 0.480               |
| $H_0$ : MASCULINE on Transwomen                                     | 0.995                | 0.710             | 0.959               |

*Note:* Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious cisman, who earns more than 20K GBP, and lives in continental Europe. In the last column from the right, the baseline is a cisman. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on Ciswomen" tests the effect of the treatment (FEMININE) on the subject group (Ciswomen).

## 13 Gender congruent upbringing

### 13.1 Competitiveness

**Supplementary Table 43** Probit regression for NEUTRAL. Dependent variable: Competition. Only transgender participants are considered.

|                             | (1)                   | (2)                 | (3)                   | (4)                   | (5)                   |
|-----------------------------|-----------------------|---------------------|-----------------------|-----------------------|-----------------------|
| Gender congruent upbringing | 0.054<br>(0.295)      | 0.004<br>(0.301)    | -0.118<br>(0.353)     | -0.279<br>(0.427)     | -0.187<br>(0.375)     |
| Perf. tournament            |                       | 0.017<br>(0.039)    | -0.103<br>(0.056)     | -0.095<br>(0.062)     | -0.100<br>(0.058)     |
| Delta perf.                 |                       | 0.101<br>(0.056)    | 0.060<br>(0.066)      | 0.033<br>(0.080)      | 0.056<br>(0.068)      |
| Belief tournament           |                       |                     | -0.819 ***<br>(0.220) | -0.958 ***<br>(0.272) | -0.793 ***<br>(0.228) |
| Risk                        |                       |                     | 0.252 *<br>(0.111)    | 0.298 *<br>(0.127)    | 0.269 *<br>(0.108)    |
| Age                         |                       |                     |                       | 0.022<br>(0.018)      |                       |
| Height                      |                       |                     |                       | -0.001<br>(0.012)     |                       |
| Student status              |                       |                     |                       | -0.292<br>(0.356)     |                       |
| Income: < 20,000 GBP        |                       |                     |                       | 0.230<br>(0.422)      |                       |
| Religion: Religious         |                       |                     |                       | 0.327<br>(0.361)      |                       |
| Religion: Not say           |                       |                     |                       | 6.768 ***<br>(0.499)  |                       |
| Residence: US               |                       |                     |                       | 0.027<br>(0.501)      |                       |
| Residence: UK               |                       |                     |                       | 0.104<br>(0.450)      |                       |
| Residence: Other            |                       |                     |                       | 0.226<br>(0.519)      |                       |
| TCS                         |                       |                     |                       |                       | 0.168<br>(0.200)      |
| STT                         |                       |                     |                       |                       | -0.028<br>(0.042)     |
| Const.                      | -0.557 ***<br>(0.141) | -0.735 *<br>(0.349) | 1.713<br>(0.938)      | 1.172<br>(2.643)      | 1.385<br>(1.063)      |
| N                           | 116                   | 116                 | 116                   | 116                   | 116                   |
| Pseudo R2 (McFadden)        | 0.000                 | 0.048               | 0.196                 | 0.306                 | 0.202                 |

*Note:* Competition is a binary variable equal to 1 if the participant enters the tournament in Part 4 and 0 otherwise. Delta perf. is the difference in performance between Part 3 (tournament) and Part 2 (piece-rate). Belief tournament is the participants' belief of their performance rank within their group in Part 3, where the value 1 represents the rank with the highest performance. Gender congruent upbringing is a binary variable equal to 1 if the way the participant's parents treated the participant matches the reported gender of the participant or the parents treated their child neutrally. Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious person, who earns more than 20K GBP, and lives in continental Europe. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

**Supplementary Table 44** Probit regression for all treatments. Dependent variable: Competition.  
Only transgender participants are considered.

|                                                                     | (1)                   | (2)                  | (3)                   | (4)                   | (5)                   |
|---------------------------------------------------------------------|-----------------------|----------------------|-----------------------|-----------------------|-----------------------|
| Gender congruent upbringing                                         | 0.054<br>(0.295)      | 0.005<br>(0.318)     | -0.108<br>(0.344)     | -0.120<br>(0.381)     | -0.279<br>(0.358)     |
| Treatment: FEMININE                                                 | 0.035<br>(0.197)      | 0.056<br>(0.209)     | 0.182<br>(0.217)      | 0.204<br>(0.217)      | 0.143<br>(0.221)      |
| Treatment: MASCULINE                                                | -0.099<br>(0.207)     | -0.161<br>(0.212)    | -0.083<br>(0.233)     | -0.081<br>(0.248)     | -0.056<br>(0.237)     |
| FEMININE x Gender congruent upbringing                              | -0.028<br>(0.408)     | 0.021<br>(0.431)     | -0.102<br>(0.471)     | -0.087<br>(0.505)     | 0.056<br>(0.482)      |
| MASCULINE x Gender congruent upbringing                             | 0.035<br>(0.402)      | 0.075<br>(0.421)     | 0.155<br>(0.450)      | 0.192<br>(0.490)      | 0.161<br>(0.468)      |
| Perf. tournament                                                    |                       | -0.022<br>(0.022)    | -0.114 ***<br>(0.029) | -0.117 ***<br>(0.029) | -0.111 ***<br>(0.030) |
| Delta perf.                                                         |                       | 0.162 ***<br>(0.032) | 0.132 ***<br>(0.036)  | 0.141 ***<br>(0.038)  | 0.135 ***<br>(0.035)  |
| Belief tournament                                                   |                       |                      | -0.727 ***<br>(0.112) | -0.730 ***<br>(0.120) | -0.705 ***<br>(0.114) |
| Risk                                                                |                       |                      | 0.196 **<br>(0.065)   | 0.222 **<br>(0.069)   | 0.194 **<br>(0.065)   |
| Const.                                                              | -0.557 ***<br>(0.141) | -0.430<br>(0.229)    | 1.669 ***<br>(0.482)  | -0.365<br>(1.433)     | 1.139 *<br>(0.549)    |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                     | –                    | –                     | Yes                   | –                     |
| Controls (TCS, STT)                                                 | –                     | –                    | –                     | –                     | Yes                   |
| N                                                                   | 355                   | 355                  | 355                   | 355                   | 355                   |
| Pseudo R2 (McFadden)                                                | 0.001                 | 0.079                | 0.198                 | 0.233                 | 0.209                 |
| $H_0$ : FEMININE on GCU                                             | 0.983                 | 0.833                | 0.840                 | 0.778                 | 0.624                 |
| $H_0$ : MASCULINE on GCU                                            | 0.852                 | 0.809                | 0.852                 | 0.781                 | 0.791                 |

*Note:* Competition is a binary variable equal to 1 if the participant enters the tournament in Part 4 and 0 otherwise. Delta perf. is the difference in performance between Part 3 (tournament) and Part 2 (piece-rate). Belief tournament is the participants' belief of their performance rank within their group in Part 3, where the value 1 represents the rank with the highest performance. Gender congruent upbringing is a binary variable equal to 1 if the way the participant's parents treated the participant matches the reported gender of the participant or the parents treated their child neutrally. Standard errors in parentheses are heteroskedasticity robust. Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on GCU" tests the effect of the treatment (FEMININE) on the group of participants that were brought up gender congruently (Gender congruent upbringing=1).

## 13.2 Risk

**Supplementary Table 45** OLS regression for NEUTRAL. Dependent variable: Risk. Only transgender participants are considered.

|                             | (1)       | (2)      | (3)       |
|-----------------------------|-----------|----------|-----------|
| Gender congruent upbringing | -0.529 *  | -0.485 * | -0.445    |
|                             | (0.236)   | (0.236)  | (0.285)   |
| Age                         |           | -0.006   |           |
|                             |           | (0.016)  |           |
| Height                      |           | 0.000    |           |
|                             |           | (0.014)  |           |
| Student status              |           | 0.121    |           |
|                             |           | (0.260)  |           |
| Income: < 20,000 GBP        |           | -0.008   |           |
|                             |           | (0.266)  |           |
| Religion: Religious         |           | 0.244    |           |
|                             |           | (0.228)  |           |
| Religion: Not say           |           | -0.597   |           |
|                             |           | (0.559)  |           |
| Residence: US               |           | -0.091   |           |
|                             |           | (0.341)  |           |
| Residence: UK               |           | 0.026    |           |
|                             |           | (0.312)  |           |
| Residence: Other            |           | 0.845 *  |           |
|                             |           | (0.425)  |           |
| TCS                         |           |          | -0.066    |
|                             |           |          | (0.150)   |
| STT                         |           |          | -0.019    |
|                             |           |          | (0.037)   |
| Const.                      | 2.008 *** | 1.894    | 2.343 *** |
|                             | (0.126)   | (2.359)  | (0.415)   |
| N                           | 116       | 116      | 116       |
| Adj. R2                     | 0.027     | 0.032    | 0.019     |

*Note:* Gender congruent upbringing is a binary variable equal to 1 if the way the participant's parents treated the participant matches the reported gender of the participant or the parents treated their child neutrally. Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious person, who earns more than 20K GBP, and lives in continental Europe. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

**Supplementary Table 46** OLS regression for all treatments. Dependent variable: Risk. Only transgender participants are considered.

|                                                                     | (1)       | (2)      | (3)       |
|---------------------------------------------------------------------|-----------|----------|-----------|
| Gender congruent upbringing                                         | -0.529 *  | -0.535 * | -0.588 *  |
|                                                                     | (0.236)   | (0.236)  | (0.255)   |
| Treatment: FEMININE                                                 | -0.229    | -0.201   | -0.239    |
|                                                                     | (0.166)   | (0.163)  | (0.169)   |
| Treatment: MASCULINE                                                | -0.144    | -0.116   | -0.138    |
|                                                                     | (0.184)   | (0.184)  | (0.184)   |
| FEMININE x Gender congruent upbringing                              | 0.726 *   | 0.737 *  | 0.773 *   |
|                                                                     | (0.323)   | (0.321)  | (0.335)   |
| MASCULINE x Gender congruent upbringing                             | 0.583     | 0.556    | 0.582     |
|                                                                     | (0.333)   | (0.334)  | (0.335)   |
| Const.                                                              | 2.008 *** | 0.453    | 1.825 *** |
|                                                                     | (0.126)   | (1.201)  | (0.238)   |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –         | Yes      | –         |
| Controls (TCS, STT)                                                 | –         | –        | Yes       |
| N                                                                   | 355       | 355      | 355       |
| Adj. R2                                                             | 0.001     | 0.014    | -0.001    |
| $H_0$ : FEMININE on GCU                                             | 0.074     | 0.055    | 0.063     |
| $H_0$ : MASCULINE on GCU                                            | 0.116     | 0.115    | 0.115     |

*Note:* Gender congruent upbringing is a binary variable equal to 1 if the way the participant's parents treated the participant matches the reported gender of the participant or the parents treated their child neutrally. Standard errors in parentheses are heteroskedasticity robust. Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on GCU" tests the effect of the treatment (FEMININE) on the group of participants that were brought up gender congruently (Gender congruent upbringing=1).

### 13.3 Altruism

**Supplementary Table 47** OLS regression for NEUTRAL. Dependent variable: Donations. Only transgender participants are considered.

|                             | (1)                  | (2)                 | (3)                  |
|-----------------------------|----------------------|---------------------|----------------------|
| Gender congruent upbringing | 0.141<br>(0.428)     | 0.019<br>(0.423)    | 0.248<br>(0.486)     |
| Age                         |                      | 0.056 *             |                      |
|                             |                      | (0.024)             |                      |
| Height                      |                      | -0.012<br>(0.016)   |                      |
| Student status              |                      | 0.917 *<br>(0.392)  |                      |
| Income: < 20,000 GBP        |                      | 0.540<br>(0.419)    |                      |
| Religion: Religious         |                      | 1.100 **<br>(0.362) |                      |
| Religion: Not say           |                      | 1.344<br>(1.498)    |                      |
| Residence: US               |                      | -0.735<br>(0.538)   |                      |
| Residence: UK               |                      | -0.335<br>(0.553)   |                      |
| Residence: Other            |                      | -0.303<br>(0.663)   |                      |
| TCS                         |                      |                     | -0.174<br>(0.259)    |
| STT                         |                      |                     | 0.013<br>(0.054)     |
| Const.                      | 2.675 ***<br>(0.214) | 2.480<br>(2.900)    | 3.013 ***<br>(0.668) |
| N                           | 116                  | 116                 | 116                  |
| Adj. R2                     | -0.008               | 0.087               | -0.021               |

*Note:* Gender congruent upbringing is a binary variable equal to 1 if the way the participant's parents treated the participant matches the reported gender of the participant or the parents treated their child neutrally. Standard errors in parentheses are heteroskedasticity robust. In the second last column from the right, the baseline is a non-student, non-religious person, who earns more than 20K GBP, and lives in continental Europe. \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

**Supplementary Table 48** OLS regression for all treatments. Dependent variable: Donations. Only transgender participants are considered.

|                                                                     | (1)                  | (2)                | (3)                  |
|---------------------------------------------------------------------|----------------------|--------------------|----------------------|
| Gender congruent upbringing                                         | 0.141<br>(0.428)     | 0.069<br>(0.410)   | 0.229<br>(0.449)     |
| Treatment: FEMININE                                                 | -0.046<br>(0.293)    | -0.004<br>(0.284)  | -0.074<br>(0.293)    |
| Treatment: MASCULINE                                                | -0.337<br>(0.304)    | -0.343<br>(0.301)  | -0.355<br>(0.305)    |
| FEMININE x Gender congruent upbringing                              | 0.213<br>(0.587)     | 0.203<br>(0.551)   | 0.197<br>(0.598)     |
| MASCULINE x Gender congruent upbringing                             | 1.029<br>(0.568)     | 1.158 *<br>(0.547) | 1.038<br>(0.568)     |
| Const.                                                              | 2.675 ***<br>(0.214) | 2.464<br>(1.690)   | 3.038 ***<br>(0.395) |
| Controls (Age, Height, Student status, Income, Religion, Residence) | –                    | Yes                | –                    |
| Controls (TCS, STT)                                                 | –                    | –                  | Yes                  |
| N                                                                   | 355                  | 355                | 355                  |
| Adj. R2                                                             | 0.013                | 0.076              | 0.012                |
| $H_0$ : FEMININE on GCU                                             | 0.742                | 0.677              | 0.812                |
| $H_0$ : MASCULINE on GCU                                            | 0.150                | 0.076              | 0.155                |

*Note:* Gender congruent upbringing is a binary variable equal to 1 if the way the participant's parents treated the participant matches the reported gender of the participant or the parents treated their child neutrally. Standard errors in parentheses are heteroskedasticity robust. Rows starting with  $H_0$  report the  $p$ -values of a joint coefficient test that the coefficients' sum equals 0. For example, " $H_0$ : FEMININE on GCU" tests the effect of the treatment (FEMININE) on the group of participants that were brought up gender congruently (Gender congruent upbringing=1).

## 14 Detailed literature summary

### 14.1 Competitiveness

Differences in competitiveness have become an essential explanation for labor market outcomes like variations in wages<sup>2</sup>, and different demands in wage negotiations<sup>3</sup>. Pinning down the causes and consequences of the willingness to compete is important as it correlates with several relevant choices and characteristics for education and labor market outcomes<sup>4</sup>. For example, subjects who are more competitive have been found to be more likely to choose competitive educational programs<sup>1,5-7</sup>, to have a higher income<sup>8-10</sup> and to become entrepreneurs<sup>11</sup>. But what role does one of the main human characteristics - being a man or a woman - play for competitiveness?

During the last decades, an impressive amount of scientific evidence showed that women are generally less competitive than men<sup>12-18</sup>. This gender gap in competitiveness (henceforth GGC) is robust when using different scientific methods. Studies report that men are more likely to compete when using classical lab<sup>18</sup>, lab-in-the-field<sup>19</sup>, field<sup>20</sup>, and online experiments<sup>1</sup>. The findings also replicate when using subjects from different age groups like children<sup>16</sup>, students<sup>18</sup>, and non-students<sup>21</sup>.

Recently some evidence has been collected on the lack of a GGC in certain circumstances. For example, for the matriarchy of Masai in Kenya, adult women are reported to be even more competitive than men<sup>19</sup>. Similarly, children living in the Khasi matrilineal society in northeast India are equally competitive<sup>21</sup>. Without the need to go afar, it has been shown that the type of school children attend influences competitiveness with female students from girl's schools being as competitive as boys<sup>22</sup>. Moreover, for children from families with lower socioeconomic backgrounds, no GGC is reported<sup>15</sup>. Also, cultural differences play a role in competitiveness, as shown by<sup>23</sup>. They found that children are equally competitive in Columbia, but boys in Sweden are more competitive than girls. These mentioned studies suggest that women's lower willingness to compete is not something that they are born with, but rather a behavioral preference that can be influenced by different factors and can thus be addressed to nurture rather than nature.

Support for this perspective is provided by research showing that the GGC can be closed or reversed when using interventions, which do not influence participants' biological makeup. For example, some studies change the institutional environment to resemble different affirmative action policies and obtain gender balance in competitive environments<sup>18,24-26</sup>. Others use the easy-to-implement intervention of priming (<sup>27</sup> and <sup>28</sup>) which encourages women to enter competitions more often. Moreover, giving feedback about relative performance<sup>29</sup> and the earnings implications related to competition avoidance<sup>30</sup> successfully increases women's entry rates, as well as when more experienced people advise strong-performing women to compete<sup>31</sup>. Besides, when the price of the competition benefits not the participants themselves, but their offspring, again no GGC has been observed<sup>32</sup>.

However, it is also plausible that biological factors like genes and hormones may lead to different decisions of women and men and are also a primary driver of behavior. Thus, a new and still developing field of research focuses on competitiveness from a more elementary perspective by taking hormones into account. Up to now, there is only one study by<sup>33</sup>, which causally analyses the effect of estrogen and progesterone (by administering oral contraceptives) on competitiveness. The authors find no impact of the two hormones on the willingness to compete. All other studies use self-reported hormonal measures by asking female participants about their menstrual cycle day and taking hormonal contraceptives to infer their hormonal level. Using self-reports is noisy (for a detailed discussion why this is the case see, <sup>34</sup>) and leads to mixed findings whether hormones play a role for competitiveness or not<sup>8,35</sup>.

The existing evidence already provides results on what factors correlate with competitive behavior and how differences in competitiveness between men and women can be closed. However, this paper will be the first to test the robustness of the GGC when priming subjects with a specific gender identity. Moreover, we contribute to the literature by investigating the willingness to compete of transgender subjects. To the best of our knowledge, no economic experiments have been done using transgender participants. According to our review of the literature, considering the behavior of LGBTQ+ individuals is extremely rare in experimental economics. We only found one paper on homosexuality and competitiveness by<sup>8</sup>. These aspects point out our study's potential to expand the knowledge in the domain of competitive behavior.

### 14.2 Risk

Risk-taking is considered a fundamental determinant of individual behavior in different domains like health<sup>36,37</sup>, stock market participation<sup>38</sup>, saving decisions<sup>39</sup>, occupational and self-employment choices<sup>40</sup>, personal and household finance<sup>41,42</sup>, education<sup>43</sup> and environmental decision making<sup>44</sup>. One strand of the literature in Behavioral Economics reports seemingly strong evidence for women preferring to take less risk compared to men<sup>45</sup>. This difference in risk-taking is robust when using different experimental methods to measure risk, such as lotteries<sup>46</sup>, investment games<sup>47</sup> or card games<sup>48</sup>. It is also reported for subjects varying from children<sup>23</sup>, to students<sup>49</sup>, to non-students<sup>50</sup>.

Moreover, the difference is not influenced by conducting the experiment in the lab or in other environments like on online platforms<sup>50</sup>.

Another strand of the literature does not support that risk-taking differs by gender. Those papers mainly concentrate on different underlying methodologies than those used by the studies mentioned above. First, they claim that it is important to clearly distinguish between differences on the individual level (categorical differences between men and women) and patterns that appear only at the aggregate level (such as, e.g., statistically detectable different means)<sup>51</sup>. Second, using quantitative measures of substantive differences that are not yet that common in economic studies (such as Cohen's *d*) or measures of substantive overlap (like, e.g., the *Index of Similarity*) also results in not having a substantially large gender gap in risk-taking<sup>51,52</sup>.<sup>52</sup>, e.g., claims that standardized differences in means across gender mostly amount to less than one standard deviation, and that the degree of overlap in distributions of risk-taking behavior of men and women is generally exceeding 80%. On-average differences between (cis-) men and women in behavior are smaller than sex differences in, e.g., height or throwing ability<sup>53</sup> and pale next to the effects of aspects such as cultural manipulations or gender priming (e.g.,<sup>52</sup>). These papers align with the so-called gender similarities hypothesis from the psychological literature which argues that males and females are similar on most, but not all, psychological dimensions<sup>53</sup>.<sup>54</sup> claims that one explanation for gender differences in risk-taking still being such a prominently repeated finding is that science is biased towards these results because of, e.g., exiting stereotypes or confirmation bias for existing publications.

Several studies analyze gender differences in risk preferences for sub-populations of managers<sup>49,55,56</sup> and find that females are similar or even less risk-averse than men. The reasons could be a selection or social learning and adaptive behavior to the job demands. To disentangle these different factors,<sup>57</sup> uses an online experiment with scientists. They vary the salience of either the private or the professional identity of the subjects. They report that priming the professional identity reduces the gender gap in risk-taking. Besides, the gender gap decreases with increasing age as female senior scientists choose riskier options in the treatment where the profession is made salient.

Also, attempts to explore the connection between biological factors and risk-taking are taken for the domain of risky behavior. First, studies are exploring the causal effect of hormones on behavior.<sup>1</sup> For example,<sup>58</sup> test for administered testosterone or estrogen affecting women's risk-taking. No effect of either testosterone or estrogen on risk-taking could be detected. In line, the study by<sup>59</sup> and<sup>60</sup> find no effect of testosterone on risk aversion.<sup>33</sup> take a comparative approach and administer an oral contraceptive or not. Again, no connection between hormones and behavior is reported. Second, studies test for the correlation between the variation in risk-taking and genes. On the one hand, for example,<sup>61</sup> find no relationship between the dopamine and the serotonin gene and risk-taking. On the other hand, studies using, for example, the twin methodology and genome-wide association techniques (GWAS) report genetic foundations for the willingness to take risk<sup>62-64</sup>. Third, a recent study by<sup>65</sup> showed that the intake of a small dose of Acetaminophen, a very popular pain killer, increases risk-taking.

Several researchers prime subjects and study the effect on risk-taking<sup>66-70</sup>. The study closest to our research is<sup>71</sup> which finds that making the subject's gender salient with a short questionnaire does not impact risk preferences. Also,<sup>72</sup> report an effect of gender priming through questions and stereotypical pictures only on male risk preferences.<sup>73</sup> prime financial professionals with their professional salience, which leads to a decrease in risk-taking in a high stakes investment game. With a similar subject pool,<sup>74</sup> find that individuals primed with a bust scenario are more risk-averse compared to those primed with a boom scenario.<sup>75</sup> test the robustness of the results of<sup>74</sup> with an Amazon Mechanical Turk subject pool. They report no evidence of priming influencing risk-taking.<sup>76</sup> primed individuals who were exposed to violence by asking them to either recall happy, fearful or neutral moments. They find that remembering frightening experiences leads to a higher preference for certainty.

The only related study we are aware of that investigates the risk-taking behavior of LGBTQ+ individuals is<sup>8</sup>. It analyzes risk preferences by asking the subjects about their risk perception (survey question). It finds no significant differences between homosexual and heterosexual men and homosexual and heterosexual women.

### 14.3 Altruism

To what extent someone is pro-social, i.e., altruistic, is argued to explain behavior in the labor market, how individuals vote, if they take up volunteer work or not, and how willing someone is to give to a charity<sup>77</sup>. Altruistic behavior is typically measured with a dictator game, where participants are asked how much they want to transfer to an anonymous other participant<sup>78,79</sup>, or how much they wish to donate to a charity<sup>80</sup>. It is a robust finding that participants in experiments transfer quite a substantial part of their endowment in dictator games, thus act altruistically<sup>81</sup>. The literature reports mixed findings on the external validity of those experiments. One strand of the

<sup>1</sup>For our literature review, we summarize only studies that concentrate on pharmacological testosterone administration with double-blind placebo-controlled designs, which allows us to interpret results causally.

literature finds that individuals behave in donation experiments similar as in naturally occurring decision situations on charitable giving<sup>82,83</sup>. Other research contradicts these findings, as recently summarized by<sup>84</sup>.

Concerning the level of altruism exhibited by men and women, a wide range of studies shows that women are generally more generous in dictator games. See, e.g.,<sup>77</sup> for an up-to-date meta-analysis of the existing literature on gender differences in charitable giving. These authors report that the magnitude of the gender differences in altruism is sensible to the experimental context. For example, the difference is more prominent if the dictator decides to donate to a charity than giving to an anonymous recipient. However, the difference is more minor if the dictator chooses between giving all or nothing compared to deciding on a continuous scale.

Turning to studies attempting to link hormones to altruism causally,<sup>60</sup> and<sup>85</sup> found no impact of administered testosterone on dictators' giving.<sup>58</sup> used another approach and administered testosterone, estrogen, or a placebo to the experimental participants. Again, no connection between either hormone or altruism is reported. Moreover, administering an oral contraceptive containing synthetic progesterone as the main ingredient suggests no hormonal impact on altruism levels. However, there is evidence that the underlying genes influence altruism. See for example<sup>86</sup> who used twins for their study.

Multiple studies explore if different priming influences altruistic behavior. For example, subsequent donations are affected by religious primes<sup>87–90</sup>, by reminding subjects of secular, moral institutions<sup>88</sup>, and by priming with subtle cues of observability<sup>91–93</sup>.<sup>94</sup> report an increased gender gap in altruism when making gender more salient by requiring participants to specify their gender before the dictator game and informing them about the gender of the recipient. Again, we have found no published studies of altruism of LGBTQ+ individuals in economics.

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## 15 Additional information

### 15.1 Study sample

We recruited a total of 798 participants. Please note that due to a technical problem on how the participant's performance was shown to them on their screen, we exclude  $n = 3$  cisgender and  $n = 6$  transgender observations. We tested with our debriefing questionnaire whether the participants had an idea about the aim of the study, the study topic, etc. Eight cisgender and one transgender participant(s) wrote to think that s/he were primed. These  $n = 9$  observations are also excluded from our analysis. Thus, the final number of subjects by subject groups and treatment is 780 as summarized in Table 49.

To have comparable transgender and cisgender observations, we first collected the major part of the transgender observations, including their main demographic characteristics (age, student status, education, income, religious affiliation, and residence) of the transgender participants. We then used Prolific's sorting tool to recruit a similar cisgender sample based on those criteria.

**Supplementary Table 49** Distribution of subject groups across treatments

|            | Treatment |          |           | Total |
|------------|-----------|----------|-----------|-------|
|            | NEUTRAL   | FEMININE | MASCULINE |       |
| Cismen     | 72        | 71       | 71        | 214   |
| Ciswomen   | 71        | 70       | 70        | 211   |
| Transmen   | 72        | 72       | 71        | 215   |
| Transwomen | 44        | 50       | 46        | 140   |
| Total      | 259       | 263      | 258       | 780   |

### 15.2 Datasets

**gender\_data.csv** S1 is the main data set. The file contains  $n=798$  observations and 103 variables. Details on the variables can be found in the second dataset S2 (codebook.csv).

**codebook.csv** This S2 file provides the details on the variables of the main data set S1. Each row includes the explanations for one of the 103 variables. Additionally, the third column summarizes the response options the subjects had.

The collected data and additional material is available at OSF using [https://osf.io/tyzjh/?view\\_only=66a8abca5f6a4aeead68f6fef19a0ee9](https://osf.io/tyzjh/?view_only=66a8abca5f6a4aeead68f6fef19a0ee9)

### 15.3 Instructions

The following pages contain screenshots of the online study conducted on the platform Prolific. Please note that one participant was randomly allocated to just one treatment. Thus, one participant saw one out of the three different treatment pages. In addition, depending on the choice made in Part 4, the system showed one of two options pages. A blue headline marks the varying screens. All other pages were identical.

## Welcome!

### Please read the following.

Dear participant,

The following will provide you with information about the experiment that will help you decide whether you wish to participate. The study received two certificates of good standing (ethical approvals). If you agree to participate, please be aware that you are free to withdraw at any point throughout the study. All data collected for this scientific study will remain confidential and anonymous. If you have any further questions concerning this study, please feel free to contact us via phone or email:

Dr. Silvio Städter at [silvio.staedter@ur.de](mailto:silvio.staedter@ur.de) or +49 941 9433259, or the team at [econ.study.research@gmail.com](mailto:econ.study.research@gmail.com).

Please indicate that by clicking the following box on the space below, you understand your rights and agree to participate in the experiment. You can revoke the consent to the collection and processing of the data at any time by just closing the internet browser via which you participate. After your revocation, no further data will be collected. However, the data collected up to the point of cancellation can continue to be used in this study. Your participation is solicited yet strictly voluntary. All information will be kept confidential, and your name will not be associated with any research findings.

☐ I understand my rights and agree to participate in the experiment.

Continue

## Welcome!



### Thank you very much for participating in our study!

This is a project of researchers from the University of Exeter (United Kingdom), the Chulalongkorn University (Thailand), and the University of Regensburg (Germany). The study is conducted by Prof. Brit Grosskopf, Chanalak Chairsilak, Dr. Helena Fornwagner, Alexander Lauf, Vanessa Schöller, and Dr. Silvio Städter.

The study received two certificates of good standing (ethical approvals).

The study consists of **six parts** and a **questionnaire**.

Depending on the decisions you take in the different parts, you can earn money.

Please note that all decisions you take, as well as all data that is collected with the survey is anonymous and only used for this study.

Before each part starts, you will get detailed instructions, what you have to do and how the decisions you take influence your payment.

In each part, you can earn money. At the end of the study, you can see how much you earned in each part. We will then randomly select one out of the six parts and pay you the money you have earned in this part.

For completing the study you will receive a compensation of **£3.75** for sure.

So your total payment will be your earnings in one randomly chosen part plus the compensation for completing the study. At the end of the study, you will receive your personal unique **8-digit Code** as proof that you have completed the study.

If you need any further details or have problems when conducting the study, please contact Dr. Silvio Städter at [silvio.staedter@ur.de](mailto:silvio.staedter@ur.de) or +49 941 9433259, or the team at [econ.study.research@gmail.com](mailto:econ.study.research@gmail.com).

Please enter your personal Code in Prolific. Then, you get **£3.75** and the additional money you earned in the randomly selected part via Prolific.

Thank you again for taking your time to participate,  
Prof. Brit Grosskopf,  
Chanalak Chairsilaky, MSc,  
Dr. Helena Fornwagner,  
Alexander Lauf, MSc,  
Vanessa Schöller, MSc, and  
Dr. Silvio Städter.

Start the Study

## Part 1: Instructions

In this game you have to solve a **Word Search Puzzle**.

On the next page, you will see a table with **10** rows and **10** columns, a word puzzle. Make sure you can see the entire table.

Within this table **8 words** are hidden. They are either **vertically**, **horizontally** or **diagonally** placed in the table.

These 8 words are revealed on the next page, just above the table. Your task is to find these 8 hidden words and mark them. To mark a word, you have to keep the left mouse button down and go over the word's letters.

Marked words are highlighted in blue. If you mark a word, it will be crossed out in the list of words. You have to mark one word in one go.

If this part is randomly selected for payment at the end of the study and you have found **all 8 words**, you get **£5.00**.

If you didn't find all 8 words, you get nothing in this part.

You cannot go back to this page and please do not reload the page.

You have **120 seconds** to find the 8 words.

If you are ready, click on the button 'Start this part' below.

Start this part

## Treatment: NEUTRAL

### Part 1: Word Search

Time left to complete this page: 1:56

Please find the following words in the word puzzle.

|        |            |
|--------|------------|
| neuter | its        |
| person | child      |
| it     | theirs     |
| people | individual |

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| E | G | J | U | R | D | I | T | S | A |
| S | N | E | U | T | E | R | S | B | O |
| A | C | P | E | O | P | L | E | I | T |
| U | H | S | V | V | J | R | B | U | Y |
| N | I | K | O | W | R | B | Y | U | W |
| C | L | C | D | L | F | O | M | K | M |
| V | D | K | F | L | U | L | D | Y | E |
| J | L | R | C | T | H | E | I | R | S |
| J | G | P | E | R | S | O | N | E | L |
| I | N | D | I | V | I | D | U | A | L |

Continue

Treatment: FEMININE

Part 1: Word Search

Time left to complete this page: 1:57

Please find the following words in the word puzzle.

female

woman

she

women

her

girl

hers

lady

H

E

R

S

E

G

J

U

R

D

S

H

E

A

S

S

B

F

O

A

H

E

R

U

S

V

V

E

J

R

B

U

W

Y

N

K

O

M

W

R

B

G

W

O

Y

U

W

A

C

C

D

L

I

O

M

F

O

L

M

K

M

V

K

R

M

A

F

E

L

L

U

L

D

Y

L

E

N

E

J

A

L

R

C

J

G

E

N

L

V

D

R

R

C

V

W

A

G

S

U

Y

Continue

Treatment: MASCULINE

Part 1: Word Search

Time left to complete this page: 1:57

Please find the following words in the word puzzle.

male

man

he

men

him

boy

his

gentleman

G

E

G

J

U

R

D

A

S

S

B

E

O

A

H

I

M

U

S

V

V

J

N

R

B

U

H

I

S

Y

N

B

K

T

O

W

R

H

E

B

Y

O

U

W

L

C

M

A

L

E

C

Y

D

M

L

E

F

O

M

K

M

M

V

K

A

F

M

L

U

L

D

Y

E

E

J

N

L

A

R

C

J

G

E

N

L

V

R

R

N

C

V

W

A

G

S

U

A

F

W

G

Continue

## Part 1: Summary

You have finished this part.

You found **8 of 8** words.

Continue to next part

## Part 2, Part 3, and Part 4

Please complete Part 2, Part 3 and Part 4 now.

In each part, you have to perform the **same task**. In this task, you have to solve as many short math quizzes as you can within 120 seconds in each part. The number of correctly solved quizzes determines your payment in each part.

Before you can start to earn money in each part, you get detailed instructions on how your payment is determined in the following part.

After the instructions for the first part, you get to practice the task for 90 seconds. The quizzes solved for practice purposes are not payoff relevant.

Continue

## Part 2: Instructions

### Instructions: Math Quizzes

In this task, you have to solve as many quizzes as possible within 120 seconds. For each correctly solved quiz you can earn money as explained under '*Payment*' after the practice round.

Each quiz consists of 9 two-digit numbers. You can see an example of a quiz below.

**Quiz 1**

You solved 0 of 0 correctly.

Please select 2 numbers that add up to 100.

|    |    |    |
|----|----|----|
| 10 | 15 | 56 |
| 87 | 75 | 25 |
| 20 | 31 | 14 |

Submit

In each quiz, you have to select two numbers that add up to 100 by clicking on them. If you have selected two numbers, you can submit your selection by clicking on the button 'Submit'.

You cannot select more than two numbers. So if you want to change your selection, unselect one of your choices by clicking a second time on your choice and select the one you want.

After submitting an answer, you will get a new quiz. Below the quiz number, you can see how many quizzes you have already solved correctly.

You have a time limit of **120 seconds** to complete as many quizzes as possible in each part.

You can continue to the practice round, where you can practice the exercise.

Continue to Practice Round

## Part 2: Practice Round

Here, you have **90 seconds** to get to know the task and practice.

The math quizzes solved in the practice round have no impact on your payment.

If you have selected two numbers, you can click the "Submit" button.

The computer will tell you, whether you were right or not.

Please, solve at least 1 quiz without reloading this page.

### Practice Quiz 1

You solved 0 of 0 correctly.

Please select 2 numbers that add up to 100.

14

10

34

84

98

95

66

21

24

Submit

If you are ready, click on the button 'Start the Practice' below.

Start the Practice

## Part 2: Practice Round

Time left to practice: **1:21**

Here, you have **90 seconds** to get to know the task and practice.

The math quizzes solved in the practice round have no impact on your payment.

If you have selected two numbers, you can click the "Submit" button.

The computer will tell you, whether you were right or not.

Please, solve at least 1 quiz without reloading this page.

### Practice Quiz 2

You solved 1 of 1 correctly.

Please select 2 numbers that add up to 100.

20

13

55

80

92

12

22

54

40

Submit

If you solved 1 quiz, you can continue.

Continue

## Part 2: Payment Details

### Payment PIECE RATE

- The money you can earn in this part depends only on your own performance.
- You receive **1 point** for each correctly solved quiz.
- You do not lose points if you submit a wrong answer.
- If this part is randomly selected for payment at the end of the study, you get **£0.50** for each collected point.

If you are ready, click on the button 'Start this part' below.

You have 120 seconds and your submissions are relevant for your payment.

Start this part

## Part 2: Math Quizzes

Time left to solve quizzes: 1:58

**Quiz 1**

You solved 0 of 0 correctly.

Please select 2 numbers that add up to 100.

|    |    |    |
|----|----|----|
| 38 | 34 | 15 |
| 96 | 58 | 31 |
| 85 | 36 | 63 |

Submit

## Part 2: Bonus Question

Please answer the following bonus question

You now have the chance to earn additional money. If this part is randomly chosen for payment, you will be paid an extra £1.00 on top of your final payoff if your following answer is correct.

Suppose we group all participants of this study into 4 groups by their achieved points and assume we have 100 participants for simplicity. First, we put the 25 participants with the highest amounts of points in Group 1. The next 25 participants with the second highest amounts of points in Group 2 and the following 25 in Group 3. The 25 participants with the fewest amounts of points are in Group 4.

With the points you collected, to which group do you think you belong?

- ☐ I would be in Group 1.
- ☐ I would be in Group 2.
- ☐ I would be in Group 3.
- ☐ I would be in Group 4.

Continue to Summary

## Part 2: Summary

### Result

You solved **1** of **1** quizzes correctly.

Continue to next part

## Part 3: Payment Details

### Payment TOURNAMENT

- For this part, you are now randomly matched with **three other participants** of this study. You are **one group**. You will not get to know who the other participants are and the other participants will not get to know who you are.
- The money you can earn in this part depends on your performance and the performance of the other group members. Thus, you are in a **tournament** with the other group members.
- You get again **1 point** for each correctly solved quiz and you do not lose points if you submit a wrong answer.
- If this part is randomly selected for payment at the end of the study, your payment is determined as follows:
  - If you collect *more points* than all other members of your group, you are the winner of this tournament and get **£2.00** for each point.
  - If you collect *less points* than the best player in your group, you get **nothing** in this part.
  - If there are ties, the winner will be randomly determined.

If you are ready, click on the button 'Start this part' below.  
You have 120 seconds and your submissions are relevant for your payment.

Start this part

## Part 3: Math Quizzes

Time left to solve quizzes: **1:40**

### Quiz 3

You solved 2 of 2 correctly.

Please select 2 numbers that add up to 100.

14

20

72

24

39

81

98

82

19

Submit

## Part 3: Bonus Question

Please answer the following bonus question

You now have the chance to earn additional money. If this part is randomly chosen for payment, you will be paid an extra £1.00 on top of your final payoff if your following answer is correct.

How well did you perform in this part relative to your group members?

- ☐ I was the best.
- ☐ I was the second best.
- ☐ I was the third best.
- ☐ I was last.

Continue to Summary

## Part 3: Summary

### Result

You solved **2** of **2** quizzes correctly.

Continue to next part

## Part 4: Your Choice

Please choose one of the two options

In this part, you can choose which payment scheme from the previous two parts should apply to your performance.

You can choose **Option A: PIECE RATE** from Part 2 or **Option B: TOURNAMENT** from Part 3.

Below you can see both options, and the respective resulting payment rules.

### Option A: PIECE RATE

#### Payment

- The money you can earn in this part depends only on your own performance.
- You receive **1 point** for each correctly solved quiz.
- You do not lose points if you submit a wrong answer.
- If this part is randomly selected for payment at the end of the study, you get **£0.50** for each collected point.

### Option B: TOURNAMENT

If you choose Option B, we compare your points to the points of your group members from the previous part. Hence, we take your points from this part and compare them with the other group members' points in Part 3. This means that your choice in this part has no impact on the payment of the other group members.

#### Payment

- You get again **1 point** for each correctly solved quiz and you do not lose points if you submit a wrong answer.
- If this part is randomly selected for payment at the end of the study, your payment is determined as follows:
  - If you collect *more points* than all other members of your group in Part 3, you are the winner of this tournament and get **£2.00** for each point.
  - If you collect *less points* than the best player in your group in Part 3, you get **nothing** in this part.
  - If there are ties, the winner will be randomly determined.

Please choose:

Option A or Option B

## Choice: Option A

### Part 4: Payment Details

You have chosen **Option A**.

#### Payment

- The money you can earn in this part depends only on your own performance.
- You receive **1 point** for each correctly solved quiz.
- You do not lose points if you submit a wrong answer.
- If this part is randomly selected for payment at the end of the study, you get **£0.50** for each collected point.

If you are ready, click on the button 'Start this part' below.  
You have 120 seconds and your submissions are relevant for your payment.

Start this part

## Choice: Option B

### Part 4: Payment Details

You have chosen **Option B**.

#### Payment

- You get again **1 point** for each correctly solved quiz and you do not lose points if you submit a wrong answer.
- If this part is randomly selected for payment at the end of the study, your payment is determined as follows:
  - If you collect *more points* than all other members of your group in Part 3, you are the winner of this tournament and get **£2.00** for each point.
  - If you collect *less points* than the best player in your group in Part 3, you get **nothing** in this part.
  - If there are ties, the winner will be randomly determined.

If you are ready, click on the button 'Start this part' below.  
You have 120 seconds and your submissions are relevant for your payment.

Start this part

## Part 4: Math Quizzes

Time left to solve quizzes: **1:18**

### Quiz 4

You solved 3 of 3 correctly.

Please select 2 numbers that add up to 100.

15

26

31

18

85

79

55

30

57

Submit

## Part 4: Summary

### Result

You solved **3** of **3** quizzes correctly.

Continue to next part

## Part 5: Instructions

In this part, you get a start capital of **£4.00** and you have to decide how much of it you want to invest into a risky lottery.

The success of this investment is decided by *flipping a virtual coin*. You can get 'heads' or 'tails' with an equal probability. That means you have a 50% chance of success.

If you get '**tails**', your investment was successful. In this case, the amount you have invested is multiplied by **2.5**. Your earnings are then the leftover of your start capital and the money from the successful investment.

But if you get '**heads**', your investment was not successful, and you have only the leftover of your start capital.

There are no restrictions: you can put everything of your start capital in the investment, or nothing, or anything in between.

On the next page, you can decide how much to invest and see the potential outcomes of your investment.

Continue

## Part 5: Your Decision

### Your Decision

How much of your £4.00 do you want to invest?

£

If you have set the amount you want to invest, click on the button "Invest" below.

Under "Potential Outcome" to the right, you can see what can happen when you click "Invest".

### Potential Outcome

You want to invest: £4.00

You want to keep: £0.00

If the coin shows 'tails', you additionally get £10.00.  
So in total you get: £0.00 + £10.00 = **£10.00**

If the coin shows 'heads', you get £0.  
So in total you get: £0.00 + £0 = **£0.00**

If you have made your decision, please click on the button 'Invest' below.

Invest

## Part 5: Summary

You started with a capital of **£4.00**.

You invested **£4.00**.

We are flipping the virtual coin to see if your investment is a success or not.  
You will see the result at the end of the experiment.

Continue to next Part

## Part 6: Instructions

You will receive an initial endowment of **£5.00** for this part.

On the next page, you can decide how much of this endowment you want to keep for yourself and how much you would like to donate to five different charities.

You can freely set the share you want to keep and the share you want to transfer to one or more respective charities. Any amount between 0 and £5.00 is possible, as long as the sum of all options equals your endowment.

Once we have finished the study, we will send the respective donations of all participants to the charities.

Continue

## Part 6: Your Donation

Please indicate the amount you want to donate.

You have received an initial endowment of £5.00.

Remember that the sum must be equal to your endowment.

Amnesty International:

 £

Doctors without Borders:

 £

International Red Cross:

 £

UNICEF:

 £

WWF:

 £

Your share:

 £

Submit

## Part 6: Summary

You started with an endowment of **£5.00**.

You kept for yourself **£0.00**.

You donated **£5.00**.

[Continue to next Part](#)

## Questionnaire

You have finished the six parts.

Now, we kindly ask you to answer the following questions.

At the end, you will get your personal unique **8-digit Code** for the completion of the study.

[Start Questionnaire](#)

## Questionnaire

Below you find several personality traits that may or may not apply to you.

Please indicate for each trait the extent to which it applies to you on a scale from 1 (*Never true*) to 6 (*Always true*).

| Trait                       | <i>Never true</i>       | <i>Sometimes true</i>   | <i>Occasionally true</i> | <i>Often true</i>       | <i>Usually true</i>     | <i>Always true</i>      |
|-----------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|-------------------------|
| Defends own beliefs         | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Tender                      | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Conscientious               | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Independent                 | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Sympathetic                 | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Moody                       | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Assertive                   | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Sensitive to needs of other | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Reliable                    | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Strong personality          | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Understanding               | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Jealous                     | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Forceful                    | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Compassionate               | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Truthful                    | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |

Continue

## Questionnaire

Below you find several personality traits that may or may not apply to you.

Please indicate for each trait the extent to which it applies to you on a scale from 1 (*Never true*) to 6 (*Always true*).

| Trait                         | <i>Never true</i>       | <i>Sometimes true</i>   | <i>Occasionally true</i> | <i>Often true</i>       | <i>Usually true</i>     | <i>Always true</i>      |
|-------------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|-------------------------|
| Has leader abilities          | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Eager to soothe hurt feelings | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Secretive                     | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Willing to take risk          | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Warm                          | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Adaptable                     | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Dominant                      | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Affectionate                  | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Conceited                     | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Willing to take a stand       | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Loves children                | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Tactful                       | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Aggressive                    | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Gentle                        | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |
| Conventional                  | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3  | <input type="radio"/> 4 | <input type="radio"/> 5 | <input type="radio"/> 6 |

Continue

## Questionnaire

**Gender identity** is defined as the gender that you identify yourself with. It is not necessarily related to your assigned sex at birth.

For the following statements, please indicate the response that best describes your experience over the past two weeks on a scale from 1 (*Strongly disagree*) to 5 (*Strongly agree*).

My outward appearance represents my gender identity.

*Strongly disagree*   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   *Strongly agree*

I experience a sense of unity between my gender identity and my body.

*Strongly disagree*   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   *Strongly agree*

My physical appearance adequately expresses my gender identity.

*Strongly disagree*   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   *Strongly agree*

I am generally comfortable with how others perceive my gender identity when they look at me.

*Strongly disagree*   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   *Strongly agree*

My physical body represents my gender identity.

*Strongly disagree*   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   *Strongly agree*

The way my body currently looks does not represent my gender identity.

*Strongly disagree*   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   *Strongly agree*

Continue

## Questionnaire

**Gender identity** is defined as the gender that you identify yourself with. It is not necessarily related to your assigned sex at birth.

For the following statements, please indicate the response that best describes your experience over the past two weeks on a scale from 1 (*Strongly disagree*) to 5 (*Strongly agree*).

I am happy with the way my appearance expresses my gender identity.

*Strongly disagree*   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   *Strongly agree*

I do not feel that my appearance reflects my gender identity.

*Strongly disagree*   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   *Strongly agree*

I feel that my mind and body are consistent with one another.

*Strongly disagree*   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   *Strongly agree*

I am not proud of my gender identity.

*Strongly disagree*   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   *Strongly agree*

I am happy that I have the gender identity that I do.

*Strongly disagree*   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   *Strongly agree*

I have accepted my gender identity.

*Strongly disagree*   ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5   *Strongly agree*

Continue

## Questionnaire

**Please answer the following questions.**

Please indicate your age.

What is your body height in cm (for a converter see: <https://www.unitconverters.net/length/feet-to-cm.htm>)?

Which is the highest level of education you have completed?

What is your personal income per year (after tax) in GBP?

Are you a student?

- ☐ Yes  
☐ No

Where are you currently living?

What is your religious affiliation?

What is your biological sex?

What is your gender?

If you selected "Other", please specify:

Who do you feel attracted to: men, women, both or neither?

Are you currently in a relationship and if yes with a man or a woman?

Do you consider yourself transgender?

- ☐ Yes  
☐ No

In what kind of accommodation are you currently living?

☐ Apartment ☐ House ☐ Dormitory ☐ Other

Do you currently live with your partner in the same accommodation?

- ☐ Yes  
☐ No

Do you currently live in the same city as your parents?

- ☐ Yes  
☐ No

Do you currently live with your parents in the same house/apartment?

- ☐ Yes  
☐ No

Do you think your parents treated you mostly as a boy or as girl?

☐ Boy ☐ Girl ☐ They treated me mostly gender neutral.

On which device do you participate in this study?

☐ Tablet ☐ Smartphone ☐ PC ☐ Laptop ☐ Other device

[Send and Continue](#)

## Questionnaire

**Please answer the following questions.**

What do you think was the purpose of this study? What do you think the study tried to find out?

Did you think any of the previous tasks were related?

☐ Yes ☐ No

Did anything you do in one task affect what you did in the other tasks?

☐ Yes ☐ No

Did you ever see or complete a word-search puzzle in another study?

☐ Yes ☐ No

Do you remember any of the words from the word-search puzzle? If not leave empty.

Did any of the words in the word-search puzzle seem strange or suspicious to you? If not leave empty.

Send and Continue

## Questionnaire

Please indicate whether you have taken any of the following actions in order to transition to your gender identity or if it does not apply.

Come out as transgender to family.

☐ Yes ☐ No ☐ Does not apply

Come out as transgender to friends.

☐ Yes ☐ No ☐ Does not apply

Come out as transgender to coworkers or fellow students.

☐ Yes ☐ No ☐ Does not apply

Adopted a name not given at birth that better represents gender identity.

☐ Yes ☐ No ☐ Does not apply

Currently called adopted name by family.

☐ Yes ☐ No ☐ Does not apply

Currently called adopted name by friends.

☐ Yes ☐ No ☐ Does not apply

Currently called adopted name by coworkers or fellow students.

☐ Yes ☐ No ☐ Does not apply

Legally had name change to adopted name.

☐ Yes ☐ No ☐ Does not apply

Wear clothing that matches gender identity in social situations.

☐ Yes ☐ No ☐ Does not apply

Wear clothing that matches gender identity in work/school.

☐ Yes ☐ No ☐ Does not apply

Legally changed sex on birth certificate (if live in state where this is possible).

☐ Yes ☐ No ☐ Does not apply

Driver's license changed to reflect gender identity.

☐ Yes ☐ No ☐ Does not apply

Had surgery to alter genitalia.

☐ Yes ☐ No ☐ Does not apply

Undergoing hormone replacement therapy.

☐ Yes ☐ No ☐ Does not apply

Used or had a nonsurgical cosmetic procedure (e.g., electrolysis) to alter physical appearance in order to make it more congruent with gender identity.

☐ Yes ☐ No ☐ Does not apply

Had non-genital surgery (e.g., breast removal, breast implants, facial feminization surgery, vocal cord surgery) to alter appearance (or presence) in order to make it more congruent with gender identity.

☐ Yes ☐ No ☐ Does not apply

[Send and Continue](#)

## Selection of your Payment

### Your results in each part

Here you can see the outcomes of all six parts.

The computer will randomly select one of these parts on the next screen. Each part has the same probability to be selected.

You will get **£3.75** and the additional money in the column 'payoff' from this part.

| Short summary of the parts |               |                                            |        |
|----------------------------|---------------|--------------------------------------------|--------|
| Part 1                     | You found:    | Payment:                                   | Payoff |
|                            | 8 words       | £5.00 if all found                         | £5.00  |
| Part 2                     | You solved:   | Payment:                                   | Payoff |
|                            | 1 quizzes     | £0.50 per quiz                             | £0.50  |
| Part 3                     | You solved:   | Payment:                                   | Payoff |
|                            | 2 quizzes     | £2.00 per quiz<br>only if you are the best | £4.00  |
| Part 4                     | You solved:   | Payment:                                   | Payoff |
|                            | 3 quizzes     | Option A<br>£0.50 per quiz                 | £1.50  |
| Part 5                     | You invested: | Success?                                   | Payoff |
|                            | £4.00         | Yes                                        | £10.00 |
| Part 6                     | You kept:     | You donated:                               | Payoff |
|                            | £0.00         | £5.00                                      | £0.00  |

Continue

# Thank you very much for participating!

Please write down or take a screenshot of the following information and the 8-digit code below.

The computer selected:

Part 2

| Payment | Part payment | Total payment |
|---------|--------------|---------------|
| £3.75   | £0.50        | £4.25         |

Your personal code:

4588DDFC

**Important:** Click on the link below to be redirected to Prolific. Clicking is necessary to claim your reward for participating in this study.

<https://app.prolific.co/submissions/complete?cc=4588DDFC>